99th Annual Report

2012

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

99th Annual Report

2012

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

This and other Federal Reserve Board reports and publications are available online at
www.federalreserve.gov/publications/default.htm.

To order copies of Federal Reserve Board publications offered in print,
see the Board's Publication Order Form (www.federalreserve.gov/pubs/orderform.pdf)
or contact:

Publications Fulfillment
Mail Stop N-127
Board of Governors of the Federal Reserve System
Washington, DC 20551
(ph) 202-452-3245
(fax) 202-728-5886
(e-mail) Publications-BOG@frb.gov

Letter of Transmittal

Board of Governors of the Federal Reserve System
Washington, D.C.

May 2013

The Speaker of the House of Representatives:

Pursuant to the requirements of section 10 of the Federal Reserve Act, I am pleased to submit the ninety-ninth annual report of the Board of Governors of the Federal Reserve System.

This report covers operations of the Board during calendar year 2012.

Sincerely,

Ben Bernanke
Chairman

Contents

Overview 1
- About this Report 1
- About the Federal Reserve System 1

Monetary Policy and Economic Developments 5
- Monetary Policy Report of February 2013 5
- Monetary Policy Report of July 2012 27

Supervision and Regulation 49
- 2012 Developments 49
- Supervision 51
- Regulation 71

Consumer and Community Affairs 75
- Supervision and Examinations 75
- Consumer Research and Emerging-Issues and Policy Analysis 85
- Community Economic Development 86
- Consumer Laws and Regulations 88

Federal Reserve Banks 91
- Federal Reserve Priced Services 91
- Currency and Coin 94
- Fiscal Agency and Government Depository Services 95
- Use of Federal Reserve Intraday Credit 97
- FedLine Access to Reserve Bank Services 98
- Information Technology 98
- Examinations of the Federal Reserve Banks 99
- Income and Expenses 100
- SOMA Holdings and Loans 100
- Federal Reserve Bank Premises 102
- Pro Forma Financial Statements for Federal Reserve Priced Services 105

Other Federal Reserve Operations 111
- Regulatory Developments: Dodd-Frank Act Implementation 111
- The Board of Governors and the Government Performance and Results Act 115

Record of Policy Actions of the Board of Governors 117

Rules and Regulations 117
Policy Statements and Other Actions 120
Discount Rates for Depository Institutions in 2012 121

Minutes of Federal Open Market Committee Meetings 123

Meeting Held on January 24–25, 2012 124
Meeting Held on March 13, 2012 156
Meeting Held on April 24–25, 2012 166
Meeting Held on June 19–20, 2012 191
Meeting Held on July 31–August 1, 2012 216
Meeting Held on September 12–13, 2012 227
Meeting Held on October 23–24, 2012 251
Meeting Held on December 11–12, 2012 261

Litigation 287

Statistical Tables 289

Federal Reserve System Audits 319

Board of Governors Financial Statements 320
Federal Reserve Banks Combined Financial Statements 342
Office of Inspector General Activities 344
Government Accountability Office Reviews 409

Federal Reserve System Organization 411

Board of Governors 411
Federal Open Market Committee 416
Board of Governors Advisory Councils 417
Federal Reserve Bank Branches 420

Index 437

Overview

The Federal Reserve, the central bank of the United States, is a federal system composed of a central governmental agency—the Board of Governors—and 12 regional Federal Reserve Banks.

The Board of Governors, located in Washington, D.C., consists of seven members appointed by the President of the United States and supported by a 2,540-person staff. Besides conducting research, analysis, and policymaking related to domestic and international financial and economic matters, the Board plays a major role in the supervision and regulation of U.S. financial institutions and activities, has broad oversight responsibility for the nation's payments system and the operations and activities of the Federal Reserve Banks, and plays an important role in promoting consumer protection, fair lending, and community development.

About this Report

This report covers Board and System operations and activities during calendar-year 2012. The report includes 11 sections:

- **Monetary Policy and Economic Developments.** Section 1 provides adapted versions of the Board's semiannual monetary policy reports to Congress.
- **Federal Reserve Operations.** Section 2 provides a summary of Board and System activities in the areas of supervision and regulation; Section 3, in consumer and community affairs; and Section 4, in Reserve Bank operations.
- **Dodd-Frank Act Implementation and Other Requirements.** Section 5 summarizes the Board's efforts in 2012 to implement provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act as well as the Board's compliance with the Government Performance and Results Act of 1993.
- **Policy Actions and Litigation.** Section 6 and Section 7 provide accounts of policy actions taken by the Board in 2012, including new or amended rules and regulations and other actions as well as the deliberations and decisions of the Federal Open Market Committee (FOMC); Section 8 summarizes litigation involving the Board.[1]
- **Statistical Tables.** Section 9 includes 14 statistical tables that provide updated historical data concerning Board and System operations and activities.
- **Federal Reserve System Audits.** Section 10 provides detailed information on the several levels of audit and review conducted in regards to System operations and activities, including those provided by outside auditors and the Board's Office of Inspector General.
- **Federal Reserve System Organization.** Section 11 provides listings of key officials at the Board and in the Federal Reserve System, including the Board of Governors, its officers, FOMC members, several System councils, and Federal Reserve Bank and Branch officers and directors.

For More Background on Board Operations

For more information about the Federal Reserve Board and the Federal Reserve System, visit the Board's website at www.federalreserve.gov/aboutthefed/default.htm. An online version of this *Annual Report* is available at www.federalreserve.gov/pubs/alpha.htm.

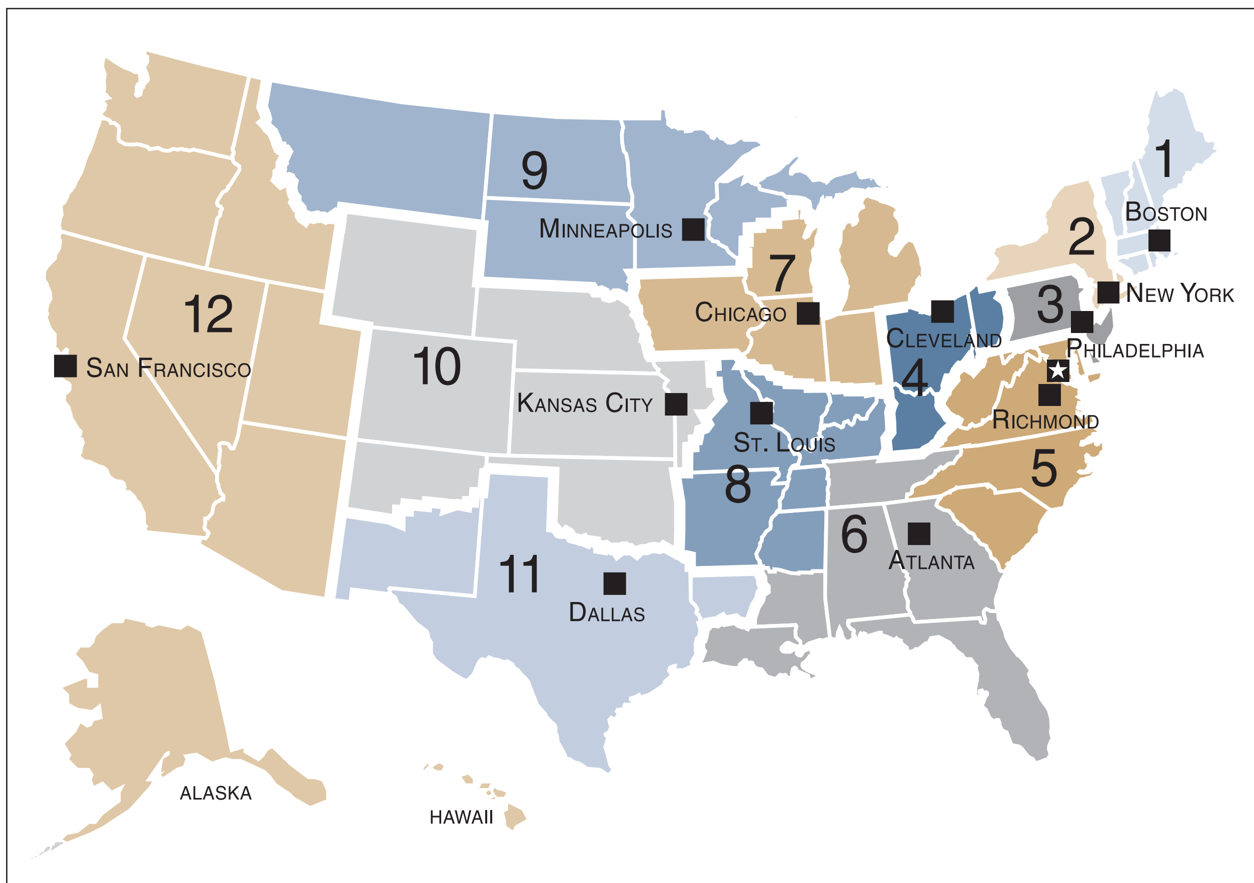
About the Federal Reserve System

The Federal Reserve System, which serves as the nation's central bank, was created by an act of Congress on December 23, 1913. The System consists of a seven-member Board of Governors with headquarters in Washington, D.C., and the 12 Reserve Banks located in major cities throughout the United States.

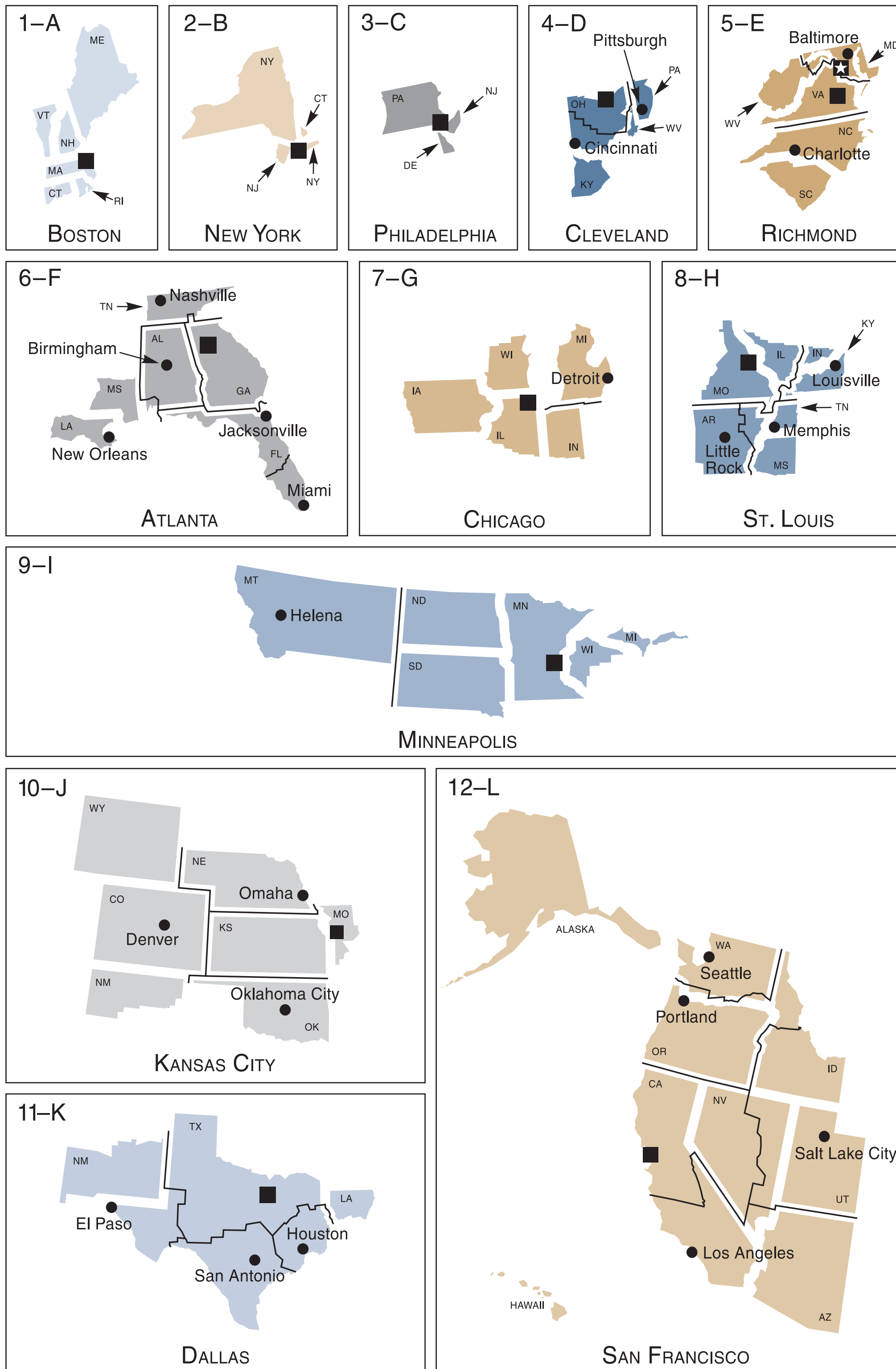
[1] For more information on the FOMC, see the Board's website at www.federalreserve.gov/monetarypolicy/fomc.htm.

The Federal Reserve Banks are the operating arms of the central banking system, carrying out a variety of System functions, including operating a nationwide payment system; distributing the nation's currency and coin; under authority delegated by the Board of Governors, supervising and regulating a variety of financial institutions and activities; serving as fiscal agents of the U.S. Treasury; and providing a variety of financial services for the Treasury, other government agencies, and other fiscal principals.

The maps below and opposite identify Federal Reserve Districts by their official number, city, and letter designation.



■ Federal Reserve Bank city
✪ Board of Governors of the Federal Reserve System, Washington, D.C.



■ Federal Reserve Bank city
● Federal Reserve Branch city
✪ Board of Governors of the Federal Reserve System, Washington, D.C.
— Branch boundary

Monetary Policy and Economic Developments

As required by section 2B of the Federal Reserve Act, the Federal Reserve Board submits written reports to the Congress that contain discussions of "the conduct of monetary policy and economic developments and prospects for the future." The *Monetary Policy Report,* submitted semiannually to the Senate Committee on Banking, Housing, and Urban Affairs and to the House Committee on Banking and Financial Services, is delivered concurrently with testimony from the Federal Reserve Board Chairman.

The following discussion is a review of U.S. monetary policy and economic developments in 2012, based on the *Monetary Policy Report*s published in February 2013 and July 2012. Those complete reports are available on the Board's website at www.federalreserve.gov/monetarypolicy/files/20130226_mprfullreport.pdf (February 2013) and www.federalreserve.gov/monetarypolicy/files/20120717_mprfullreport.pdf (July 2012).

Other materials in this annual report related to the conduct of monetary policy include the minutes of the 2012 meetings of the Federal Open Market Committee (see the "Minutes" section on page 123) and statistical tables 1–4 (see the "Statistical Tables" section on page 289).

Monetary Policy Report of February 2013

Summary

The U.S. economy continued to expand at a moderate rate, on average, over the second half of 2012. The housing recovery appeared to gain additional traction, consumer spending rose moderately, and business investment advanced further. Financial conditions eased over the period but credit remained tight for many households and businesses, and concerns about the course of federal fiscal policy and the ongoing European situation likely restrained private-sector demand. In addition, total government purchases continued to move lower in an environment of budget restraint, while export growth was held back by slow foreign economic growth. All told, real gross domestic product (GDP) is estimated to have increased at an average annual rate of 1½ percent in the second half of the year, similar to the pace in the first half.

Conditions in the labor market gradually improved. Employment increased at an average monthly pace of 175,000 in the second half of the year, about the same as in the first half. The unemployment rate moved down from 8¼ percent last summer to a little below 8 percent in January. Even so, the unemployment rate was still well above levels observed prior to the recent recession. Moreover, it remained the case that a large share of the unemployed had been out of work for more than six months, and that a significant portion of the employed had part-time jobs because they were unable to find full-time employment. Meanwhile, consumer price inflation remained subdued amid stable long-term inflation expectations and persistent slack in labor markets. Over the second half of the year, the price index for personal consumption expenditures increased at an annual rate of 1½ percent.

During the summer and fall, the Federal Open Market Committee (FOMC) judged that the economic recovery would strengthen only gradually over time, as some of the factors restraining activity—including restrictive credit for some borrowers, continuing concerns about the domestic and international economic environments, and the ongoing shift toward tighter federal fiscal policy—were thought likely to recede only slowly. Moreover, the Committee judged that the possibility of an escalation of the financial crisis in Europe and uncertainty about the course of fiscal policy in the United States posed significant downside risks to the outlook for economic activity. However, the Committee expected that, with appropriate monetary accommodation, economic growth would proceed at a moderate pace, with the unemployment rate gradually declining toward levels consistent with

the FOMC's dual mandate of maximum employment and price stability. Against this backdrop, and with long-run inflation expectations well anchored, the FOMC projected that inflation would remain at or below the rate consistent with the Committee's dual mandate.

Accordingly, to promote its objectives, the FOMC provided additional monetary accommodation during the second half of 2012 by both strengthening its forward guidance regarding the federal funds rate and initiating additional asset purchases. In September, the Committee announced that it would continue its program to extend the average maturity of its Treasury holdings and would begin purchasing additional agency-guaranteed mortgage-backed securities (MBS) at a pace of $40 billion per month. The Committee also stated its intention to continue its purchases of agency MBS, undertake additional asset purchases, and employ its other policy tools as appropriate until the outlook for the labor market improves substantially in a context of price stability. The Committee agreed that in determining the size, pace, and composition of its asset purchases, it would, as always, take account of the likely efficacy and costs of such purchases. The Committee also modified its forward guidance regarding the federal funds rate at the September meeting, noting that exceptionally low levels for the federal funds rate were likely to be warranted at least through mid-2015, longer than had been indicated in previous FOMC statements. Moreover, the Committee stated its expectation that a highly accommodative stance of monetary policy would remain appropriate for a considerable time after the economic recovery strengthens.

In December, the Committee announced that in addition to continuing its purchases of agency MBS, it would purchase longer-term Treasury securities, initially at a pace of $45 billion per month, starting after the completion at the end of the year of its program to extend the maturity of its Treasury holdings. It also further modified its forward rate guidance, replacing the earlier date-based guidance with numerical thresholds for the unemployment rate and projected inflation. In particular, the Committee indicated that it expected the exceptionally low range for the federal funds rate would remain appropriate at least as long as the unemployment rate remains above 6½ percent, inflation between one and two years ahead is projected to be no more than ½ percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored.

Partly in response to this additional monetary accommodation, as well as to improved sentiment regarding the situation in Europe, broad financial conditions eased over the second half of 2012. Although yields on nominal Treasury securities rose, on net, yields on inflation-protected Treasury securities declined, and longer-term interest rates paid by households and firms generally fell. Yields on agency MBS and investment- and speculative-grade corporate bonds touched record lows, and broad equity price indexes rose. Conditions in short-term dollar funding markets eased over the summer and remained stable thereafter, and market sentiment toward the banking industry improved. Nonetheless, credit remained tight for borrowers with lower credit scores, and borrowing conditions for small businesses continued to improve more gradually than for large firms.

At the time of the most recent FOMC meeting in January, Committee participants saw the economic outlook as little changed or modestly improved from the time of their December meeting, when the most recent Summary of Economic Projections (SEP) was compiled. (The December SEP is included as Part 3 of the February 2013 *Monetary Policy Report* on pages 43–57; it is also included in the "Minutes" section of this annual report on page 272.) Participants generally judged that strains in global financial markets had eased somewhat, and that the downside risks to the economic outlook had lessened. Under the assumption of appropriate monetary policy—that is, policy consistent with the Committee's Statement on Longer-Run Goals and Monetary Policy Strategy (see box 1)—FOMC participants expected the economy to expand at a moderate pace, with the unemployment rate gradually declining and inflation remaining at or below the Committee's 2 percent longer-run goal.

Box 1. Statement on Longer-Run Goals and Monetary Policy Strategy

As amended effective on January 29, 2013

The Federal Open Market Committee (FOMC) is firmly committed to fulfilling its statutory mandate from the Congress of promoting maximum employment, stable prices, and moderate long-term interest rates. The Committee seeks to explain its monetary policy decisions to the public as clearly as possible. Such clarity facilitates well-informed decisionmaking by households and businesses, reduces economic and financial uncertainty, increases the effectiveness of monetary policy, and enhances transparency and accountability, which are essential in a democratic society.

Inflation, employment, and long-term interest rates fluctuate over time in response to economic and financial disturbances. Moreover, monetary policy actions tend to influence economic activity and prices with a lag. Therefore, the Committee's policy decisions reflect its longer-run goals, its medium-term outlook, and its assessments of the balance of risks, including risks to the financial system that could impede the attainment of the Committee's goals.

The inflation rate over the longer run is primarily determined by monetary policy, and hence the Committee has the ability to specify a longer-run goal for inflation. The Committee judges that inflation at the rate of 2 percent, as measured by the annual change in the price index for personal consumption expenditures, is most consistent over the longer run with the Federal Reserve's statutory mandate. Communicating this inflation goal clearly to the public helps keep longer-term inflation expectations firmly anchored, thereby fostering price stability and moderate long-term interest rates and enhancing the Committee's ability to promote maximum employment in the face of significant economic disturbances.

The maximum level of employment is largely determined by nonmonetary factors that affect the structure and dynamics of the labor market. These factors may change over time and may not be directly measurable. Consequently, it would not be appropriate to specify a fixed goal for employment; rather, the Committee's policy decisions must be informed by assessments of the maximum level of employment, recognizing that such assessments are necessarily uncertain and subject to revision. The Committee considers a wide range of indicators in making these assessments. Information about Committee participants' estimates of the longer-run normal rates of output growth and unemployment is published four times per year in the FOMC's Summary of Economic Projections. For example, in the most recent projections, FOMC participants' estimates of the longer-run normal rate of unemployment had a central tendency of 5.2 percent to 6.0 percent, unchanged from one year ago but substantially higher than the corresponding interval several years earlier.

In setting monetary policy, the Committee seeks to mitigate deviations of inflation from its longer-run goal and deviations of employment from the Committee's assessments of its maximum level. These objectives are generally complementary. However, under circumstances in which the Committee judges that the objectives are not complementary, it follows a balanced approach in promoting them, taking into account the magnitude of the deviations and the potentially different time horizons over which employment and inflation are projected to return to levels judged consistent with its mandate.

The Committee intends to reaffirm these principles and to make adjustments as appropriate at its annual organizational meeting each January.

Part 1 Recent Economic and Financial Developments

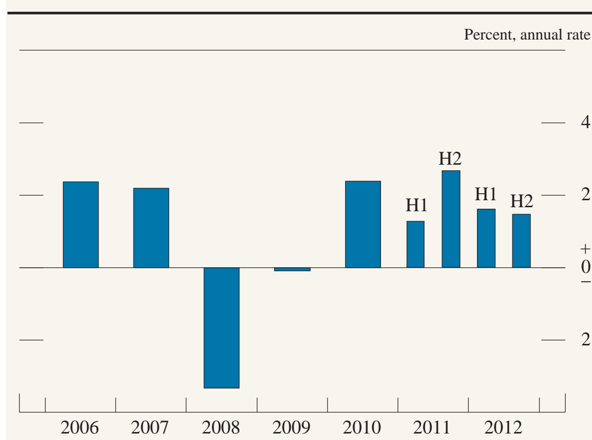
Real gross domestic product (GDP) increased at a moderate annual rate of 1½ percent, on average, in the second half of 2012—similar to the rate of increase in the first half—as various headwinds continued to restrain growth. Financial conditions eased over the second half in response to the additional monetary accommodation provided by the Federal Open Market Committee (FOMC) and to improved sentiment regarding the crisis in Europe. However, credit availability remained tight for many households and businesses. In addition, declines in real government purchases continued to weigh on economic activity, as did household and business concerns about the economic outlook, while weak foreign demand restrained exports. In this environment, conditions in the labor market continued to improve gradually but remained weak. At a little under 8 percent in January, the unemployment rate was still well above levels prevailing prior to the recent recession. Inflation remained subdued at the end of last year, with consumer prices rising at about a 1½ percent annual rate in the second half, and measures of longer-run inflation expectations remained in the narrow ranges seen over the past several years.

Domestic Developments

GDP increased moderately but continued to be restrained by various headwinds

Real GDP is estimated to have increased at an annual rate of 3 percent in the third quarter but to have been essentially flat in the fourth, as economic activity was

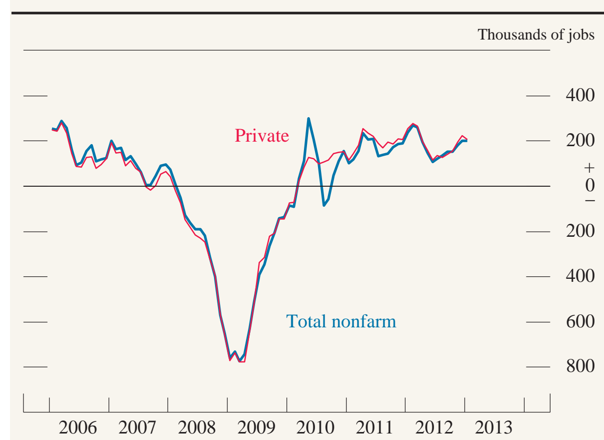
Figure 1. Change in real gross domestic product, 2006–12



Note: Here and in subsequent figures, except as noted, change for a given period is measured to its final quarter from the final quarter of the preceding period.

Source: Department of Commerce, Bureau of Economic Analysis.

Figure 2. Net change in payroll employment, 2006–13

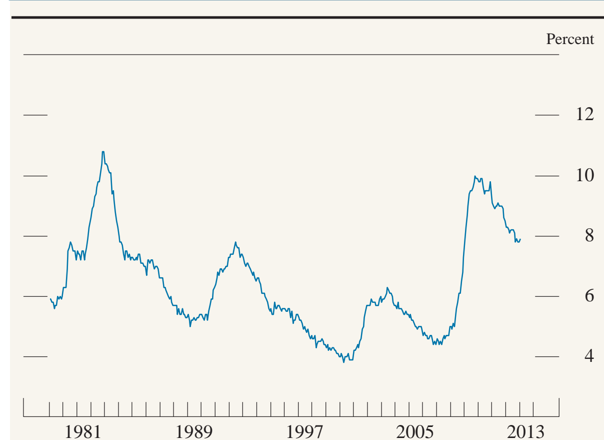


Note: The data are three-month moving averages and extend through January 2013.

Source: Department of Labor, Bureau of Labor Statistics.

temporarily restrained by weather-related disruptions and declines in some erratic categories of spending, including inventory investment and federal defense spending.[1] On average, real GDP expanded at an annual rate of 1½ percent in the second half of 2012, similar to the pace of increase in the first half of the year (figure 1). The housing recovery gained additional traction, consumer spending continued to increase moderately, and business investment rose further. However, a severe drought in much of the country held down farm production, and disruptions from Hurricane Sandy also likely held back economic activity somewhat in the fourth quarter. More fundamentally, some of the same factors that restrained growth in the first half of last year likely continued to weigh on activity. Although financial conditions continued to improve overall, the financial system has not fully recovered from the financial crisis, and banks remained cautious in their lending to many households and businesses. In particular, restricted financing for home mortgages and new-home construction projects, along with the depressing effects on housing demand of an uncertain outlook for house prices and jobs, kept the level of activity in the housing sector well below longer-run norms. Budgetary pressures at all levels of government also continued to weigh on GDP growth. Moreover, businesses and households remained concerned about many aspects of the economic environment, including the uncertain course of U.S. fiscal policy at the turn of

Figure 3. Civilian unemployment rate, 1979–2013



Note: The data are monthly and extend through January 2013.

Source: Department of Labor, Bureau of Labor Statistics.

the year as well as the still-worrisome European situation and the slow recovery more generally.

The labor market improved somewhat, but the unemployment rate remained high

In this economic environment, firms increased their workforces moderately. Over the second half of last year, nonfarm payroll employment rose an average of about 175,000 per month, similar to the average increase in the first half (figure 2). These job gains helped lower the unemployment rate from 8.2 percent in the second quarter of last year to 7.9 percent in January (figure 3). Nevertheless, the unemployment rate remained much higher than it was prior to the recent recession, and long-term unemployment con-

[1] Data for the fourth quarter of 2012 from the national income and product accounts reflect the advance estimate released on January 30, 2013.

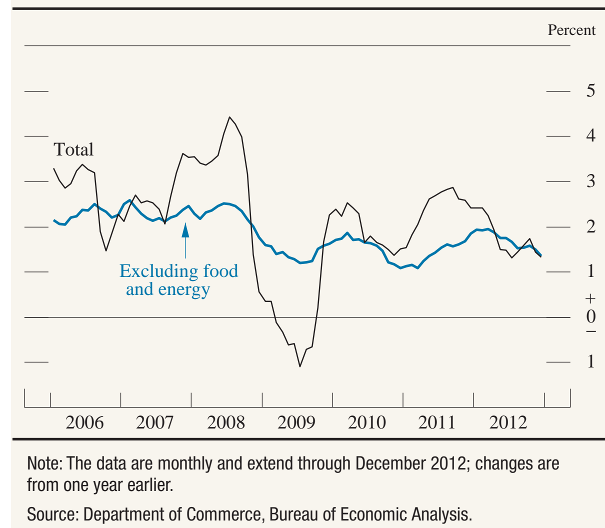
tinued to be widespread. In the fourth quarter, about 40 percent of the unemployed had been out of work for more than six months. Moreover, the proportion of workers employed part time because they were unable to find full-time work remained elevated. Some of the increase in the unemployment rate since the beginning of the recent recession could reflect structural changes in the labor market—such as a greater mismatch between the types of jobs that are open and the skills of workers available to fill them—that would reduce the maximum sustainable level of employment. However, most of the economic analysis on this subject suggests that the bulk of the increase in unemployment probably reflects a deficiency in labor demand.[2] As a result, the unemployment rate likely remains well above levels consistent with maximum sustainable employment.

As described in the box "Assessing Conditions in the Labor Market" (see pages 8–9 of the February 2013 *Monetary Policy Report*), the unemployment rate appears to be a very good indicator of labor market conditions. That said, other indicators also provide important perspectives on the health of the labor market, and the most accurate assessment of labor market conditions can be obtained by combining the signals from many such indicators. Aside from the decline in the unemployment rate, probably the most important other pieces of evidence corroborating the gradual improvement in labor market conditions over the second half of last year were the gains in nonfarm payrolls noted earlier and the slight net reduction in initial claims for unemployment insurance.

Restrained by the ongoing weak conditions in the labor market, labor compensation has increased slowly. The employment cost index for private industry workers, which encompasses both wages and the cost to employers of providing benefits, increased only 2 percent over the 12 months of 2012, similar to the rate of gain since 2010. Similarly, nominal compensation per hour in the nonfarm business sector—a measure derived from the labor compensation data in the national income and product accounts

2 See, for example, Mary C. Daly, Bart Hobijn, Ayşegül Şahin, and Robert G. Valletta (2012), "A Search and Matching Approach to Labor Markets: Did the Natural Rate of Unemployment Rise?" *Journal of Economic Perspectives,* vol. 26 (Summer), pp. 3–26; Michael W. L. Elsby, Bart Hobijn, Ayşegül Şahin, and Robert G. Valletta (2011), "The Labor Market in the Great Recession—An Update to September 2011," *Brookings Papers on Economic Activity,* Fall, pp. 353–71; and Jesse Rothstein (2012), "The Labor Market Four Years into the Crisis: Assessing Structural Explanations," *ILRReview*, vol. 65 (July), pp. 467–500.

Figure 4. Change in the chain-type price index for personal consumption expenditures, 2006–12



Note: The data are monthly and extend through December 2012; changes are from one year earlier.

Source: Department of Commerce, Bureau of Economic Analysis.

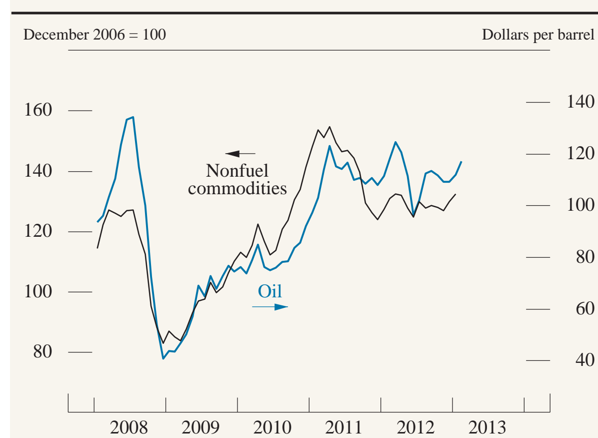
(NIPA)—increased 2½ percent over the four quarters of 2012, well below average increases of close to 4 percent in the years prior to the recent recession. As a result of these modest gains, nominal compensation has increased only about as fast as consumer prices over the recovery.

Inflation remained low . . .

Consumer price inflation was low over the second half of 2012. With considerable slack in labor markets and limited increases in labor costs, relatively stable prices for commodities and imports, and well-anchored longer-term inflation expectations, prices for personal consumption expenditures (PCE) increased at an annual rate of 1½ percent in the second half of the year, similar to the rate of increase in the first half (figure 4). Excluding food and energy prices, consumer prices increased only 1 percent in the second half of the year, down from 2 percent in the first half. A deceleration in prices of imported goods likely contributed to the low rate of inflation seen in the second half, though price increases for non-energy services were also low.

As noted, gains in labor compensation have been subdued given the weak conditions in labor markets, and unit labor costs—which measure the extent to which compensation rises in excess of productivity—have increased very little over the recovery. That said, compensation per hour rose more rapidly last year, and productivity growth, which has averaged 1½ percent per year over the recovery, was relatively low. As

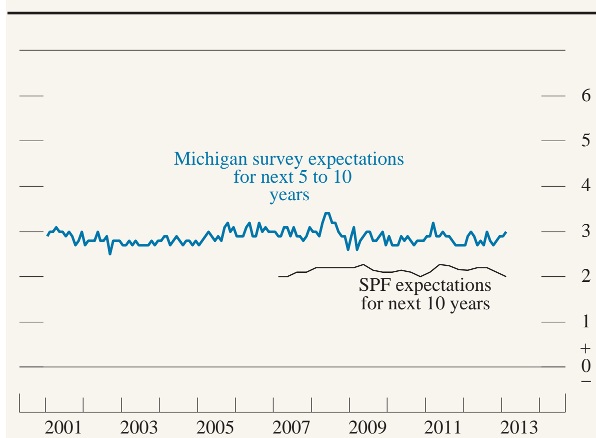
Figure 5. Prices of oil and nonfuel commodities, 2008–13



Note: The data are monthly. The oil price is the spot price of Brent crude oil, and the last observation is the average for February 1–21, 2013. The price of nonfuel commodities is an index of 45 primary-commodity prices and extends through January 2013.

Source: For oil, the Commodity Research Bureau; for nonfuel commodities, International Monetary Fund.

Figure 6. Median inflation expectations, 2001–13



Note: The Michigan survey data are monthly and extend from January 2001 through a preliminary estimate for February 2013. The SPF data are quarterly and extend from 2007:Q1 through 2013:Q1.

Source: Thomson Reuters/University of Michigan Surveys of Consumers and Survey of Professional Forecasters (SPF).

a result, unit labor costs rose 2 percent in 2012, well above average increases earlier in the recovery.

Global oil prices rose in early 2012 but subsequently gave up those gains and remained about flat through the later part of the year (figure 5). Developments related to Iran, including a tightening embargo on Iranian oil exports, likely put upward pressure on prices, but these pressures were apparently offset by continued concerns about weak global demand. However, in recent weeks, global oil prices have increased in response to generally positive demand indicators from China and some reductions in Saudi production. Partly in response to this rise, retail gasoline prices, which changed little, on net, over 2012, have moved up appreciably.

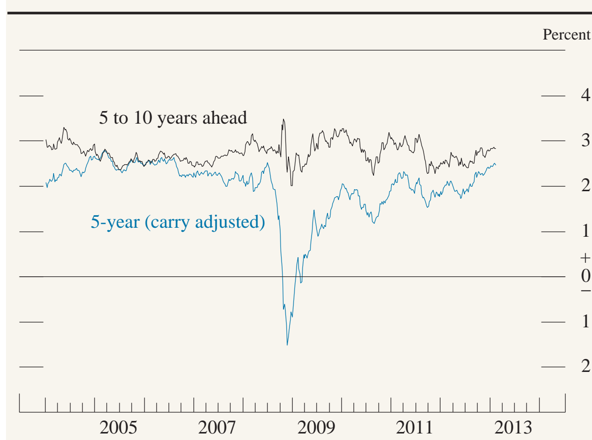
Nonfuel commodity prices have remained relatively flat over the past year despite significant movements in the prices of a few specific commodities. Of particular interest, prices for corn and soybeans eased some over the fall after having risen sharply during the summer as the scale of the drought affecting much of the United States became apparent. Given this easing and the small share of grain costs in the retail price of food, the effect of the drought on U.S. consumer food prices is likely to be modest: Consumer food prices rose at an annual rate of 2 percent in the fourth quarter following increases of less than 1 percent in the middle of last year.

In line with these flat overall commodity prices, as well as earlier dollar appreciation, prices for imported goods excluding oil were about unchanged on average over the last five months of 2012 and the early part of 2013.

. . . and longer-term inflation expectations stayed in their historical range

Survey measures of longer-term inflation expectations have changed little, on net, since last summer. Median expected inflation over the next 5 to 10 years, as reported in the Thomson Reuters/University of Michigan Surveys of Consumers, was 3 percent in early February, within the narrow range of the past 10 years (figure 6). In the Survey of Professional Forecasters, conducted by the Federal Reserve Bank of Philadelphia, the median expectation for the increase in the price index for PCE over the next 10 years was 2 percent in the first quarter of this year, similar to its level in recent years. A measure of 5-year inflation compensation derived from nominal and inflation-protected Treasury securities has increased 55 basis points since the end of June, while a similar measure of inflation compensation for the period 5 to 10 years ahead has increased about 30 basis points; both measures are within their respective ranges observed in the several years before the recent financial crisis (figure 7). While the increases in these measures could reflect changes in market participants' expectations of future inflation, they may also have been affected by improved investor risk sentiment and an associated reduction in

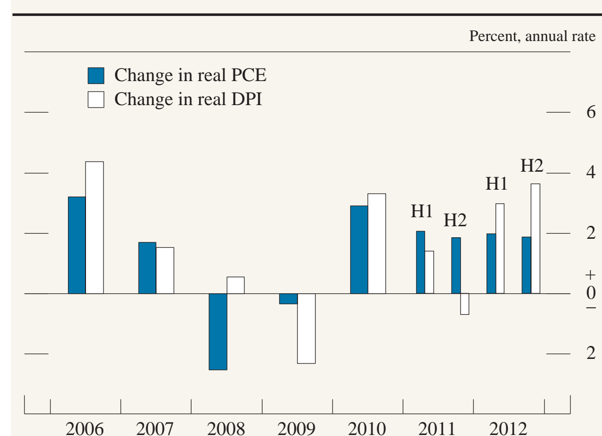
Figure 7. Inflation compensation, 2004–13



Note: The data are weekly averages of daily data and extend through February 15, 2013. Inflation compensation is the difference between yields on nominal Treasury securities and Treasury inflation-protected securities (TIPS) of comparable maturities, based on yield curves fitted to off-the-run nominal Treasury securities and on- and off-the-run TIPS. The 5-year measure is adjusted for the effect of indexation lags.

Source: Federal Reserve Bank of New York; Barclays; Federal Reserve Board staff estimates.

Figure 8. Change in real personal consumption expenditures and disposable personal income, 2006–12



Note: The data are quarterly and extend through 2012:Q4.

Source: Department of Commerce, Bureau of Economic Analysis.

demand for the relatively greater liquidity of nominal Treasury securities.

Consumer spending continued to increase moderately

Turning to some important components of final demand, real PCE increased at a moderate annual rate of 2 percent over the second half of 2012, similar to the rate of increase in the first half (figure 8). Household wealth—buoyed by increases in house prices and equity values—moved up over the second half of the year and provided some support for consumer spending. In addition, for those households with access to credit, low interest rates spurred spending on motor vehicles and other consumer durables, which increased at an annual rate of 11 percent over the second half of last year. But increases in real wages and salaries were modest over the second half of the year, and overall growth in consumer spending continued to be held back by concerns about the economic outlook and limited access to credit for some households. After rising earlier in the year, consumer sentiment—which reflects household views on their own financial situations as well as broader economic conditions—fell back at the end of the year and stood well below longer-run norms.

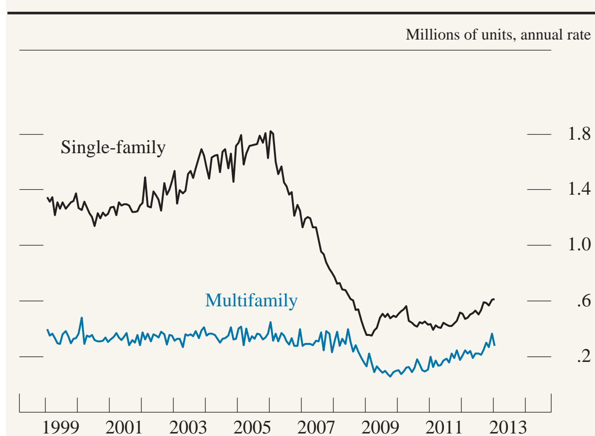
Real disposable personal income (DPI) rose at an annual rate of 3½ percent over the second half of 2012. However, much of this increase was a result of unusually large increases in dividends and employee bonuses, as many firms apparently shifted income disbursements into 2012 in anticipation of an increase in marginal tax rates for high-income households at the beginning of this year. Excluding these special payments, real DPI is estimated to have increased at a modest annual rate of 1¼ percent over the second half of the year, similar to the average pace of increase over the recovery. The surge in dividend and bonus payments also led the personal saving rate to jump from 3.8 percent in the second quarter to 4.7 percent in the fourth quarter. In their absence, the saving rate would have likely been little changed over the second half of the year.

Households continue to pay down debt and gain access to credit

Household debt—the sum of mortgage and consumer debt—edged down further in the third quarter of 2012 as a continued contraction in mortgage debt more than offset a solid expansion in consumer credit. With the reduction in household debt, low levels of most interest rates, and modest income growth, the household debt service ratio—the ratio of required principal and interest payments on outstanding household debt to DPI—decreased further and, at the end of the third quarter, stood at a level last seen in 1983.

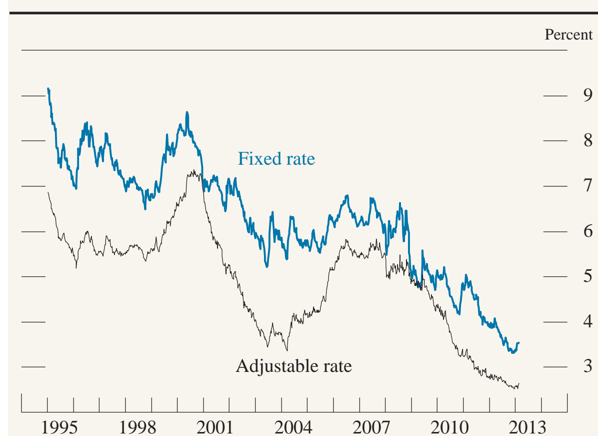
Consumer credit expanded at an annual rate of about 5¼ percent in the second half of 2012. Nonrevolving credit (mostly auto loans and student loans), which accounts for about two-thirds of total consumer credit outstanding, drove the increase. Revolving consumer credit (primarily credit card lending) was

Figure 9. Private housing starts, 1999–2013



Note: The data are monthly and extend through January 2013.
Source: Department of Commerce, Bureau of the Census.

Figure 10. Mortgage interest rates, 1995–2013



Note: The data, which are weekly and extend through February 20, 2013, are contract rates on 30-year mortgages.
Source: Federal Home Loan Mortgage Corporation.

about flat on net. Overall, the increase in nonrevolving consumer credit is consistent with banks' recent responses to the Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS), which indicated that demand had strengthened and standards eased, on net, for auto loans.[3]

Changes in interest rates on consumer loans were mixed over the second half of 2012. Interest rates on auto loans declined a bit, as did most measures of the spreads of rates on these loans over yields on Treasury securities of comparable maturity. Interest rates on credit card debt quoted by banks generally declined slightly, while rates observed in credit card offer mailings continued to increase.

The housing market recovery gained traction . . .

The housing market has continued to recover. Housing starts, sales of new and existing homes, and builder and realtor sentiment all increased over the second half of last year, and residential investment rose at an annual rate of nearly 15 percent. Combined, single-family and multifamily housing starts rose from an average annual rate of 740,000 in the second quarter of last year to 900,000 in the fourth quarter (figure 9). Activity increased most noticeably in the smaller multifamily sector—where starts have nearly reached pre-recession levels—as demand for new housing has apparently shifted toward smaller rental units and away from larger, typically owner-occupied single-family units.

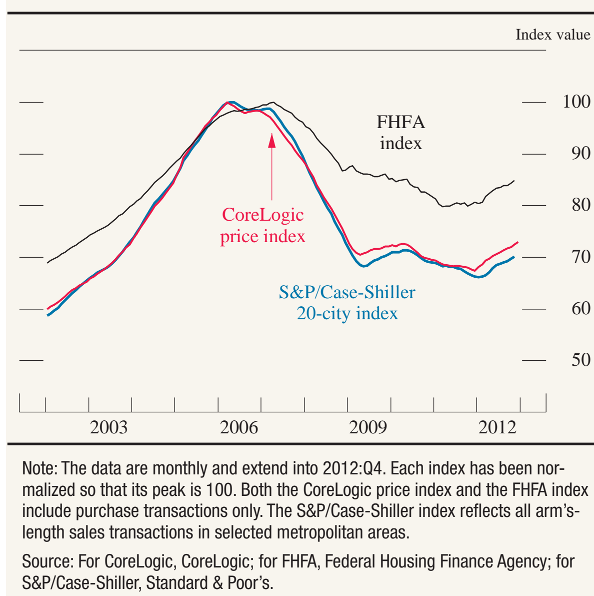
. . . as mortgage interest rates reached record lows and house prices rose . . .

Mortgage interest rates declined to historically low levels toward the end of 2012—importantly reflecting Federal Reserve policy actions—making housing quite affordable for households with good credit ratings (figure 10). However, the spread between mortgage rates and yields on agency-guaranteed mortgage-backed securities (MBS) remained elevated by historical standards. This unusually wide spread probably reflects still-elevated risk aversion and some capacity constraints among mortgage originators. Overall, refinance activity increased briskly over the second half of 2012—though it was still less than might have been expected, given the level of interest rates—while the pace of mortgage applications for home purchases remained sluggish. Recent responses to the SLOOS indicate that banks' lending standards for residential mortgage loans were little changed over the second half of 2012.

House prices, as measured by several national indexes, continued to increase in the second half of 2012. For example, the CoreLogic repeat-sales index rose 3½ percent (not an annual rate) over the last six months of the year to reach its highest level since late 2008 (figure 11). This recent improvement notwith-

[3] The SLOOS is available on the Federal Reserve Board's website at www.federalreserve.gov/boarddocs/SnLoanSurvey.

Figure 11. Prices of existing single-family houses, 2002–12



Note: The data are monthly and extend into 2012:Q4. Each index has been normalized so that its peak is 100. Both the CoreLogic price index and the FHFA index include purchase transactions only. The S&P/Case-Shiller index reflects all arm's-length sales transactions in selected metropolitan areas.

Source: For CoreLogic, CoreLogic; for FHFA, Federal Housing Finance Agency; for S&P/Case-Shiller, Standard & Poor's.

standing, this measure of house prices remained 27 percent below its peak in early 2006.

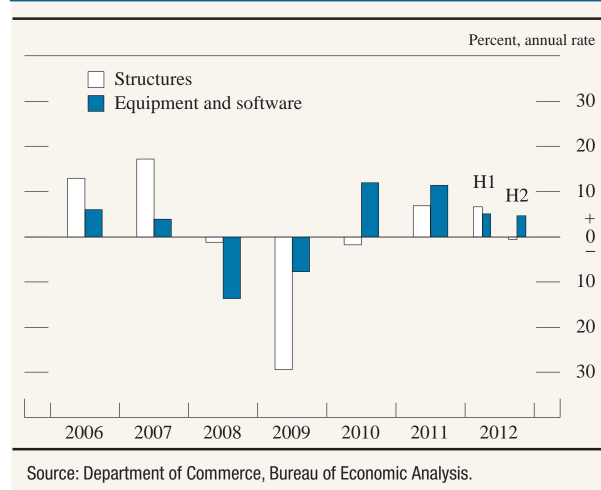
. . . but the level of new construction remained low, and mortgage delinquencies remained elevated

Despite the improvements seen over the second half of 2012, housing starts remained well below the 1960–2000 average of 1.5 million per year, as concerns about the job market and tight mortgage credit for less-credit-worthy households continued to restrain demand for housing. In addition, although the number of vacant homes for sale has declined significantly, the stock of vacant homes held off the market remained quite elevated. Once put on the market, this "shadow" inventory, which likely includes many bank-owned properties, may redirect some demand away from new homes and toward attractively priced existing homes. With home values depressed and unemployment still high, measures of late-stage mortgage delinquency, such as the inventory of properties in foreclosure, remained elevated, keeping high the risk of homes transitioning to vacant bank-owned properties.

Growth of business investment has slowed since earlier in the recovery

After increasing at double-digit rates in 2010 and 2011, business expenditures on equipment and software (E&S) decelerated in 2012 (figure 12). Pent-up demand for capital goods, an important contributor to earlier increases in E&S spending, has likely

Figure 12. Change in real business fixed investment, 2006–12



Source: Department of Commerce, Bureau of Economic Analysis.

diminished as the recovery has aged. In addition, concerns about possible threats to economic growth and stability from U.S. fiscal policy and the situation in Europe may have contributed to soft investment spending in the middle of last year. As a result, despite a pickup in the pace of gains toward the end of the year, E&S investment increased at an annual rate of 5 percent in the second half of the year, similar to the first-half pace. As for business investment in structures, a sustained recovery has yet to take hold, as high vacancy rates, tight credit for new construction, and low prices for commercial real estate (CRE) are still hampering investment in new buildings. However, in the drilling and mining sector, elevated oil prices and new drilling technologies have kept investment in structures at a relatively high level.

Inventory investment remained at a moderate level in the second half of last year, as limited growth in final sales and the uncertain economic environment continued to limit firms' incentives to accumulate inventories. Census Bureau measures of book-value inventory-to-sales ratios, as well as surveys of private inventory satisfaction and plans, generally suggest that stocks were fairly well aligned with sales at the end of 2012.

Corporate earnings growth slowed, but firms' balance sheets remained strong

After having risen 6 percent over the first half of 2012, aggregate operating earnings per share for S&P 500 firms were about flat on a seasonally adjusted basis in the second half of 2012, held down, in part, by weak demand from Europe and some emerging market economies (EMEs). However, the ratio of

corporate profits to gross national product in the second half of 2012 hovered around its historical high, and cash flow remained solid. In addition, the ratio of liquid assets to total assets for nonfinancial corporations was close to its highest level in more than 20 years, and the aggregate debt-to-asset ratio remained low by historical standards.

With corporate credit quality remaining robust and interest rates at historically low levels, nonfinancial firms continued to raise funds at a strong pace in the second half of 2012. Bond issuance by both investment- and speculative-grade nonfinancial firms was extraordinarily strong, although much of the proceeds from bond issuance appeared to be earmarked for the refinancing of existing debt. Meanwhile, nonfinancial commercial paper (CP) outstanding was about unchanged. Issuance in the institutional segment of the syndicated leveraged loan market accelerated in the second half of the year, boosted by rapid growth of newly established collateralized loan obligations. Commercial and industrial (C&I) loans outstanding at commercial banking organizations in the United States continued to expand at a brisk pace in the second half of 2012. Moreover, according to the SLOOS, modest net fractions of banks continued to report having eased their lending standards on C&I loans over the second half of the year, and large net fractions of banks indicated having reduced the spread of rates on C&I loans over their cost of funds, largely in response to increased competition from other banks or nonbank lenders.

Gross public equity issuance by nonfinancial firms slowed a bit in the second half of 2012, held down by a moderate pace of initial public offerings. Meanwhile, data for the third quarter of 2012 indicate that net equity issuance remained deeply negative, as share repurchases and cash-financed mergers by nonfinancial firms remained robust.

Borrowing conditions for small businesses continued to improve, albeit more gradually than for large firms

Borrowing conditions for small businesses continued to improve over the second half of 2012, but as has been the case in recent years, the improvement was more gradual than for larger firms. Moreover, the demand for credit from small firms apparently remained subdued. C&I loans with original amounts of $1 million or less—a large share of which likely consist of loans to small businesses—rose slightly in the second half of 2012, at about the same rate that prevailed in the first half. Recent readings from the Survey of Terms of Business Lending indicate that the spreads charged by commercial banks on newly originated C&I loans with original amounts less than $1 million, while still quite elevated, continued to decline.[4]

According to surveys conducted by the National Federation of Independent Business during the second half of 2012, the fraction of small businesses with borrowing needs stayed low. The net percentage of respondents that found credit more difficult to obtain than three months prior edged up, on balance, over this period, as did the net percentage that expected tighter credit conditions over the next three months; both measures remained at relatively high levels in the January survey.

Financial conditions in the commercial real estate sector eased but remained relatively tight

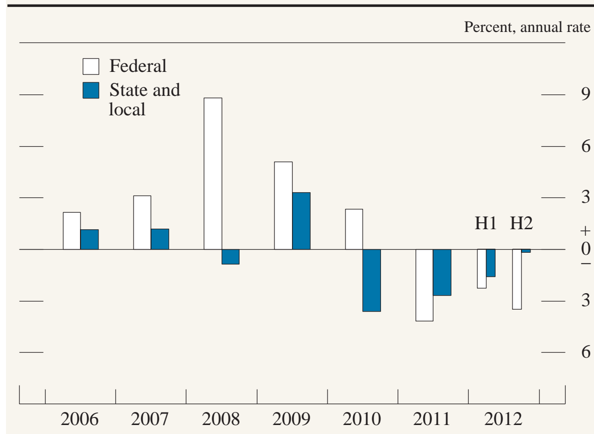
Financial conditions in the CRE sector continued to ease but remained relatively tight amid weak fundamentals. According to the SLOOS, a modest net fraction of banks reported having eased standards on CRE loans over the second half of last year, and a significant net fraction of banks reported increased demand for such loans. Consistent with these readings, the multiyear contraction in banks' holdings of CRE loans continued to slow and, indeed, came roughly to a halt as banks' holdings of CRE loans were about flat over the last quarter of 2012. Issuance of commercial mortgage-backed securities (CMBS) continued to increase over the second half of 2012 from the low levels observed in 2011. Nonetheless, the delinquency rate on loans in CMBS pools remained extremely high, as some borrowers with five-year loans issued in 2007 were unable to refinance upon the maturity of those loans because of high loan-to-value ratios. While delinquency rates for CRE loans at commercial banks continued to decline, they remained somewhat elevated, especially for construction and land development loans.

Budget strains for state and local governments eased, but federal purchases continued to decline

Strains on state and local government budgets appear to have lessened some since earlier in the recovery. Although federal grants provided to state governments in the American Recovery and Reinvestment Act have essentially phased out, state and local tax

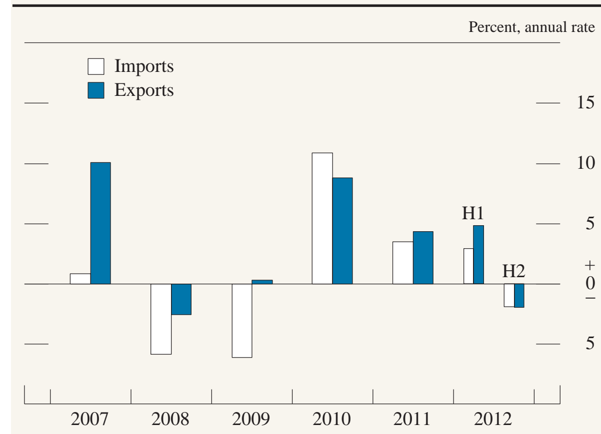
[4] Data releases for the Survey of Terms of Business Lending are available on the Federal Reserve Board's website at www.federalreserve.gov/releases/e2/default.htm.

Figure 13. Change in real government expenditures on consumption and investment, 2006–12



Source: Department of Commerce, Bureau of Economic Analysis.

Figure 14. Change in real imports and exports of goods and services, 2007–12



Source: Department of Commerce, Bureau of Economic Analysis.

receipts, which have been increasing since 2010, rose moderately further over the second half of last year. Accordingly, after declining at an annual rate of 1½ percent in the first half of last year, real government purchases at the state and local level changed little in the second half (figure 13). Similarly, employment levels at states and municipalities, which had been declining since 2009, changed little, on balance, over the second half of last year.

Federal purchases continued to decline over the second half of 2012, reflecting ongoing efforts to reduce the budget deficit and the scaling back of overseas military activities. As measured in the NIPA, real federal expenditures on consumption and gross investment—the part of federal spending included in the calculation of GDP—fell at an annual rate of 3½ percent over the second half of 2012. Real defense spending fell at an annual rate of a little over 6 percent, while nondefense purchases increased at an annual rate of 2 percent.

The deficit in the federal unified budget remains high. The budget deficit for fiscal year 2012 was $1.1 trillion, or 7 percent of nominal GDP, down from the deficit recorded in 2011 but still sharply higher than the deficits recorded prior to the onset of the last recession. The narrowing of the budget deficit relative to fiscal 2011 reflected an increase in tax revenues that largely stemmed from the gradual increase in economic activity as well as a decline in spending. Despite the rise in tax revenues, the ratio of federal receipts to national income, at 16 percent in fiscal 2012, remained near the low end of the range for this ratio over the past 60 years. The ratio of federal outlays to GDP declined but was still high by historical standards, at 23 percent. With deficits still large, federal debt held by the public rose to 73 percent of nominal GDP in the fourth quarter of 2012, 5 percentage points higher than at the end of 2011.

Net exports added modestly to real GDP growth

Real imports of goods and services contracted at an annual rate of nearly 2 percent over the second half of 2012, held back by the sluggish pace of U.S. demand (figure 14). The decline in imports was fairly broad based across major trading partners and categories of trade.

Real exports of goods and services also fell at an annual rate of about 2 percent in the second half despite continued expansion in demand from EMEs. Exports were dragged down by a steep falloff in demand from the euro area and declining export sales to Japan, consistent with weak economic conditions in those areas. In contrast, exports to Canada remained essentially flat. Across the major categories of exports, industrial supplies, automotive products, and agricultural goods contributed to the overall decrease.

Overall, real net exports added an estimated 0.1 percentage point to real GDP growth in the second half of 2012, according to the advance estimate of GDP from the Bureau of Economic Analysis, but data received since then suggest a somewhat larger positive contribution.

The nominal trade deficit shrank, on net, over the second half of 2012, contributing to the narrowing of

the current account deficit to 2¾ percent of GDP in the third quarter. The trade deficit as a share of GDP narrowed substantially in late 2008 and early 2009 when U.S. imports dropped sharply, in part reflecting the steep decline in oil prices. Since then, the trade deficit as a share of GDP has remained close to its 2009 level: Although imports recovered from their earlier drop, exports strengthened as well.

The current account deficit in the third quarter was financed by strong inflows from foreign official institutions and by foreign private purchases of Treasury securities and equities. More-recent data suggest continued strong foreign purchases of Treasury securities and equities in the fourth quarter of 2012. Consistent with improved market sentiment over the third quarter, U.S. investors also increased their holdings of foreign assets.

National saving is very low

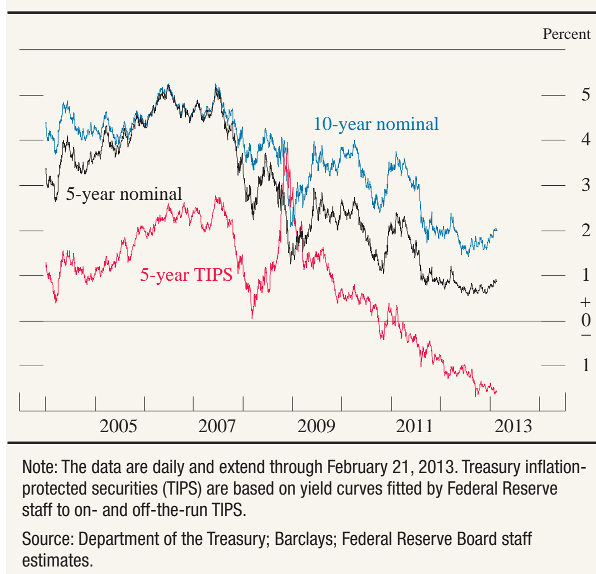
Total U.S. net national saving—that is, the saving of U.S. households, businesses, and governments, net of depreciation charges—remains extremely low by historical standards. In the third quarter of last year, net national saving as a percent of nominal GDP was close to zero. The relative flatness of the national saving rate over the past few years reflects the offsetting effects of a narrowing in the federal budget deficit as a share of nominal GDP and a downward movement in the private saving rate. National saving will likely remain low this year, in light of the still-large federal budget deficit. A portion of the decline in federal savings relative to pre-recession levels is cyclical and would be expected to reverse as the economy recovers. If low levels of national saving persist over the longer run, they will likely be associated with both low rates of capital formation and heavy borrowing from abroad, limiting the rise in the standard of living for U.S. residents over time.

Financial Developments

Expectations regarding the future stance of monetary policy reflected the additional accommodation provided by the Federal Open Market Committee . . .

In response to the steps taken by the FOMC to provide additional monetary policy accommodation over the second half of 2012, market participants pushed out the date when they expect the federal funds rate to first rise above its current target range of 0 to ¼ percent. In particular, interest rates on overnight index swaps indicate that investors currently anticipate that the effective federal funds rate will rise above its current target range around the fourth quarter of 2014, roughly four quarters later than they expected at the end of June 2012. Meanwhile, the modal target rate path—the most likely values for future federal funds rates derived from interest rate options—suggests that investors think the rate is most likely to remain in its current range through the first quarter of 2016. In addition, recent readings from the Survey of Primary Dealers conducted by the Open Market Desk at the Federal Reserve Bank of New York suggest that market participants expect the Federal Reserve to hold about $3.75 trillion of Treasury and agency securities at the end of 2014, roughly $1 trillion more than was expected in the middle of 2012.[5]

Figure 15. Interest rates on Treasury securities at selected maturities, 2004–13



Note: The data are daily and extend through February 21, 2013. Treasury inflation-protected securities (TIPS) are based on yield curves fitted by Federal Reserve staff to on- and off-the-run TIPS.

Source: Department of the Treasury; Barclays; Federal Reserve Board staff estimates.

. . . and held yields on longer-term Treasury securities and agency mortgage-backed securities near historic lows

Yields on nominal and inflation-protected Treasury securities remained near historic lows over the second half of 2012 and into 2013. Yields on longer-term nominal Treasury securities rose, on balance, over this period, while yields on inflation-protected securities fell (figure 15). These changes likely reflect the effects of additional monetary accommodation, a substantial improvement in sentiment regarding the crisis in Europe that reduced demand for the relative

5 The Survey of Primary Dealers is available on the Federal Reserve Bank of New York's website at www.newyorkfed.org/markets/primarydealer_survey_questions.html.

safety and liquidity of nominal Treasury securities, and increases in the prices of key commodities since the end of June 2012. On balance, yields on 5-, 10-, and 30-year nominal Treasury securities increased roughly 15 basis points, 30 basis points, and 40 basis points, respectively, from their levels at the end of June 2012, while yields on 5- and 10-year inflation-protected securities decreased roughly 55 basis points and 15 basis points, respectively. Treasury auctions generally continued to be well received by investors, and the Desk's outright purchases and sales of Treasury securities did not appear to have a material adverse effect on liquidity or market functioning.

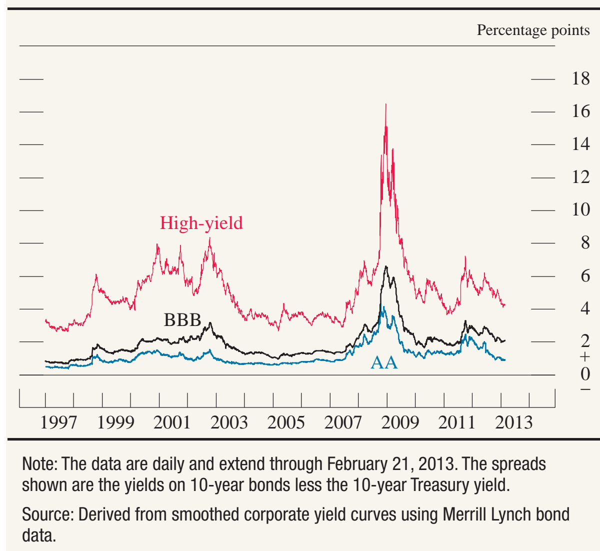
Yields on agency MBS were little changed, on net, over the second half of 2012 and into 2013. They fell sharply following the FOMC's announcement of additional agency MBS purchases in September but retraced over subsequent months. Spreads of yields on agency MBS over yields on nominal Treasury securities narrowed, largely reflecting the effects of the additional monetary accommodation. The Desk's outright purchases of agency MBS did not appear to have a material adverse effect on liquidity or market functioning, although implied financing rates for some securities in the MBS dollar roll market declined in the second half of 2012, and the Desk responded by postponing settlement of some purchases using dollar roll transactions.[6]

Yields on corporate bonds reached record lows, and equity prices increased

Yields on investment- and speculative-grade bonds reached record lows in the second half of 2012 and early 2013, respectively, partly reflecting the effects of the FOMC's additional monetary policy accommodation and increased investor appetite for bearing risk. Spreads to comparable-maturity Treasury securities also narrowed substantially but remained above the narrowest levels that they reached prior to the financial crisis (figure 16). Prices in the secondary market for syndicated leveraged loans have increased, on balance, since the middle of 2012.

Broad equity price indexes have increased about 10 percent since the end of June 2012, boosted by the same factors that contributed to the narrowing in bond spreads. Nevertheless, the spread between the

Figure 16. Spreads of corporate bond yields over comparable off-the-run Treasury yields, by securities rating, 1997–2013



Note: The data are daily and extend through February 21, 2013. The spreads shown are the yields on 10-year bonds less the 10-year Treasury yield.

Source: Derived from smoothed corporate yield curves using Merrill Lynch bond data.

12-month forward earnings–price ratio for the S&P 500 and a long-run real Treasury yield—a rough gauge of the equity risk premium—remained at the high end of its historical range. Implied volatility for the S&P 500 index, as calculated from option prices, spiked at times but is currently near the bottom end of the range it has occupied since the onset of the financial crisis.

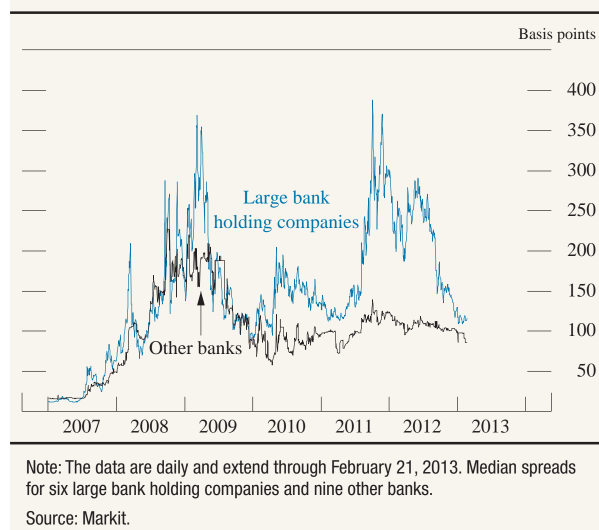
Conditions in short-term dollar funding markets improved some in the third quarter and remained stable thereafter

Measures of stress in unsecured dollar funding markets eased somewhat in the third quarter of 2012 and remained stable at relatively low levels thereafter, reflecting improved sentiment regarding the crisis in Europe. For example, the average maturity of unsecured financial CP issued by institutions with European parents increased, on net, to around the same length as such CP issued by institutions with U.S. parents.

Signs of stress were largely absent in secured short-term dollar funding markets. In the market for repurchase agreements (repos), bid–asked spreads and haircuts for most collateral types have changed little since the middle of 2012. However, repo rates continued to edge up over the second half of 2012, likely reflecting in part the financing of the increase in dealers' inventories of shorter-term Treasury securities that resulted from the maturity extension program (MEP). Following year-end, repo rates fell back

[6] Dollar roll transactions consist of a purchase or sale of agency MBS with the simultaneous agreement to sell or purchase substantially similar securities on a specified future date. The Committee directs the Desk to engage in these transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS purchases.

Figure 17. Spreads on credit default swaps for selected U.S. banking organizations, 2007–13



Note: The data are daily and extend through February 21, 2013. Median spreads for six large bank holding companies and nine other banks.

Source: Markit.

as the MEP came to an end and the level of reserve balances began to increase. In asset-backed commercial paper (ABCP) markets, volumes outstanding declined a bit for programs with European and U.S. sponsors, while spreads on ABCP with European bank sponsors remained slightly above those on ABCP with U.S. bank sponsors.

Year-end pressures in short-term funding markets were generally modest and roughly in line with the experiences during other years since the financial crisis.

Market sentiment toward the banking industry improved as the profitability of banks increased

Market sentiment toward the banking industry improved in the second half of 2012, reportedly driven in large part by perceptions of reduced downside risks stemming from the European crisis. Equity prices for bank holding companies (BHCs) increased, outpacing the increases in broad equity price indexes, and BHC credit default swap (CDS) spreads declined (figure 17).

The profitability of BHCs increased in the second half of 2012 but continued to run well below the levels that prevailed before the financial crisis. Measures of asset quality generally improved further, as delinquency and charge-off rates decreased for almost all major loan categories, although the recent improvement in delinquency rates for consumer credit in part reflects a compositional shift of credit supply toward higher-credit-quality borrowers. Loan loss provisions were flat at around the slightly elevated levels seen prior to the crisis, though they continued to be outpaced by charge-offs. Regulatory capital ratios remained at high levels based on current standards, but the implementation of generally more stringent Basel III capital requirements will likely lead to some decline in reported regulatory capital ratios at the largest banks. Overall, banks remain well funded with deposits, and their reliance on short-term wholesale funding stayed near its low levels seen in recent quarters. The expiration of the Federal Deposit Insurance Corporation's Transaction Account Guarantee program on December 31, 2012, does not appear to have caused any significant change in the availability of deposit funding for banks.

Credit provided by commercial banking organizations in the United States increased in the second half of 2012 at about the same moderate pace as in the first half of the year. Core loans—the sum of C&I loans, real estate loans, and consumer loans—expanded modestly, with strong growth in C&I loans offsetting weakness in real estate and credit card loans. Banks' holdings of securities continued to rise moderately overall, as strong growth in holdings of Treasury and municipal securities more than offset modest declines in holdings of agency MBS.

Despite continued improvements in market conditions, risks to the stability of financial markets remain

While conditions in short-term dollar funding markets have improved, these markets remain vulnerable to potential stresses. Money market funds (MMFs) have sharply reduced their overall exposures to Europe since the middle of 2011, but prime fund exposures to Europe continue to be substantial. MMFs also remain susceptible to the risk of investor runs due to structural vulnerabilities posed by the rounding of net asset values and the absence of loss-absorbing capital.[7]

Dealer firms have reduced their wholesale short-term funding ratios and have increased their liquidity buffers in recent years, but they still heavily rely on wholesale short-term funding. As a result, they remain susceptible to swings in market confidence and a possible resurgence of anxiety regarding counterparty credit risk. Respondents to the Senior Credit Officer Opinion Survey on Dealer Financing Terms

[7] In November 2012, the Financial Stability Oversight Council proposed recommendations for structural reforms of U.S. MMFs to reduce their vulnerability to runs and mitigate associated risks to the financial system.

indicated that credit terms applicable to important classes of counterparties were little changed over the second half of 2012.[8] Dealers reported increased demand for funding of securitized products and indicated that the use of financial leverage among trading real estate investment trusts, or REITs, had increased somewhat. However, respondents continued to note an increase in the amount of resources and attention devoted to the management of concentrated exposures to central counterparties and other financial utilities as well as, to a smaller extent, dealers and other financial intermediaries.

With prospective returns on safe assets remaining low, some financial market participants appeared willing to take on more duration and credit risk to boost returns. The pace of speculative-grade corporate bond issuance has been rapid in recent months, and while most of this issuance appears to have been earmarked for the refinancing of existing debt, there has also been an increase in debt to facilitate transactions involving significant risks. In particular, in bonds issued to finance private equity transactions, there has been a reemergence of payment-in-kind options that permit the issuer to increase the face value of debt in lieu of a cash interest payment, and anecdotal reports indicate that bond covenants are becoming less restrictive. Similarly, issuance of bank loans to finance dividend recapitalization deals as well as covenant-lite loans was robust over the second half of the year. (For a discussion of regulatory steps taken related to financial stability, see the box "The Federal Reserve's Actions to Foster Financial Stability" on pages 30–31 of the February 2013 *Monetary Policy Report*.)

Federal Reserve assets increased, and the average maturity of its Treasury holdings lengthened . . .

Total assets of the Federal Reserve increased to $3,097 billion as of February 20, 2013, $231 billion more than at the end of June 2012 (table 1). The increase primarily reflects growth in Federal Reserve holdings of Treasury securities and agency MBS as a result of the purchase programs initiated at the September 2012 and December 2012 FOMC meetings. As of February 20, 2013, the par value of Treasury securities and agency MBS held by the Federal Reserve had increased $70 billion and $178 billion, respectively, since the end of June 2012. The composition of Treasury securities holdings also changed over the second half of 2012 as a result of the continuation of the MEP, which was announced at the June 2012 FOMC meeting. Under this program, between July and December, the Desk purchased $267 billion in Treasury securities with remaining maturities of 6 to 30 years and sold or redeemed an equal par value of Treasury securities with maturities of 3 years or less. As a result, the average maturity of the Federal Reserve's Treasury holdings increased 1.7 years over the second half of 2012 and into 2013 and, as of February 2013, stood at 10.5 years.

. . . while exposure to facilities established during the crisis continued to wind down

In the second half of 2012, the Federal Reserve continued to reduce its exposure to facilities established during the financial crisis to support specific institutions. The portfolio holdings of Maiden Lane LLC and Maiden Lane III LLC—entities that were created during the crisis to acquire certain assets from The Bear Stearns Companies, Inc., and American International Group, Inc., to avoid the disorderly failures of those institutions—declined $14 billion to approximately $1 billion, primarily reflecting the sale of the remaining securities in Maiden Lane III LLC that was announced in August 2012. These sales resulted in a net gain of $6.6 billion for the benefit of the U.S. public. The Federal Reserve's loans to Maiden Lane LLC and Maiden Lane III LLC had been fully repaid, with interest, as of June 2012. Loans outstanding under the Term Asset-Backed Securities Loan Facility (TALF) decreased $4 billion to under $1 billion because of prepayments and maturities of TALF loans. With accumulated fees collected through TALF exceeding the amount of TALF loans outstanding, the Federal Reserve and the Treasury agreed in January to end the backstop for TALF provided by the Troubled Asset Relief Program.

The improvement in offshore U.S. dollar funding markets over the second half of 2012 led to a decline in the outstanding amount of dollars provided through the temporary U.S. dollar liquidity swap arrangements with other central banks. As of February 20, 2013, draws on the liquidity swap lines were $5 billion, down from $27 billion at the end of June 2012. On December 13, 2012, the Federal Reserve announced the extension of these arrangements through February 1, 2014.

On the liability side of the Federal Reserve's balance sheet, deposits held by depository institutions

[8] The Senior Credit Officer Opinion Survey on Dealer Financing Terms is available on the Federal Reserve Board's website at www.federalreserve.gov/econresdata/releases/scoos.htm.

Table 1. Selected components of the Federal Reserve balance sheet, 2012–13
Millions of dollars

Balance sheet item	Feb. 22, 2012	June 27, 2012	Feb. 20, 2013
Total assets	2,935,149	2,865,698	3,096,802
Selected assets			
Credit extended to depository institutions and dealers			
Primary credit	3	18	8
Central bank liquidity swaps	107,959	27,059	5,192
Credit extended to other market participants			
Term Asset-Backed Securities Loan Facility (TALF)	7,629	4,773	439
Net portfolio holdings of TALF LLC	825	845	507
Support of critical institutions			
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC[1]	30,822	15,031	1,483
Securities held outright			
U.S. Treasury securities	1,656,581	1,666,530	1,736,456
Agency debt securities	100,817	91,484	74,613
Agency mortgage-backed securities (MBS)[2]	853,045	854,979	1,032,712
Total liabilities	**2,880,556**	**2,811,029**	**3,041,820**
Selected liabilities			
Federal Reserve notes in circulation	1,048,004	1,067,917	1,127,723
Reverse repurchase agreements	89,824	83,737	93,121
Deposits held by depository institutions	1,622,800	1,491,988	1,668,383
Of which: Term deposits	0	0	0
U.S. Treasury, general account	36,033	117,923	40,703
U.S. Treasury, Supplementary Financing Account	0	0	0
Total capital	**54,594**	**54,669**	**54,982**

Note: LLC is a limited liability company.

[1] The Federal Reserve has extended credit to several LLCs in conjunction with efforts to support critical institutions. Maiden Lane LLC was formed to acquire certain assets of The Bear Stearns Companies, Inc. Maiden Lane II LLC was formed to purchase residential mortgage-backed securities from the U.S. securities lending reinvestment portfolio of subsidiaries of American International Group, Inc. (AIG). Maiden Lane III LLC was formed to purchase multisector collateralized debt obligations on which the Financial Products group of AIG has written credit default swap contracts.

[2] Includes only MBS purchases that have already settled.

Source: Federal Reserve Board, Statistical Release H.4.1, “Factors Affecting Reserve Balances of Depository Institutions and Condition Statement of Federal Reserve Banks.”

increased $176 billion since June 2012, while Federal Reserve notes in circulation rose $60 billion, reflecting solid demand both at home and abroad. M2 has increased at an annual rate of about 8 percent since June 2012. Holdings of M2 assets, including its largest component, liquid deposits, remain elevated relative to what would have been expected based on historical relationships with nominal income and interest rates, likely due to investors’ continued preference to hold safe and liquid assets.

As part of its ongoing program to ensure the readiness of tools to manage reserves, the Federal Reserve conducted a series of small-value reverse repurchase transactions using all eligible collateral types with its expanded list of counterparties, as well as a few small-value repurchase agreements with primary dealers. In the same vein, the Federal Reserve continued to offer small-value term deposits through the Term Deposit Facility to provide eligible institutions with an opportunity to become familiar with term deposit operations.

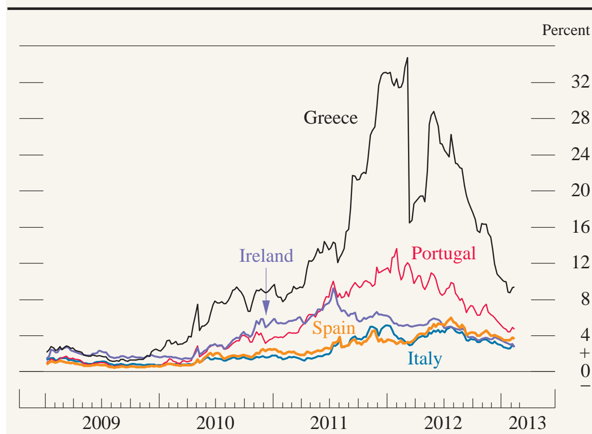
International Developments

Foreign financial market stresses abated . . .

Since mid-July, global financial market conditions have improved, on balance, in part reflecting reduced fears of a significant worsening of the European fiscal and financial crisis. Market sentiment was bolstered by a new European Central Bank (ECB) framework for purchases of sovereign debt known as Outright Monetary Transactions (OMT), agreements on continued official-sector support for Greece, progress by Spain in recapitalizing its troubled banks, and some steps toward fiscal and financial integration in Europe. Nevertheless, financial market stresses in Europe remained elevated, and policymakers still face significant challenges (see the box “An Update on the European Fiscal and Banking Crisis” on page 32 of the February 2013 *Monetary Policy Report*).

Reduced concerns about the European crisis contributed to an easing of funding conditions for European banks. Euro-area banks have relied somewhat less on

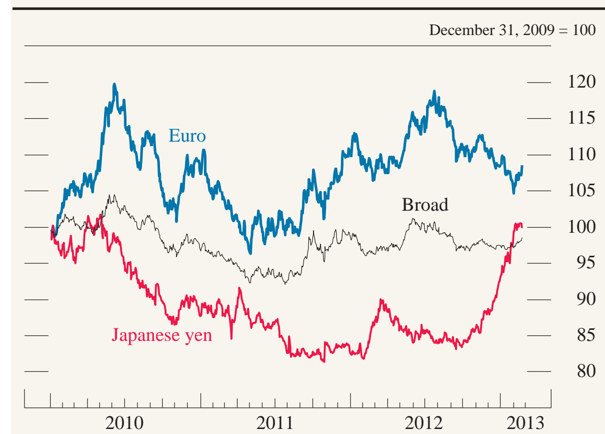
Figure 18. Government debt spreads for peripheral European economies, 2009–13



Note: The data are weekly. The last observation for each series is February 15, 2013. The spreads shown are the yields on 10-year bonds less the 10-year German bond yield.

Source: For Greece, Italy, Portugal, and Spain, Bloomberg; for Ireland, staff estimates using traded bond prices from Thomson Reuters and Bloomberg.

Figure 19. U.S. dollar exchange rate against broad index and selected major currencies, 2010–13



Note: The data, which are in foreign currency units per dollar, are daily. The last observation for each series is February 21, 2013.

Source: Federal Reserve Board, Statistical Release H.10, "Foreign Exchange Rates."

ECB funding in recent months, and use of central bank dollar liquidity swap lines declined significantly. Reflecting market views of the decreased risk of default, CDS premiums on the debt of many large banks in Europe dropped significantly, on net, especially for Italy and Spain, and euro-area bank stocks increased about 30 percent since mid-2012.

As risk sentiment improved, foreign equity indexes rose significantly: Over the second half of 2012 and into early 2013, equity indexes increased about 10 percent for the United Kingdom and Canada, about 15 percent in the euro area, and about 25 percent in Japan; equity indexes in EMEs also moved up across the board. Likewise, yields on 10-year government bonds in many countries increased moderately, though Japanese yields remained below 1 percent. Spreads of peripheral European sovereign yields over German bond yields of comparable maturity declined significantly as overall euro-area financial strains abated (figure 18). Corporate credit spreads also declined, and bond issuance picked up.

The U.S. dollar depreciated nearly 1 percent against a broad set of currencies over the second half of 2012 and into early 2013 (figure 19). Some of this depreciation reflected a reversal of flight-to-safety flows, in part stemming from the reduction in European financial stress. Indeed, the dollar depreciated 4 percent against the euro. In contrast, the dollar appreciated 17 percent against the Japanese yen. Most of this rise came in recent months, as Shinzo Abe, the newly elected prime minister of Japan, called for the Bank of Japan to employ "unlimited easing" of monetary policy to overcome deflation.

. . . but economic activity in the advanced foreign economies continued to weaken . . .

Despite the easing of financial stresses in the euro area and some improvement in global financial markets, activity in the advanced foreign economies (AFEs) continued to lose steam in the second half of 2012. The euro area fell further into recession, as fiscal austerity, rising unemployment, and depressed confidence restrained spending, especially in the countries at the center of the crisis. Real GDP also contracted in Japan, reflecting plummeting exports. In the United Kingdom, real GDP growth resumed in the third quarter, partly thanks to a temporary boost to demand from the London Olympics, but contracted again in the fourth quarter. Canadian real GDP growth remained positive but also weakened, largely owing to lower external demand. Survey indicators suggest that conditions in the AFEs improved only marginally around the turn of the year. Amid this weakness in economic activity and limited pressures from commodity prices, inflation readings for most AFEs remained contained.

Several foreign central banks expanded their balance sheets further and took other actions to support their economies. In addition to its introduction of the OMT, the ECB lowered its main policy rate. The Bank of England completed its latest round of asset

purchases, bringing its holdings to £375 billion, and began the implementation of its Funding for Lending Scheme, designed to boost lending to households and firms. The Bank of Japan took a number of steps. It introduced a new Stimulating Bank Lending Facility in October and raised its inflation target from 1 percent to 2 percent in January. In addition, it increased the size of its Asset Purchase Program by ¥30 trillion, to ¥101 trillion, by the end of 2013 and announced that purchases would be open ended beginning in 2014.

. . . even as economic growth stabilized in emerging market economies

After slowing earlier in the year, in part because of headwinds associated with Europe's troubles, economic growth in EMEs stabilized in the third quarter and appeared to pick up in the fourth. This modest pickup in economic activity in the face of continued weakness in exports to advanced economies was supported by monetary and fiscal policy stimulus.

In China, following slower growth in the first half of 2012, stimulus measures helped boost the pace of real GDP growth in the second half of the year. Improved economic conditions in China also provided a lift to other emerging Asian economies. GDP accelerated in Hong Kong and Taiwan in the third quarter; in the fourth quarter, exports and purchasing managers indexes moved higher in most of the region, and GDP growth rebounded in a number of economies.

After stagnating for about a year, economic activity in Brazil picked up in the third quarter to a still-lackluster pace of 2½ percent. Indicators for the fourth quarter suggest a further modest pickup, supported by accommodative policies. In contrast, GDP growth in Mexico continued to fall in the third quarter as the growth of U.S. manufacturing production slowed; however, Mexican growth picked up to 3 percent in the fourth quarter, boosted by services and the volatile agricultural sector.

Despite occasional spikes in food prices, inflation in most emerging Asian economies remained well contained as moderate output growth limited broader price pressures. India was a notable exception, with 12-month inflation around 10 percent in recent months. In some Latin American economies, increases in food prices had a greater effect on inflation than in Asia, leading to 12-month price increases of around 5½ percent in Brazil and around 4¼ percent in Mexico over the second half of last year.

Part 2
Monetary Policy

To promote the objectives given to it by the Congress, the Federal Open Market Committee (FOMC) provided additional monetary accommodation at its September 2012 and December 2012 meetings, by both strengthening its forward guidance regarding the federal funds rate and initiating additional asset purchases.

As discussed in Part 1, incoming economic data throughout the second half of 2012 and into 2013 indicated that economic activity was expanding at a moderate pace. Employment gains were modest, and although the unemployment rate declined somewhat over the period, it remained elevated relative to levels that almost all members of the FOMC viewed as consistent with the Committee's dual mandate. Inflation remained subdued, apart from some temporary variations that largely reflected fluctuations in commodities prices. Members generally attached an unusually high level of uncertainty to their assessments of the economic outlook. Moreover, they continued to judge that the risks to economic growth were tilted to the downside because of strains in financial markets stemming from the sovereign debt and banking situation in Europe, as well as the potential for a significant slowdown in global economic growth and for a sharper-than-anticipated fiscal contraction in the United States. With longer-term inflation expectations stable and still-considerable slack in resource markets, most members anticipated that inflation over the medium term would run at or below the Committee's longer-run goal of 2 percent.

Accordingly, to promote the FOMC's objectives of maximum employment and price stability, the Committee maintained a target range for the federal funds rate of 0 to ¼ percent throughout the second half of 2012 and provided additional monetary accommodation at its September and December meetings, by both strengthening its forward guidance regarding the federal funds rate and initiating additional purchases of longer-term securities. The Committee also completed at year-end the continuation of the program to extend the average maturity of its holdings of Treasury securities that was announced in June 2012 and continued its policy of reinvesting principal payments from its holdings of agency debt and agency-guaranteed mortgage-backed securities (MBS) into agency MBS.

Box 2. Efficacy and Costs of Large-Scale Asset Purchases

In order to provide additional monetary stimulus when short-term interest rates are near zero, the Federal Reserve has undertaken a series of large-scale asset purchase (LSAP) programs. Between late 2008 and early 2010, the Federal Reserve purchased approximately $1.7 trillion in longer-term Treasury securities, agency debt, and agency mortgage-backed securities (MBS). From late 2010 to mid-2011, a second round of LSAPs was implemented, consisting of purchases of $600 billion in longer-term Treasury securities. Between September 2011 and the end of 2012, the Federal Reserve implemented the maturity extension program and its continuation, under which it purchased approximately $700 billion in longer-term Treasury securities and sold or allowed to run off an equal amount of shorter-term Treasury securities. And in September and December 2012, the Federal Reserve announced flow-based purchases of agency MBS and longer-term Treasury securities at initial paces of $40 billion and $45 billion per month, respectively.

These purchases were undertaken in order to put downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative, thereby supporting the economic recovery. One mechanism through which asset purchases can affect financial conditions is the "portfolio balance channel," which is based on the premise that different financial assets may be reasonably close but imperfect substitutes in investors' portfolios. This assumption implies that changes in the supplies of various assets available to private investors may affect the prices or yields of those assets and the prices of assets that may be reasonably close substitutes. As a result, the Federal Reserve's asset purchases can push up the prices and lower the yields on the securities purchased and influence other asset prices as well. As investors further rebalance their portfolios, overall financial conditions should ease more generally, stimulating economic activity through channels similar to those for conventional monetary policy. In addition, asset purchases could also signal that the central bank intends to pursue a more accommodative policy stance than previously thought, thereby lowering investor expectations about the future path of the federal funds rate and putting additional downward pressure on longer-term yields.

A substantial body of empirical research finds that the Federal Reserve's asset purchase programs have significantly lowered longer-term Treasury yields.[1] More important, the effects of LSAPs do not

[1] For a selective list of references regarding the effect of the first LSAP, see the box "The Effects of Federal Reserve Asset Purchases" in Board of Governors of the Federal Reserve System (2011), *Monetary Policy Report to the Congress* (Washington: Board of Governors, March), www.federalreserve.gov/monetarypolicy/mpr_20110301_part2.htm. For additional references, including those that analyze the effect of the second LSAP as well as the maturity extension program, see, for example, Stefania D'Amico, William English, David López-Salido, and Edward Nelson (2012), "The Federal Reserve's Large-Scale Asset Purchase Programmes: Rationale and Effects," *Economic Journal,* vol. 122 (November), pp. F415–45; Arvind Krishnamurthy and Annette Vissing-Jorgensen (2011), "The Effects of Quantitative Easing on Interest Rates: Channels and Implications for Policy," Brookings Papers on Economic Activity, Fall, pp. 215–65; Canlin Li and Min Wei (2012), "Term Structure Modelling with Supply Factors and the Federal Reserve's Large Scale Asset Purchase Programs," Finance and Economics Discussion Series 2012-37 (Washington: Board of Governors of the Federal Reserve System, May), www.federalreserve.gov/pubs/feds/2012/201237/201237pap.pdf, and references in those studies. For work that specifically emphasizes the signaling channel of LSAPs, see, for example, Michael D. Bauer and Glenn D. Rudebusch (2012), "The Signaling Channel for Federal Reserve Bond Purchases," Working Paper Series 2011-21 (San Francisco: Federal Reserve Bank of San Francisco, August), www.frbsf.org/publications/economics/papers/2011/wp11-21bk.pdf. For work that focuses on the effects on credit default risk, see, for example, Simon Gilchrist and Egon Zakrajšek (2012), "The Impact of the Federal Reserve's Large-

(continued on next page)

At the September 12–13 meeting, the Committee agreed that the outlook called for additional monetary accommodation, and that such accommodation should be provided by both strengthening its forward guidance regarding the federal funds rate and initiating additional purchases of agency MBS at a pace of $40 billion per month. Along with the ongoing purchases of $45 billion per month of longer-term Treasury securities under the maturity extension program announced in June, these purchases increased the Committee's holdings of longer-term securities by about $85 billion each month through the end of the year. These actions were taken to put downward pressure on longer-term interest rates, support mortgage markets, and help make broader financial conditions more accommodative (see box 2, "Efficacy and Costs of Large-Scale Asset Purchases"). The Committee agreed that it would closely monitor incoming information on economic and financial developments in coming months, and that if the outlook for the labor market did not improve substantially, it would continue its purchases of agency MBS, undertake additional asset purchases, and employ its other policy tools as appropriate until such improvement is achieved in a context of price stability. The Committee also agreed that in determining the size, pace, and composition of its asset purchases, it would, as always, take appropriate account of the likely efficacy

Box 2. Efficacy and Costs of Large-Scale Asset Purchases—*continued*

seem to be restricted to Treasury yields. In particular, LSAPs have been found to be associated with significant declines in MBS yields and corporate bond yields as well as with increases in equity prices.

While there seems to be substantial evidence that LSAPs have lowered longer-term yields and eased broader financial conditions, obtaining accurate estimates of the effects of LSAPs on the macroeconomy is inherently difficult, as the counterfactual case—how the economy would have performed without LSAPs—cannot be directly observed. However, econometric models can be used to estimate the effects of LSAPs on the economy under the assumption that the economic effects of the easier financial conditions that are induced by LSAPs are similar to those that are induced by conventional monetary policy easing. Model simulations conducted at the Federal Reserve have generally found that asset purchases provide a significant boost to the economy. For example, a study based on the Federal Reserve Board's FRB/US model estimated that, as of 2012, the first two rounds of LSAPs had raised real gross domestic product almost 3 percent and increased private payroll employment by about 3 million jobs, while lowering the unemployment rate about 1.5 percentage points, relative to what would have been expected otherwise. These simulations also suggest that the program materially reduced the risk of deflation.[2]

Of course, all model-based estimates of the macroeconomic effects of LSAPs are subject to considerable statistical and modeling uncertainty and thus should be treated with caution. Indeed, while some other studies also report significant macroeconomic effects from asset purchases, other research finds smaller effects.[3] Nonetheless, a balanced reading of the evidence supports the conclusion that LSAPs have provided meaningful support to the economic recovery while mitigating deflationary risks.

Scale Asset Purchase Programs on Default Risk," paper presented at "Macroeconomics and Financial Intermediation: Directions since the Crisis," a conference held at the National Bank of Belgium, Brussels, December 9–10, 2011. Although the majority of research on the effects of LSAPs appears to support a significant influence on asset prices, the overall result of such programs is generally difficult to estimate precisely: Event studies can make only sharp predictions on the effects within a relatively short time horizon, whereas approaches based on time-series models tend to face challenges in isolating the effects of the programs from other economic developments. For a more skeptical view on the effect of LSAPs, see, for example, Daniel L. Thornton (2012), "Evidence on the Portfolio Balance Channel of Quantitative Easing," Working Paper Series 2012-015A (St. Louis: Federal Reserve Bank of St. Louis, October), http://research.stlouisfed.org/wp/2012/2012-015.pdf.

[2] These results are discussed further in Hess Chung, Jean-Philippe Laforte, David Reifschneider, and John C. Williams (2012), "Have We Underestimated the Likelihood and Severity of Zero Lower Bound Events?" *Journal of Money, Credit and Banking*, vol. 44 (February supplement), pp. 47–82.

[3] For studies reporting significant macroeconomic effects from asset purchases, see, for example, Jeffrey C. Fuhrer and Giovanni P. Olivei (2011), "The Estimated Macroeconomic Effects of the Federal Reserve's Large-Scale Treasury Purchase Program," Public Policy Briefs 11-02 (Boston: Federal Reserve Bank of Boston, April), www.bos.frb.org/economic/ppb/2011/ppb112.pdf; and Christiane Baumeister and Luca Benati (2012), "Unconventional Monetary Policy and the Great Recession: Estimating the Macroeconomic Effects of a Spread Compression at the Zero Lower Bound," Working Papers 2012-21 (Ottawa: Bank of Canada, July), www.bankofcanada.ca/wp-content/uploads/2012/07/wp2012-21.pdf. Also, the Bank of England has implemented LSAPs similar to those undertaken by the Federal Reserve, and its staff research finds that the effects appear to be quantitatively similar to those in the United States.

For studies reporting smaller effects from asset purchases, see, for example, Michael T. Kiley (2012), "The Aggregate Demand Effects of Short- and Long-Term Interest Rates," Finance and Economics Discussion Series 2012-54 (Washington: Board of Governors of the Federal Reserve System, August), www.federalreserve.gov/pubs/feds/2012/201254/201254pap.pdf; and Han Chen, Vasco Curdia, and Andrea Ferrero (2012), "The Macroeconomic Effects of Large-Scale Asset Purchase Programmes," *Economic Journal*, vol. 122 (November), pp. F289–315.

and costs of such purchases. This flexible approach was seen as allowing the Committee to tailor its policy over time in response to incoming information while clarifying its intention to improve labor market conditions, thereby enhancing the effectiveness of the action by helping to bolster business and consumer confidence.

The Committee also modified its forward guidance regarding the federal funds rate at the September meeting, noting that exceptionally low levels for the federal funds rate were likely to be warranted at least through mid-2015, longer than had been indicated in previous FOMC statements. Moreover, the Committee stated its expectation that a highly accommodative stance of monetary policy would remain appropriate for a considerable time after the economic recovery strengthens. The new language was meant to clarify that the Committee's anticipation that exceptionally low levels for the federal funds rate were likely to be warranted at least through mid-2015 did not reflect an expectation that the economy would remain weak, but rather reflected the Committee's determination to support a stronger economic recovery.

At the December 11–12 meeting, members judged that continued provision of monetary accommoda-

Box 2. Efficacy and Costs of Large-Scale Asset Purchases—*continued*

The potential benefits of LSAPs must be considered alongside their possible costs. One potential cost of conducting additional LSAPs is that the operations could lead to a deterioration in market functioning or liquidity in markets where the Federal Reserve is engaged in purchasing. More specifically, if the Federal Reserve becomes too dominant a buyer in a certain market, trading among private participants could decrease enough that market liquidity and price discovery become impaired. As the global financial system relies on deep and liquid markets for U.S. Treasury securities, significant impairment of this market would be especially costly; impairment of this market could also impede the transmission of monetary policy. Although the large volume of the Federal Reserve's purchases relative to the size of the markets for Treasury or agency securities could ultimately become an issue, few if any problems have been observed in those markets thus far.

A second potential cost of LSAPs is that they may undermine public confidence in the Federal Reserve's ability to exit smoothly from its accommodative policies at the appropriate time. Such a reduction in confidence might increase the risk that long-term inflation expectations become unanchored. The Federal Reserve is certainly aware of these concerns and accordingly has placed great emphasis on developing the necessary tools to ensure that policy accommodation can be removed when appropriate. For example, the Federal Reserve will be able to put upward pressure on short-term interest rates at the appropriate time by raising the interest rate it pays on reserves, using draining tools like reverse repurchase agreements or term deposits with depository institutions, or selling securities from the Federal Reserve's portfolio. To date, the expansion of the balance sheet does not appear to have materially affected long-term inflation expectations.

A third cost to be weighed is that of risks to financial stability. For example, some observers have raised concerns that, by driving longer-term yields lower, nontraditional policies could induce imprudent risk-taking by some investors. Of course, some risk-taking is a necessary element of a healthy economic recovery, and accommodative monetary policies could even serve to reduce the risk in the system by strengthening the overall economy. Nonetheless, the Federal Reserve has substantially expanded its monitoring of the financial system and modified its supervisory approach to take a more systemic perspective.

There has been limited evidence so far of excessive buildups of duration, credit risk, or leverage, but the Federal Reserve will continue both its careful oversight and its implementation of financial regulatory reforms designed to reduce systemic risk.[4]

The Federal Reserve has remitted substantial income to the Treasury from its earnings on securities, totaling some $290 billion since 2009. However, if the economy continues to strengthen and policy accommodation is withdrawn, remittances will likely decline in coming years. Indeed, in some scenarios, particularly if interest rates were to rise quickly, remittances to the Treasury could be quite low for a time.[5] Even in such scenarios, however, average annual remittances over the period affected by the Federal Reserve's purchases are highly likely to be greater than the pre-crisis norm, perhaps substantially so. Moreover, if monetary policy promotes a stronger recovery, the associated reduction in the federal deficit would far exceed any variation in the Federal Reserve's remittances to the Treasury. That said, the Federal Reserve conducts monetary policy to meet its congressionally mandated objectives of maximum employment and price stability and not primarily for the purpose of turning a profit for the U.S. Department of the Treasury.

---

4 For additional details, see the box "The Federal Reserve's Actions to Foster Financial Stability" on page 30 of the February 2013 *Monetary Policy Report.*

5 For additional details, see Seth B. Carpenter, Jane E. Ihrig, Elizabeth C. Klee, Daniel W. Quinn, and Alexander H. Boote (2013), "The Federal Reserve's Balance Sheet and Earnings: A primer and projections," Finance and Economics Discussion Series 2013-01 (Washington: Board of Governors of the Federal Reserve System, January), www.federalreserve.gov/pubs/feds/2013/201301/201301abs.html.

tion was warranted in order to support further progress toward the Committee's goals of maximum employment and price stability. The Committee judged that, following the completion of the maturity extension program at the end of the year, such accommodation should be provided in part by continuing to purchase agency MBS at a pace of $40 billion per month and by purchasing longer-term Treasury securities at a pace initially set at $45 billion per month. The Committee also decided that, starting in January, it would resume rolling over maturing Treasury securities at auction.

With regard to its forward rate guidance, the Committee decided to indicate in the statement that it expects the highly accommodative stance of monetary policy to remain appropriate for a considerable time after the asset purchase program ends and the economic recovery strengthens. In addition, it replaced the date-based guidance for the federal

funds rate with numerical thresholds linked to the unemployment rate and projected inflation. In particular, the Committee indicated that it expected that the exceptionally low range for the federal funds rate would be appropriate at least as long as the unemployment rate remains above 6½ percent, inflation between one and two years ahead is projected to be no more than ½ percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored. These thresholds were seen as helping the public to more readily understand how the likely timing of an eventual increase in the federal funds rate would shift in response to unanticipated changes in economic conditions and the outlook. Accordingly, thresholds could increase the probability that market reactions to economic developments would move longer-term interest rates in a manner consistent with the Committee's assessment of the likely future path of short-term interest rates. The Committee indicated in its December statement that it viewed the economic thresholds, at least initially, as consistent with its earlier, date-based guidance. The new language noted that the Committee would also consider other information when determining how long to maintain the highly accommodative stance of monetary policy, including additional measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments.

At the conclusion of its January 29–30 meeting, the Committee made no changes to its target range for the federal funds rate, its asset purchase program, or its forward guidance for the federal funds rate. The Committee stated that, with appropriate policy accommodation, it expected that economic growth would proceed at a moderate pace and the unemployment rate would gradually decline toward levels the Committee judges consistent with its dual mandate. It noted that strains in global financial markets had eased somewhat, but that it continued to see downside risks to the economic outlook. The Committee continued to anticipate that inflation over the medium term likely would run at or below its 2 percent objective.

Monetary Policy Report of July 2012

Part 1
Overview: Monetary Policy and the Economic Outlook

The pace of economic recovery appears to have slowed during the first half of this year, with real gross domestic product (GDP) likely having risen at only a modest pace. In the labor market, the rate of job gains has diminished recently, and, following a period of improvement, the unemployment rate has been little changed at an elevated level since January. Meanwhile, consumer price inflation over the first five months of 2012 was lower, on net, than in 2011, and longer-term inflation expectations have remained stable. A number of factors will likely restrain economic growth in the period ahead, including weak economic growth abroad and a fiscal environment that looks set to become less accommodative. Uncertainty about these factors may also restrain household and business spending. In addition, credit conditions are likely to improve only gradually, as are still-elevated inventories of vacant and foreclosed homes. Moreover, the possibility of a further material deterioration of conditions in Europe, or of a particularly severe change in U.S. fiscal conditions, poses significant downside risks to the outlook.

Against this backdrop, the Federal Open Market Committee (FOMC) took steps to provide additional monetary policy accommodation during the first half of 2012. In particular, the Committee changed its forward guidance regarding the period over which it anticipates the federal funds rate to remain at exceptionally low levels and announced a continuation of its maturity extension program (MEP) through the end of the year. These policies put downward pressure on longer-term interest rates and made broad financial conditions more accommodative than they would otherwise be, thereby supporting the economic recovery.

The European fiscal and banking crisis has remained a major source of strain on global financial markets. Early in the year, financial stresses within the euro area moderated somewhat in light of a number of policy actions: The European Central Bank (ECB) provided ample liquidity to the region's banks, euro-area leaders agreed to increase the lending capacity of their rescue facilities, and a new assistance package for Greece was approved following a restructuring of Greek sovereign debt. However, tensions within the euro area increased again in the spring as political uncertainties rekindled fears of a disorderly Greek exit from the euro area and mounting losses at Spanish banks renewed questions about the sustainability of Spain's sovereign debt and the resiliency of the euro-area banking system. As yields on the government debt of Spain and other vulnerable European countries rose toward new highs, euro-area leaders responded with additional policy measures in late June, including increasing the flexibility of the region's financial backstops and making progress toward greater cooperation in the supervision and, as necessary, recapitalization of Europe's banks. Many critical details, however, remain to be worked out against a backdrop of continued economic weakness and political strain.

Financial markets were somewhat volatile over the first half of 2012 mostly due to fluctuating views regarding the crisis in the euro area and the likely pace of economic growth at home and abroad. As investors' concerns about the situation in Europe eased early in the year and with data releases generally coming in to the upside of market expectations, broad equity price indexes rose and risk spreads in several markets narrowed. Subsequently, however, market participants pulled back from riskier assets amid renewed concerns about the euro area and evidence of slowing global economic growth. Reflecting these developments but also owing to the lengthening of the forward rate guidance, continuation of the MEP, and increased expectations by market participants of additional balance sheet actions by the Federal Reserve, yields on longer-term Treasury securities and corporate debt as well as rates on residential mortgages declined, on net, and reached historically low levels at times during the first half of the year. On balance since the beginning of the year, broad equity prices rose as corporate earnings remained fairly resilient through the first quarter.

After rising at an annual rate of 2½ percent in the second half of 2011, real GDP increased at a 2 percent pace in the first quarter of 2012, and available indicators point to a still smaller gain in the second quarter. Private spending continues to be weighed down by a range of factors, including uncertainty about developments in Europe and the path for U.S. fiscal policy, concerns about the strength and sustainability of the recovery, the still-anemic state of the housing market, and the difficulties that many would-be borrowers continue to have in obtaining credit. Such considerations have made some businesses more cautious about increasing investment or

materially expanding their payrolls and have led households to remain quite pessimistic about their income and employment prospects. Smoothing through the effects of unseasonably warm weather this past winter, activity in the housing sector appears to have been a little stronger so far this year. However, the level of housing activity remains low and continues to be held down by tight mortgage credit. Meanwhile, the drag on real GDP growth from government purchases is likely to persist, as budgets for state and local governments remain strained and federal fiscal policy is likely to become more restrictive in 2013.

In the labor market, gains in private payroll employment averaged 225,000 jobs per month in the first quarter, up from 165,000 jobs per month in the second half of last year, but fell back in the second quarter to just 90,000 jobs per month. Although the slowing in the pace of net job creation may have been exaggerated by issues related to swings in the weather and to seasonal adjustment difficulties associated with the timing of the sharpest job losses during the recession, those factors do not appear to fully account for the slowdown. The unemployment rate declined from about 9 percent last summer to a still-elevated 8¼ percent in January, and it has remained close to that level since then. Likewise, long-term joblessness has shown little net improvement this year, with the share of those unemployed persons who have been jobless for six months or longer remaining around 40 percent. Further meaningful reductions in unemployment are likely to require some pickup in the pace of economic activity.

Consumer price inflation moved down, on net, during the first half of the year. The price index for overall personal consumption expenditures (PCE) rose rapidly in the first three months of the year, reflecting large increases in oil prices, but inflation turned down in the spring when oil prices more than reversed their earlier run-ups. In all, the PCE price index increased at an annual rate of about 1½ percent over the first five months of the year, compared with a rise of 2½ percent during 2011. Excluding food and energy, consumer prices rose at about a 2 percent rate over the first five months of the year, close to the pace recorded over 2011. In addition to the net decline in crude oil prices over the first half of the year, factors contributing to low consumer price inflation this year include the deceleration of non-oil import prices in the latter part of 2011, subdued labor costs associated with the weak labor market, and stable inflation expectations.

In the household sector, credit conditions have generally remained tight for all but highly rated borrowers; among other factors, this tightness reflects the uncertain economic outlook and the high unemployment rate. Total mortgage debt decreased further as the pace of mortgage applications to purchase a new home was sluggish. Refinancing activity increased over the course of the second quarter but remained below levels reached in previous refinancing booms despite historically low mortgage interest rates. The increase in refinancing was partially attributable to recent enhancements made to the Home Affordable Refinance Program that appeared to boost refinancing activity somewhat for borrowers with underwater mortgages—that is, for those who owed more on their mortgages than their homes were worth. Consumer credit expanded moderately mainly because of growth in federal student loans.

Firms in the nonfinancial corporate sector continued to raise funds at a generally moderate pace in the first half of the year. Those with access to capital markets took advantage of low interest rates to refinance existing debt. As a result, corporate debt issuance was solid over the first part of the year, although issuance of speculative-grade corporate bonds weakened notably in June as investors pulled back from riskier assets. Commercial and industrial loans on the books of banks expanded briskly, but borrowing conditions for small businesses have improved more slowly than have those for larger firms. Financing conditions for commercial real estate stayed relatively restrictive, and fundamentals in that sector showed few signs of improvement.

Market sentiment toward major global banks fluctuated in the first half of 2012. In March, the release of the results from the Comprehensive Capital Analysis and Review, which investors interpreted as indicating continued improvements in the health of domestic banks, provided a significant boost to the equity prices of U.S. financial institutions. Those gains partially reversed when market sentiment worsened in May, driven in large part by concerns about Europe and potential spillovers to the United States and its financial institutions. On balance, however, equity prices of banks rose significantly from relatively low levels at the start of the year. An index of credit default swap spreads for the large bank holding companies declined about 60 basis points, but those spreads remained at a high level. Despite the swings in market sentiment about global banking organizations, conditions in unsecured short-term dollar funding markets were fairly stable in the first half of

2012. European financial institutions have reduced their demand for dollar funding over recent quarters, and general funding pressures apparently were alleviated by the ECB's longer-term refinancing operations.

With the Committee anticipating only slow progress in bringing unemployment down toward levels that it judges to be consistent with its dual mandate and strains in global financial markets continuing to pose significant downside risks to the economic outlook, the FOMC took additional steps to augment the already highly accommodative stance for monetary policy during the first half of 2012. In January, the Committee modified its forward rate guidance, noting that economic conditions were likely to warrant exceptionally low levels for the federal funds rate at least through late 2014. And in June, the FOMC decided to continue the MEP until the end of the year rather than completing the program at the end of June as previously scheduled.

The June Summary of Economic Projections is presented in Part 4 of the July 2012 *Monetary Policy Report* on pages 43–55 (it is also included in the "Minutes" section of this annual report on page 203). At the time of the Committee's June meeting, FOMC participants (the 7 members of the Board of Governors and the presidents of the 12 Federal Reserve Banks) saw the economy expanding at a moderate pace over coming quarters and then picking up gradually under the assumption of appropriate monetary policy. Most participants marked down their projections for economic growth in 2012 and 2013 relative to what they anticipated in January and April largely as a result of the adverse developments in Europe and the associated effects on financial markets. Moreover, headwinds from the fiscal and financial situation in Europe, from the still-depressed housing market, and from tight credit for some borrowers were cited as likely to hold back the pace of economic expansion over the forecast period.

FOMC participants also projected slower progress in reducing unemployment than they had anticipated in January and April. Committee participants' projections for the unemployment rate had a central tendency of 8.0 to 8.2 percent in the fourth quarter of this year and then declined to 7.0 to 7.7 percent at the end of 2014; those levels are still generally well above participants' estimates of the longer-run normal rate of unemployment. Meanwhile, participants' projections for inflation had a central tendency of 1.2 to 1.7 percent for 2012 and 1.5 to 2.0 percent for both 2013 and 2014; these projections are lower, particularly in 2012, than participants reported in January and April, in part reflecting the effects of the recent drop in crude oil prices.

With the unemployment rate expected to remain elevated over the projection period and inflation generally expected to be at or under the Committee's 2 percent objective, most participants expected that, under their individual assessments of appropriate monetary policy, the federal funds rate would remain extraordinarily low for some time. In particular, 11 of the 19 participants placed the target federal funds rate at 0.75 percent or lower at the end of 2014; only 4 of them saw the appropriate rate at 2 percent or higher. 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. In addition to projecting only slow progress in bringing down unemployment, most participants saw the risks to the outlook as weighted mainly toward slower growth and higher unemployment. In particular, participants noted that strains in global financial markets, the prospect of reduced fiscal accommodation in the United States, and a general slowdown in global economic growth posed significant risks to the recovery and to a further improvement in labor market conditions.

Part 2 Recent Economic and Financial Developments

Economic activity appears to have expanded at a somewhat slower pace over the first half of 2012 than in the second half of 2011. After rising at an annual rate of 2½ percent in the second half of 2011, real gross domestic product (GDP) increased at a 2 percent pace in the first quarter of 2012, and available indicators point to a still smaller gain in the second quarter. An important factor influencing economic and financial developments this year is the unfolding fiscal and banking crisis in Europe. Indeed, the economic outlook for the second half of 2012 depends crucially on the extent to which current and potential disruptions in Europe directly reduce U.S. net exports and indirectly curtail private domestic spending through adverse spillover effects on U.S. financial markets and institutions and on household and business confidence. At the same time, the economy continues to face other headwinds, including restricted access to some types of household and small business credit, a still sizable inventory of vacant homes, and less-accommodative fiscal policy.

The labor market remains weak. Private payroll employment stepped up early in the year but then slowed in the second quarter (though those moves may have been exaggerated by issues related to swings in the weather and to seasonal adjustment), and the unemployment rate hovered around 8¼ percent after a significant decrease over the latter months of 2011 and in January. Meanwhile, consumer price inflation, in part buffeted by sharp swings in the price of gasoline, stepped up early in the year but subsequently turned down, and longer-term inflation expectations remained stable.

Financial markets were somewhat volatile over the first half of 2012 mostly due to fluctuating views regarding the crisis in the euro area and the likely pace of economic growth at home and abroad. Yields on longer-term Treasury securities have declined significantly, reflecting greater monetary policy accommodation, the weaker outlook, and safe-haven flows. Broad indexes of U.S. equity prices rose, on net, risk spreads on corporate bonds were generally unchanged or slightly lower, and unsecured short-term dollar funding markets were fairly stable. Debt issuance by U.S. corporations was solid, and bank lending to larger firms was brisk. In the household sector, consumer credit expanded and mortgage refinancing activity increased modestly, reflecting the decline in mortgage rates to historically low levels as well as recent changes to the Home Affordable Refinance Program (HARP).

Domestic Developments

The Household Sector

Consumer Spending and Household Finance

After rising at an annual rate of about 2 percent in the second half of 2011, real personal consumption expenditures (PCE) increased 2½ percent in the first quarter, but available information suggests that real PCE decelerated some in the second quarter. The first-quarter increase in spending occurred across a broad array of goods and services with the notable exception of outlays for energy services, which were held down by reduced demand for heating because of the unseasonably warm winter. Spending on energy services appears to have rebounded in the second quarter as the temperate winter gave way to a relatively more typical spring. In contrast, the pace of motor vehicle sales edged down in the second quarter, and reports on retail sales suggest that consumer outlays on a wide range of items rose less rapidly than they did in the first quarter. The moderate rise in consumer spending over the first half of the year occurred against the backdrop of the considerable economic challenges still facing many households, including high unemployment, sluggish gains in employment, tepid growth in income, still-stressed balanced sheets, tight access to some types of credit, and lingering pessimism about job and income prospects. With increases in spending outpacing growth in income so far this year, the personal saving rate continued to decline, on net, though it remained well above levels that prevailed before the recession.

Aggregate real disposable personal income (DPI)—personal income less personal taxes, adjusted for changes in prices—rose more rapidly over the first five months of the year than it did in 2011, in part because of declining energy prices. The wage and salary component of real DPI, which reflects both the number of hours worked and average hourly wages adjusted for inflation, rose at an annual rate of nearly 1¼ percent through May of this year after having increased at a similar pace in 2011. The increase in real wage and salary income so far in 2012 is largely attributable to the modest improvement in employment and hours worked; real average hourly earnings are little changed thus far this year.

The ratio of household net worth to income, in the aggregate, moved up slightly further in the first quarter, reflecting increases in both house prices and equity prices. Taking a longer view, this ratio has been on a slow upward trend since 2009, and while it remains far below levels seen in the years leading up to the recession, it is about equal to its average over the past 20 years. Household-level data through 2010 indicate that wealth losses were proportionately larger for the middle portion of the wealth distribution—not a surprising result, given the relative importance of housing among the assets of those households. Meanwhile, indicators of consumer sentiment are above their lows from last summer but have yet to return to pre-recession levels.

Household debt—the sum of mortgage and consumer debt—edged down again in the first quarter of 2012 as the continued contraction in mortgage debt was almost offset by solid expansion in consumer credit. With the reduction in household debt, low level of most interest rates, and modest growth of income, the debt-service ratio—the aggregate required principal and interest payments on existing household debt relative to income—decreased further, and, at the end of the first quarter, it stood at a level last seen in 1994.

Consumer credit expanded at an annual rate of about 6¼ percent in the first five months of 2012, driven by an increase in nonrevolving credit. This component accounts for about two-thirds of total consumer credit and primarily consists of auto and student loans. The rise in nonrevolving credit so far this year was primarily due to the strength in student loans, which were almost entirely originated and funded by the federal government. Meanwhile, auto loans maintained a steady pace of increase. Revolving consumer credit (primarily credit card lending) remained much more subdued in the first five months of the year in part because nonprime borrowers continued to face tight underwriting standards. Overall, the increase in consumer credit is consistent with recent responses to the Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS) indicating that demand had strengthened and standards had eased, on net, for all consumer loan categories.[1]

Interest rates on consumer loans generally edged down in the first half of 2012, and spreads on these loans relative to Treasury securities of comparable maturity held fairly steady. In particular, interest rates on new auto loans continued to be quite low. However, the spread of rates on credit card loans relative to the two-year Treasury yield has remained wide since the end of 2008 in part because of pricing adjustments made in response to provisions included in the Credit Card Accountability Responsibility and Disclosure Act of 2009.[2]

Aggregate indicators of consumer credit quality improved further in the first quarter of 2012. The delinquency rate on credit card loans registered its lowest level since the series began in 1991. The recent improvement importantly reflects an ongoing compositional shift in total credit card balances toward borrowers with higher credit scores, due in part to tighter lending standards. Charge-offs on credit card loans also declined, reaching levels last seen at the end of 2007. Delinquencies and charge-offs on nonrevolving consumer loans at commercial banks also edged lower, to levels slightly below their historical averages. In addition, the delinquency rate on auto loans at finance companies decreased slightly to a level that is near the middle of its historical range.

Issuance of consumer asset-backed securities (ABS) in the first half of 2012 exceeded issuance for the same period in 2011 but was still below pre-crisis levels. Issuances of securities backed by auto loans dominated the market for most of the first half, while student loan ABS issuance was about the same as in the past two years. In contrast, issuance of credit card ABS remained weak for most of the first half of 2012 as growth of credit card loans continued to be somewhat subdued and most major banks have chosen to fund such loans on their balance sheets. Yields on ABS and their spreads over comparable-maturity swap rates were little changed, on net, over the first half of 2012 and held steady in the low ranges that have prevailed since early 2010.

Housing Activity and Housing Finance

Activity in the housing sector appears to be on a gradual uptrend, albeit from a very depressed level. Sales of new and existing homes have risen so far this year, likely supported by the low level of house prices and by low interest rates for conventional mortgages. Nonetheless, the factors that have restrained demand for owner-occupied housing in recent years have yet to dissipate. Many potential buyers are reluctant to purchase homes because of ongoing concerns about future income, employment, and the direction of house prices. In addition, tight mortgage finance conditions preclude many borrowers from obtaining mortgage credit. Much of the home purchase demand that does exist has been channeled to the abundant stock of vacant houses, thereby limiting the response of new construction activity to such expansion of demand as has occurred. Given the large numbers of properties still in, or at risk of being in, foreclosure, this overhang seems likely to continue to weigh on new construction activity for some time.

Despite these factors, housing starts have risen gradually so far this year. From January to May, single-family houses were started at an annual rate of about 495,000 units, up from 450,000 in the second half of 2011 but less than half of the average pace of the past 50 years. Although the unseasonably warm winter may have contributed to the increase, the underlying pace of activity likely rose some as well. Indeed, data on single-family permit issuance, which is less likely to be affected by weather, also moved up a little from its level late last year. In the multifamily sector, demand has remained robust, as many individuals and families that are unable or unwilling to purchase homes have sought out rental units. As a result, the vacancy rate for rental housing has fallen

---

1 The SLOOS is available on the Federal Reserve Board's website at www.federalreserve.gov/boarddocs/SnLoanSurvey.

2 The act includes some provisions that place restrictions on issuers' ability to impose certain fees and to engage in risk-based pricing.

to its lowest level since 2002, putting upward pressure on rents and spurring new construction. Over the first five months of the year, new multifamily projects were started at an average annual rate of about 225,000 units, up from about 200,000 in the second half of 2011 but still below the 300,000-unit rate that prevailed for much of the previous decade.

House prices, as measured by several national indexes, turned up in recent months after edging down further, on balance, in 2011. For example, the CoreLogic repeat-sales index rose 4 percent (not an annual rate) over the first five months of the year. This recent improvement notwithstanding, this measure of house prices remains 30 percent below its peak in 2006. The same factors that are restraining single-family housing construction also continue to weigh on house prices, including the large inventory of vacant homes, tight mortgage credit conditions, and lackluster demand.

Mortgage rates declined to historically low levels during the first half of 2012. While significant, the drop in mortgage rates generally did not keep pace with the declines in the yields on Treasury and mortgage-backed securities (MBS), probably reflecting still-elevated risk aversion and some capacity constraints among mortgage originators. Despite the drop in mortgage rates, many potentially creditworthy borrowers have had difficulty obtaining mortgages or refinancing because of tight standards and terms (see the box "The Supply of Mortgage Credit" on pages 10–11 of the July 2012 *Monetary Policy Report*). Another factor impeding the ability of many borrowers to refinance, or to sell their home and purchase a new one, has been the prevalence of underwater mortgages. Overall, refinancing activity increased in the second quarter but was still less than might be expected, given the level of interest rates, and the pace of mortgage applications for home purchases remained sluggish. However, refinancing activity attributed to recent changes to the HARP—one of which eliminated caps on loan-to-value ratios for those who were refinancing mortgages already owned by government-sponsored enterprises (GSEs)—has picked up over the first half of the year.

Indicators of credit quality in the residential mortgage sector continued to reflect strains on homeowners confronting depressed home values and high unemployment. The fraction of current prime mortgages becoming delinquent remained at a high level but inched lower, on net, over the first five months of the year, likely reflecting in part stricter underwriting of more-recent originations. Additionally, measures of late-stage mortgage delinquency, such as the inventory of properties in foreclosure, continued to linger near the peak in the first quarter of 2012.

Gross issuance of MBS guaranteed by GSEs remained moderate in the first half of 2012, consistent with the slow pace of mortgage originations. In contrast, the securitization market for mortgage loans not guaranteed by a housing-related GSE or the Federal Housing Administration—an important source of funding before the crisis for prime-grade mortgages that exceeded the conforming loan size limit—continued to be essentially closed.

The Business Sector

Fixed Investment

Real business spending for equipment and software (E&S) rose at an annual rate of 3½ percent in the first quarter of 2012 after having risen at a double-digit pace, on average, in the second half of 2011. The slowdown in E&S investment growth in the first quarter was fairly widespread across categories of equipment and software. This deceleration in E&S spending along with the recent softening in indicators of investment demand, such as surveys of business sentiment and capital spending plans, may signal some renewed caution on the part of businesses, perhaps related to the situation in Europe.

After posting robust gains throughout much of 2011, investment in nonresidential structures edged up in the first quarter of this year. A drop in outlays for drilling and mining structures was probably related to the low level of natural gas prices. Outside of the drilling and mining segments, investment increased at an annual rate of 7 percent in the first quarter, broadly similar to its gain in the fourth quarter of 2011. Although financing conditions for existing properties have eased some, they remain tight; moreover, high vacancy rates, low commercial real estate prices, and difficult financing conditions for new construction will likely weigh on building activity for the foreseeable future.

Inventory Investment

Firms accumulated inventories in the first quarter at about the same pace as in the fourth quarter of last year. Motor vehicle inventories surged in the first quarter, as automakers rebuilt dealers' inventories to comfortable levels after natural disasters disrupted global supply chains in 2011. Stockbuilding outside of motor vehicles moderated somewhat from the

fourth-quarter pace of accumulation. Inventory-to-sales ratios for most industries covered by the Census Bureau's book-value data, as well as surveys of private inventory satisfaction and plans, generally suggest that stocks are fairly well aligned with the pace of sales.

Corporate Profits and Business Finance

Aggregate operating earnings per share for S&P 500 firms rose about 7 percent at a seasonally adjusted quarterly rate in the first quarter of 2012. Financial firms accounted for most of the gain, while profits for firms in the nonfinancial sector were about unchanged from the high level seen in the fourth quarter of last year. As of the end of June, private-sector analysts projected moderate earnings growth through the end of the year.

The ratio of corporate profits to gross national product in the first quarter of 2012 hovered around its historical high, and cash flow remained solid. In addition, the ratio of liquid assets to total assets continued to be near its highest level in more than 20 years, and the share of corporate cash flow needed to cover interest expenses remained low. Against this backdrop of generally strong corporate earnings and balance sheets, credit rating upgrades continued to outpace downgrades for nonfinancial corporations, and the bond default rate for nonfinancial firms remained low in the first half of the year. The delinquency rate on commercial and industrial (C&I) loans decreased further in the first quarter and approached the lower end of its historical range.

With corporate credit quality remaining robust, nonfinancial firms were able to continue to raise funds at a generally strong pace in the first half of the year. So far this year, nonfinancial commercial paper (CP) outstanding was about unchanged. Bond issuance by both investment- and speculative-grade nonfinancial firms was strong over the first four months of the year, but speculative-grade issuance weakened some in May and notably further in June. The institutional segment of the syndicated leveraged loan market remained solid in the first half of the year, reportedly supported by continued demand for loans from nonbank investors, such as pension plans and insurance companies. In addition, the volume of newly established collateralized loan obligations so far this year has already surpassed 2011 levels. Much of the bond and loan issuance was reportedly used to refinance, and likely also to extend the maturity of, existing debt, given the low level of long-term interest rates.

C&I loans outstanding at commercial banking organizations in the United States expanded at a brisk pace in the first half of 2012 despite declines in the holdings of such loans by U.S. branches and agencies of European institutions. The strength is consistent with a relatively large number of banks, on balance, that have reported stronger demand for C&I loans in the recent SLOOS. Moreover, in the April SLOOS, banks continued to report having eased both price and nonprice terms for C&I loans, largely in response to strong competition from other banks and nonbank lenders. The extent of easing generally has been greater for large and middle-market firms. That said, according to the Survey of Terms of Business Lending (STBL), spreads on C&I loans over banks' cost of funds, while continuing to trend down gradually in the February and May surveys, are still quite high in historical terms. Spreads on newly issued syndicated loans have also remained somewhat wide.

Borrowing conditions for small businesses generally have improved over the past few years but have done so much more gradually than have conditions for larger firms; moreover, the demand for credit from small firms apparently remains subdued. C&I loans with original amounts of $1 million or less—a large share of which likely consists of loans to small businesses—were about unchanged in the first quarter.[3] According to results from surveys conducted by the National Federation of Independent Business during the first half of this year, the fraction of firms with borrowing needs stayed low. The net percentage of respondents that found credit more difficult to obtain than three months earlier and that expected tighter credit conditions over the next three months have both declined, but they remained at relatively high levels in the June survey. In addition, recent readings from the STBL indicate that the spreads charged by commercial banks on newly originated C&I loans with original amounts less than $1 million remained quite high, even on loans with the strongest credit ratings.

Financial conditions in the commercial real estate (CRE) sector have eased some but stayed relatively tight amid weak fundamentals. According to the April SLOOS, some domestic banks reported having eased standards on CRE loans and, on balance, a significant number of domestic banks reported increased demand for such loans. While banks' hold-

[3] The original amount for a C&I loan is defined in the Call Report as the maximum of the amount of the loan or the amount of the total commitment.

ings of CRE loans continued to contract in the first half of this year, they did so at a slower pace than in the second half of last year. The weakest segment of CRE lending has been the portion supporting construction and land development; some other segments have recently expanded modestly. Issuance of commercial mortgage-backed securities (CMBS) has also increased recently from the low levels observed last year. Nonetheless, the delinquency rate on loans in CMBS pools continued to set new highs in June, as some five-year loans issued in 2007 at the height of the market were unable to refinance at maturity because of their high loan-to-value ratios. While delinquency rates for CRE loans at commercial banks improved slightly in the first quarter, they remained elevated, especially for construction and land development loans.

In the corporate equity market, gross public equity issuance by nonfinancial firms was strong in the first five months of 2012, boosted by a solid pace of initial public offerings (IPOs).[4] Data for the first quarter of 2012 indicate that share repurchases and cash-financed mergers by nonfinancial firms remained robust, and net equity issuance remained deeply negative. However, fewer mergers and new share repurchase programs were announced in the second quarter.

The Government Sector

Federal Government

The deficit in the federal unified budget remains elevated. The Congressional Budget Office projects that the deficit for fiscal year 2012 will be close to $1.2 trillion, or about 7½ percent of nominal GDP. Such a deficit would be a narrower share of GDP than those recorded over the past several years though still sharply higher than those recorded in the few years prior to the onset of the financial crisis and recession. The narrowing of the budget deficit expected to occur in the current fiscal year mostly reflects increases in tax revenues as the economy continues to recover, although the growth in outlays is being held back by the winding down of expansionary fiscal policies enacted in response to the recession, as well as some budgetary restraint in defense and other discretionary spending programs.

Federal receipts increased 5 percent in the first nine months of fiscal 2012 compared with the same period in fiscal 2011. Receipts were bolstered thus far this fiscal year by a robust rise in corporate tax revenues that is largely attributable to a scaling back in the favorable tax treatment of some business investment. In addition, individual income and payroll tax receipts have moved higher, reflecting increases in nominal wage and salary income. Nonetheless, at only about 15½ percent, the ratio of federal receipts to national income is near the lowest reading for this ratio over the past 60 years.

Total federal outlays moved sideways in the first nine months of fiscal 2012 relative to the comparable year-earlier period. Outlays were reduced by the winding down of stimulus-related programs (including the American Recovery and Reinvestment Act of 2009), lower payments for unemployment insurance, and falling defense expenditures. In addition, outlays for Medicaid so far this fiscal year were unusually weak, apparently reflecting in part the implementation of cost-containment measures by many state governments to reduce spending growth for that program. In contrast, Social Security outlays rose in part because of the first cost-of-living adjustments since 2009, and outlays for financial transactions were boosted by the revaluation of the expected cost of previous Troubled Asset Relief Program transactions and an increase in net outlays for deposit insurance.[5] Net interest payments increased moderately, reflecting the rising level of the federal debt.

As measured in the national income and product accounts (NIPA), real federal expenditures on consumption and gross investment—the part of federal spending included in the calculation of GDP—fell at an annual rate of close to 6 percent in the first quarter. Defense spending, which tends to be erratic from quarter to quarter, contracted more than 8 percent, and nondefense purchases edged down.

Federal debt held by the public rose to about 72 percent of nominal GDP in the second quarter of 2012, 3½ percentage points higher than at the end of last year. Treasury auctions generally continued to be well received by investors. Indicators of demand at Treas-

[4] Indeed, the second largest IPO on record began trading in mid-May. However, the price performance of those shares in the days following that offering was sharply negative on net, and IPO activity subsequently weakened significantly.

[5] The subsidy costs of outstanding Troubled Asset Relief Program assistance are reestimated annually by updating cash flows for actual experience and new assumptions about the future performance of the programs; any changes in these estimated subsidy costs are recorded in the federal budget in the current fiscal year.

ury auctions, such as bid-to-cover ratios and indirect bidding ratios, were within their historical ranges.

State and Local Government

State and local government budgets remain strained, but overall fiscal conditions for these governments may be slowly improving. In particular, state and local tax receipts appeared to increase moderately over the first half of this year. Census Bureau data indicate that state revenue collections rose 4 percent in the first quarter relative to a year earlier, and anecdotal evidence suggests that collections during April and May were well maintained. Moreover, only a few states reported budget shortfalls during fiscal 2012 (which ended on June 30 in most states). The improvement is less evident at the local level, where property tax receipts—the largest source of tax revenue for these governments—were roughly flat in 2011 and early 2012, reflecting the crosscutting effects of the earlier declines in home prices and increases in property tax rates. Moreover, federal aid to both state and local governments has declined as stimulus-related grants have been almost completely phased out.

One of the ways that state and local governments have addressed their tight budget situations has been through cuts in their employment and construction spending. After shedding jobs at an average pace of 19,000 per month in 2011, these governments reduced their employment over the first half of the year at a slower pace by trimming 3,000 jobs per month on average. However, real construction expenditures fell sharply in the first quarter after having edged down in the latter half of 2011, and available information on nominal construction spending through May points to continued declines in recent months. The decreases in employment and construction are evident in the Bureau of Economic Analysis (BEA) estimate for real state and local purchases, which fell at an annual rate of 2¾ percent in the first quarter, about the same pace as in 2011.

Gross issuance of bonds by states and municipalities picked up in the second quarter of 2012. Credit quality in the sector continued to deteriorate over the first half of the year. For instance, credit rating downgrades by Moody's Investors Service substantially outpaced upgrades, and credit default swap (CDS) indexes for municipal bonds rose on net. Yields on long-term general obligation municipal bonds were about unchanged over the first half of the year.

The External Sector

Exports and Imports

Both real exports and imports grew moderately in the first quarter of 2012. Real exports of goods and services rose at an annual rate of 4¼ percent, supported by relatively strong foreign economic growth. Exports of services, automobiles, computers, and aircraft expanded rapidly, while those of consumer goods declined. The rise in exports was particularly strong to Canada and Mexico. Data for April and May suggest that exports continued to rise at a moderate pace in the second quarter.

Real imports of goods and services rose a relatively modest 2¾ percent in the first quarter, reflecting slower growth in U.S. economic activity. Imports of services, automobiles, and computers rose significantly, while those of petroleum, aircraft, and consumer goods fell. The rise in imports was broadly based across major trading partners, with imports from Japan and Mexico showing particularly strong growth. April and May data suggest that import growth picked up in the second quarter.

Altogether, net exports made a small positive contribution of one-tenth of 1 percentage point to real GDP growth in the first quarter.

Commodity and Trade Prices

After increasing earlier in the year, oil prices have subsequently fallen back. Over much of the first quarter, an improved outlook for the global economy and increased geopolitical tensions—most notably with Iran—helped spur a run-up in the spot price of oil, with the Brent benchmark averaging $125 per barrel in March, about $15 above its January average. Since mid-March, however, oil prices have more than retraced their earlier gains amid an intensification of the crisis in Europe and increased concerns over the strength of economic growth in China. An easing of geopolitical tensions and increased crude oil supply—production by Saudi Arabia has been running at near-record high levels—have also likely contributed to the decline in oil prices. All told, the price of Brent has plunged $25 a barrel from March to about $100 per barrel in mid-July.

Prices of many nonfuel commodities followed a path similar to that shown by oil prices, albeit with less volatility. Early in 2012, commodity prices rallied, as global economic prospects and financial conditions

improved along with a temporary abatement of stresses in Europe. However, as with oil prices, broader commodity prices fell in the second quarter, reflecting growing pessimism regarding prospects for the global economy.

Prices for non-oil imported goods increased less than ¼ percent in the first quarter, with the modest pace of increase likely reflecting the lagged effects of both the appreciation of the dollar and the decline in commodity prices that occurred late last year. Moving into the second quarter, import price inflation appears to have remained subdued, consistent with a further appreciation of the dollar.

The Current and Financial Accounts

Largely reflecting the run-up in oil prices early in the year, the nominal trade deficit widened slightly in the first quarter. In addition, as the net investment income balance continued to decline, the current account deficit deteriorated from an annual average of $470 billion in 2011 to $550 billion in the first quarter, or 3½ percent of GDP.[6]

The financial flows that provide the financing of the current account deficit reflected the general trends in financial market sentiment and in reserve accumulation by emerging market economies (EMEs). Consistent with a temporary improvement in the tone of financial markets in the first quarter, foreign private investors slowed their net purchases of U.S. Treasury securities and resumed net purchases of U.S. equities, although they continued to sell other U.S. bonds. However, the tentative increase in foreign risk appetite abated early in the second quarter and foreign private investors showed renewed demand for U.S. Treasury securities and less demand for other U.S. securities.

U.S. investors' demand for foreign securities was flat, on net, in the first quarter and the early part of the second quarter, but this outcome nonetheless represents an increase relative to net sales of foreign securities in the fourth quarter of 2011.

Inflows from foreign official institutions strengthened in the first quarter as emerging market governments bought dollars to counter upward pressure on their currencies, resulting in increased accumulation of dollar-denominated reserves, which were then invested in U.S. securities. Partial data for the second quarter suggest that foreign official inflows remained strong despite renewed dollar appreciation against emerging market currencies. U.S. official assets registered a $51 billion inflow during the first quarter as drawings on the Federal Reserve's dollar swap lines with the European Central Bank (ECB) and the Bank of Japan (BOJ) were partially repaid.

National Saving

Total U.S. net national saving—that is, the saving of U.S. households, businesses, and governments, net of depreciation charges—remains extremely low by historical standards. Net national saving fell from 4 percent of nominal GDP in 2006 to negative 2 percent in 2009, as the federal budget deficit widened. The national saving rate subsequently increased to near zero, where it remained as of the first quarter of 2012 (the latest quarter for which data are available). The relative flatness of the saving rate over the past couple of years reflects the offsetting effects of a narrowing in the federal budget deficit as a share of nominal GDP and a downward movement in the private saving rate. National saving will likely remain low this year in light of the continuing large federal budget deficit. A portion of the decline in federal savings relative to pre-crisis levels is cyclical and would be expected to reverse as the economy recovers. However, if low levels of national saving persist over the longer run, they will likely be associated with both low rates of capital formation and heavy borrowing from abroad, limiting the rise in the standard of living for U.S. residents over time.

The Labor Market

Employment and Unemployment

Labor market conditions remain weak. After averaging 165,000 jobs per month in the second half of 2011, private payroll employment gains increased to 225,000 jobs per month over the first three months of the year and then fell back to 90,000 jobs per month over the past three months. The apparent slowing in the pace of net job creation may have been exaggerated by issues related to swings in the weather and to seasonal adjustment difficulties associated with the timing of the sharpest job losses during the recession. Moreover, employment gains during the second half of last year and into the early part of this year may have reflected some catch-up in hiring on the part of employers that aggressively pared their workforces during and just after the recession. The recent decel-

[6] In 1999, the BEA—while revisiting its methodology for the balance of payments accounts—redefined the current account to exclude capital transfers. In the process, the capital account was renamed the financial account, and a newly defined capital account was created to include capital transfers as well as the acquisition and disposal of nonproduced nonfinancial assets.

eration in employment may suggest that much of this catch-up has now taken place and that, consequently, more-rapid gains in economic activity will be required to achieve significant further increases in employment and declines in the unemployment rate.

The unemployment rate, though down from around 9 percent last summer, has held about flat at 8¼ percent since early this year and remains elevated relative to levels observed prior to the recent recession. Moreover, long-term unemployment also remains elevated. In June, around 40 percent of those unemployed had been out of work for more than six months. Meanwhile, the labor force participation rate has fluctuated around a low level so far this year after having moved down 2 percentage points since 2007.

Other labor market indicators were consistent with little change in overall labor market conditions during the first half of the year. Initial claims for unemployment insurance were not much changed, on net, although their average level over the first half of the year was lower than in the second half of 2011. Measures of job vacancies edged up, on balance, and households' labor market expectations largely reversed the steep deterioration from last summer. However, indicators of hiring activity remained subdued.

Productivity and Labor Compensation

Gains in labor productivity have continued to slow recently following an outsized increase in 2009 and a solid gain in 2010. According to the latest published data, output per hour in the nonfarm business sector rose just ½ percent in 2011 and declined in the first quarter of 2012. Although these data can be volatile from quarter to quarter, the moderation in productivity growth over the past two years suggests that firms have been adding workers not only to meet rising production needs but also to relieve pressures on their existing workforces, which were cut back sharply during the recession.

Increases in hourly compensation continue to be restrained by the very weak condition of the labor market. The 12-month change in the employment cost index for private industry workers, which measures both wages and the cost to employers of providing benefits, has been about 2 percent or less since the start of 2009 after several years of increases in the neighborhood of 3 percent. Nominal compensation per hour in the nonfarm business sector—a measure derived from the labor compensation data in the NIPA—also decelerated significantly over the past few years; this measure rose just 1¼ percent over the year ending in the first quarter of 2012, well below the average increase of about 4 percent in the years before the recession. Similarly, average hourly earnings for all employees—the timeliest measure of wage developments—rose about 2 percent in nominal terms over the 12 months ending in June. According to each of these measures, gains in hourly compensation failed to keep up with increases in consumer prices in 2011 and again in the first quarter of this year.

The change in unit labor costs faced by firms—which measures the extent to which nominal hourly compensation rises in excess of labor productivity—remained subdued. Unit labor costs in the nonfarm business sector rose 1 percent over the year ending in the first quarter of 2012. Over the preceding year, unit labor costs increased 1½ percent.

Prices

Consumer price inflation moved down, on net, during the first part of 2012. Overall PCE prices rose rapidly in the first three months of the year, reflecting large increases in oil prices, but inflation turned down in the spring as oil prices more than reversed their earlier run-ups. The overall chain-type PCE price index increased at an annual rate of about 1½ percent between December 2011 and May 2012, compared with a rise of 2½ percent over 2011. Excluding food and energy, consumer prices rose at a rate of about 2 percent over the first five months of the year, essentially the same pace as in 2011. In addition to the net decline in crude oil prices over the first half of the year, factors contributing to low consumer price inflation this year include the deceleration of non-oil import prices in the latter part of 2011, subdued labor costs associated with the weak labor market, and stable inflation expectations.

Consumer energy prices surged at an annual rate of over 20 percent in the first three months of 2012, as higher costs for crude oil were passed through to gasoline prices. In April, the national-average price for gasoline at the pump approached $4 per gallon. Since then, crude oil prices have tumbled, and gasoline prices have declined roughly in line with crude costs, more than reversing the earlier run-up. Consumer prices for natural gas plunged over the first five months of the year after falling late last year; this drop is attributable, at least in part, to the unseasonably warm winter, which reduced demand for natural gas. More recently, spot prices for natural gas have turned up as production has been cut back, but they

still remain substantially lower than they were last summer.

Consumer food price inflation has slowed noticeably so far this year, as the effect on retail food prices from last year's jump in farm commodity prices appears to have largely dissipated. Indeed, PCE prices for food and beverages only edged up slightly, rising at an annual rate of about ½ percent from December to May after increasing more than 5 percent in 2011. Although farm commodity prices were tempered earlier this year by expectations of a substantial increase in crop output this growing season, grain prices rose rapidly in late June and early July as a wide swath of the Midwest experienced a bout of hot, dry weather that farm analysts believe cut yield prospects considerably.

Survey-based measures of near-term inflation expectations have changed little, on net, so far this year. Median year-ahead inflation expectations, as reported in the Thomson Reuters/University of Michigan Surveys of Consumers (Michigan survey), rose in March when gasoline prices were high but then fell back as those prices reversed course. Longer-term expectations remained more stable. In the Michigan survey, median expected inflation over the next 5 to 10 years was 2.8 percent in early July, within the narrow range of the past 10 years. In the Survey of Professional Forecasters, conducted by the Federal Reserve Bank of Philadelphia, expectations for the increase in the price index for PCE over the next 10 years remained at 2¼ percent, in the middle of its recent range.

Measures of medium- and longer-term inflation compensation derived from nominal and inflation-protected Treasury securities—which not only reflect inflation expectations, but also can be affected by changes in investor risk aversion and by the different liquidity properties of the two types of securities—were little changed, on net, so far this year. These measures increased early in the period amid rising prices for oil and other commodities, but they subsequently declined as commodity prices fell back and as worries about domestic and global economic growth increased.

Financial Developments

Financial markets were somewhat volatile over the first half of 2012. Early in the year, broad equity price indexes rose and risk spreads in several markets narrowed as investor sentiment regarding short-term European prospects and the economic outlook improved. Those gains partially reversed when market participants became more pessimistic about the European situation and global growth prospects in May and June. Yields on longer-term Treasury securities declined, on balance, over the first half of the year. Conditions in unsecured short-term dollar funding markets generally remained stable as European financial institutions reduced their demand for dollar funding and general funding pressures were alleviated by the longer-term refinancing operations of the ECB. In the domestic banking sector, the release of the results from the Comprehensive Capital Analysis and Review (CCAR) in March provided a significant boost to the equity prices of U.S. financial institutions (see the box "The Capital and Liquidity Position of Large U.S. Banks" on pages 24–25 of the July 2012 *Monetary Policy Report*).

Monetary Policy Expectations and Treasury Rates

In response to the steps taken by the Federal Open Market Committee (FOMC) to provide additional monetary policy accommodation, and amid growing anxiety about the European crisis and a worsening of the economic outlook, investors pushed out further the date when they expect the federal funds rate to first rise above its current target range of 0 to ¼ percent. In addition, they apparently scaled back the pace at which they expect the federal funds rate subsequently to be increased. Market participants currently anticipate that the effective federal funds rate will be about 50 basis points by the middle of 2015, roughly 55 basis points lower than they expected at the beginning of 2012.

Yields on longer-term nominal Treasury securities declined, on balance, over the first half of 2012. Early in the year, longer-term Treasury yields rose, reflecting generally positive U.S. economic data, improved market sentiment regarding the crisis in Europe, and higher energy prices. More recently, however, longer-term yields have more than reversed their earlier increases. Investors sought the relative safety and liquidity of Treasury securities as the crisis in Europe intensified again and as weaker-than-expected economic data releases raised concerns about the pace of economic recovery both in the United States and abroad. In addition, those developments fostered expectations that the Federal Reserve would provide additional accommodation. And the Treasury yield curve flattened further following the FOMC's decision at its June meeting to continue the maturity extension program (MEP) through the end of 2012. On balance, yields on 5-, 10-, and

30-year nominal Treasury securities declined roughly 20, 40, and 35 basis points, respectively, from their levels at the start of this year. The Open Market Desk's outright purchases and sales of Treasury securities under the MEP did not appear to have any material adverse effect on Treasury market functioning.

Short-Term Funding Markets

Despite the reemergence of strains in Europe, conditions in unsecured short-term dollar funding markets have remained fairly stable in the first half of 2012. Measures of stress in short-term funding markets have eased somewhat, on balance, since the beginning of the year. A few factors seem to have contributed to the relative stability of those markets. European institutions apparently reduced their demand for funds in recent quarters by selling dollar-denominated assets and exiting from business lines requiring heavy dollar funding. In addition, European banks reportedly switched to secured funding supported by various types of collateral. Further, the availability of funds from the ECB through its longer-term refinancing operations likely helped reduce funding strains and the need to access interbank markets more generally. Reflecting these developments, the amount of dollar swaps outstanding between the Federal Reserve and the ECB has declined substantially from its peak earlier this year.

Conditions in the CP market were also fairly stable. On net, 30-day spreads of rates on unsecured A2/P2 CP over comparable-maturity AA-rated nonfinancial CP declined a bit. The volume outstanding of unsecured financial CP issued in the United States by institutions with European parents decreased slightly in the first half of the year. The average maturity of unsecured financial CP issued by institutions with both U.S. and European parents is about 50 days, a level that is near the middle of its historical range.

Signs of stress were also largely absent in secured short-term dollar funding markets. In the market for repurchase agreements, bid-asked spreads for most collateral types were little changed. However, short-term interest rates continued to edge up from the level observed around the turn of the year, likely reflecting in part the financing of the increase in dealers' inventories of shorter-term Treasury securities that resulted from the ongoing MEP and higher-than-expected bill issuance by the Treasury Department earlier in the year. In asset-backed commercial paper (ABCP) markets, volumes outstanding declined for programs with European sponsors, and spreads on ABCP with European bank sponsors remained a bit above those on ABCP with U.S. bank sponsors.

Respondents to the Senior Credit Officer Opinion Survey on Dealer Financing Terms (SCOOS) in both March and June indicated that credit terms applicable to important classes of counterparties have been relatively stable since the beginning of the year.[7] In addition, dealers reported that the use of financial leverage among hedge funds had decreased somewhat since the beginning of 2012. Moreover, respondents to the June SCOOS noted an increase in the amount of resources and attention devoted to the management of concentrated exposures to dealers and other financial intermediaries as well as central counterparties and other financial utilities. In response to a special question in the June SCOOS, dealers reported that despite the persistently low level of interest rates, only moderate fractions of their unlevered institutional clients had shown an increased appetite for credit risk or duration risk over the past year.

Financial Institutions

Market sentiment toward the banking industry fluctuated in the first half of 2012. Early in the year, after the actions of the European authorities to ease the euro-area crisis and the release of the results from the CCAR, equity prices for bank holding companies (BHCs) increased and their CDS spreads declined. In late spring—as investors reacted to concerns about Europe—equity prices reversed some of those gains, and CDS spreads rose for large BHCs, especially those with substantial investment-banking operations. More recently, Moody's downgraded the long- and short-term credit ratings of five of the six largest U.S. banks, but none of the banks lost their investment-grade status on long-term debt. The short-term debt ratings of some banks were downgraded to Prime-2, which may affect the ability of some to place significant amounts of CP with money market funds, but the market effect appears to have been muted so far, as those banks currently have limited demand for such funding. On balance, equity prices of banks rose significantly from relatively low levels at the start of the year; an index of CDS spreads for large BHCs declined about 60 basis points but remained at a high level.

---

[7] The SCOOS is available on the Federal Reserve Board's website at www.federalreserve.gov/econresdata/releases/scoos.htm.

The profitability of BHCs decreased slightly in the first quarter of 2012 and remained well below the levels that prevailed before the financial crisis. Litigation provisions taken by some large banks in connection with the mortgage settlement reached earlier this year accounted for some of the downward pressure on bank profitability. The variability in earnings due to accounting gains and losses related to changes in the market value of banks' own debt amplified recent swings of bank profits.[8] Smoothing through these special factors, profitability has been about flat in recent quarters. Net income continued to be supported by the release of loan loss reserves, albeit to a lesser extent than in the previous year, as charge-off rates decreased a bit further across most major asset classes. Still-subdued dividend payouts and share repurchases as well as reductions in risk-weighted assets pushed regulatory capital ratios higher in the first quarter of 2012 (see the box "Implementing the New Financial Regulatory Regime" on pages 28–29 of the July 2012 *Monetary Policy Report*).

Credit provided by commercial banking organizations in the United States increased in the first half of 2012 at about the same moderate pace as in the second half of 2011. Core loans—the sum of C&I loans, real estate loans, and consumer loans—expanded modestly; as noted earlier, the upturn in lending was particularly noticeable for C&I loans. The expansion in C&I lending has been broad based outside of U.S. branches and agencies of European banks and has been particularly evident at large domestic banks. This pattern is consistent with SLOOS results suggesting that a portion of the increase in C&I lending observed at large domestic banks reflected decreased competition from European banks and their affiliates and subsidiaries for either foreign or domestic customers. Banks' holdings of securities rose moderately, with purchases concentrated in Treasury securities and agency-guaranteed MBS. Given the still-depressed housing market, banks continued to be attracted by the government guarantee on agency securities, and some large banks may also have been accumulating government-backed securities to improve their liquidity positions.

[8] Under fair value accounting rules, changes in the creditworthiness of a BHC generate changes in the value of some of its liabilities. Those changes are then reflected as gains or losses on the income statement.

Corporate Debt and Equity Markets

Yields on investment-grade bonds reached record lows in June, partly reflecting the search by investors for relatively safe assets in light of rising concerns about Europe as well as the weakness in the domestic and global economic data releases. However, yields on speculative-grade corporate debt, which had reached record-low levels in February, rose somewhat in the second quarter reflecting those same concerns. The spread on investment-grade corporate bonds was about unchanged, on net, relative to the start of the year. Despite the backup in yields over the second quarter, spreads on speculative-grade corporate bonds decreased some, on balance, over the same period. Prices in the secondary market for syndicated leveraged loans have changed little, on balance, since the beginning of the year; demand from institutional investors for these mostly floating-rate loans has remained strong despite the reemergence of anxiety about developments in Europe.

Broad equity price indexes were boosted early in the year by improved sentiment stemming in part from relatively strong job gains as well as actions taken by major central banks to mitigate the financial strains emanating from Europe. However, equity price indexes subsequently reversed a portion of their earlier gains as concerns about the European banking and fiscal crisis intensified again and economic reports suggested slower growth, on balance, at home and abroad. The spread between the 12-month forward earnings-price ratio for the S&P 500 and a real long-run Treasury yield—a rough gauge of the equity risk premium—widened a bit more in the first half of 2012, and is now closer to the very high levels it reached in 2008 and again last fall. Implied volatility for the S&P 500 index, as calculated from option prices, spiked at times this year but is currently toward the bottom end of the range that this indicator has occupied since the onset of the financial crisis.

In the current environment of very low interest rates, mutual funds that invest in higher-yielding debt instruments (including speculative-grade corporate bonds and leveraged loans) continued to have significant inflows for most of the first half of 2012, while money market funds experienced outflows. Equity mutual funds also recorded modest outflows early in the year and, as market sentiment deteriorated, both

equity and high-yield mutual funds registered outflows in May.

Monetary Aggregates and the Federal Reserve's Balance Sheet

The growth rate of M2 slowed in the first half of 2012 to an annual rate of about 7 percent.[9] However, the levels of M2 and its largest component, liquid deposits, remain elevated relative to what would have been expected based on historical relationships with nominal income and interest rates, likely reflecting investors' continued preference to hold safe and liquid assets. Currency in circulation increased robustly, reflecting solid demand both at home and abroad. Retail money market funds and small time deposits continued to contract. At the same time as currency in circulation was increasing, reserve balances held at the Federal Reserve were decreasing; as a result, the monetary base—which is equal to the sum of these two items—changed little, on average, over the first half of the year.

Total assets of the Federal Reserve decreased to $2,868 billion as of July 11, 2012, about $60 billion less than at the end of 2011 (table 1). The small decrease since December largely reflects lower usage of foreign central bank liquidity swaps and declines in the net portfolio holdings of the Maiden Lane LLCs. The composition of Treasury security holdings changed over the course of the first half of this year as a result of the implementation of the MEP. As of July 13, 2012, the Open Market Desk at the Federal Reserve Bank of New York (FRBNY) had purchased $283 billion in Treasury securities with remaining maturities of 6 to 30 years and sold or redeemed $293 billion in Treasury securities with maturities of 3 years or less under the MEP.[10] Total

Table 1. Selected components of the Federal Reserve balance sheet, 2011–12
Millions of dollars

Balance sheet item	Dec. 28, 2011	Feb. 22, 2012	July 11, 2012
Total assets	2,928,485	2,935,149	2,868,387
Selected assets			
Credit extended to depository institutions and dealers			
Primary credit	42	3	8
Central bank liquidity swaps	**99,823**	**107,959**	**29,708**
Credit extended to other market participants			
Term Asset-Backed Securities Loan Facility (TALF)	9,013	7,629	4,504
Net portfolio holdings of TALF LLC	811	825	845
Support of critical institutions			
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC [1]	34,248	30,822	15,388
Credit extended to American International Group, Inc.	...	...	...
Preferred interests in AIA Aurora LLC and ALICO Holdings LLC	...	...	...
Securities held outright			
U.S. Treasury securities	1,672,092	1,656,581	1,663,949
Agency debt securities	103,994	100,817	91,484
Agency mortgage-backed securities (MBS)[2]	837,295	853,045	855,044
Total liabilities	**2,874,686**	**2,880,556**	**2,813,713**
Selected liabilities			
Federal Reserve notes in circulation	1,034,520	1,048,004	1,073,732
Reverse repurchase agreements	88,674	89,824	89,689
Deposits held by depository institutions	1,569,267	1,622,800	1,527,556
Of which: term deposits	0	0	0
U.S. Treasury, general account	91,418	36,033	75,287
U.S. Treasury, Supplementary Financing Account	0	0	0
Total capital	**53,799**	**54,594**	**54,674**

Note: LLC is a limited liability company.

1 The Federal Reserve has extended credit to several LLCs in conjunction with efforts to support critical institutions. Maiden Lane LLC was formed to acquire certain assets of The Bear Stearns Companies, Inc. Maiden Lane II LLC was formed to purchase residential mortgage-backed securities from the U.S. securities lending reinvestment portfolio of subsidiaries of American International Group, Inc. (AIG). Maiden Lane III LLC was formed to purchase multisector collateralized debt obligations on which the Financial Products group of AIG has written credit default swap contracts.

2 Includes only MBS purchases that have already settled.

... Not applicable.

Source: Federal Reserve Board, Statistical Release H.4.1, "Factors Affecting Reserve Balances of Depository Institutions and Condition Statement of Federal Reserve Banks."

Federal Reserve holdings of agency MBS increased about $18 billion as the policy of reinvesting principal payments from agency debt and agency MBS into agency MBS continued.

In the first half of 2012, the Federal Reserve continued to reduce its exposure to facilities established during the financial crisis to support specific institutions. The portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC—

9 M2 consists of (1) currency outside the U.S. Treasury, Federal Reserve Banks, and the vaults of depository institutions; (2) traveler's checks of nonbank issuers; (3) demand deposits at commercial banks (excluding those amounts held by depository institutions, the U.S. government, and foreign banks and official institutions) less cash items in the process of collection and Federal Reserve float; (4) other checkable deposits (negotiable order of withdrawal, or NOW, accounts and automatic transfer service accounts at depository institutions; credit union share draft accounts; and demand deposits at thrift institutions); (5) savings deposits (including money market deposit accounts); (6) small-denomination time deposits (time deposits issued in amounts of less than $100,000) less individual retirement account (IRA) and Keogh balances at depository institutions; and (7) balances in retail money market mutual funds less IRA and Keogh balances at money market mutual funds.

10 Between the MEP's announcement in September 2011 and the end of that year, the Desk had purchased $133 billion in longer-term Treasury securities and had sold $134 billion in shorter-term Treasury securities.

entities that were created during the crisis to acquire certain assets from The Bear Stearns Companies, Inc., and American International Group, Inc. (AIG), to avoid the disorderly failures of those institutions—declined, on net, primarily as a result of asset sales and principal payments. Of note, proceeds from the sales of all of the remaining assets in the Maiden Lane II LLC portfolio in January and February enabled the repayment of the entire remaining outstanding balance of the senior loan from the FRBNY to Maiden Lane II LLC in March, with interest and a $2.8 billion net gain. In addition, proceeds from the sales of assets from Maiden Lane LLC and Maiden Lane III LLC in April and May enabled the repayment, with interest, of the entire remaining outstanding balances of the senior loans from the FRBNY to Maiden Lane LLC and Maiden Lane III LLC in June. Proceeds from further asset sales from Maiden Lane III in June enabled repayment of the equity position of AIG in July. A net gain on the sale of the remaining assets in Maiden Lane III LLC is likely during the next few months. Sales of most of the remaining assets in Maiden Lane LLC should be completed by the end of the year, but a few legacy assets may take longer to dispose of. Loans outstanding under the Term Asset-Backed Securities Loan Facility (TALF) were slightly lower, reflecting, in part, the first maturity of a TALF loan with a three-year initial term.

On the liability side of the Federal Reserve's balance sheet, deposits held by depository institutions declined about $42 billion in the first half of 2012, while Federal Reserve notes in circulation increased roughly $39 billion. As part of its ongoing program to ensure the readiness of tools to drain reserves when doing so becomes appropriate, the Federal Reserve conducted a series of small-scale reverse repurchase transactions involving all eligible collateral types with its expanded list of counterparties. In the same vein, the Federal Reserve also continued to offer small-value term deposits through the Term Deposit Facility.

On March 20, the Federal Reserve System released its 2011 combined annual comparative audited financial statements. The Federal Reserve reported net income of about $77 billion for the year ending December 31, 2011, derived primarily from interest income on securities acquired through open market operations (Treasury securities, federal agency and GSE MBS, and GSE debt securities). The Reserve Banks transferred about $75 billion of the $77 billion in comprehensive income to the U.S. Treasury in 2011; though down slightly from 2011, the transfer to the U.S. Treasury remained historically very large.

International Developments

The European fiscal and banking crisis continued to affect international financial markets and foreign economic activity during the first half of 2012. Early in the year, aggressive action by the ECB and some progress in addressing the crisis by the region's leaders contributed to a temporary easing of financial stresses. (See the box "An Update on the European Fiscal and Banking Crisis" on pages 34–35 of the July 2012 *Monetary Policy Report*.) However, amid ongoing political uncertainty in Greece and increased concerns about the health of Spanish banks, financial conditions deteriorated again in the spring. Foreign economic growth picked up in the first quarter, but this acceleration largely reflected temporary factors, and recent data point to widespread slowing in the second quarter.

International Financial Markets

Foreign financial markets have been volatile. Initially in the first quarter, encouraging macroeconomic data and some easing of tensions within the euro area led to an improvement in global financial conditions. This improvement was reversed in the spring as the boost from previous policy measures, including the ECB's longer-term refinancing operations, faded and political and banking stresses in vulnerable European countries resurfaced. Euro-area leaders responded to the worsening of the crisis by announcing additional measures at a summit on June 28–29. The market reaction was positive but short-lived.

Increased uncertainty and greater volatility have pushed up the foreign exchange value of the dollar about 4¼ percent on a trade-weighted basis against a broad set of currencies since its low in early February, with most of the appreciation occurring in May. Typical of periods of flight to safety, the dollar has appreciated against most currencies but depreciated against the Japanese yen for most of the period. The Swiss franc has moved very closely with the euro as the Swiss National Bank has intervened to maintain a ceiling for the franc relative to the euro.

During the second quarter of this year, flight-to-safety flows and the deteriorating global economic outlook helped push government bond yields for Canada, Germany, and the United Kingdom to record lows. Likewise, Japanese yields on 10-year bonds fell well below 1 percent. By contrast, Spanish sovereign spreads over German bunds rose more

than 250 basis points between February and June due to escalating concerns over Spain's public finances. Italian sovereign spreads moved up as well over this period.

Equity prices abroad declined significantly in the second quarter, more so than in the United States. Indexes tumbled in the nations at the center of the euro-area fiscal and banking crisis, and the fall in value from their March peaks was more than 10 percent across the advanced foreign economies (AFEs). This fall was attenuated toward the end of the second quarter by the positive market reaction to the June summit. Equity markets in the EMEs were also markedly down in the second quarter.

European banks faced renewed stresses in recent months. In Greece, after inconclusive elections in early May, deposit outflows from banks accelerated, generating concerns that deposit flight could spread to banking systems in the rest of the euro area. News that Spain had partly nationalized the troubled lender Bankia and would need to inject an additional €19 billion into the bank and its holding company added to unease about the region, eventually leading to plans for an official aid package of up to €100 billion to recapitalize Spanish banks. Apprehension about bank health was widespread, with major institutions in Italy, Germany, and several other European countries receiving credit ratings downgrades. As a result, European bank stock prices have tumbled since mid-March. At the same time, reflecting market views of increased risk of default, the CDS premiums on the debt of many large banks in Europe have risen substantially, while issuance of unsecured bank debt, which had previously recovered, has fallen. Notwithstanding these developments, funding market stresses have remained relatively muted, as many banks accessed funds from the Eurosystem—the system formed by the ECB and the national central banks of the euro-area member states—rather than interbank markets. A standard measure of the cost of this interbank funding, the implied basis spread from euro–dollar swaps, was little changed at shorter maturities.

Advanced Foreign Economies

The European fiscal and banking crisis was at the center of economic developments in the AFEs. Euro-area real GDP was flat in the first quarter of 2012 following a contraction in late 2011. Within the euro area, output fell sharply in more vulnerable countries, including Italy and Spain, whereas other countries, especially Germany, performed better. Mounting financial tensions and fiscal austerity measures appear to have further restrained the euro-area economy in the second quarter, as evidenced by declining business confidence and a further drift of purchasing managers indexes into contractionary territory.

Economic performance in the other AFEs has been uneven. In the United Kingdom, real GDP continued to fall early in the year, and indicators point to further weakness fueled by tight fiscal policy and negative spillover effects from the euro area. In Japan, output rose at a robust pace in the first quarter, reflecting fiscal stimulus measures as well as a recovery from the shortage of parts supplies caused by the floods in Thailand last year, but recent data suggest that activity decelerated in the second quarter. The Canadian economy continued to expand moderately in the first three months of the year, supported by solid domestic demand and a resilient labor market.

In most AFEs, headline inflation rates—measured on a 12-month change basis—continued to decline in the first half of the year as the effects of the large run-up in commodity prices in early 2011 waned. The smaller run-up in energy prices that took place early this year exerted a less marked effect on consumer prices, though it helped keep 12-month inflation rates above 2 percent in the euro area and in the United Kingdom. Japan appears to be emerging from several years of deflation, but Japanese inflation remains below the 1 percent inflation goal introduced by the BOJ in February.

Several central banks eased further their monetary policy stances. The BOJ increased the size of its asset purchases from ¥30 trillion to ¥40 trillion in April, and then to ¥45 trillion in July. The ECB, after having conducted the second of its three-year longer-term refinancing operations in late February, cut its policy interest rates to record lows in early July. In late June, the Bank of England (BOE) activated its Extended Collateral Term Repo facility, offering six-month funds against a wide set of collateral. In addition, in July, the BOE increased the size of its asset purchase program from £325 billion to £375 billion, and, together with the U.K. Treasury, introduced a new Funding for Lending Scheme designed to boost lending to households and firms.

Emerging Market Economies

Following a disappointing performance at the end of last year, real GDP growth rebounded in the first quarter in most EMEs. Economic activity expanded

especially briskly in emerging Asia, largely reflecting the reconnection of supply chains damaged by the floods in Thailand. Economic growth, however, continued to slow in China and India. Moreover, recent indicators suggest that the pace of economic activity decelerated in most EMEs going into the second quarter amid headwinds associated with the European crisis and relatively subdued growth in China.

In China, real GDP increased at about a 7 percent pace in the first half of the year, down from an 8½ percent pace in the second half of last year. The slowdown reflected weaker demand for Chinese exports as well as domestic factors, including moderating consumer spending and the restraining effects on investment of previous government measures to cool activity in the property sector. Macroeconomic data for May and June suggest that economic activity was picking up a bit toward the end of the second quarter, with growth of investment, retail sales, and bank lending edging higher. Headline 12-month inflation fell to 2.2 percent in June, led by additional moderation in food prices. As inflationary pressures eased and concerns about growth mounted, the People's Bank of China lowered banks' reserve requirements by 50 basis points in both February and May and then reduced the benchmark one-year lending rate by 25 basis points in June and 31 basis points in July, the first changes in that rate since an increase in July of last year. Over the first half of the year, the renminbi was little changed, on net, against the dollar, but it appreciated about 1½ percent on a real trade-weighted basis, as the renminbi followed the dollar upward against China's other major trading partners.

In India, economic growth has also moderated as slow progress on fiscal and structural reforms and previous monetary tightening stalled investment. Noting rising vulnerabilities from the country's twin fiscal and current account deficits, some credit rating agencies warned that India's sovereign debt risks losing its investment-grade status.

In Mexico, economic activity rebounded briskly in the first quarter as the agricultural sector rebounded from the fourth-quarter drought, domestic demand gained momentum, and exports to the United States picked up. Economic indicators, however, suggest that growth moderated somewhat in the second quarter. On July 1, Enrique Peña Nieto of the Institutional Revolutionary Party, or PRI, won the Mexican presidential election, promising to pursue market-oriented reforms to bolster economic growth.

In Brazil, real GDP—restrained by flagging investment and weather-related problems in the agricultural sector—increased slightly in the first quarter, making it the fourth consecutive quarter of below-trend growth. Industrial production, which has been on a downward trend since early 2011, continued to fall through May, suggesting that economic activity in Brazil remained weak in the second quarter.

Headline inflation generally moderated in the EMEs reflecting lower food price pressures and weaker economic growth. In addition to China, several other central banks in the EMEs also loosened monetary policy, including those in Brazil, Chile, India, Indonesia, the Philippines, South Korea, and Thailand.

Part 3 Monetary Policy: Recent Developments and Outlook

Monetary Policy over the First Half of 2012

To promote the Federal Open Market Committee's (FOMC) objectives of maximum employment and price stability, the Committee maintained a target range for the federal funds rate of 0 to ¼ percent throughout the first half of 2012.[11] With the incoming data suggesting a somewhat slower pace of economic recovery than the Committee had anticipated, and with inflation seen as settling at levels at or below those consistent, over the long run, with its statutory mandate, the Committee took steps during the first half of 2012 to provide additional monetary accommodation in order to support a stronger economic recovery and to help ensure that inflation, over time, runs at levels consistent with its mandate. These steps included lengthening the horizon of the forward rate guidance regarding the Committee's expectations for the period over which economic conditions will warrant exceptionally low levels for the federal funds rate, continuing the Committee's maturity extension program (MEP) through the end of this year rather than completing the program in June as previously scheduled, retaining its existing policies regarding the reinvestment of principal payments on agency securities in agency-guaranteed mortgage-backed securities (MBS), and continuing to reinvest the proceeds of maturing Treasury securities.

[11] Members of the FOMC in 2012 consist of the members of the Board of Governors of the Federal Reserve System plus the presidents of the Federal Reserve Banks of Atlanta, Cleveland, New York, Richmond, and San Francisco. As of the June FOMC meeting, Governors Jerome H. Powell and Jeremy C. Stein joined the Board of Governors increasing the number of FOMC members to 12.

The information reviewed at the January 24–25 meeting indicated that U.S. economic activity had expanded moderately, while global growth appeared to be slowing. Labor market indicators pointed to some further improvement in labor market conditions, but progress was gradual and the unemployment rate remained elevated. Household spending had continued to advance at a moderate pace despite diminished growth in real disposable income, but growth in business fixed investment had slowed. The housing sector remained depressed. Inflation had been subdued in recent months, and longer-term inflation expectations had remained stable. Meeting participants observed that financial conditions had improved and financial market stresses had eased somewhat during the intermeeting period, in part because of the European Central Bank's (ECB) three-year refinancing operation. Nonetheless, participants expected that global financial markets would remain focused on the evolving situation in Europe, and they anticipated that further policy efforts would be required to fully address the fiscal and financial problems there.

With the economy facing continuing headwinds and growth slowing in several U.S. export markets, members generally expected a modest pace of economic growth over coming quarters, with the unemployment rate declining only gradually. At the same time, members thought that inflation would run at levels at or below those consistent with the Committee's dual mandate. Against this backdrop, members agreed to keep the target range for the federal funds rate at 0 to ¼ percent, to continue the program of extending the average maturity of the Federal Reserve's holdings of securities as announced in September, and to retain the existing policies regarding the reinvestment of principal payments from Federal Reserve holdings of securities. In light of the economic outlook, most members also agreed to indicate that the Committee anticipates that economic conditions are likely to warrant exceptionally low levels for the federal funds rate at least through late 2014, longer than had been indicated in recent FOMC statements. The Committee also stated that it is prepared to adjust the size and composition of its securities holdings as appropriate to promote a stronger economic recovery in a context of price stability.

The data in hand at the March 13 FOMC meeting indicated that U.S. economic activity had continued to expand moderately. Although the unemployment rate remained elevated, it had declined notably in recent months and payroll employment had increased. Household spending and business fixed investment had advanced. Signs of improvement or stabilization emerged in some local housing markets, but overall housing activity continued to be restrained by the substantial inventory of foreclosed and distressed properties, tight credit conditions for mortgage loans, and uncertainty about the economic outlook and future home prices. Inflation continued to be subdued, although prices of crude oil and gasoline had increased substantially. Longer-term inflation expectations had remained stable.

Many participants believed that policy actions in the euro area, notably the Greek debt swap and the ECB's longer-term refinancing operations, had helped ease strains in financial markets and reduced the downside risks to the U.S. and global economic outlook. Against that backdrop, equity prices had risen and conditions in credit markets improved, leading many meeting participants to see financial conditions as more supportive of economic growth than at the time of the January meeting.

Members viewed the information on U.S. economic activity as suggesting that the economy would continue to expand moderately. However, despite the easing of strains in global financial markets, members continued to perceive significant downside risks to economic activity. Members generally anticipated that the recent increase in oil and gasoline prices would push up inflation temporarily, but that inflation subsequently would run at or below the rate that the Committee judges most consistent with its mandate. As a result, the Committee decided to keep the target range for the federal funds rate at 0 to ¼ percent, to reiterate its anticipation that economic conditions were likely to warrant exceptionally low levels for the federal funds rate at least through late 2014, to continue the program of extending the average maturity of the Federal Reserve's holdings of securities that it had adopted in September, and to maintain the existing policies regarding the reinvestment of principal payments from Federal Reserve holdings of securities. The Committee again stated that it is prepared to adjust the size and composition of its securities holdings as appropriate to promote a stronger economic recovery in a context of price stability.

By the time of the April 24–25 FOMC meeting, the data again indicated that economic activity was expanding moderately. Payroll employment had continued to move up, and the unemployment rate, while still elevated, had declined a little further. Household

spending and business fixed investment had continued to expand. The housing sector showed signs of improvement but from a very low level of activity. Mainly reflecting the increase in the prices of crude oil and gasoline earlier this year, inflation had picked up somewhat; however, measures of long-run inflation expectations remained stable. Meeting participants judged that, in general, conditions in domestic credit markets had improved further, but noted that investors' concerns about the sovereign debt and banking situation in the euro area intensified during the intermeeting period. Many U.S. financial institutions had been taking steps to bolster their resilience, including expanding their capital levels and liquidity buffers and reducing their European exposures.

Members expected growth to be moderate over coming quarters and then to pick up over time. Strains in global financial markets stemming from the sovereign debt and banking situation in Europe as well as uncertainty about U.S. fiscal policy continued to pose significant downside risks to economic activity both here and abroad. Most members anticipated that the increase in inflation would prove temporary and that subsequently inflation would run at or below the rate that the Committee judges to be most consistent with its mandate. Against this backdrop, the Committee members reached the collective judgment that it would be appropriate to maintain the existing highly accommodative stance of monetary policy. In particular, the Committee agreed to keep the target range for the federal funds rate at 0 to ¼ percent, to continue the program of extending the average maturity of the Federal Reserve's holdings of securities as announced last September, and to retain the existing policies regarding the reinvestment of principal payments from Federal Reserve holdings of securities. The Committee left the forward guidance for the target federal funds rate unchanged at this meeting. Members emphasized that their forward guidance was conditional on expected economic developments, but they preferred adjusting the forward guidance only once they were more confident that the medium-term economic outlook or the risks to that outlook had changed significantly.

Data received over the period leading up to the June 19–20 FOMC meeting indicated that economic activity was expanding at a somewhat more modest pace than earlier in the year. Improvements in labor market conditions had slowed in recent months, and the unemployment rate seemed to have flattened out. Household spending appeared to be rising at a somewhat slower rate, and business investment had continued to advance. Despite some ongoing signs of improvement, the housing sector remained depressed. Consumer price inflation had declined, mainly reflecting lower prices of crude oil and gasoline, and longer-term inflation expectations remained well anchored. Meeting participants observed that financial markets were volatile over the intermeeting period and that investor sentiment was strongly influenced by the developments in Europe and evidence of slowing economic growth at home and abroad.

In the discussion of monetary policy, most members agreed that the outlook had deteriorated somewhat relative to the time of the April meeting, and that significant downside risks were present, importantly including the financial stresses in the euro area and uncertainty about the degree of fiscal restraint in the United States, and its effects on economic activity over the medium term. As a result, the Committee decided that providing additional monetary policy accommodation would be appropriate to support a stronger economic recovery and to help ensure that inflation, over time, was at a level consistent with the Committee's dual mandate. Specifically, the Committee agreed to continue the MEP through the end of the year, instead of ending the program in June as had been planned. In doing so, the Federal Reserve will purchase Treasury securities with remaining maturities of 6 years to 30 years and sell or redeem an equal par value of Treasury securities with remaining maturities of approximately 3 years or less. This continuation of the MEP will proceed at about the same pace as had been executed through the first phase of the program, increasing 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. For the duration of this program, the Committee directed the Open Market Desk to suspend its current policy of rolling over maturing Treasury securities into new issues at auction (and instead purchase only additional longer-term securities with the proceeds of maturing securities). The Committee expected the continuation of the MEP to put downward pressure on longer-term interest rates and help make broader financial conditions more accommodative. In addition, the Committee decided to continue reinvesting principal payments from its holdings of agency debt and agency MBS in agency MBS. The Committee also decided to keep the target range for the federal funds rate at 0 to ¼ percent and to reaffirm its anticipation that economic conditions were likely to warrant exceptionally low levels for the federal funds rate at least through late 2014. In its state-

ment, the Committee noted that it was prepared to take further action as appropriate to promote stronger economic recovery and sustained improvement in labor market conditions in a context of price stability.

FOMC Communications

Transparency is an essential principle of modern central banking because it contributes to the accountability of central banks to the government and to the public and because it can enhance the effectiveness of central banks in achieving their macroeconomic objectives. To this end, the Federal Reserve provides to the public a considerable amount of information concerning the conduct of monetary policy. Following each meeting of the FOMC, the Committee immediately releases a statement that lays out the rationale for its policy decision and issues detailed minutes of the meeting about three weeks later. Lightly edited transcripts of FOMC meetings are released to the public with a five-year lag.[12] Moreover, beginning in April 2011, the Chairman has held press conferences on an approximately quarterly basis. At the press conferences, the Chairman presents the current economic projections of FOMC participants and provides additional context for the Committee's policy decisions.

The Committee continued to consider further improvements in its communications approach in the first half of 2012. At the January meeting, the FOMC released a statement of its longer-run goals and policy strategy in an effort to enhance the transparency, accountability, and effectiveness of monetary policy and to facilitate well-informed decision-making by households and businesses.[13] The statement did not represent a change in the Committee's policy approach, but rather was intended to help enhance the transparency, accountability, and effectiveness of monetary policy. The statement emphasizes the Federal Reserve's firm commitment to pursue its congressional mandate to promote maximum employment, stable prices, and moderate long-term interest rates. To clarify its longer-term objectives, the FOMC stated that inflation at the rate of 2 percent, as measured by the annual change in the price index for personal consumption expenditures, is most consistent over the longer run with the Federal Reserve's statutory mandate. While noting that the Committee's assessments of the maximum level of employment are necessarily uncertain and subject to revision, the statement indicated that the central tendency of FOMC participants' current estimates of the longer-run normal rate of unemployment is between 5.2 and 6.0 percent. It stressed that the Federal Reserve's statutory objectives are generally complementary, but when they are not, the Committee will follow a balanced approach in its efforts to return both inflation and employment to levels consistent with its mandate.

In addition, in light of a decision made at the December meeting, the Committee provided, starting in the January Summary of Economic Projections (SEP), information about each participant's assessment of appropriate monetary policy. Specifically, the SEP included information about participants' estimates of the appropriate level of the target federal funds rate in the fourth quarter of the current year and the next few calendar years, and over the longer run; the SEP also reported participants' current projections of the likely timing of the appropriate first increase in the target federal funds rate given their assessments of the economic outlook. The accompanying narrative described the key factors underlying those assessments and provided some qualitative information regarding participants' expectations for the Federal Reserve's balance sheet.

At the March meeting, participants discussed a range of additional steps that the Committee might take to help the public better understand the linkages between the evolving economic outlook and the Federal Reserve's monetary policy decisions, and thus the conditionality in the Committee's forward guidance. Participants discussed ways in which the Committee might include, in its postmeeting statements and other communications, additional qualitative or quantitative information that could convey a sense of how the Committee might adjust policy in response to changes in the economic outlook. However, participants also observed that the Committee had introduced several important enhancements to its policy communications over the past year or so; these included the Chairman's postmeeting press conference as well as changes to the FOMC statement and the SEP. Against this backdrop, some participants noted that additional experience with the changes

[12] FOMC statements, minutes, and transcripts, as well as other related information, are available on the Federal Reserve Board's website at www.federalreserve.gov/monetarypolicy/fomc.htm.

[13] The FOMC statement of longer-run goals and policy strategy is available on the Federal Reserve Board's website at www.federalreserve.gov/monetarypolicy/fomccalendars.htm.

implemented to date could be helpful in evaluating potential further enhancements.

At the April meeting, the Committee discussed the relationship between the postmeeting statement, which expresses the collective view of the Committee, and the policy projections of individual participants, which are included in the SEP. The Chairman asked the subcommittee on communications to consider possible enhancements and refinements to the SEP that might help clarify the link between economic developments and the Committee's view of the appropriate stance of monetary policy. Following up on this issue at the June meeting, participants discussed several possibilities for enhancing the clarity and transparency of the Committee's economic projections as well as the role they play in policy decisions and policy communications. 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. However, 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. Participants agreed to continue to explore ways to increase clarity and transparency in the Committee's policy communications, but many emphasized that further changes in those communications should be considered carefully.

Supervision and Regulation

The Federal Reserve has supervisory and regulatory authority over a variety of financial institutions and activities with the goal of promoting a safe, sound, and stable financial system that supports the growth and stability of the U.S. economy. As described in this report, the Federal Reserve carries out its supervisory and regulatory responsibilities and supporting functions primarily by

- promoting the safety and soundness of individual financial institutions supervised by the Federal Reserve;
- developing supervisory policy (rulemakings, supervision and regulation letters (SR letters), policy statements, and guidance);
- identifying requirements and setting priorities for supervisory information technology initiatives;
- ensuring ongoing staff development to meet evolving supervisory responsibilities;
- regulating the U.S. banking and financial structure by acting on a variety of proposals; and
- enforcing other laws and regulations.

2012 Developments

During 2012, the U.S. banking system and financial markets continued to improve, at a slow pace, following their recovery from the financial crisis that started in mid-2007.

Performance of bank holding companies. While an improvement in bank holding companies' (BHCs) performance was evident during 2012, performance remains weak by historical standards. U.S. BHCs, in aggregate, reported earnings of $137 billion for 2012, up from $108 billion for the year ending December 31, 2011. The proportion of unprofitable BHCs, although down from 18 percent in 2011, remains elevated at 10 percent; unprofitable BHCs encompass roughly 5 percent of banking industry assets. Nonperforming assets continue to be a challenge to industry recovery, with the nonperforming asset ratio remaining elevated at 3.4 percent of loans and foreclosed assets, an improvement from 4.1 percent at year-end 2011. Weaknesses were broad based, encompassing residential mortgages (first-lien), commercial real estate—especially non-owner nonfarm nonresidential and construction other than single-family—commercial and industrial (C&I) loans, and construction and land development loans. (Also see "Bank Holding Companies" on page 56.)

Performance of state member banks. The performance at state member banks in 2012 improved compared to the last few years. As a group, state member banks reported a profit of $17.8 billion for 2012, up from $11.5 billion for 2011 but still slightly below pre-crisis levels. Provisions (as a percent of revenue) have continued to decrease and are now 5.0 percent, down from a crisis high of 32.4 percent at year-end 2009. Further, 6.4 percent of all state member banks continued to report losses, down from 11 percent for year-end 2011. Mirroring trends at BHCs, the nonperforming assets ratio remained elevated at 2.1 percent of loans and foreclosed assets, reflecting both contracting loan balances and ongoing weaknesses in asset quality. Growth in problem loans continued to slow during 2012; however, weakness encompassed nonfarm nonresidential lending, residential mortgages, and C&I loans. The risk-based capital ratios for state member banks were basically unchanged compared to the prior year in the aggregate, and the percent of state member banks deemed well capitalized under prompt corrective action standards remained high at 99 percent. In 2012, four state member banks with $1.3 billion in assets failed. (Also see "State Member Banks" on page 55.)

Consolidated supervision framework for large financial institutions. In December, the Board issued a new framework for consolidated supervision of large financial institutions. Building on lessons from the recent financial crisis, this framework strengthens traditional microprudential supervision and regulation to enhance the safety and soundness of individual

Box 1. Consolidated Supervision Framework for Large Financial Institutions

Building on lessons from the recent financial crisis, the Federal Reserve issued a new framework for the consolidated supervision of large financial institutions in December 2012. This framework strengthens traditional microprudential supervision and regulation to enhance the safety and soundness of individual firms and incorporates macroprudential considerations to reduce potential threats to the stability of the financial system.

The new framework has two primary objectives:

1. **Enhancing resiliency of a firm to lower the probability of its failure or inability to serve as a financial intermediary.** Each firm is expected to ensure that the consolidated organization (or the combined U.S. operations in the case of foreign banking organizations) and its core business lines can survive under a broad range of internal or external stresses. This requires financial resilience by maintaining sufficient capital and liquidity, and operational resilience by maintaining effective corporate governance, risk management, and recovery planning.
2. **Reducing the impact on the financial system and the broader economy in the event of a firm's failure or material weakness.** Each firm is expected to ensure the sustainability of its critical operations and banking offices under a broad range of internal or external stresses. This requires, among other things, effective resolution planning that addresses the complexity and the interconnectivity of the firm's operations.

The framework is designed to support a tailored supervisory approach that accounts for the unique risk characteristics of each firm and applies to the following institutions:

- **Large Institution Supervision Coordinating Committee (LISCC) firms**: the largest, most complex U.S. and foreign financial organizations subject to consolidated supervision by the Federal Reserve. Nonbank financial companies designated by the Financial Stability Oversight Council for supervision by the Federal Reserve are included in the LISCC portfolio. LISCC firms are considered to pose the greatest systemic risk to the U.S. economy.
- **Large Banking Organizations**: domestic bank and savings and loan holding companies with consolidated assets of $50 billion or more that are not included in the LISCC portfolio.
- **Large Foreign Banking Organizations**: foreign banking organizations with combined assets of U.S. operations of $50 billion or more that are not included in the LISCC portfolio.

The consolidated supervision framework for large financial institutions is being implemented in a multistage approach. Additional supervisory and operational guidance will be developed to support implementation of the framework and to assess the progress of firms in meeting these expectations.

For more information about the supervisory framework, see the Board's press release and SR letter 12-17/CA 12-14 at www.federalreserve.gov/newsevents/press/bcreg/20121217a.htm.

firms, and incorporates macroprudential considerations to reduce potential threats to the stability of the financial system. The consolidated supervision framework for large financial institutions is being implemented in a multi-stage approach. Additional supervisory and operational guidance will be developed to support implementation of the framework and to assess the progress of firms in meeting expectations. (See box 1 for more details.)

Enhanced prudential standards and early remediation requirements for foreign banking organizations. In December, the Board issued a notice of proposed rulemaking (NPR) to strengthen the oversight of U.S. operations of foreign banks. (See box 2 for details.)

Proposed Basel III capital rules. In June, the federal banking agencies jointly issued three NPRs to help ensure banks maintain strong capital positions, enabling them to continue lending to creditworthy households and businesses even after unforeseen losses and during severe economic downturns. (See box 3 for details.)

Capital planning and stress testing. Since the financial crisis, the Board has led a series of initiatives to strengthen the capital positions of the largest banking organizations. Two related initiatives are the Comprehensive Capital Analysis and Review (CCAR) and the Dodd-Frank Act stress tests. (See box 4 for details.)

Recovery and resolution planning. The Federal Reserve continues to work with other regulatory agencies to reduce the probability of failure of the largest, most complex financial firms and to minimize the losses to the financial system and the economy if such a firm should fail. In 2012, 11 financial institutions submitted their first plans for a rapid

Box 2. Enhanced Prudential Standards and Early Remediation Requirements for Foreign Banking Organizations

In December 2012, the Board issued an NPR to implement the enhanced prudential standards and early remediation requirements in sections 165 and 166 of the Dodd-Frank Act for large foreign banking organizations. The proposal generally applies to foreign banking organizations with a U.S. banking presence and total global consolidated assets of $50 billion or more. More stringent standards were proposed for foreign banking organizations with combined U.S. assets of $50 billion or more.

The NPR proposes

A U.S. intermediate holding company requirement. A foreign banking organization with both $50 billion or more in global consolidated assets and U.S. subsidiaries with $10 billion or more in total assets generally would be required to organize its U.S. subsidiaries under a single U.S. intermediate holding company (IHC). This structure would create a platform for the consistent supervision and regulation of the U.S. operations of foreign banking organizations and help facilitate the resolution of failing U.S. operations of a foreign bank if needed. Direct U.S. branches and agencies of foreign banking organizations would remain outside the U.S. IHC.

Risk-based capital and leverage requirements. IHCs of foreign banking organizations would be subject to the same risk-based and leverage capital standards applicable to U.S. bank holding companies. This proposed requirement would help bolster the consolidated capital positions of the IHCs as well as promote a level playing field among all banking firms operating in the United States. IHCs with $50 billion or more in consolidated assets also would be subject to the Federal Reserve's capital plan rule.

Liquidity requirements. The U.S. operations of foreign banking organizations with combined U.S. assets of $50 billion or more would be required to meet enhanced liquidity risk-management standards, conduct liquidity stress tests, and hold a 30-day buffer of high-quality liquid assets. The liquidity requirements would help make the U.S. operations of foreign banking organizations more resilient to funding shocks during times of stress.

Other requirements: The proposal also includes measures regarding capital stress tests, single-counterparty credit limits, risk management, and early remediation.

The proposal includes a substantial phase-in period to give foreign banking organizations time to adjust to the new rules. Foreign banking organizations with global consolidated assets of $50 billion or more on July 1, 2014, would be required to meet the new standards on July 1, 2015.

The comment period ends on March 31, 2013. See press release and notice at www.federalreserve.gov/newsevents/press/bcreg/20121214a.htm.

and orderly resolution under the Bankruptcy Code in the event of their material financial distress or failure, in fulfillment of a Dodd-Frank Act requirement. The public section of these plans, which are posted on the Federal Reserve's and FDIC's public websites, provides a high-level description of the financial institution's resolution strategy, core business lines and material entities, corporate governance structure and processes related to resolution planning, derivative activities and hedging activities, and financial information.[1] During 2013, the Federal Reserve and FDIC will provide guidance to the remaining firms that must file initial plans this year under the resolution plan requirement. Additionally, for the upcoming 2013 submissions, the Federal Reserve and FDIC have publicly released the detailed guidance provided to the covered companies that submitted initial resolution plans in 2012.[2]

Supervision

The Federal Reserve is the federal supervisor and regulator of all U.S. BHCs, including financial holding companies, and state-chartered commercial banks that are members of the Federal Reserve System. The Federal Reserve also has responsibility for supervising the operations of all Edge Act and agreement corporations, the international operations of state member banks and U.S. BHCs, and the U.S. operations of foreign banking organizations. Furthermore, through the Dodd-Frank Act, the Federal Reserve has been assigned responsibilities for nonbank financial firms and financial market utilities (FMUs) des-

[1] The public sections of the resolution plans are available at www.federalreserve.gov/bankinforeg/resolution-plans.htm.

[2] The guidance is available at www.federalreserve.gov/newsevents/press/bcreg/20130415c.htm.

Box 3. Proposed Basel III Capital Rule

In June 2012, the federal banking agencies jointly proposed three NPRs that would restructure the agencies' current regulatory capital rules into a harmonized, comprehensive framework that would implement Basel III for internationally-active U.S. banking organizations and would modernize and strengthen the regulatory capital rules for other U.S. banking organizations. Taken together, the NPRs would address shortcomings in regulatory capital requirements that became apparent during the recent financial crisis by (1) increasing both the quantity and quality of regulatory capital banking organizations are required to hold, (2) better reflecting banking organizations' risk profiles, and (3) improving the resiliency of the U.S. banking system during times of stress.

The proposed rulemaking was divided into three proposals to minimize burden on smaller and mid-sized banking organizations and to allow firms to focus on the aspects of the proposed revisions that are relevant to their organizations.

Basel III NPR

Consistent with the Basel framework, this proposal would introduce a new common equity tier 1 capital ratio of 4.5 percent of risk-weighted assets; increase the minimum tier 1 capital ratio from 4 percent to 6 percent of risk-weighted assets; revise the definition of capital to improve the loss absorbency of regulatory capital instruments; establish limitations on capital distributions and certain discretionary bonus payments if additional specified amounts, or "buffers," of common equity tier 1 capital are not met; introduce a supplementary leverage ratio for banking organizations subject to the advanced approaches risk-based capital rule; and update the prompt corrective action framework with the new regulatory capital minimums and a revised definition of tangible equity. The Basel III NPR would apply to all depository institutions, savings and loan holding companies, and those bank holding companies that are not subject to the Board's Small Bank Holding Company Policy Statement.

Standardized Approach NPR

This proposal would revise and harmonize the federal banking agencies' rules for calculating risk-weighted assets to enhance risk sensitivity and address weaknesses that have been identified over the past several years. The changes would include revised methodologies for determining risk-weighted assets for residential mortgages, securitization exposures, and counterparty credit risk. In addition, the proposal would modify the recognition of credit risk mitigation to include greater recognition of financial collateral and a wider range of eligible guarantors. The proposal would also eliminate references to and reliance on credit ratings in the calculation of risk-weighted assets. The Standardized Approach NPR would apply to the same set of institutions as the Basel III NPR.

Advanced Approaches and Market Risk NPR

This proposal would enhance the risk sensitivity of the advanced approaches risk-based capital rule to better address counterparty credit risk and interconnectedness among financial institutions, and would extend application of the rule to savings and loan holding companies. In addition, the proposal would incorporate the market risk capital rule into an integrated capital framework and extend application of the rule to savings and loan holding companies and savings associations. This NPR would apply only to those institutions that meet the relevant thresholds, which are generally those that are internationally active or that have significant trading activities.

The federal banking agencies received thousands of comment letters on the NPRs and are working to finalize the rulemaking in 2013.

See press release and notices at www.federalreserve.gov/newsevents/press/bcreg/20120607a.htm.

ignated by the Financial Stability Oversight Council as systemically important. In addition, the Dodd-Frank Act transferred authority for consolidated supervision of more than 400 savings and loan holding companies (SLHCs) and their non-depository subsidiaries from the Office of Thrift Supervision (OTS) to the Federal Reserve.

In overseeing the institutions under its authority, the Federal Reserve seeks primarily to promote safety and soundness, including compliance with laws and regulations.

Safety and Soundness

The Federal Reserve uses a range of supervisory activities to promote the safety and soundness of financial institutions and maintain a comprehensive understanding and assessment of each firm. These activities include horizontal reviews, firm-specific

Table 1. State member banks and bank holding companies, 2008–2012

Entity/item	2012	2011	2010	2009	2008
State member banks					
Total number	843	828	829	845	862
Total assets (billions of dollars)	2,005	1,891	1,697	1,690	1,854
Number of examinations	769	809	912	850	717
By Federal Reserve System	487	507	722	655	486
By state banking agency	282	302	190	195	231
Top-tier bank holding companies					
Large (assets of more than $1 billion)					
Total number	508	491	482	488	485
Total assets (billions of dollars)	16,112	16,443	15,986	15,744	14,138
Number of inspections	712	672	677	658	519
By Federal Reserve System[1]	691	642	654	640	500
On site	514	461	491	501	445
Off site	177	181	163	139	55
By state banking agency	21	30	23	18	19
Small (assets of $1 billion or less)					
Total number	4,124	4,251	4,362	4,486	4,545
Total assets (billions of dollars)	983	982	991	1,018	1,008
Number of inspections	3,329	3,306	3,340	3,264	3,192
By Federal Reserve System	3,150	3,160	3,199	3,109	3,048
On site	200	163	167	169	107
Off site	2,950	2,997	3,032	2,940	2,941
By state banking agency	179	146	141	155	144
Financial holding companies					
Domestic	408	417	430	479	557
Foreign	38	40	43	46	45

[1] For large bank holding companies subject to continuous, risk-focused supervision, includes multiple targeted reviews.

examinations and inspections, continuous monitoring and surveillance activities, and implementation of enforcement or other supervisory actions as necessary. The Federal Reserve also provides training and technical assistance to foreign supervisors and minority-owned and de novo depository institutions.

Examinations and Inspections

The Federal Reserve conducts examinations of state member banks, FMUs, the U.S. branches and agencies of foreign banks, and Edge Act and agreement corporations. In a process distinct from examinations, it conducts inspections of holding companies and their nonbank subsidiaries. Whether an examination or an inspection is being conducted, the review of operations entails

- an evaluation of the adequacy of governance provided by the board and senior management, including an assessment of internal policies, procedures, controls, and operations;
- an assessment of the quality of the risk-management and internal control processes in place to identify, measure, monitor, and control risks;
- an assessment of the key financial factors of capital, asset quality, earnings, and liquidity; and
- a review for compliance with applicable laws and regulations.

Table 1 provides information on examinations and inspections conducted by the Federal Reserve during the past five years.

Consolidated Supervision

Consolidated supervision, a method of supervision that encompasses the parent company and its subsidiaries, allows the Federal Reserve to understand the organization's structure, activities, resources, risks, and financial and operational resilience. Working with other relevant supervisors and regulators, the Federal Reserve seeks to ensure that financial, operational, or other deficiencies are addressed before they pose a danger to the consolidated organization, its banking offices, or the broader economy.[3]

[3] "Banking offices" are defined as U.S. depository institution subsidiaries, as well as the U.S. branches and agencies of foreign banking organizations.

Box 4. Capital Planning and Stress Testing

Since the financial crisis, the Board has led a series of initiatives to strengthen the capital positions of large, complex banking organizations, including working with the organizations to bolster their internal processes for assessing capital needs and enhancing the Board's supervisory practices for assessing capital adequacy. These efforts culminated in the Comprehensive Capital Analysis and Review (CCAR), the annual supervisory review of capital plans of large banking organizations, including any plans they had for increasing dividends or buying back stock. The Board further strengthened its supervisory approach to assessing capital adequacy at the large financial companies by finalizing its Dodd-Frank Act capital stress testing rules in October of 2012.

During the Board's annual CCAR process, the Federal Reserve evaluates the capital adequacy; internal capital adequacy processes; and plans to make capital distributions, such as dividend payments or stock repurchases, of BHCs with $50 billion or more in assets. The capital plan rule requires companies to develop comprehensive capital policies to govern their capital planning, capital issuance, usage, and distribution. CCAR includes the Board's evaluation of each company's capital plan to ensure that companies' capital planning processes are sufficiently comprehensive and forward-looking. As part of their capital plans, companies are required to conduct company-run stress tests under scenarios provided by the Board and scenarios designed by the companies in order to assess each company's view of its idiosyncratic risks. The Board assesses a company's ability to effectively identify, measure, and assess its risks; its methodologies for estimating company-wide losses and revenues under stress scenarios; and its process for determining the impact of a stressed operating environment on capital adequacy. Supervisory evaluations of individual companies' capital plans, including a quantitative analysis that incorporates Dodd-Frank Act supervisory stress tests, are conducted simultaneously across all participating companies, allowing a comparative analysis across the companies and providing the Federal Reserve with a broad view of U.S. banking system assets and activities.

The Board finalized two Dodd-Frank stress testing rules:

- **covered company rule**—provides details on the process for annual supervisory stress tests and requirements for semi-annual company-run stress tests for BHCs with $50 billion or more in assets and systemically important nonbank financial companies.

(continued on next page)

Large financial institutions increasingly operate and manage their integrated businesses across corporate boundaries. Financial trouble in one part of a financial institution can spread rapidly to other parts of the institution. Risks that cross legal entities or that are managed on a consolidated basis cannot be monitored properly through supervision that is directed at any one of the legal entity subsidiaries within the overall organization. A new framework for the consolidated supervision of all large financial institutions was issued in December 2012 (see box 1).

To strengthen its supervision of the largest, most complex financial institutions, the Federal Reserve created a centralized multidisciplinary body called the Large Institution Supervision Coordinating Committee (LISCC) to oversee the supervision and evaluate conditions of supervised firms. The committee also develops cross-firm perspectives and monitors interconnectedness and common practices that could lead to systemic risk.

The Federal Reserve uses a range of supervisory activities to maintain a comprehensive understanding and assessment of each large financial institution:

- **Coordinated horizontal reviews.** These reviews involve examining several institutions simultaneously and encompass firm-specific supervision and the development of cross-firm perspectives. The Federal Reserve recognizes the priority of these reviews through the dedication of experienced staff with multidisciplinary skills. Examples include analysis of capital adequacy and planning through the Comprehensive Capital Analysis and Review (CCAR), as well as horizontal evaluations of resolution plans and incentive compensation practices.
- **Firm-specific examinations and/or inspections and continuous monitoring activities.** These activities are designed to maintain an understanding and assessment across the core areas of supervisory focus. These activities include review and assessment of changes in strategy, inherent risks, control pro-

Box 4. Capital Planning and Stress Testing—*continued*

- **other financial companies rule**—requires annual company-run stress tests at companies supervised by the Board, with more than $10 billion in assets.

For more information on the stress test rules, see the Board's press release and *Federal Register* notices at www.federalreserve.gov/newsevents/press/bcreg/20121009a.htm.

The Dodd-Frank Act supervisory stress tests and the annual company-run stress tests are conducted under common scenarios (baseline, adverse, and severely adverse) provided by the Board, making the results of the supervisory and company-run stress tests comparable (the "mid-cycle" company-run stress test for covered companies uses scenarios designed by the companies). In November 2012, the Board published a policy document for public comment on its development process for supervisory stress test scenarios. (For more information on the stress testing scenario development, see the Board's press release and *Federal Register* notice at www.federalreserve.gov/newsevents/press/bcreg/20121115a.htm.)

In March 2013, the Board publicly released a summary of the results of CCAR and its Dodd-Frank Act supervisory stress tests, providing valuable information to market participants about the capital adequacy of large banking organizations under hypothetical stressful circumstances (www.federalreserve.gov/bankinforeg/stress-tests-capital-planning.htm). Under the Dodd-Frank Act stress test rules, companies must also publicly release a summary of their company-run stress tests under the "severely adverse" scenario, including both quantitative results and qualitative information on the risks captured in the stress tests and the stress testing methodologies—as a complement to the publication of the results of the Federal Reserve's supervisory stress tests.

Together CCAR and Dodd-Frank Act stress tests help the Federal Reserve assess whether companies would have sufficient capital to withstand a significant decline in revenues and potentially large losses and to continue functioning as sources of credit and providers of other financial services, even in the event of a worse-than-anticipated weakening of the economy. These processes also provide a means to assess capital adequacy across companies more fully and to support the Board's financial stability efforts.

cesses, and key personnel, and follow-up on previously identified concerns (for example, areas subject to enforcement actions), or emerging vulnerabilities.

- **Interagency information sharing and coordination.** In developing and executing a detailed supervisory plan for each firm, the Federal Reserve generally relies to the fullest extent possible on the information and assessments provided by other relevant supervisors and functional regulators. The Federal Reserve actively participates in interagency information sharing and coordination, consistent with applicable laws, to promote comprehensive and effective supervision and limit unnecessary duplication of information requests. Supervisory agencies continue to enhance formal and informal discussions to jointly identify and address key vulnerabilities, and to coordinate supervisory strategies for large financial institutions.
- **Internal audit and control functions.** In certain instances, supervisors may be able to rely on a firm's internal audit or internal control functions in developing a comprehensive understanding and assessment.

The Federal Reserve uses a risk-focused approach to supervision, with activities directed toward identifying the areas of greatest risk to financial institutions and assessing the ability of institutions' management processes to identify, measure, monitor, and control those risks. For medium and small-sized financial institutions, the risk-focused consolidated supervision program provides that examination and inspection procedures are tailored to each organization's size, complexity, risk profile, and condition. The supervisory program for an institution, regardless of its asset size, entails both off-site and on-site work, including development of supervisory plans, pre-examination visits, detailed documentation, and preparation of examination reports tailored to the scope and findings of the examination.

State Member Banks

At the end of 2012, 2,075 banks (excluding nondepository trust companies and private banks) were

members of the Federal Reserve System, of which 843 were state chartered. Federal Reserve System member banks operated 58,714 branches, and accounted for 34 percent of all commercial banks in the United States and for 71 percent of all commercial banking offices. State-chartered commercial banks that are members of the Federal Reserve, commonly referred to as state member banks, represented approximately 14 percent of all insured U.S. commercial banks and held approximately 15 percent of all insured commercial bank assets in the United States.

Under section 10 of the Federal Deposit Insurance Act, as amended by section 111 of the Federal Deposit Insurance Corporation Improvement Act of 1991 and by the Riegle Community Development and Regulatory Improvement Act of 1994, the Federal Reserve must conduct a full-scope, on-site examination of state member banks at least once a year,[4] although certain well-capitalized, well-managed organizations with total assets of less than $500 million may be examined once every 18 months.[5] The Federal Reserve conducted 487 exams of state member banks in 2012.

Bank Holding Companies

At year-end 2012, a total of 5,210 U.S. BHCs were in operation, of which 4,632 were top-tier BHCs. These organizations controlled 5,088 insured commercial banks and held approximately 99 percent of all insured commercial bank assets in the United States.

Federal Reserve guidelines call for annual inspections of large BHCs and complex smaller companies. In judging the financial condition of the subsidiary banks owned by holding companies, Federal Reserve examiners consult examination reports prepared by the federal and state banking authorities that have primary responsibility for the supervision of those banks, thereby minimizing duplication of effort and reducing the supervisory burden on banking organizations.

Inspections of BHCs, including financial holding companies, are built around a rating system introduced in 2005. The system reflects the shift in supervisory practices away from a historical analysis of financial condition toward a more dynamic, forward-looking assessment of risk-management practices and financial factors. Under the system, known as RFI but more fully termed RFI/C(D), holding companies are assigned a composite rating (C) that is based on assessments of three components: Risk Management (R), Financial Condition (F), and the potential Impact (I) of the parent company and its nondepository subsidiaries on the subsidiary depository institution. The fourth component, Depository Institution (D), is intended to mirror the primary supervisor's rating of the subsidiary depository institution.[6] Noncomplex BHCs with consolidated assets of $1 billion or less are subject to a special supervisory program that permits a more flexible approach.[7] In 2012, the Federal Reserve conducted 691 inspections of large BHCs and 3,150 inspections of small, noncomplex BHCs.

Financial Holding Companies

Under the Gramm-Leach-Bliley Act, BHCs that meet certain capital, managerial, and other requirements may elect to become financial holding companies and thereby engage in a wider range of financial activities, including full-scope securities underwriting, merchant banking, and insurance underwriting and sales. As of year-end 2012, 408 domestic BHCs and 38 foreign banking organizations had financial holding company status. Of the domestic financial holding companies, 38 had consolidated assets of $15 billion or more; 118, between $1 billion and $15 billion; 63, between $500 million and $1 billion; and 189, less than $500 million.

Savings and Loan Holding Companies

On July 21, 2011, responsibility for supervision and regulation of SLHCs transferred from the OTS to the Federal Reserve, pursuant to the Dodd-Frank Act. At year-end 2012, a total of 689 SLHCs were in operation, of which 371 were top-tier SLHCs. These SLHCs controlled 326 thrift institutions and included 40 companies engaged primarily in nonbanking activities, such as insurance underwriting (21 SLHCs), securities brokerage (10 SLHCs), and com-

[4] The Office of the Comptroller of the Currency examines nationally chartered banks, and the FDIC examines state-chartered banks that are not members of the Federal Reserve.

[5] The Financial Services Regulatory Relief Act of 2006, which became effective in October 2006, authorized the federal banking agencies to raise the threshold from $250 million to $500 million, and final rules incorporating the change into existing regulations were issued on September 21, 2007.

[6] Each of the first two components has four subcomponents: **Risk Management**— (1) Board and Senior Management Oversight; (2) Policies, Procedures, and Limits; (3) Risk Monitoring and Management Information Systems; and (4) Internal Controls. **Financial Condition**— (1) Capital, (2) Asset Quality, (3) Earnings, and (4) Liquidity.

[7] The special supervisory program was implemented in 1997 and modified in 2002. See SR letter 02-01 for a discussion of the factors considered in determining whether a BHC is complex or noncomplex (www.federalreserve.gov/boarddocs/srletters/2002/sr0201.htm).

mercial activities (9 SLHCs). The 25 largest SLHCs accounted for more than $2.7 trillion of total combined assets. The savings association subsidiaries of all top-tier SLHCs accounted for just $680 billion (approximately 22 percent) of total assets. Seven institutions in the top 25 and approximately 90 percent of all SLHCs are engaged primarily in depository activities. These firms hold approximately 13 percent ($397 billion) of the total combined assets of all SLHCs. The Office of the Comptroller of the Currency (OCC) is the primary regulator for most of the subsidiary savings associations of the firms engaged primarily in depository activities.

Board staff continues to work on operational, technical, and practical transition issues while engaging the industry, Reserve Banks, and other financial regulatory agencies. Board staff has also issued internal policies and procedures, presented training sessions, conducted bi-weekly conference calls, and developed job aids to enhance the understanding of the SLHC population and to ensure consistent supervisory treatment of these institutions throughout the Federal Reserve System.

Although significant milestones have been achieved, several complex policy issues still need to be addressed by the Board, including those related to consolidated capital requirements, intermediate holding companies, application of a formal rating system, and the determination of the applicability of enhanced prudential standards to the SLHC population.

Financial Market Utilities

FMUs manage or operate multilateral systems for the purpose of transferring, clearing, or settling payments, securities, or other financial transactions among financial institutions or between financial institutions and the FMU. Under the Federal Reserve Act, the Federal Reserve supervises FMUs that are chartered as member banks or Edge Act corporations and cooperates with other federal banking supervisors to supervise FMUs organized as bank service providers under the Bank Service Company Act.

In July 2012, the Financial Stability Oversight Council voted to designate eight FMUs as systemically important under title VIII of the Dodd-Frank Act. As a result of these designations, the Federal Reserve assumed an expanded set of responsibilities related to these FMUs that include promoting uniform risk-management standards, playing an enhanced role in the supervision of FMUs, reducing systemic risk, and supporting the stability of the broader financial system. To ensure appropriate supervision of these FMUs, the Federal Reserve established risk-management standards and expectations that are articulated in Board Regulation HH (effective September 2012). In addition to setting minimum risk-management standards, Regulation HH also establishes requirements for the advance notice of proposed material changes to the rules, procedures, or operations of a designated FMU for which the Federal Reserve is the supervisory agency under title VIII of the Dodd-Frank Act.

The Federal Reserve's risk-based supervision program for FMUs is administered by the FMU Supervision Committee (FMU-SC). The FMU-SC is a multidisciplinary committee of senior supervision, payment policy, and legal staff at the Board of Governors and Reserve Banks who are responsible for, and knowledgeable about, supervisory issues for FMUs. The FMU-SC's primary objective is to provide senior level oversight, consistency, and direction to the Federal Reserve's supervisory process for FMUs. The FMU-SC coordinates with the LISCC on issues related to large financial institutions' roles in FMUs; the payment, clearing, and settlement activities of large financial institutions; and the FMU activities and implications for large financial institutions.

In an effort to promote greater financial market stability and mitigate systemic risk, the Board also is working with the U.S. Securities and Exchange Commission and the U.S. Commodity Futures Trading Commission, both of which also have supervisory authority for certain FMUs. The Federal Reserve's work with these agencies, including the sharing of appropriate information and participation in certain FMU examinations, aims to improve consistency in FMU supervision, promote robust FMU risk management, and improve the regulators' ability to monitor and mitigate systemic risk.

International Activities

The Federal Reserve supervises the foreign branches and overseas investments of member banks, Edge Act and agreement corporations, and BHCs (including the investments by BHCs in export trading companies). In addition, it supervises the activities that

foreign banking organizations conduct through entities in the United States, including branches, agencies, representative offices, and subsidiaries.

Foreign operations of U.S. banking organizations. In supervising the international operations of state member banks, Edge Act and agreement corporations, and BHCs, the Federal Reserve generally conducts its examinations or inspections at the U.S. head offices of these organizations, where the ultimate responsibility for the foreign offices resides. Examiners also visit the overseas offices of U.S. banking organizations to obtain financial and operating information and, in some instances, to test their adherence to safe and sound banking practices and compliance with rules and regulations. Examinations abroad are conducted with the cooperation of the supervisory authorities of the countries in which they take place; for national banks, the examinations are coordinated with the OCC.

At the end of 2012, 45 member banks were operating 525 branches in foreign countries and overseas areas of the United States; 25 national banks were operating 469 of these branches, and 20 state member banks were operating the remaining 56. In addition, 16 nonmember banks were operating 24 branches in foreign countries and overseas areas of the United States.

Edge Act and agreement corporations. Edge Act corporations are international banking organizations chartered by the Board to provide all segments of the U.S. economy with a means of financing international business, especially exports. Agreement corporations are similar organizations, state or federally chartered, that enter into agreements with the Board to refrain from exercising any power that is not permissible for an Edge Act corporation. Sections 25 and 25A of the Federal Reserve Act grant Edge Act and agreement corporations permission to engage in international banking and foreign financial transactions. These corporations, most of which are subsidiaries of member banks, may (1) conduct a deposit and loan business in states other than that of the parent, provided that the business is strictly related to international transactions and (2) make foreign investments that are broader than those permissible for member banks.

At year-end 2012, 50 banking organizations, operating 8 branches, were chartered as Edge Act or agreement corporations. These corporations are examined annually.

U.S. activities of foreign banks. Foreign banks continue to be significant participants in the U.S. banking system. As of fourth quarter 2012, 168 foreign banks from 53 countries operated 195 state-licensed branches and agencies, of which 6 were insured by the FDIC, and 48 OCC-licensed branches and agencies, of which 4 were insured by the FDIC. These foreign banks also owned 10 Edge Act and agreement corporations and 1 commercial lending company. In addition, they held a controlling interest in 49 U.S. commercial banks. Altogether, the U.S. offices of these foreign banks controlled approximately 21 percent of U.S. commercial banking assets. These 168 foreign banks also operated 88 representative offices; an additional 40 foreign banks operated in the United States through a representative office. The Federal Reserve—in coordination with appropriate state regulatory authorities—examines state-licensed, non-FDIC insured branches and agencies of foreign banks on-site at least once every 18 months.[8] In most cases, on-site examinations are conducted at least once every 12 months, but the period may be extended to 18 months if the branch or agency meets certain criteria. As part of the supervisory process, a review of the financial and operational profile of each organization is conducted to assess the organization's ability to support its U.S. operations and to determine what risks, if any, the organization poses to the banking system through its U.S. operations. The Federal Reserve conducted or participated with state and federal regulatory authorities in 447 examinations in 2012.

Compliance with Regulatory Requirements

The Federal Reserve examines institutions for compliance with a broad range of legal requirements, including anti-money-laundering (AML) and consumer protection laws and regulations, and other laws pertaining to certain banking and financial activities. Most compliance supervision is conducted under the oversight of the Board's Division of Banking Supervision and Regulation, but consumer compliance supervision is conducted under the oversight of the Division of Consumer and Community Affairs. The two divisions coordinate their efforts with each other and also with the Board's Legal Division to ensure consistent and comprehensive Federal Reserve supervision for compliance with legal requirements.

8 The OCC examines federally licensed branches and agencies, and the FDIC examines state-licensed FDIC-insured branches in coordination with the appropriate state regulatory authority.

Anti-Money-Laundering Examinations

The Treasury regulations implementing the Bank Secrecy Act (BSA) generally require banks and other types of financial institutions to file certain reports and maintain certain records that are useful in criminal, tax, or regulatory proceedings. The BSA and separate Board regulations require banking organizations supervised by the Board to file reports on suspicious activity related to possible violations of federal law, including money laundering, terrorism financing, and other financial crimes. In addition, BSA and Board regulations require that banks develop written BSA compliance programs and that the programs be formally approved by bank boards of directors. The Federal Reserve is responsible for examining institutions for compliance with applicable AML laws and regulations and conducts such examinations in accordance with the Federal Financial Institutions Examination Council's (FFIEC) *Bank Secrecy Act/Anti-Money Laundering Examination Manual*.[9]

Specialized Examinations

The Federal Reserve conducts specialized examinations of supervised financial institutions in the areas of information technology, fiduciary activities, transfer agent activities, and government and municipal securities dealing and brokering. The Federal Reserve also conducts specialized examinations of certain nonbank entities that extend credit subject to the Board's margin regulations.

Information Technology Activities

In recognition of the importance of information technology to safe and sound operations in the financial industry, the Federal Reserve reviews the information technology activities of supervised financial institutions, as well as certain independent data centers that provide information technology services to these organizations. All safety-and-soundness examinations include a risk-focused review of information technology risk-management activities. During 2012, the Federal Reserve continued as the lead supervisory agency for four of the 16 large, multiregional data processing servicers recognized on an interagency basis and assumed leadership of three more of the large servicers.

Fiduciary Activities

The Federal Reserve has supervisory responsibility for state member banks and state member nondepository trust companies, which reported $53.9 trillion and $39.5 trillion of assets, respectively, as of year-end 2012. These assets were held in various fiduciary and custodial capacities. On-site examinations of fiduciary and custodial activities are risk-focused and entail the review of an organization's compliance with laws, regulations, and general fiduciary principles, including effective management of conflicts of interest; management of legal, operational, and reputational risk exposures; and audit and control procedures. In 2012, Federal Reserve examiners conducted 113 on-site fiduciary examinations, excluding transfer agent examinations, of state member banks.

Transfer Agents

As directed by the Securities Exchange Act of 1934, the Federal Reserve conducts specialized examinations of those state member banks and BHCs that are registered with the Board as transfer agents. Among other things, transfer agents countersign and monitor the issuance of securities, register the transfer of securities, and exchange or convert securities. On-site examinations focus on the effectiveness of an organization's operations and its compliance with relevant securities regulations. During 2012, the Federal Reserve conducted on-site transfer agent examinations at 11 of the 30 state member banks and BHCs that were registered as transfer agents.

Government and Municipal Securities Dealers and Brokers

The Federal Reserve is responsible for examining state member banks and foreign banks for compliance with the Government Securities Act of 1986 and with the Treasury regulations governing dealing and brokering in government securities. Fourteen state member banks and six state branches of foreign banks have notified the Board that they are government securities dealers or brokers not exempt from the Treasury's regulations. During 2012, the Federal Reserve conducted seven examinations of broker–dealer activities in government securities at these organizations. These examinations are generally conducted concurrently with the Federal Reserve's examination of the state member bank or branch.

The Federal Reserve is also responsible for ensuring that state member banks and BHCs that act as municipal securities dealers comply with the Securities Act Amendments of 1975. Municipal securities dealers are examined, pursuant to the Municipal

[9] The FFIEC is an interagency body of financial regulatory agencies established to prescribe uniform principles, standards, and report forms and to promote uniformity in the supervision of financial institutions. The Council has six voting members: the Board of Governors of the Federal Reserve System, the FDIC, the National Credit Union Administration, the OCC, the Consumer Financial Protection Bureau (CFPB), and the chair of the State Liaison Committee.

Securities Rulemaking Board's rule G-16, at least once every two calendar years. Eight of the 12 entities supervised by the Federal Reserve that dealt in municipal securities were examined during 2012.

Securities Credit Lenders

Under the Securities Exchange Act of 1934, the Board is responsible for regulating credit in certain transactions involving the purchasing or carrying of securities. As part of its general examination program, the Federal Reserve examines the banks under its jurisdiction for compliance with Board Regulation U (Credit by Banks and Persons other than Brokers or Dealers for the Purpose of Purchasing or Carrying Margin Stock). In addition, the Federal Reserve maintains a registry of persons other than banks, brokers, and dealers who extend credit subject to Regulation U. The Federal Reserve may conduct specialized examinations of these lenders if they are not already subject to supervision by the Farm Credit Administration or the National Credit Union Administration (NCUA).

At the end of 2012, 451 lenders other than banks, brokers, or dealers were registered with the Federal Reserve. Other federal regulators supervised 116 of these lenders, and the remaining 335 were subject to limited Federal Reserve supervision. The Federal Reserve exempted 139 lenders from its on-site inspection program on the basis of their regulatory status and annual reports. Forty-two inspections were conducted during the year.

Enforcement Actions

The Federal Reserve has enforcement authority over the financial institutions it supervises and their affiliated parties. Enforcement actions may be taken to address unsafe and unsound practices or violations of any law or regulation. Formal enforcement actions include cease-and-desist orders, written agreements, prompt corrective action directives, removal and prohibition orders, and civil money penalties. In 2012, the Federal Reserve completed 74 formal enforcement actions. Civil money penalties totaling $1,043,700,000 were assessed. As directed by statute, all civil money penalties are remitted to either the Treasury or the Federal Emergency Management Agency. Enforcement orders and prompt corrective action directives, which are issued by the Board, and written agreements, which are executed by the Reserve Banks, are made public and are posted on the Board's website (www.federalreserve.gov/apps/enforcementactions/).

In 2012, the Reserve Banks completed 198 informal enforcement actions. Informal enforcement actions include memoranda of understanding (MOU), commitment letters, and board of directors' resolutions.

Surveillance and Off-Site Monitoring

The Federal Reserve uses automated screening systems to monitor the financial condition and performance of state member banks and BHCs in the period between on-site examinations. Such monitoring and analysis helps direct examination resources to institutions that have higher risk profiles. Screening systems also assist in the planning of examinations by identifying companies that are engaging in new or complex activities.

The primary off-site monitoring tool used by the Federal Reserve is the Supervision and Regulation Statistical Assessment of Bank Risk model (SR-SABR). Drawing mainly on the financial data that banks report on their Reports of Condition and Income (Call Reports), SR-SABR uses econometric techniques to identify banks that report financial characteristics weaker than those of other banks assigned similar supervisory ratings. To supplement the SR-SABR screening, the Federal Reserve also monitors various market data, including equity prices, debt spreads, agency ratings, and measures of expected default frequency, to gauge market perceptions of the risk in banking organizations. In addition, the Federal Reserve prepares quarterly Bank Holding Company Performance Reports (BHCPRs) for use in monitoring and inspecting supervised banking organizations. The BHCPRs, which are compiled from data provided by large BHCs in quarterly regulatory reports (FR Y-9C and FR Y-9LP), contain, for individual companies, financial statistics and comparisons with peer companies. BHCPRs are made available to the public on the National Information Center (NIC) website, which can be accessed at www.ffiec.gov.

Federal Reserve analysts use Performance Report Information and Surveillance Monitoring (PRISM), a querying tool, to access and display financial, surveillance, and examination data. In the analytical module, users can customize the presentation of institutional financial information drawn from Call Reports, Uniform Bank Performance Reports, FR Y-9 statements, BHCPRs, and other regulatory reports. In the surveillance module, users can generate reports summarizing the results of surveillance screening for banks and BHCs. During 2012, two

major upgrades to the web-based PRISM application were completed.

The Federal Reserve works through the FFIEC Task Force on Surveillance Systems to coordinate surveillance activities with the other federal banking agencies.

Training and Technical Assistance

The Federal Reserve provides training and technical assistance to foreign supervisors and minority-owned and de novo depository institutions.

International Training and Technical Assistance

In 2012, the Federal Reserve continued to provide technical assistance on bank supervisory matters to foreign central banks and supervisory authorities. Technical assistance involves visits by Federal Reserve staff members to foreign authorities as well as consultations with foreign supervisors who visit the Board or the Reserve Banks. The Federal Reserve, along with the OCC, the FDIC, and the Treasury, was an active participant in the Middle East and North Africa Financial Regulators' Training Initiative, which is part of the U.S. government's Middle East Partnership Initiative. The Federal Reserve also contributes to the regional training provision under the Asia Pacific Economic Cooperation Financial Regulators' Training Initiative.

In 2012, the Federal Reserve offered a number of training courses exclusively for foreign supervisory authorities, both in the United States and in a number of foreign jurisdictions. Federal Reserve staff also took part in technical assistance and training missions led by the International Monetary Fund, the World Bank, the Asian Development Bank, the Basel Committee on Banking Supervision, and the Financial Stability Institute.

The Federal Reserve is also an associate member of the Association of Supervisors of Banks of the Americas (ASBA), an umbrella group of bank supervisors from countries in the Western Hemisphere. The group, headquartered in Mexico,

- promotes communication and cooperation among bank supervisors in the region;
- coordinates training programs throughout the region with the help of national banking supervisors and international agencies; and
- aims to help members develop banking laws, regulations, and supervisory practices that conform to international best practices.

The Federal Reserve contributes significantly to ASBA's organizational management and to its training and technical assistance activities.

Initiatives for Minority-Owned and De Novo Depository Institutions

The Federal Reserve System implements its responsibilities under section 367 of the Dodd-Frank Act primarily through its Partnership for Progress (PFP) program. Established in 2008, this program promotes the viability of minority-owned institutions (MOIs) by facilitating activities designed to strengthen their business strategies, maximize their resources, and increase their awareness and understanding of regulatory topics. In addition, the Federal Reserve continues to maintain the PFP website, which supports MOIs by providing them with technical information and links to useful resources (www.fedpartnership.gov). Representatives from each of the 12 Reserve Bank districts, along with staff from the Board of Governors, continue to offer personalized technical assistance to MOIs by providing targeted supervisory guidance, identifying additional resources, and fostering mutually beneficial partnerships between MOIs and community organizations. Currently, 16 state member banks and 120 BHCs supervised by the Federal Reserve are MOIs.

During 2012, the Federal Reserve System undertook several specific actions to strengthen its MOI support efforts. For example, the Federal Reserve

- revised its processing procedures to implement prescreening of MOI applications, resulting in early identification and resolution of factors that may cause processing delays;
- increased staff resources for MOI oversight;
- partnered with the National Bankers Association, the National Urban League, and the Minority Council of the Independent Community Bankers Association in outreach events;
- in conjunction with the Division of Consumer and Community Affairs, conducted several joint outreach efforts to educate MOIs on supervisory topics;
- conducted training at a National Bankers Association convention to respond to concerns about the potential effect of Basel III capital proposals on community banks, including MOIs;
- educated potential investors in MOIs about benefits under Board Regulation BB (Community Reinvestment, section 228.21(f)); and

- participated in an interagency taskforce to consider and address supervisory challenges facing MOIs.

During 2012, PFP representatives hosted and participated in numerous banking workshops and seminars aimed at promoting and preserving MOIs, including the National Bankers Association's Legislative and Regulatory Conference and the Interagency Minority Depository Institutions National Conference. Further, program representatives collaborated with community leaders, trade groups, the Small Business Administration, and other organizations to seek support for MOIs.

Business Continuity

In 2012, the Federal Reserve continued its efforts to strengthen the resilience of the U.S. financial system in the event of unexpected disruptions, including focused supervisory efforts to evaluate the resiliency of the banking institutions under its jurisdiction. The Mid-Atlantic derecho windstorm in June, Hurricane Sandy in October, and the distributed denial of service attacks against U.S. financial institutions during the second half of the year presented major challenges to the financial system. The resiliency of the financial system in the aftermath of these events, however, proved to be effective in protecting the safety and soundness of critical systems and customer information. The Federal Reserve, together with other federal and state financial regulators, is a member of the Financial and Banking Information Infrastructure Committee (FBIIC), which was formed to improve coordination and communication among financial regulators, enhance the resiliency of the financial sector, and promote the public/private partnership. The FBIIC has established emergency protocols to maintain effective communication among member agencies and convenes by conference call no later than 90 minutes following the first public report of an event to share situational and operational status reports. During aforementioned events of 2012, the Federal Reserve participated in the FBIIC, the FFIEC, and internal communications to promote the resiliency of the financial sector.

Supervisory Policy

The Federal Reserve's supervisory policy function, carried out by the Board, is responsible for developing regulations and guidance for financial institutions under the Federal Reserve's supervision, as well as guidance for examiners. The Board, (often in concert with the other federal banking agencies) issues rulemakings, public SR letters, and other policy statements and guidance in order to carry out its supervisory policy function. Federal Reserve staff also take part in supervisory and regulatory forums, provide support for the work of the FFIEC, and participate in international policymaking forums, including the Basel Committee on Banking Supervision, the Financial Stability Board, and the Joint Forum.

Capital Adequacy Standards

In 2012, the Board issued several rulemakings and guidance documents related to capital adequacy standards, including joint proposed rulemakings with the other federal banking agencies that would implement certain revisions to the Basel capital framework and that address certain provisions of the Dodd-Frank Act.

- The federal banking agencies published a final rule in June that amended the market risk capital rule to implement certain revisions made by the Basel Committee on Banking Supervision to its market risk framework between 2005 and 2010. The revisions will increase capital requirements for market risk by better capturing positions for which the market risk capital rule is appropriate, reducing pro-cyclicality in market risk capital requirements, enhancing sensitivity to risks that were not adequately captured by the previous regulatory methodologies, and increasing transparency through enhanced disclosures. Consistent with section 939A of the Dodd-Frank Act, the final rule does not include those aspects of the Basel Committee's market risk framework that rely on credit ratings. Instead, the final rule includes alternative standards of creditworthiness for determining specific risk capital requirements for certain debt and securitization positions. The rule is available at www.gpo.gov/fdsys/pkg/FR-2012-08-30/pdf/2012-16759.pdf.
- In June, the federal banking agencies issued for comment three notices of proposed rulemaking (NPRs) to amend the regulatory capital rules. Taken together, the proposals would establish an integrated regulatory capital framework that addresses shortcomings in regulatory capital requirements that became apparent during the recent financial crisis. For internationally active banking organizations, the proposed rule would implement in the United States the Basel III regulatory capital reforms adopted by the Basel Committee on Banking Supervision. The proposed rule would also make changes required by the Dodd-

Frank Act, including removal of references to and reliance on credit ratings. The NPRs are available at

- www.gpo.gov/fdsys/pkg/FR-2012-08-30/pdf/2012-16757.pdf (*Regulatory Capital Rules: Regulatory Capital, Implementation of Basel III, Minimum Regulatory Capital Ratios, Capital Adequacy, Transition Provisions, and Prompt Corrective Action,* "Basel III NPR");
- www.gpo.gov/fdsys/pkg/FR-2012-08-30/pdf/2012-17010.pdf (*Regulatory Capital Rules: Standardized Approach for Risk-weighted Assets; Market Discipline and Disclosure Requirements,* "Standardized Approach NPR"); and
- www.gpo.gov/fdsys/pkg/FR-2012-08-30/pdf/2012-16761.pdf (*Regulatory Capital Rules: Advanced Approaches Risk-based Capital Rule; Market Risk Capital Rule,* "Advanced Approaches and Market Risk NPR"). (Also see box 3.)

- In September, the federal banking agencies announced the availability of a regulatory capital estimation tool to help community banking organizations and other interested parties evaluate the regulatory capital proposals issued in June. The tool was developed to assist these organizations in estimating the potential effects on their capital ratios of the agencies' Basel III and Standardized Approach NPRs. The announcement and the capital estimation tool are available at www.federalreserve.gov/newsevents/press/bcreg/20120924a.htm.

In 2012, Board and Reserve Bank staff conducted in-depth supervisory analyses of a number of complex capital issuances and private capital investments to evaluate their qualification for inclusion in regulatory capital. For certain transactions, banking organizations were required to make changes necessary for instruments to satisfy regulatory capital criteria, whereas other instruments were disallowed from inclusion in a banking organization's regulatory capital.

International Coordination on Supervisory Policies

As a member of the Basel Committee on Banking Supervision, the Federal Reserve actively participates in efforts to advance sound supervisory policies for internationally active banking organizations and enhance the strength and stability of the international banking system.

Basel Committee

During 2012, the Federal Reserve participated in ongoing international initiatives to track the progress of implementation of the Basel framework in member countries. Participation in this assessment not only included examining the progress made by other countries, but also an assessment of progress made by the United States. The preliminary report on the United States' progress is available at www.bis.org/bcbs/implementation/l2_us.pdf.

The Federal Reserve contributed to supervisory policy recommendations, reports, and papers issued for consultative purposes or finalized by the Basel Committee that were designed to improve the supervision of banking organizations' practices and to address specific issues that emerged during the financial crisis. The listing below includes key final and consultative papers from 2012.

Final papers:

- *Composition of capital disclosure requirements* (issued in June and available at www.bis.org/publ/bcbs221.htm).
- *Capital requirements for bank exposures to central counterparties* (issued in July and available at www.bis.org/publ/bcbs227.htm).
- *Core principles for effective banking supervision* (issued in September and available at www.bis.org/publ/bcbs230.htm).
- *A framework for dealing with domestic systemically important banks* (issued in October and available at www.bis.org/publ/bcbs233.htm).

Consultative papers:

- *Fundamental review of the trading book* (issued in May and available at www.bis.org/publ/bcbs219.htm).
- *Margin requirements for non-centrally-cleared derivatives* (issued jointly with the Board of the International Organization of Securities Commissions in July and available at www.bis.org/publ/bcbs226.htm).
- *Supervisory guidance for managing risks associated with the settlement of foreign exchange transactions* (issued in August and available at www.bis.org/publ/bcbs229.htm).
- *Revisions to the Basel Securitisation Framework* (issued in December and available at www.bis.org/press/p121218.htm).

Joint Forum

In 2012, the Federal Reserve continued its participation in the Joint Forum—an international group of supervisors of the banking, securities, and insurance industries established to address various cross-sector issues, including the regulation of financial conglomerates. The Joint Forum operates under the aegis of the Basel Committee, the International Organization of Securities Commissions, and the International Association of Insurance Supervisors.

In September, the Joint Forum issued *Principles for the supervision of financial conglomerates*, which supersedes similar principles developed by the Joint Forum in 1999. The principles include guidance for policymakers on the powers and authority necessary for the supervision of financial conglomerates. The document is available at www.bis.org/publ/joint29.htm.

Financial Stability Board

In 2012, the Federal Reserve continued its active participation in the Financial Stability Board (FSB)—an international group that helps coordinate the work of national financial authorities and international standard setting bodies, and develops and promotes the implementation of financial sector policies in the interest of financial stability. Through the FSB Standing Committee on Supervisory and Regulatory Cooperation, the FSB is engaged in several issues, including the regulation of shadow banking, the regulation and supervision of globally systemically important financial institutions, and the development of effective resolution regimes for large financial institutions. Consultative papers issued by the FSB in 2012 can be found at www.financialstabilityboard.org/list/fsb_publications/tid_150/index.htm.

Accounting Policy

The Federal Reserve strongly endorses sound corporate governance and effective accounting and auditing practices for all regulated financial institutions. Accordingly, the Federal Reserve's supervisory policy function is responsible for monitoring major domestic and international proposals, standards, and other developments affecting the banking industry in the areas of accounting, auditing, internal controls over financial reporting, financial disclosure, and supervisory financial reporting.

During 2012, Federal Reserve staff addressed numerous issues related to financial sector accounting and reporting, including loan accounting, troubled debt restructurings, deferred taxes, other real estate accounting, insurance accounting, business combinations, securitizations, fair value accounting, financial instrument accounting and reporting, balance sheet offsetting, securities financing transactions, consolidation of structured entities, and external and internal audit processes.

To address these and other issues, Federal Reserve staff consulted with key constituents in the accounting and auditing professions, including standard-setters, accounting firms, accounting and financial sector trade groups, and other financial sector regulators. The Federal Reserve also participated in meetings of the Basel Committee's Accounting Task Force, which represents the Basel Committee at international meetings on accounting, auditing, and disclosure issues affecting global banking organizations. These efforts helped inform our understanding of domestic and international practices—as well as proposed accounting, auditing, and regulatory standards—and helped in our formulation of policy positions using insight obtained through these forums.

During 2012, the Federal Reserve shared its views with accounting and auditing standard-setters through informal discussions and public comment letters. Comment letters on the following proposals were issued during the past year:

- Financial Accounting Standards Board's proposals related to disclosures about liquidity risk and interest rate risk, revenue recognition, and principal versus agent analysis in consolidation guidance.
- Financial Accounting Foundation's proposal to establish the Private Company Standards Improvement Council to address the needs of private companies in the standard-setting process.

Working with international bank supervisors, Federal Reserve staff contributed to the development of numerous other comment letters related to accounting and auditing matters that were submitted to standard setters through the Basel Committee.

Federal Reserve staff also participated in other supervisory activities to assess interactions between accounting standards and regulatory reform efforts. These activities included supporting Dodd-Frank Act initiatives related to stress testing of banks and credit-risk retention requirements for securitizations, as well as various Basel III activities.

The Federal Reserve issued supervisory guidance to financial institutions and supervisory staff on

accounting matters, as appropriate, and participated in a number of supervisory-related activities. For example, Federal Reserve staff

- issued guidance to address allowance estimation practices related to junior lien loans and lines of credit;
- developed and participated in a number of domestic and international supervisory training programs and external education sessions to educate supervisors and bankers about new and emerging accounting and reporting topics affecting financial institutions; and
- supported the efforts of the Reserve Banks in financial institution supervisory activities related to financial accounting, auditing, reporting, and disclosure.

Credit-Risk Management

The Federal Reserve works with the other federal banking agencies to develop guidance on the management of credit risk; to coordinate the assessment of regulated institutions' credit risk; and to ensure that institutions properly identify, measure, and manage credit risk.

Guidance on Credit Risk

In 2012, the Federal Reserve issued final guidance to banks on Allowance for Loan Loss Estimation Practices for Junior Lien Loans and Lines of Credit, on rental of Residential Other Real Estate Owned (OREO) properties, and on stress testing for banks with greater than $10 billion in assets.[10] It also issued for public comment guidance relating to Leveraged Lending practices.[11]

Shared National Credit Program

In August, the Federal Reserve and the other banking agencies released summary results of the 2012 annual review of the Shared National Credit (SNC) Program. The agencies established the program in 1977 to promote an efficient and consistent review and classification of shared national credits. A SNC is any loan or formal loan commitment—and any asset, such as other real estate, stocks, notes, bonds, and debentures taken as debts previously contracted—extended to borrowers by a supervised institution, its subsidiaries, and affiliates. A SNC must have an original loan amount that aggregates to $20 million or more and either (1) is shared by three or more unaffiliated supervised institutions under a formal lending agreement or (2) a portion of which is sold to two or more unaffiliated supervised institutions, with the purchasing institutions assuming their pro rata share of the credit risk.

The 2012 SNC review was based on analyses prepared in the second quarter of 2012 using credit-related data provided by federally supervised institutions as of December 31, 2011, and March 31, 2012. The 2012 SNC portfolio totaled $2.79 trillion, with roughly 8,700 credit facilities to approximately 5,600 borrowers. From the previous period, the dollar volume of the portfolio commitment amount rose by $268 billion or 10.6 percent, and the number of credits increased by over 660, or 8.2 percent.

The number of SNCs originated in 2011 rose by 61 percent compared to 2010 loan originations, and equaled approximately 114 percent of the large volume of credits originated in 2007. While the overall quality of underwriting in 2011 was significantly better than in 2007, some easing of standards was noted, specifically in leveraged finance credits, compared with the relatively tighter standards present in 2009 and the latter half of 2008. The primary underwriting deficiencies identified during the 2012 SNC Review were minimal or no loan covenants, liberal repayment terms, repayment dependent on refinancing, and inadequate collateral valuations. The easing in standards may be due to aggressive competition and market liquidity and was more pronounced in leveraged finance transactions.

Refinancing risk has declined in the SNC portfolio as only 37.1 percent of SNCs will mature over the next three years compared with 63.4 percent for the same time frame in the 2011 SNC Review. Poorly underwritten credits originated in 2006 and 2007 continued to adversely affect the SNC portfolio. During 2011 and into 2012, syndications continued to modify loan agreements to extend maturities. These transactions

---

[10] Final guidance documents are available at www.federalreserve.gov/newsevents/press/bcreg/bcreg20120131a1.pdf; and www.federalreserve.gov/newsevents/press/bcreg/bcreg20120405a1.pdf. For more information on stress testing, see box 4.

[11] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2012-03-30/html/2012-7620.htm

had the effect of relieving near-term refinancing risk, but may not improve borrowers' ability to repay their debts in the longer term.

For more information on the 2012 SNC review, visit the Board's website at www.federalreserve.gov/newsevents/press/bcreg/20120827a.htm

Compliance Risk Management

The Federal Reserve works with international and domestic supervisors to develop guidance that promotes compliance with Bank Secrecy Act and Anti-Money-Laundering Compliance (BSA/AML) and counter terrorism laws.

Bank Secrecy Act and Anti-Money-Laundering Compliance

In 2012, the Federal Reserve continued to actively promote the development and maintenance of effective BSA/AML compliance risk-management programs. For example, the Federal Reserve offered an "Ask the Fed" session in November 2012 devoted entirely to BSA/AML.[12] Supervisory trends such as examination findings, bulk currency transactions, outsourcing of BSA/AML responsibilities, and third-party payment processors were discussed, along with updates on customer due diligence, electronic filing of reports, Iranian sanctions, and other international concerns. Also, Federal Reserve supervisory staff participated in a number of industry conferences to continue to communicate regulatory expectations.

The Federal Reserve is a member of the Treasury-led BSA Advisory Group, which includes representatives of regulatory agencies, law enforcement, and the financial services industry and covers all aspects of the BSA. In addition, the Federal Reserve also participated in several Treasury-led private/public sector dialogues with Latin American and Mexican financial institutions, regulators, and supervisors. The objective of these dialogues is to optimize correspondent relations between U.S. and country-specific financial sectors. The Federal Reserve also participates in the FFIEC BSA/AML working group, a monthly forum for the discussion of pending BSA policy and regulatory matters. In addition to the FFIEC agencies, the BSA/AML working group includes the Financial Crimes Enforcement Network (FinCEN) and, on a quarterly basis, the U.S. Securities and Exchange Commission, the Commodity Futures Trading Commission, the Internal Revenue Service, and the Office of Foreign Assets Control (OFAC).

The FFIEC BSA/AML working group is responsible for updating the FFIEC *Bank Secrecy Act/Anti-Money Laundering Examination Manual*). The FFIEC developed this manual as part of its ongoing commitment to provide current and consistent interagency guidance on risk-based policies, procedures, and processes for financial institutions to comply with the BSA and safeguard their operations from money laundering and terrorist financing.

Throughout 2012, the Federal Reserve and other federal banking agencies continued to regularly share examination findings and enforcement proceedings with FinCEN under the interagency MOU that was finalized in 2004.

In 2012, the Federal Reserve continued to regularly share examination findings and enforcement proceedings with OFAC under the 2006 interagency MOU. The Federal Reserve also provided a speaker for and participated in OFAC's day-long Financial Institution Symposium.

In 2012, the Federal Reserve joined the U.S. Treasury's Interagency Task Force on Strengthening and Clarifying the BSA/AML Framework (Task Force), which includes representatives from the Department of Justice, OFAC, FinCEN, the federal banking agencies, the Securities and Exchange Commission, and the Commodity Futures Trading Commission. The primary focus of the Task Force is to review the BSA, its implementation, and its enforcement with respect to U.S. financial institutions that are subject to these requirements, and to develop recommendations for ensuring the continued effectiveness of the BSA and efficiency in agency efforts to monitor compliance.

International Coordination on Sanctions, Anti-Money-Laundering, and Counter-Terrorism Financing

The Federal Reserve participates in a number of international coordination initiatives related to sanctions, money laundering, and terrorism financing. For example, the Federal Reserve has a long-standing role in the U.S. delegation to the intergovernmental Financial Action Task Force (FATF) and its working groups, contributing a banking supervisory perspective to formulation of international standards. In addition, the Federal Reserve has provided input and review of ongoing work to revise the FATF Recom-

[12] "Ask the Fed" is a free program that covers the latest financial and regulatory developments for senior banking officials and boards of directors.

mendations to ensure that they continue to provide a comprehensive and current framework for combating money laundering and terrorist financing. Finally, the Federal Reserve continues to participate in a subcommittee of the Basel Committee that focuses on AML/counter-terrorism financing issues.

Other Policymaking Initiatives

- In May, the federal banking agencies issued final supervisory guidance regarding stress-testing practices at banking organizations with total consolidated assets of more than $10 billion. The guidance highlights the importance of stress testing at banking organizations as an ongoing risk-management practice that supports a banking organization's forward-looking assessment of its risks and better equips it to address a range of adverse outcomes. This guidance builds upon previously issued supervisory guidance and outlines general principles for a satisfactory stress testing framework and describes various stress testing approaches and how stress testing should be used at various levels within an organization. The guidance also discusses the importance of stress testing in capital and liquidity planning and the importance of strong internal governance and controls as part of an effective stress-testing framework. The guidance is available at www.gpo.gov/fdsys/pkg/FR-2012-05-17/pdf/2012-11989.pdf. (Also see box 4.)
- In May, the Board announced the approval of a final rule outlining the procedures for securities holding companies (SHCs) to elect to be supervised by the Federal Reserve. An SHC is a nonbank company that owns at least one registered broker or dealer. The rule specifies the information that an SHC will need to provide to the Board as part of registration for supervision, including information related to organizational structure, capital, and financial condition. In addition, the rule provides that upon an effective registration, an SHC would be supervised and regulated as if it were a bank holding company with the exception that the restrictions on nonbanking activities in the Bank Holding Company Act would not apply to a supervised SHC. The rule is available at www.gpo.gov/fdsys/pkg/FR-2012-06-04/pdf/2012-13311.pdf.

Regulatory Reports

The Federal Reserve's supervisory policy function is also responsible for developing, coordinating, and implementing regulatory reporting requirements for various financial reporting forms filed by domestic and foreign financial institutions subject to Federal Reserve supervision. Federal Reserve staff members interact with other federal agencies and relevant state supervisors, including foreign bank supervisors as needed, to recommend and implement appropriate and timely revisions to the reporting forms and the attendant instructions.

Bank Holding Company Regulatory Reports

The Federal Reserve requires that U.S. BHCs periodically submit reports that provide information about their financial condition and structure. This information is essential to formulating and conducting bank regulation and supervision. It is also used in responding to requests by Congress and the public for information about BHCs and their nonbank subsidiaries. Foreign banking organizations also are required to periodically submit reports to the Federal Reserve.

- FR Y-9 series reports—the FR Y-9C, FR Y-9LP, FR Y-9SP and FR Y-9ES—provide standardized financial statements for BHCs on both a consolidated and a parent-only basis. The reports are used to detect emerging financial problems, to review performance and conduct pre-inspection analysis, to monitor and evaluate risk profiles and capital adequacy, to evaluate proposals for BHC mergers and acquisitions, and to analyze a holding company's overall financial condition.
- Nonbank subsidiary reports—the FR Y-11, FR 2314, FR Y-7N, and FR 2886b—help the Federal Reserve determine the condition of BHCs that are engaged in nonbank activities and also aid in monitoring the number, nature, and condition of the companies' nonbank subsidiaries.
- The FR Y-8 report provides information on transactions between an insured depository institution and its affiliates that are subject to section 23A of the Federal Reserve Act; it is used to monitor bank exposures to affiliates and to ensure banks' compliance with section 23A of the Federal Reserve Act.
- The FR Y-10 report provides data on changes in organization structure at domestic and foreign banking organizations.
- The FR Y-6 and FR Y-7 reports gather additional information on organization structure and shareholders from domestic banking organizations and foreign banking organizations, respectively; the information is used to monitor structure so as to determine compliance with provisions of the Bank Holding Company Act (BHC Act) and Regula-

tion Y and to assess the ability of a foreign banking organization to continue as a source of strength to its U.S. operations.

During 2012, the Federal Reserve implemented the following revisions to the FR Y-9C to better understand BHCs' risk exposures and to collect certain information prescribed by changes in accounting standards: (1) added two data items to Schedule HC-P, 1–4 Family Residential Mortgage Banking Activities, to collect the amount of representation and warranty reserves for one- to four-family residential mortgage loans sold; (2) added a data item to Schedule HC-N, Past Due and Nonaccrual Loans, Leases, and Other Assets, to collect the outstanding balance of purchased credit impaired loans by past due and nonaccrual status; and (3) modified the reporting instructions to clarify the reporting and accounting treatment of specific valuation allowances.

Savings and Loan Holding Company Regulatory Reports

During 2012, the first phase of Federal Reserve reporting began for the non-exempt SLHCs. These SLHCs began reporting the FR Y-9 series of reports and the FR Y-6 or FR Y-7. The exempt SLHCs also began filing the FR Y-6 and FR Y-7 reports.[13] Several training sessions on the various Federal Reserve reports were provided to the SLHCs.

On June 11, 2012, the Board issued a proposal to expand the entities that must file the FR Y-10 report to include SLHCs and security holding companies, effective December 1, 2012. In addition, a one-time verification of an SLHC's organization structure was proposed. After consideration of the comments received on the proposal, the Board issued in the *Federal Register* on September 14, 2012, (77 *Fed. Reg*. 86842) the final requirements with modifications. The requirement that the FR Y-10 be filed by all SLHCs, including their savings associations and branches, as of December 1, 2012, was retained; however, the one-time verification was scaled back to include only select information on nonbanks that would be required to file financial reports (FR Y-11 or FR 2314) beginning in March 31, 2013. Additionally, a phased-in approach for reporting nonbank subsidiaries on the FR Y-10 based on the frequency of financial reporting by the nonbank subsidiaries was approved.

Commercial Bank Regulatory Reports

As the federal supervisor of state member banks, the Federal Reserve, along with the other banking agencies (through the FFIEC), requires banks to submit quarterly Call Reports. Call Reports are the primary source of data for the supervision and regulation of banks and the ongoing assessment of the overall soundness of the nation's banking system. Call Report data provide the most current statistical data available for evaluating institutions' corporate applications, for identifying areas of focus for both on-site and off-site examinations, and for considering monetary and other public policy issues. Call Report data, which also serve as benchmarks for the financial information required by many other Federal Reserve regulatory financial reports, are widely used by state and local governments, state banking supervisors, the banking industry, securities analysts, and the academic community.

During 2012, the FFIEC implemented the following revisions to the Call Report to better understand banks' risk exposures and to collect certain information prescribed by changes in accounting standards: (1) added new Schedule RI-C –Disaggregated Data on the Allowance for Loan and Lease Losses to collect information on the allowance for loan and lease losses by major loan category (effective March 2013); (2) added two data items to Schedule RC-P, 1–4 Family Residential Mortgage Banking Activities, to collect the amount of representation and warranty reserves for one- to four-family residential mortgage loans sold; (3) added a data item to Schedule RC-N, Past Due and Nonaccrual Loans, Leases, and Other Assets, to collect the outstanding balance of purchased credit impaired loans by past due and nonaccrual status; (4) added new items in Schedule RC-M, Memoranda, in which savings associations and certain state savings and cooperative banks would report on the tests they use to determine compliance with the Qualified Thrift Lender requirement and whether they have remained in compliance with this requirement; (5) revised two existing items in Schedule RC-R, Regulatory Capital, used to calculate the

---

[13] A final notice was published in the *Federal Register* on December 29, 2011, (76 *Fed. Reg.* 81933) in which the Board retained the two-year phase-in approach for most SLHCs and modified the exemption criteria for commercial SLHCs and certain insurance SLHCs. The exemption for commercial SLHCs will be reviewed periodically and may be rescinded if the Board determines that FR Y–9 financial information and other regulatory reports are needed to effectively and consistently assess compliance with capital and other regulatory requirements. Insurance SLHCs will be exempt only until consolidated regulatory capital rules are finalized for SLHCs, at which time they may be required to file consolidated financial statements—to demonstrate their compliance with the capital rules—and other Federal Reserve reports.

leverage ratio denominator to accommodate certain differences between the regulatory capital standards that apply to the leverage capital ratios of banks versus savings associations; and (6) modified the reporting instructions to clarify the reporting and accounting treatment of specific valuation allowances.

Supervisory Information Technology

The Federal Reserve's supervisory information technology function, carried out by the Board's Division of Banking Supervision and Regulation and the Reserve Banks under the guidance of the Subcommittee on Supervisory Administration and Technology, works to identify and set priorities for information technology initiatives within the supervision and regulation business line.

In 2012, the supervisory information technology function focused on

- **Large Bank Supervision**. Improved the supervision of large and regional financial institutions with new processes and linked workflows to enable continuous updates of information provided through examinations and ongoing monitoring activities.
- **Community and Regional Bank Supervision**. Worked with community and regional bank examiners and other regulators to implement enhanced tools to support community and regional bank examinations.
- **Collaboration**. (1) Enhanced information sharing among staff at the Board and Reserve Banks through new and enhanced collaboration tools; (2) implemented an electronic solution to support exam teams' ability to share documents, and (3) leveraged an Interagency Steering Group to improve methods for sharing work among state and federal regulators.
- **Modernization**. Acquired products to modernize business capabilities in the areas of document management, resource prioritization, and scheduling.
- **Information Security**. Commenced several initiatives to improve overall information security and the efficiency of our information security practices.

National Information Center

The National Information Center (NIC) is the Federal Reserve's comprehensive repository for supervisory, financial, and banking structure data. It is also the main repository for many supervisory documents. The NIC includes (1) data on banking structure throughout the United States as well as foreign banking concerns; (2) the National Examination Data (NED), an application that enables supervisory personnel as well as federal and state banking authorities to access NIC data; (3) the Banking Organization National Desktop, an application that facilitates secure, real-time electronic information sharing and collaboration among federal and state banking regulators for the supervision of banking organizations; and (4) the Central Document and Text Repository (CDTR), an application that contains documents supporting the supervisory processes.

Within the NIC, the supporting systems continue to be modified over time to extend their usefulness and improve business workflow efficiency, especially for the sourcing transactional data systems. Throughout 2012, the NIC supervisory and structure databases continued to be modified to support Dodd-Frank Act changes and to facilitate the supervision of SLHCs. Business changes were implemented to the NED application for inspections of SLHCs and CFPB-led examinations. A significant amount of progress occurred to successfully capture and integrate the former OTS data and documents into several NIC databases, making substantially more SLHC examination and enforcement action data available. Also, SLHCs were added to the reporting panel for the structure reporting forms, with an emphasis on the Report of Changes in Organizational Structure (FR Y-10), and data changes to the structure reporting forms resulted in additional modifications to the NIC structure databases. Other significant database enhancements included a geocoding web service and a new Legal Entity Identifier field, being developed for use by the international community.

The NIC also supports the interagency Shared National Credit (SNC) Program and the SNC Modernization initiative (SNCMod). The SNC Program is the annual review of large syndicated loans while the SNCMod initiative is a multiyear, interagency information technology development effort to improve the efficiency and effectiveness of the systems that support the SNC Program. SNCMod focuses on a complete redesign of the current legacy systems to take advantage of modern technology to enhance and extend the system's capabilities, including automating tasks and providing tools for the examination and analysis of loan data for the agencies' staff. During 2012, the agencies finalized requirements for automating the appeals process,

loan matching, and concordance, and for creating additional analytical and reporting capabilities with the SNC data.

In 2012, the NIC team continued to implement changes to the NIC public website in response to the Dodd-Frank Act. These changes included adding the Quarterly Savings and Loan Holding Company Report (FR 2320) data to the website and adding SLHCs to the listing of holding companies (based on consolidated assets). The NIC team also worked extensively toward adding the Risk-Based Capital Reporting for Institutions Subject to the Advanced Capital Adequacy Framework (FFIEC 101) data to the website; this is expected to be placed into production by mid-year 2013.

In mid-2012, the NIC staff, in partnership with System and other supervisory staff, issued internal guidance to System staff regarding the acquisition and use of purchased data across the System to achieve cost effectiveness, reduce duplicative purchases, and achieve greater coordination of contract services.

Begun in 2011, the Supervision and Regulation National Data Inventory Project, a Federal Reserve System strategic initiative, is being implemented in two phases over several years. Overall, this initiative focuses on providing transparency and awareness of data collections that support broad risk monitoring and emerging macro-prudential supervision analysis in LISCC and other supervisory business portfolios. Phase I, which produced a data inventory proof of concept, brought visibility to supervision and regulation ad hoc data collections for large complex banking organizations and was placed into production in November 2011. Development for Phase II was completed in December 2012 and is expected to be placed into production in March 2013. Once in production the Phase II changes, which built upon the Phase I proof of concept, would allow other business lines to utilize various functionalities, such as automated feeds from other data inventories, extensibility and segregation of the inventory and institutions by business lines, reporting services, and enhanced workflows.

Throughout 2012, in an effort to best serve supervisory business sponsors, NIC staff provided project management for the maturation of the CCAR, Capital Plan Review, and Dodd-Frank Act Stress Testing program initiatives and for the automation of the Capital Assessment and Stress Testing information collection (FR Y-14). The NIC staff also managed the third-party data aggregator contractual relationships for the FR Y-14 monthly credit card and mortgage data collections.

Finally, supervisory staff participated in a number of interagency technology-related initiatives as part of FFIEC task forces and interagency committees. These efforts support standardized data collections and cross-agency information sharing. Work in this area will continue to be important as the agencies work through the implementation of the remaining Dodd-Frank Act initiatives. One such technology-related initiative required Board staff to collaborate with the FDIC and OCC to develop and release a Request for Proposal for the Central Data Repository, the data collection and validation system for the FFIEC commercial bank Consolidated Reports of Condition and Income (Call Reports: FFIEC 031 and FFIEC 041) and the Uniform Bank Performance Report. Another technology-related initiative, started in 2012, required Board staff to collaborate with the CFPB on a document exchange initiative that would require implementing changes to the CDTR in 2013.

Staff Development

The Federal Reserve's staff development program has oversight of the ongoing development of about 3,100 professional supervisory staff to ensure that they have the skills necessary to meet their evolving supervisory responsibilities. The Federal Reserve also provides course offerings to staff at state banking agencies. Training activities in 2012 are summarized in table 2.

Examiner Commissioning Program

The Examiner Commissioning Program (ECP) involves approximately 22 weeks of instruction. Individuals move through a combination of classroom offerings, self-paced assignments, and on-the-job training over a period of two to four years. Achievement is measured by two professionally validated proficiency examinations: the first exam is required of all ECP participants, and the second exam is offered in two specialty areas—(1) safety and soundness and (2) consumer compliance. A third specialty, information technology, requires that individuals earn the Certified Information Systems Auditor certification offered by the Information Systems Audit Control Association. In 2012, 291 examiners passed the first proficiency exam and 135 passed the second proficiency exam (106 in safety and soundness and 29 in consumer compliance).

Table 2. Training for banking supervision and regulation, 2012

Course sponsor or type	Number of enrollments		Instructional time (approximate training days)[1]	Number of course offerings
	Federal Reserve personnel	State and federal banking agency personnel		
Federal Reserve System	1,689	262	525	105
FFIEC	822	267	394	91
The Options Institute[2]	12	3	3	1
Rapid Response™	12,913	1,170	11	86

1 Training days are approximate. System courses were calculated using five days as an average, with FFIEC courses calculated using four days as an average.

2 The Options Institute, an educational arm of the Chicago Board Options Exchange, provides a three-day seminar on the use of options in risk management.

Continuing Professional Development

Other formal and informal learning opportunities are available to examiners, including other schools and programs offered within the System and FFIEC-sponsored schools. System programs are also available to state and federal banking agency personnel. The Rapid Response® program, introduced in 2008, offers System and state personnel 60–90 minute teleconference presentations on emerging issues or urgent training needs associated with implementation or issuance of new laws, regulations, or guidance.

Regulation

The Federal Reserve exercises important regulatory influence over entry into the U.S. banking system and the system structure through its administration of several federal statutes. The Federal Reserve is also responsible for imposing margin requirements on securities transactions. In carrying out its responsibilities, the Federal Reserve coordinates supervisory activities with the other federal banking agencies, state agencies, functional regulators (that is, regulators for insurance, securities, and commodities firms), and foreign bank regulatory agencies.

Regulation of the U.S. Banking Structure

The Federal Reserve administers six federal statutes that apply to BHCs, financial holding companies, member banks, SLHCs, and foreign banking organizations: the BHC Act, the Bank Merger Act, the Change in Bank Control Act, the Federal Reserve Act, section 10 of the Home Owners' Loan Act (HOLA (applies to SLHCs)), and the International Banking Act.

In administering these statutes, the Federal Reserve acts on a variety of applications that directly or indirectly affect the structure of the U.S. banking system at the local, regional, and national levels; the international operations of domestic banking organizations; or the U.S. banking operations of foreign banks. The applications concern BHC and SLHC formations and acquisitions, bank mergers, and other transactions involving banks and savings associations or nonbank firms. In 2012, the Federal Reserve acted on 1,029 applications filed under the six statutes. Many of these applications involved target banking organizations in less than satisfactory financial condition.

Bank Holding Company Act Applications

Under the BHC Act, a corporation or similar legal entity must obtain the Federal Reserve's approval before forming a BHC through the acquisition of one or more banks in the United States. Once formed, a BHC must receive Federal Reserve approval before acquiring or establishing additional banks. Also, BHCs generally may engage in only those nonbanking activities that the Board has previously determined to be closely related to banking under section 4(c)(8) of the BHC Act.[14] Depending on the circumstances, these activities may or may not require Federal Reserve approval in advance of their commencement.

When reviewing a BHC application or notice that requires prior approval, the Federal Reserve may consider the financial and managerial resources of the applicant, the future prospects of both the applicant and the firm to be acquired, financial stability factors, the convenience and needs of the community to be served, the potential public benefits, the competi-

14 Since 1996, the act has provided an expedited prior notice procedure for certain permissible nonbank activities and for acquisitions of small banks and nonbank entities. Since that time, the act has also permitted well-run BHCs that satisfy certain criteria to commence certain other nonbank activities on a de novo basis without first obtaining Federal Reserve approval.

tive effects of the application, and the applicant's ability to make available to the Federal Reserve information deemed necessary to ensure compliance with applicable law. In the case of a foreign banking organization seeking to acquire control of a U.S. bank, the Federal Reserve also considers whether the foreign bank is subject to comprehensive supervision or regulation on a consolidated basis by its home-country supervisor. In 2012, the Federal Reserve acted on 288 applications and notices filed by BHCs to acquire a bank or a nonbank firm, or to otherwise expand their activities, including applications involving private equity firms.

A BHC may repurchase its own shares from its shareholders. When the company borrows money to buy the shares, the transaction increases the company's debt and decreases its equity. The Federal Reserve may object to stock repurchases by holding companies that fail to meet certain standards, including the Board's capital adequacy guidelines. In 2012, the Federal Reserve acted on six stock repurchase applications by BHCs.

The Federal Reserve also reviews elections submitted by BHCs seeking financial holding company status under the authority granted by the Gramm-Leach-Bliley Act. BHCs seeking financial holding company status must file a written declaration with the Federal Reserve. In 2012, 32 domestic financial holding company declarations were approved.

Bank Merger Act Applications

The Bank Merger Act requires that all applications involving the merger of insured depository institutions be acted on by the relevant federal banking agency. The Federal Reserve has primary jurisdiction if the institution surviving the merger is a state member bank. Before acting on a merger application, the Federal Reserve considers the financial and managerial resources of the applicant, the future prospects of the existing and combined organizations, the convenience and needs of the communities to be served, and the competitive effects of the proposed merger. The Federal Reserve also must consider the views of the U.S. Department of Justice regarding the competitive aspects of any proposed bank merger involving unaffiliated insured depository institutions. In 2012, the Federal Reserve approved 60 merger applications under the act.

Change in Bank Control Act Applications

The Change in Bank Control Act requires individuals and certain other parties that seek control of a U.S. bank, BHC, or SLHC to obtain approval from the relevant federal banking agency before completing the transaction. The Federal Reserve is responsible for reviewing changes in the control of state member banks, BHCs, and SLHCs. In its review, the Federal Reserve considers the financial position, competence, experience, and integrity of the acquiring person; the effect of the proposed change on the financial condition of the bank, BHC, or SLHC being acquired; the future prospects of the institution to be acquired; the effect of the proposed change on competition in any relevant market; the completeness of the information submitted by the acquiring person; and whether the proposed change would have an adverse effect on the Deposit Insurance Fund. A proposed transaction should not jeopardize the stability of the institution or the interests of depositors. During its review of a proposed transaction, the Federal Reserve may contact other regulatory or law enforcement agencies for information about relevant individuals. In 2012, the Federal Reserve approved 140 change in control notices related to state member banks, BHCs, and SLHCs, including applications involving private equity firms.

Federal Reserve Act Applications

Under the Federal Reserve Act, a bank must seek Federal Reserve approval to become a member bank. A member bank may be required to seek Federal Reserve approval before expanding its operations domestically or internationally. State member banks must obtain Federal Reserve approval to establish domestic branches, and all member banks (including national banks) must obtain Federal Reserve approval to establish foreign branches. When reviewing applications for membership, the Federal Reserve considers, among other things, the bank's financial condition and its record of compliance with banking laws and regulations. When reviewing applications to establish domestic branches, the Federal Reserve considers, among other things, the scope and nature of the banking activities to be conducted. When reviewing applications for foreign branches, the Federal Reserve considers, among other things, the condition of the bank and the bank's experience in international banking. In 2012, the Federal Reserve acted on membership applications for 48 banks, and new and merger-related branch applications for 382 domestic branches and two foreign branches.

State member banks must also obtain Federal Reserve approval to establish financial subsidiaries. These subsidiaries may engage in activities that are financial in nature or incidental to financial activities,

including securities-related and insurance agency-related activities. In 2012, no financial subsidiary applications were submitted.

Home Owners' Loan Act Applications

Under HOLA, a corporation or similar legal entity must obtain the Federal Reserve's approval before forming an SLHC through the acquisition of one or more savings associations in the United States. Once formed, an SLHC must receive Federal Reserve approval before acquiring or establishing additional savings associations. Also, SLHCs generally may engage in only those nonbanking activities that are specifically enumerated in HOLA or which the Board has previously determined to be closely related to banking under section 4(c)(8) of the BHC Act. Depending on the circumstances, these activities may or may not require Federal Reserve approval in advance of their commencement. In 2012, the Federal Reserve acted on 17 applications and notices filed by SLHCs to acquire a bank or a nonbank firm, or to otherwise expand their activities.

Under HOLA, a savings association reorganizing to a mutual holding company (MHC) structure must receive Federal Reserve approval prior to its reorganization. In addition, an MHC must receive Federal Reserve approval before converting to stock form, and MHCs must receive Federal Reserve approval before waiving dividends declared by the MHC's subsidiary. In 2012, the Federal Reserve acted on no applications for MHC reorganizations. In 2012, the Federal Reserve acted on eight applications filed by MHCs to convert to stock form, and nine applications to waive dividends.

When reviewing an SLHC application or notice that requires prior approval, the Federal Reserve may consider the financial and managerial resources of the applicant, the future prospects of both the applicant and the firm to be acquired, the convenience and needs of the community to be served, the potential public benefits, the competitive effects of the application, and the applicant's ability to make available to the Federal Reserve information deemed necessary to ensure compliance with applicable law.

The Federal Reserve also reviews elections submitted by SLHCs seeking treatment as financial holding companies under the authority granted by the Dodd-Frank Act. SLHCs seeking financial holding company treatment must file a written declaration with the Federal Reserve. In 2012, four SLHC financial holding company declarations were approved.

Overseas Investment Applications by U.S. Banking Organizations

U.S. banking organizations may engage in a broad range of activities overseas. Many of the activities are conducted indirectly through Edge Act and agreement corporation subsidiaries. Although most foreign investments are made under general consent procedures that involve only after-the-fact notification to the Federal Reserve, large and other significant investments require prior approval. In 2012, the Federal Reserve approved 31 applications and notices for overseas investments by U.S. banking organizations, many of which represented investments through an Edge Act or agreement corporation.

International Banking Act Applications

The International Banking Act, as amended by the Foreign Bank Supervision Enhancement Act of 1991, requires foreign banks to obtain Federal Reserve approval before establishing branches, agencies, commercial lending company subsidiaries, or representative offices in the United States.

In reviewing applications, the Federal Reserve generally considers whether the foreign bank is subject to comprehensive supervision or regulation on a consolidated basis by its home-country supervisor. It also considers whether the home-country supervisor has consented to the establishment of the U.S. office; the financial condition and resources of the foreign bank and its existing U.S. operations; the managerial resources of the foreign bank; whether the home-country supervisor shares information regarding the operations of the foreign bank with other supervisory authorities; whether the foreign bank has provided adequate assurances that information concerning its operations and activities will be made available to the Federal Reserve, if deemed necessary to determine and enforce compliance with applicable law; whether the foreign bank has adopted and implemented procedures to combat money laundering and whether the home country of the foreign bank is developing a legal regime to address money laundering or is participating in multilateral efforts to combat money laundering; and the record of the foreign bank with respect to compliance with U.S. law. In 2012, the Federal Reserve approved two applications by foreign banks to establish branches, agencies, or representative offices in the United States.

Public Notice of Federal Reserve Decisions

Certain decisions by the Federal Reserve that involve an acquisition by a BHC, a bank merger, a change in

control, or the establishment of a new U.S. banking presence by a foreign bank are made known to the public by an order or an announcement. Orders state the decision, the essential facts of the application or notice, and the basis for the decision; announcements state only the decision. All orders and announcements are made public immediately; they are subsequently reported in the Board's weekly H.2 statistical release. The H.2 release also contains announcements of applications and notices received by the Federal Reserve upon which action has not yet been taken. For each pending application and notice, the related H.2A release gives the deadline for comments. The Board's website provides information on orders and announcements (www.federalreserve.gov/newsevents/press/orders/2013orders.htm) as well as a guide for U.S. and foreign banking organizations that wish to submit applications (www.federalreserve.gov/bankinforeg/afi/afi.htm).

Enforcement of Other Laws and Regulations

The Federal Reserve's enforcement responsibilities also extend to the disclosure of financial information by state member banks and the use of credit to purchase and carry securities.

Financial Disclosures by State Member Banks

State member banks that issue securities registered under the Securities Exchange Act of 1934 must disclose certain information of interest to investors, including annual and quarterly financial reports and proxy statements. By statute, the Board's financial disclosure rules must be substantially similar to those of the SEC. The enactment of the Jumpstart Our Business Startups Act (JOBS Act) in April 2012 changed the registration threshold under the Securities Exchange Act and resulted in a significant decline in the number of state member banks required to register with the Board. At the end of 2012, four state member banks were registered with the Board under the Securities Exchange Act.

Securities Credit

Under the Securities Exchange Act of 1934, the Board is responsible for regulating credit in certain transactions involving the purchasing or carrying of securities. The Board's Regulation T limits the amount of credit that may be provided by securities brokers and dealers when the credit is used to purchase debt and equity securities. The Board's Regulation U limits the amount of credit that may be provided by lenders other than brokers and dealers when the credit is used to purchase or carry publicly held equity securities if the loan is secured by those or other publicly held equity securities. The Board's Regulation X applies these credit limitations, or margin requirements, to certain borrowers and to certain credit extensions, such as credit obtained from foreign lenders by U.S. citizens.

Several regulatory agencies enforce the Board's securities credit regulations. The SEC, the Financial Industry Regulatory Authority, and the Chicago Board Options Exchange examine brokers and dealers for compliance with Regulation T. With respect to compliance with Regulation U, the federal banking agencies examine banks under their respective jurisdictions; the Farm Credit Administration and the NCUA examine lenders under their respective jurisdictions; and the Federal Reserve examines other Regulation U lenders.

Consumer and Community Affairs

The Division of Consumer and Community Affairs (DCCA) has primary responsibility for carrying out the Board's consumer financial protection and community development programs. DCCA conducts consumer-focused supervision, research, and policy analysis, as well as implements statutory requirements and facilitates community development. These activities promote a fair and transparent consumer financial services market, including for traditionally underserved households and neighborhoods.

Throughout 2012, the division engaged in numerous consumer and community-related functions and policy activities in the following areas:

- **Consumer-focused supervision and examinations.** The division provided leadership for the Reserve Bank consumer compliance supervision and examination programs in state member banks and bank holding companies through: policy development, examiner training, supervision oversight, fair lending, Unfair or Deceptive Acts or Practices (UDAP) and flood enforcement, analysis of bank and bank holding company applications in regard to consumer protection, and processing consumer complaints.

- **Consumer research and emerging-issues and policy analysis.** The division analyzed emerging issues in consumer financial services policies and practices in order to understand their implications for the economic and supervisory policies that are core to the central bank's functions, as well as to gain insight into consumer decisionmaking.

- **Community development activities.** The division continued to promote fair and informed access to financial markets for all consumers, recognizing the particular needs of underserved populations by engaging lenders, government officials, and community leaders. Throughout the year, DCCA convened programs to share information and research on effective community development policies and strategies.

- **Consumer laws and regulations.** The division continued to administer the Board's regulatory responsibilities with respect to certain entities and specific statutory provisions of the consumer financial services and fair lending laws. DCCA also drafts regulations and official interpretations and issues regulatory interpretations and compliance guidance for the industry, the Reserve Banks, other federal agencies, and congressional staff.

Supervision and Examinations

The Board's Division of Consumer and Community Affairs develops and supports supervisory policy and examination procedures for consumer protection laws and regulations, as well as the Community Reinvestment Act (CRA), as part of its supervision of the organizations for which it has authority, including holding companies, state member banks, and foreign banking organizations. The division also administers the Federal Reserve System's risk-focused program for assessing consumer compliance risk at the largest bank and financial holding companies in the System, with division staff ensuring that consumer compliance risk is effectively integrated into the consolidated supervision oversight of the holding company. The division oversees the efforts of the 12 Reserve Banks to ensure that compliance with consumer protection laws and regulations is fully evaluated and fairly enforced. Division staff provides guidance and expertise to the Reserve Banks on consumer protection laws and regulations, bank and bank holding company application analysis and processing, examination and enforcement techniques and policy matters, examiner training, and emerging issues. Staff review Reserve Bank supervisory reports, examination work products, and consumer complaint analyses and responses. Finally, staff members participate in interagency activities that promote uniformity in examination principles, standards, and processes.

Examinations are the Federal Reserve's primary method of enforcing compliance with consumer pro-

tection laws and assessing the adequacy of consumer compliance risk-management systems within regulated entities. During the 2012 reporting period (July 1, 2011, through June 30, 2012), the Reserve Banks conducted 282 consumer compliance examinations of state member banks and 11 examinations of foreign banking organizations.

Bank Holding Company Consolidated Supervision Program

During 2012, staff in the Bank Holding Company (BHC) Consolidated Supervision Program had responsibility for reviewing more than 110 bank and financial holding companies to ensure consumer compliance risk was appropriately incorporated into the consolidated risk assessment for the organization. Through a combination of risk-focused, on-/off-site examination and monitoring activities, supervisory staff were able to assess the impact enterprise-wide consumer issues had on the overall risk profiles of the consolidated entity. In addition, as a result of changes brought about by the Dodd-Frank Wall Street Reform and Consumer Protection Act (the Dodd-Frank Act), supervisory functions related to savings and loan holding companies (SLHCs) were transferred to the Board, and SLHCs were added to the portfolio of entities covered by the Consolidated Supervision Program.

On December 17, 2012, the Federal Reserve issued guidance entitled "Consolidated Supervision Framework for Large Financial Institutions,"[1] which sets forth a new framework for the consolidated supervision of large financial institutions. The framework strengthens traditional microprudential supervision and regulation to enhance the safety and soundness of individual firms. It also incorporates macroprudential considerations to reduce potential threats to the stability of the financial system and to provide insights into financial market trends. The consolidated supervision framework has two primary objectives:

1. enhance the resiliency of firms to lower the probability of failure or inability to serve as a financial intermediary
2. reduce the impact on the financial system and the broader economy in the event of a firm's failure or material weakness

BHC Consolidated Supervision Program staff also participated jointly with staff of the Board's Division of Banking Supervision and Regulation on numerous Dodd-Frank Act-related implementation projects regarding supervisory assessment fees, consolidated supervision, and thrift holding company integration. Also, as part of the consolidated supervision of BHCs, staff continued to monitor compliance with the provisions in the consent orders that were implemented in 2011 at the four mortgage servicers and 10 BHCs for which the Federal Reserve has supervisory authority. Staff's oversight is designed to determine if the servicers and BHCs have corrected the noted deficiencies, that future abuses in the loan modification and foreclosure process are prevented, and that borrowers are compensated for financial injury they suffered as a result of errors, misrepresentations, or other deficiencies in the foreclosure process.

On July 11, 2012, the Federal Reserve issued "Guidance on a Lender's Decision to Discontinue Foreclosure Proceedings,"[2] which emphasizes the importance of appropriate risk management practices and controls in connection with a decision not to complete foreclosure proceedings after they have been initiated. The objective of the supervisory process related to abandoned foreclosures is to confirm that an institution manages its decision to initiate and/or discontinue foreclosure proceedings in a prudent manner. The policy letter notes four key concepts that banking organizations with residential mortgage servicing operations should ensure are covered in their policies and procedures:

1. notification to borrowers
2. communication methods
3. notification to local authorities

[1] Board of Governors of the Federal Reserve System, Division of Banking Supervision and Regulation and Division of Consumer and Community Affairs (2012), "Consolidated Supervision Framework for Large Financial Institutions," Supervision and Regulation Letter SR 12-17 and CA 12-14 (December 17), www.federalreserve.gov/bankinforeg/srletters/sr1217.htm.

[2] Board of Governors of the Federal Reserve System, Division of Banking Supervision and Regulation and Division of Consumer and Community Affairs (2012), "Guidance on a Lender's Decision to Discontinue Foreclosure Proceedings," Supervision and Regulation Letter SR 12-11 and CA 12-10 (July 11), www.federalreserve.gov/bankinforeg/srletters/sr1211.htm.

4. obtaining and monitoring collateral values

Mortgage Servicing and Foreclosure: Implementing and Overseeing the Independent Foreclosure Review

Throughout 2012, the Federal Reserve continued to work with the Office of the Comptroller of the Currency (OCC) and the Office of Thrift Supervision (OTS) to provide remediation to consumers who were harmed by certain banking organizations in their residential mortgage loan servicing and foreclosure processing operations.[3] (See box 1.)

During the first half of the year, the agencies worked to develop a remediation framework to provide examples of situations where compensation or other remediation would be required for those borrowers who had been deemed to be financially harmed as a result of errors, misrepresentations, and other deficiencies in the foreclosure process. In June, the Federal Reserve and the OCC issued guidance to help ensure that similarly-situated borrowers would be treated in the same manner, with remediation for injuries, including lump-sum payments (from $500 to $125,000 plus equity), suspension or rescission of a foreclosure, loan modification or other loss mitigation assistance, correction of credit reports, or cor-

[3] For more information on the Independent Foreclosure Review, go to www.federalreserve.gov/consumerinfo/independent-foreclosure-review.htm and www.independentforeclosurereview.com.

Box 1. Independent Foreclosure Review: Developing the Program, Reaching Borrowers

In 2010, the federal banking agencies (the Federal Reserve Board of Governors, the Office of the Comptroller of the Currency (OCC), and the Office of Thrift Supervision (OTS)) launched a coordinated and targeted review of 14 of the nation's largest mortgage servicing organizations, which handled more than two-thirds of all mortgage servicing from November 2010 to January 2011. The reviews revealed a range of misconduct and negligence by certain banking organizations in their residential mortgage loan servicing and foreclosure processing operations. In April 2011, the Board issued consent orders against 10 parent bank holding companies,[1] including four servicing entities regulated by the Board, for deficient, unsafe, and unsound practices in mortgage loan servicing and foreclosure processing.[2]

These enforcement actions required each of the organizations to correct deficient practices and provide remediation to borrowers who suffered financial injury. Over the course of several months, the federal banking agencies worked with the 14 organizations to develop a program to implement the actions mandated under the foreclosure review provision in the consent orders. The resulting program, known as the Independent Foreclosure Review (IFR), required the organizations to retain independent consultants to review foreclosures that were initiated, pending, or completed during 2009 or 2010 to determine if borrowers suffered financial harm resulting from errors, misrepresentations, or other deficiencies that may have occurred during the foreclosure process. In addition, the Board issued monetary penalties of $766.5 million against five banking organizations, in conjunction with the Department of Justice and the State Attorneys General.

Outreach to more than four million borrowers that were eligible for the IFR program, to make them aware of the opportunity to submit a request for a review, presented challenges to the servicers and the agencies. The goal was to cast the widest net possible, so the Federal Reserve and the OCC directed mortgage servicers to conduct an extensive outreach campaign about the IFR. Print, radio, television, and online advertising campaigns targeted the communities hardest hit by mortgage foreclosures, with materials available in English, Spanish, Mandarin, Korean, Vietnamese, Hmong, Russian, Creole, and Tagalog. Additional outreach efforts included direct contact with eligible borrowers by mail, e-mail, and telephone, as well as coordinated efforts by community, housing, and faith-based groups. Over the course of the program, in order to provide adequate time for borrowers to submit a request for review, the agencies extended the deadline three times, ultimately to December 31, 2012. In the end, more than 500,000 borrowers submitted a request for review.

[1] The 10 institutions are: Bank of America Corporation; Citigroup Inc.; Ally Financial Inc.; HSBC North America Holdings, Inc.; JPMorgan Chase & Co.; MetLife, Inc.; The PNC Financial Services Group, Inc.; SunTrust Banks, Inc.; U.S. Bancorp; and Wells Fargo & Company.

[2] Board of Governors of the Federal Reserve System (2011), "Federal Reserve issues enforcement actions related to deficient practices in residential mortgage loan servicing and foreclosure processing," press release, April 13, www.federalreserve.gov/newsevents/press/enforcement/20110413a.htm.

rection of deficiency amounts and records.[4] The results of the independent consultants' file review were originally intended to determine whether a borrower was eligible for remediation, with regular oversight and review of the process, including testing of files by Federal Reserve and OCC examiners.

Throughout the second half of 2012, the agencies and consultants worked diligently to expand outreach to potentially affected borrowers and to conduct case-by-case reviews of mortgage files. The reviews of the mortgage files was necessarily detail-oriented and time consuming, and the agencies, servicers, community organizations, and financial institutions shared great concern about the delay in compensating borrowers. This concern reached a critical level by the end of 2012, and the agencies and the majority of the financial institutions involved agreed to renegotiate the terms of the consent orders to expedite payments to all borrowers in the 2009–10 period. In early January 2013, 13 mortgage servicing companies subject to the consent orders for deficient practices in mortgage loan servicing and foreclosure processing agreed to pay more than $9.3 billion in cash payments and other assistance to help borrowers.[5] The sum includes $3.6 billion in cash payments to eligible borrowers and $5.7 billion in other assistance, such as loan modifications and forgiveness of deficiency judgments.[6]

As a result of this agreement, participating servicers ceased the Independent Foreclosure Review (IFR) program, replacing it with a broader framework allowing eligible borrowers to receive compensation significantly more quickly. The OCC and the Federal Reserve accepted this agreement because it provides the greatest benefit to consumers subject to unsafe and unsound mortgage servicing and foreclosure practices during the relevant period in a more timely manner than would have occurred under the review process. The agreement also includes additional incentives for servicers to provide more foreclosure assistance to borrowers. Borrowers covered under the agreement will receive compensation whether or not they filed a request-for-review form, and borrowers do not need to take further action to be eligible for compensation. For those servicers that are not participating in the agreement, the IFR process will continue.

The resolution of the IFR marks an important milestone and, combined with the other corrective measures in the consent orders, a major step forward toward improving mortgage servicing. In addition, all remaining articles in the original consent orders remain in full force and effect to correct the servicers' deficient foreclosure practices. OCC and Federal Reserve examiners continue to monitor the servicers' implementation of corrective actions required by the original consent orders to address unsafe and unsound mortgage servicing and foreclosure practices.

Supervisory Matters

In October 2012, the Board issued a formal enforcement action, including a $9 million civil money penalty, against American Express Company (Amex) and American Express Travel Related Services Company (TRS) to address deceptive marketing and debt collection practices and associated deficiencies in compliance risk management and internal audit programs. Amex and TRS are both bank holding companies located in New York.

TRS, which provides debt collection and marketing services to subsidiary banks (American Express Centurion Bank and American Express Bank, FSB), allegedly led customers to believe that their defaulted debt would be "waived" or "forgiven" by acting on settlement offers without disclosing the effect that settling for less than the full debt would have on the customers' future abilities to obtain credit. TRS also allegedly made deceptive representations in credit card solicitations concerning the benefits customers would receive by acting on the offer. Finally, the Federal Reserve found deficiencies in compliance risk

---

[4] Board of Governors of the Federal Reserve System (2012), "Agencies release financial remediation guidance, extend deadline for requesting a free independent foreclosure review to September 30, 2012," press release, June 21, www.federalreserve.gov/newsevents/press/bcreg/20120621a.htm.

[5] Board of Governors of the Federal Reserve System (2013), "Independent foreclosure review to provide $3.3 billion in payments, $5.2 billion in mortgage assistance," press release, January 7, www.federalreserve.gov/newsevents/press/bcreg/20130107a.htm.

[6] Although not part of the Independent Foreclosure Review, on January 16, 2013, Goldman Sachs and Morgan Stanley reached similar agreements in principle with the Federal Reserve related to enforcement actions for deficient practices in mortgage loan servicing and foreclosure processing. See Board of Governors of the Federal Reserve System (2013), "Federal Reserve Board reaches agreements in principle with Goldman Sachs and Morgan Stanley to provide $557 million in payments and other mortgage assistance to borrowers," press release, January 16, www.federalreserve.gov/newsevents/press/bcreg/20130116a.htm and Board of Governors of the Federal Reserve System and Office of the Comptroller of the Currency (2013), "OCC and Federal Reserve reach agreement with HSBC to provide $249 million in payments and assistance," press release, January 18, www.federalreserve.gov/newsevents/press/bcreg/20130118b.htm.

management and internal audit, which are firm-wide functions at Amex. The Board's action was taken in coordination with formal actions taken by the Consumer Financial Protection Bureau (CFPB), the Federal Deposit Insurance Corporation (FDIC), the Office of the Comptroller of the Currency (OCC), and the Utah Department of Financial Institutions against the entities that they supervise.

Community Reinvestment Act

The CRA requires that the Federal Reserve and other federal banking and thrift agencies encourage financial institutions to help meet the credit needs of the local communities in which they do business, consistent with safe and sound operations. To carry out this mandate, the Federal Reserve

- examines state member banks to assess their compliance with the CRA
- analyzes applications for mergers and acquisitions by state member banks and bank holding companies in part within the context of CRA performance
- disseminates information about community development techniques to bankers and the public through Community Development offices at the Reserve Banks

The Federal Reserve assesses and rates the CRA performance of state member banks in the course of examinations conducted by staff at the 12 Reserve Banks. During the 2012 reporting period, the Reserve Banks conducted 256 CRA examinations of state member banks. Of those banks examined, 28 were rated "Outstanding," 228 were rated "Satisfactory," none were rated "Needs to Improve," and none were rated "Substantial Non-Compliance."

Mergers and Acquisitions

During 2012, the Board considered and approved seven banking merger applications that were protested on CRA or fair lending grounds or that raised issues involving consumer compliance or the CRA.[7]

- An application by Capital One Financial Corporation, McLean, Virginia, to acquire ING Bank, FSB, Wilmington, Delaware, was approved in February.
- An application by Adam Bank Group, Inc., Tampa, Florida, to acquire Brazos Valley Bank, N.A., College Station, Texas, was approved in March.
- Applications by Industrial and Commercial Bank of China Limited, China Investment Corporation, and Central Huijin Investment Ltd., all of Beijing, People's Republic of China, to become bank holding companies by acquiring up to 80 percent of the voting shares of The Bank of East Asia (U.S.A.) National Association, New York, New York, were approved in May.
- An application by BB&T Corporation, Winston-Salem, North Carolina, to acquire BankAtlantic, a subsidiary federal savings association of BankAtlantic Bancorp, Inc., both of Ft. Lauderdale, Florida, was approved in July.
- An application by Sumitomo Mitsui Financial Group, Inc. and Sumitomo Mitsui Banking Corporation, both of Tokyo, Japan, to increase their ownership interest to up to 9.9 percent of the outstanding shares of The Bank of East Asia, Limited, Hong Kong SAR, People's Republic of China and thereby increase their interest in The Bank of East Asia (U.S.A.) National Association, New York, New York, was approved in October.
- An application by Mitsubishi UFJ Financial Group, Inc., The Bank of Tokyo-Mitsubishi UFJ, Ltd., both of Tokyo, Japan, and UnionBanCal Corporation, San Francisco, California, to acquire Pacific Capital Bancorp and, indirectly, its subsidiary, Santa Barbara Bank Trust, N.A., both of Santa Barbara, California, was approved in November.

Members of the public submitted comments on each of the above applications. Public comments raised various issues for staff to consider in their analyses of the supervisory and lending records of the applicants. Several commenters alleged that various institutions failed to make credit available to certain minority groups and to low- and moderate-income (LMI) individuals and in LMI geographies or inadequate marketing through minority outlets. Commenters also alleged predatory and discriminatory lending practices with respect to tax refund anticipation loans, residential mortgages, checking accounts, and small business loans. Several commenters raised CRA-related concerns about applicants with weak CRA records following recent acquisitions or inadequate plans to meet communities' credit needs, potential branch closures that would disproportion-

[7] Another protested application was withdrawn by the applicant. For more information on Orders on Banking Applications in 2012, go to www.federalreserve.gov/newsevents/press/orders/2012orders.htm.

ately exclude LMI consumers, inadequate branches in predominantly minority tracts, and inaccuracies in a CRA public disclosure.

In evaluating the merits of these comments, the Board considered information provided by applicants and analyzed relevant lending data in markets of interest to the commenters. The Board also incorporated other information, including examination reports with on-site evaluations of compliance with fair lending and other consumer protection laws and regulations and conferred with other regulators for their supervisory views.

The application by Capital One Financial Corporation (Capital One), to acquire ING Bank, FSB (ING) was one of the first of its kind to be subject to the financial stability factor mandated by the Dodd-Frank Act. The application was filed in July 2011, and more than 900 comments were submitted by individuals and community groups, almost two-thirds of which opposed the merger. In addition, the Board held three public meetings—in Washington, D.C., Chicago, and San Francisco—related to this case.[8] Commenters expressed concerns about Capital One's lending activities, including its concentration in credit card lending, and urged the Board to delay or deny the proposal until the CRA regulation has been reformed to accommodate such nationwide lenders. Commenters also contended that any public benefits would be inadequate to offset the increase in risk posed to the financial system given projected increases in Capital One's size and complexity.

In its February 14, 2012, order approving the proposal, the Board referenced various consumer complaints and legal actions against Capital One which suggested that Capital One's processes and procedures for enterprise-wide compliance transaction testing could be improved.[9] The Board conditioned its approval on Capital One adopting, within 90 days of the date of approval, a plan acceptable to the Federal Reserve Bank of Richmond, to augment its enterprise-wide compliance transaction testing. The plan was to specify areas in which transaction testing would be conducted, address the scope and frequency of testing, provide for periodic reporting, provide for improved employee training, and include a requirement for an annual review of internal audit of the testing implementation for at least the next three years. Compliance with this condition was to be monitored as part of the supervisory process.

The application by Mitsubishi UFJ Financial Group, Inc., The Bank of Tokyo-Mitsubishi UFJ, Ltd., both of Tokyo, Japan, and UnionBanCal Corporation, San Francisco, California, to acquire Pacific Capital Bancorp, Santa Barbara, California, was of particular interest because it represented the first application of the financial stability statutory factor to a proposal by a globally systemically important banking organization to acquire a bank in the United States.

The Board also considered 90 applications with outstanding issues involving compliance with consumer protection statutes and regulations, including fair lending laws and the CRA. Some of those issues involved the existence of a consent order due to weaknesses in foreclosure processes, as well as concerns about unfair and deceptive practices. Eighty-one of those applications were approved and 10 were withdrawn.

Fair Lending Enforcement

The Federal Reserve supervises 836 state member banks. Pursuant to provisions of the Dodd-Frank Act, effective on July 21, 2011, the CFPB supervises state member banks with assets of more than $10 billion for compliance with the Equal Credit Opportunity Act (ECOA), and the Board has supervisory authority for compliance with the Fair Housing Act. For the approximately 815 state member banks with assets of $10 billion or less, the Board retains the authority to enforce both the ECOA and the Fair Housing Act.

Fair lending reviews are conducted regularly within the supervisory cycle. Additionally, examiners may conduct fair lending reviews outside of the usual supervisory cycle, if warranted by fair lending risk. When examiners find evidence of potential discrimination, they work closely with DCCA's Fair Lending Enforcement Section, which provides additional legal and statistical expertise and ensures that fair lending laws are enforced consistently and rigorously throughout the Federal Reserve System.

---

8 Minutes for the Washington, D.C., meeting are available at www.federalreserve.gov/foia/files/Capital_One-ING_Meeting_Transcript_09-20-2011.pdf; for Chicago at www.federalreserve.gov/foia/files/Capital-One-ING-Chicago-Meeting-Transcript_09-27-2011.pdf; and for San Francisco at www.federalreserve.gov/foia/files/Capital-One-ING-Hearing-Transcript-San-Francisco-20111005.pdf.

9 Federal Reserve System (2012), "Capital One Financial Corporation, McLean, Virginia: Order Approving the Acquisition of a Savings Association and Nonbanking Subsidiaries," FRB Order No. 2012-2 (February 14), www.federalreserve.gov/newsevents/press/orders/order20120214.pdf.

Pursuant to the ECOA, if the Board has reason to believe that a creditor has engaged in a pattern or practice of discrimination in violation of the ECOA, the matter will be referred to the U.S. Department of Justice (DOJ). The DOJ reviews the referral and determines whether further investigation is warranted. A DOJ investigation may result in a public civil enforcement action or settlement. Alternatively, the DOJ may decide to return the matter to the Board for administrative enforcement. When a matter is returned to the Board, staff ensures that the institution takes all appropriate corrective action.

During 2012, the Board referred the following two matters to the DOJ:

- One referral involved discrimination on the basis of national origin, in violation of the ECOA. The lender charged Hispanic borrowers higher interest rates than non-Hispanic borrowers for unsecured consumer loans. Legitimate pricing factors failed to explain the pricing disparities.
- One referral involved discrimination on the basis of marital status, in violation of the ECOA. The bank improperly required spousal signatures on home equity loans, in violation of Regulation B.

If a fair lending violation does not constitute a pattern or practice, the Federal Reserve acts on its own to ensure that the violation is remedied by the bank. Most lenders readily agree to correct fair lending violations. In fact, lenders often take corrective action as soon as they become aware of a problem. Thus, the Federal Reserve generally uses informal supervisory tools (such as memoranda of understanding between banks' boards of directors and the Reserve Banks, or board resolutions) to ensure that violations are corrected. If necessary to protect consumers, however, the Board can bring public enforcement actions.

Financial Fraud Enforcement Task Force and Other Outreach

As an active member of the Financial Fraud Enforcement Task Force (FFETF), the Board coordinates with other agencies to facilitate consistent and effective enforcement of the fair lending laws.[10] The Director of the Board's Division of Consumer and Community Affairs co-chairs the FFETF's Non-Discrimination Working Group with the Assistant Attorney General for DOJ's Civil Rights Division, the Deputy General Counsel of the U.S. Department of Housing and Urban Development, the Assistant Director of the CFPB's Office of Fair Lending and Equal Opportunity, and the National Association of Attorneys General, represented by the Attorney General for the State of Illinois. In 2012, the Board and the Non-Discrimination Working Group sponsored a free interagency webinar that had more than 5,000 registrants, most of which were community banks.

In addition, the Federal Reserve participates in numerous meetings, conferences, and trainings sponsored by consumer advocates, industry representatives, and interagency groups. Fair Lending Enforcement staff meets regularly with consumer advocates, supervised institutions, and industry representatives to discuss fair lending matters and receive feedback. Through this outreach, the Board is able to address emerging fair lending issues and promote sound fair lending compliance.

Flood Insurance

The National Flood Insurance Act imposes certain requirements on loans secured by buildings or mobile homes located in, or to be located in, areas determined to have special flood hazards. Under the Federal Reserve's Regulation H, which implements the act, state member banks are generally prohibited from making, extending, increasing, or renewing any such loan unless the building or mobile home, as well as any personal property securing the loan, are covered by flood insurance for the term of the loan. The law requires the Board and other federal financial institution regulatory agencies to impose civil money penalties when they find a pattern or practice of violations of the regulation. The civil money penalties are payable to the Federal Emergency Management Agency (FEMA) for deposit into the National Flood Mitigation Fund.

On July 6, 2012, the Biggert-Waters Flood Insurance Reform Act of 2012 was signed into law. Among other things, the act raised the civil money penalty cap when a pattern or practice of flood violations exists. Specifically, the cap was raised from $385 per violation to $2,000 per violation. In addition, the overall calendar year cap on penalties was removed.

Coordination with Other Federal Banking Agencies

The member agencies of the Federal Financial Institutions Examination Council (FFIEC) develop uni-

[10] For more information about the FFETF, go to www.stopfraud.gov.

form examination principles, standards, procedures, and report formats.[11] In 2012, the FFIEC member organizations issued examination procedures for three regulations.[12]

Interagency Examination Procedures for Regulation Z

Procedures were revised to reflect an interim final rule published by the CFPB on December 22, 2011, which restated Regulation Z to reflect the transfer of authority and certain other changes made by the Dodd-Frank Act on July 21, 2011. The interim final rule did not impose any new substantive obligations on persons subject to the existing Regulation Z previously published by the Board.

Interagency Examination Procedures for the Fair Credit Reporting Act (FCRA)

Procedures were revised to reflect amendments to the FCRA pursuant to the Dodd-Frank Act and related amendments to Regulation V, which implements portions of the FCRA. The Dodd-Frank Act amended sections 615(a) and 615(h) of the FCRA to require the disclosure of credit scores and information relating to credit scores in (1) adverse action notices if a consumer's credit score is used in taking adverse action and (2) risk-based pricing notices if a consumer's credit score is used in setting the material terms of credit. These new credit score disclosure requirements became effective on August 15, 2011.

Interagency Guidance on Mortgage Servicing for Military Homeowners

In June, the FFIEC member agencies jointly announced guidance concerning mortgage servicing practices that might pose risks to homeowners serving in the military.[13] The guidance addresses risks related to military homeowners who have informed their loan servicer that they have received Permanent Change of Station (PCS) orders to relocate to a new duty station and who might need assistance with their mortgage loans if they are unable to sell their homes to pay off the mortgage debt.

The guidance reminds mortgage loan servicers that their employees should be adequately trained about the options available for assisting military homeowners with PCS orders. It also directs servicers to provide accurate, clear, and readily understandable information about available options for which homeowners may qualify based on the information known when the homeowners notify their servicers that they have received PCS orders. The guidance also reminds servicers to communicate decisions on assistance requests in a timely manner.

Examiner Training

Ensuring that financial institutions comply with laws that protect consumers and encourage community reinvestment is an important part of the bank examination and supervision process. As the number and complexity of consumer financial transactions grow, training examiners becomes even more important. The examiner staff development function is responsible for the ongoing development of the professional consumer compliance supervisory staff, and ensuring that these staff members have the skills necessary to meet their supervisory responsibilities now and in the future.

Consumer Compliance Examiner Training Curriculum

The consumer compliance examiner training curriculum consists of five courses focused on various consumer protection laws, regulations, and examining concepts. In 2012, these courses were offered in 13 sessions, and training was delivered to a total of 277 System consumer compliance examiners and staff members and five state banking agency examiners.

When appropriate, courses are delivered via alternative methods, such as the Internet or other distance-learning technologies. For instance, several courses use a combination of instructional methods:
(1) classroom instruction focused on case studies and
(2) specially developed computer-based instruction that includes interactive self-check exercises.

Board and Reserve Bank staff regularly review the core curriculum for examiner training, updating subject matter and adding new elements as appropriate. During 2012, staff initiated one interim curriculum review. The Fair Lending Examination Techniques course was reviewed in order to incorporate lessons

---

[11] FFIEC member agencies include the Board of Governors of the Federal Reserve System, the FDIC, the National Credit Union Administration (NCUA), the OCC, the State Liaison Committee (SLC), and the CFPB.

[12] In prior years, the Board included in this section the findings and rate of compliance with the consumer protection rules for which it had rulemaking authority as reported by the various federal agencies with supervisory authority for those regulations. This reporting responsibility transferred to the CFPB in July 2011. For more information see www.consumerfinance.gov/reports.

[13] Board of Governors of the Federal Reserve System (2012), "Agencies issue guidance concerning mortgage servicing practices that impact servicemembers," press release, June 21, www.federalreserve.gov/newsevents/press/bcreg/20120620a.htm.

learned from previous courses. This course is designed to equip assistant level examiners with the skills and knowledge to plan and conduct a risk-focused fair lending examination, and incorporates the FFIEC fair lending examination procedures.

Life-long Learning

In addition to providing core examiner training, the examiner staff development function emphasizes the importance of continuing life-long learning. Opportunities for continuing learning include special projects and assignments, self-study programs, rotational assignments, the opportunity to instruct at System schools, mentoring programs, and an annual consumer compliance examiner forum, where senior consumer compliance examiners receive information on emerging compliance issues and are able to share best practices from across the System.

In 2012, the System continued to offer "Rapid Response" sessions, which provide a powerful delivery method for just-in-time training. Debuted in 2008, Rapid Response sessions offer examiners one-hour teleconference presentations on emerging issues or urgent training needs that result from the implementation of new laws, regulations, or supervisory guidance. A total of nine consumer compliance Rapid Response sessions were designed, developed, and presented to System staff during 2012.

Table 1. Complaints against state member banks and selected nonbank subsidiaries of bank holding companies about regulated practices, by Regulation/Act, 2012

Regulation/Act	Number
Regulation AA (Unfair or Deceptive Acts or Practices)	7
Regulation B (Equal Credit Opportunity)	26
Regulation BB (Community Reinvestment)	2
Regulation C (Home Mortgage Disclosure)	0
Regulation CC (Expedited Funds Availability)	65
Regulation D (Reserve Requirements)	3
Regulation DD (Truth in Savings)	55
Regulation E (Electronic Funds Transfers)	67
Regulation G (Disclosure/Reporting of CRA-Related Agreements)	0
Regulation H (National Flood Insurance Act/Insurance Sales)	20
Regulation M (Consumer Lending)	0
Regulation P (Privacy of Consumer Financial Information)	17
Regulation Q (Payment of Interest)	1
Regulation V (Fair and Accurate Credit Transactions)	14
Regulation Z (Truth in Lending)	51
Fair Credit Reporting Act	49
Fair Debt Collection Practices Act	15
Fair Housing Act	14
Home Ownership Counseling	0
HOPA (Homeowners Protection Act)	2
Real Estate Settlement Procedures Act	31
Right to Financial Privacy Act	3
Protecting Tenants at Foreclosure Act	2
Servicemembers Civil Relief Act	3
Total	**447**

Responding to Consumer Complaints and Inquiries

The Federal Reserve investigates complaints against state member banks and selected nonbank subsidiaries of bank holding companies (Federal Reserve-regulated entities), and forwards complaints against other creditors and businesses to the appropriate enforcement agency. Each Reserve Bank investigates complaints against state member banks and selected nonbank subsidiaries in its District. The Federal Reserve also responds to consumer inquiries on a broad range of banking topics, including consumer protection questions.

In late 2007, the Federal Reserve established Federal Reserve Consumer Help (FRCH) to centralize the processing of consumer complaints and inquiries. In 2012, FRCH processed 39,246 cases. Of these cases, more than half (25,841) were inquiries and the remainder (13,405) were complaints, with most cases received directly from consumers. Approximately 6 percent of cases were referred to the Federal Reserve from other agencies.

While consumers can contact FRCH by telephone, fax, mail, e-mail, or online (at www.federalreserveconsumerhelp.gov), most FRCH consumer contacts occurred by telephone (56 percent). Forty-one percent (15,947) of complaint and inquiry submissions were made electronically (via e-mail, online submissions, and fax), and the online form page received 333,281 visits during the year.

Consumer Complaints

Complaints against Federal Reserve-regulated entities totaled 2,194 in 2012. Approximately 43 percent of these complaints were closed without investigation pending the receipt of additional information from consumers. Nearly 7 percent of the total complaints are still under investigation. Of the remaining complaints (1,109), 60 percent (662) involved unregulated

Table 2. Complaints against state member banks and selected nonbank subsidiaries of bank holding companies about regulated practices, by product type, 2012

Subject of complaint/product type	All complaints		Complaints involving violations	
	Number	Percent	Number	Percent
Total	**447**	**100**	**6**	**1.3**
Discrimination alleged				
Real estate loans	15	3.4	0	0
Credit cards	4	0.8	0	0
Other loans	6	1.3	0	0
Nondiscrimination complaints				
Checking accounts	119	27.0	3	0.07
Real estate loans	87	19.5	1	0.02
Credit cards	77	17.0	0	0
Other	139	31.0	2	0.04

practices and 40 percent (447) involved regulated practices.

Complaints about Regulated Practices

The majority of regulated practices complaints concerned checking accounts (27 percent), real estate[14] (23 percent), and credit cards (18 percent). The most common checking account complaints related to funds availability not as expected (37 percent), insufficient funds or overdraft charges and procedures (18 percent), forgery/fraud/embezzlement (9 percent), and disputed rates, terms, or fees (8 percent). The most common real estate complaints by problem code related to flood insurance (18 percent), debt collection/foreclosure concerns (15 percent), disputed rates, terms, and fees (14 percent), and payment errors or delays (5 percent). The most common credit card complaints related to inaccurate credit reporting (32 percent), payment errors and delays (10 percent), bank debt collection tactics (9 percent), billing error resolutions (9 percent), and interest rates, terms, and fees (8 percent).

Twenty-five regulated practices complaints alleging discrimination were received. Of these, 12 complaints (3 percent of total regulated complaints) alleged discrimination on the basis of prohibited borrower traits or rights.[15] Twenty-eight percent of discrimination complaints was related to the race, color, national origin, or ethnicity of the applicant or borrower. Eight percent of discrimination complaints was related to either the age or handicap of the applicant or borrower. Of the complaints alleging discrimination based on a prohibited basis, there were no violations.

In 96 percent of investigated complaints against Federal Reserve-regulated entities, evidence revealed that institutions correctly handled the situation. Of the remaining 4 percent of investigated complaints, 1 percent was deemed violations of law, 3 percent was identified errors which were corrected by the bank, and the remainder included matters involving litigation or factual disputes, withdrawn complaints, internally referred complaints, or information was provided to the consumer.

Complaints about Unregulated Practices

The Board continued to monitor complaints about banking practices not subject to existing regulations. In 2012, the Board received 662 complaints against Federal Reserve-regulated entities that involved these unregulated practices. The complaints were related to credit cards (24 percent), checking account activity (24 percent), and real estate concerns (18 percent).

Complaint Referrals

In 2012, the Federal Reserve forwarded 11,230 complaints against other banks and creditors to the appropriate regulatory agencies and government offices for investigation. To minimize the time required to re-route complaints to these agencies, referrals were transmitted electronically.

The Federal Reserve forwarded 11 complaints to the Department of Housing and Urban Development (HUD) that alleged violations of the Fair Housing

[14] Real estate loans include adjustable-rate mortgages, residential construction loans, open-end home equity lines of credit, home improvement loans, home purchase loans, home refinance/closed-end loans, and reverse mortgages.

[15] This includes alleged discrimination on the basis of race, color, religion, national origin, sex, marital status, age, applicant income derived from public assistance programs, or applicant reliance on provisions of the Consumer Credit Protection Act.

Act.[16] The Federal Reserve's investigation of these complaints revealed no instances of illegal credit discrimination.

Consumer Inquiries

The Federal Reserve received 25,841 consumer inquiries in 2012, covering a wide range of topics. Consumers were typically directed to other resources, including other federal agencies or written materials, to address their inquiries.

Consumer Research and Emerging-Issues and Policy Analysis

Throughout 2012, DCCA analyzed emerging issues in consumer financial services policies and practices in order to understand their implications for the economic and supervisory policies that are core to the Federal Reserve's functions, as well as to gain insight into consumer decisionmaking.

Consumer Financial Services Research

Consumers' Use of Mobile Financial Services

The evolution of technologies that enable consumers to conduct financial transactions using mobile devices has dramatically affected how consumers conduct their financial lives; however, little research has explored this topic. The division has been monitoring trends and developments in mobile financial services for several years and undertook efforts to delve more formally into the topic in 2012. (See box 2.)

To further understand consumers' use of, and opinions about, mobile financial services, the division commissioned an online survey, polling nearly 2,300 respondents to learn whether and how they use mobile devices for banking and payments. This survey was among the first to integrate questions about using mobile devices for shopping and comparing products along with questions about using mobile devices for banking and payments. The findings of the survey were published and released in the report, *Consumers and Mobile Financial Services*, and was the topic of Congressional testimony.[17] A second survey was conducted in November to update the first survey, with the findings compiled and published in early 2013.

Emerging-Issues Analysis

The Policy Analysis function of DCCA provides key insights, information, and analysis on emerging financial services issues that affect the well-being of consumers and communities. To this end, Policy Analysis staff follow and analyze trends, lead Division-wide working groups, and organize expert roundtables to identify emerging risks and inform policy recommendations.

In 2012, the Policy Analysis team was actively engaged in a broad set of issues and activities to promote household financial security and sustainable recovery from the financial crisis. Staff contributed to broad analysis of policy considerations for housing market recovery. In conjunction with other divisions of the Board, the team was involved in proposals for re-use strategies for bank-owned foreclosure properties (also referred to as "real estate owned," or REO) and developing guidance to address some banks' practice of abandoning a foreclosure process without notification to borrowers or local authorities.[18]

Policy Analysis continued its work on residential mortgage foreclosure issues by assisting with the implementation of the Independent Foreclosure Review (IFR). As part of the 2011 enforcement actions against 14 mortgage servicers for deficient practices in mortgage loan servicing and foreclosure processing, the IFR process was created to remediate borrowers financially harmed from improper foreclosure actions in 2009 and 2010.[19] Policy staff led the effort to make public data that could be used to inform a more targeted approach to reaching borrowers potentially eligible for an IFR review, and also developed web-based communication materials to broaden IFR outreach efforts.

---

[16] A memorandum of understanding between HUD and the federal bank regulatory agencies requires that complaints alleging a violation of the Fair Housing Act be forwarded to HUD.

[17] See Sandra F. Braunstein, Director, Division of Consumer and Community Affairs (2012), "Mobile payments," Before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, March 29, www.federalreserve.gov/newsevents/testimony/braunstein20120329a.htm.

[18] Board of Governors of the Federal Reserve System, Division of Banking Supervision and Regulation and Division of Consumer and Community Affairs (2012), "Guidance on a Lender's Decision to Discontinue Foreclosure Proceedings," Supervision and Regulation Letter SR 12-11 and CA 12-10 (July 11) www.federalreserve.gov/bankinforeg/srletters/sr1211.htm.

[19] Board of Governors of the Federal Reserve System (2011), "Federal Reserve issues enforcement actions related to deficient practices in residential mortgage loan servicing and foreclosure processing," press release, April 13, www.federalreserve.gov/newsevents/press/enforcement/20110413a.htm.

Box 2. Consumers' Evolving Use of Mobile Financial Services

In recent years, an increasing array of financial services—including banking services, shopping tools, and payment options—have become available for consumers using cell phones and other mobile devices. Collectively, these developments may ultimately have significant effects on the ways in which consumers conduct their financial lives. Several functions of the Federal Reserve Board—including the Division of Consumer and Community Affairs (DCCA)—have been monitoring these new developments in recent years. As mobile financial services are becoming increasingly common, DCCA set out to conduct a survey to assess: the extent of consumers' adoption of these services, how these services are being used, how they could help consumers in their financial decisionmaking, how they could expand access to financial services for underserved populations, and where there may be areas of concern.

Through a nationally representative survey conducted by DCCA in early 2012, the Board learned that 21 percent of all mobile phone users, and 42 percent of smartphone users, had used mobile banking services in the preceding 12 months.[1]

[1] See Board of Governors of the Federal Reserve System (2012), *Consumers and Mobile Financial Services*, (Washington: Board of Governors, March), www.federalreserve.gov/econresdata/mobile-devices/files/mobile-device-report-201203.pdf. See also Matthew B. Gross, Jeanne M. Hogarth, and Maximilian D. Schmeiser (2012), "Use of Financial Services by the Unbanked and Underbanked and the Potential for Mobile Financial Services Adoption," *Federal Reserve Bulletin,* vol. 94, no. 4, www.federalreserve.gov/pubs/bulletin/2012/articles/MobileFinancialServices/mobile-financial-services.htm.

Fewer consumers reported that they had used their mobile devices to make some form of payment in the prior 12 months—just 12 percent of all mobile phone users and 23 percent of smartphone users. For both mobile banking and mobile payments, the two primary reasons why people chose not to adopt the service were: (1) concerns about the security of the technology and (2) the belief that these new services did not provide sufficient benefits over existing services to justify their usage.

The survey further showed that the increasing availability of just-in-time financial information may change the way that consumers make financial decisions. For example, among the respondents who indicated that they receive text message alerts telling them that they have a low balance, 86 percent reported taking action—such as transferring funds into the account, making a deposit, or reducing their spending—in response to those messages. Consumers are also making use of their mobile phones to inform their decisions when shopping. For instance, among smartphone users, 41 percent reported using their phones to comparison shop over the Internet while at a store. Of these people, 68 percent indicated that the price comparison resulted in them purchasing the product somewhere other than the store they were in.

As the mobile financial services market is quickly evolving, DCCA plans to conduct a follow-up survey to track trends and recent developments in consumers' use of mobile services. It will report the resulting information in 2013.

As part of an ongoing effort to understand various aspects of consumers' financial lives, Policy Analysis conducted inquiries into specific issues. For example, together with the Consumer Research group, Policy Analysis hosted expert roundtables to discuss changes in post-secondary education financing and the possible implications of the trends in student indebtedness for individuals, households, and for the broader economy. The group also facilitated expert dialogues and initiated research into the financial lives and needs of older adults, a growing demographic in the U.S. population with potentially distinct patterns of use of financial services.

Community Economic Development

The Federal Reserve System's Community Development function promotes economic growth and financial stability for low- and moderate-income (LMI) communities and individuals through a range of activities: convening stakeholders, conducting and sharing research, and identifying emerging issues. As a decentralized function, the Community Affairs Officers (CAOs) at each of the 12 Reserve Banks design activities to respond to the specific needs of the communities they serve, with oversight from Board staff. The Board's Community Development staff promote and coordinate Systemwide priorities; in particular, Community Development has five strategic goals:

1. support programs and promote policies that improve the financial stability of LMI households
2. strengthen LMI communities by advancing comprehensive neighborhood revitalization and stabilization strategies

3. foster innovative strategies that assist LMI communities and individuals in launching, growing, and sustaining small businesses
4. advance innovation and efficiency in community development programs, funding, and infrastructure to promote scale, sustainability, and impact
5. strategically communicate key findings of the Community Development function and share emerging community development issues and trends that have national implications

Growing Economies in Indian Country

Even as the national economy shows signs of improvement, communities in rural areas of the United States—particularly on tribal lands—still face considerable obstacles in attracting investment, accessing financial services, and supporting entrepreneurship. The *Growing Economies in Indian Country* (GEIC) initiative was an innovative interagency and Systemwide endeavor focused on a singular cause: Indian Country. The 2011 GEIC workshop series was an interagency effort to address economic development issues, raise awareness of federal assistance programs, and highlight best practices of economic development strategies for Indian Country. The most important objective of GEIC was to hear from members of the community about the barriers to economic development in Native American communities and strategies being employed to overcome those barriers. Nine federal agencies and four Federal Reserve Banks participated in this effort to host workshops at six locations across the country.

In May 2012, the working group released a report and hosted a national summit in Washington, D.C., to share the wide range of views and ideas that surfaced in the GEIC series.[20] The summit provided a venue for tribal leaders, policymakers, financial industry professionals, and community development service providers to discuss challenges to economic development in Indian country, opportunities to strengthen Tribal enterprise development, opportunities to expand Native American entrepreneurship and access to small business capital, and opportunities to strengthen governance and legal structures.

[20] Board of Governors of the Federal Reserve System (2012), "Growing Economies in Indian Country: Taking Stock of Progress and Partnerships," (Board of Governors of the Federal Reserve System: Washington, D.C., April), www.federalreserve.gov/newsevents/conferences/GEIC-white-paper-20120501.pdf.

The working group continues to meet and share resources as it looks to increase its collaborative efforts and form new partnerships. The hope is that the GEIC series will serve as a model and launching pad for future interagency efforts in Indian Country.

Stabilizing Communities through Strategic Use of Resources

Fallout from the economic crisis has included large inventories of foreclosed properties that stand vacant and abandoned and can have significant destabilizing effects on communities, including increased crime and decreased property values. The challenge of disposing of these real estate owned (REO) properties often outstrips resources, particularly in low-income communities. Throughout 2012, the Federal Reserve's Community Development function and its national partner organizations supported efforts to transform how community investments are made to stabilize communities. Many communities have a mismatch between development needs and available resources to meet these needs. Strategic use of data and other available tools to target limited resources is one method increasingly used to more effectively stabilize distressed neighborhoods. The Federal Reserve is providing information on innovative practices in communities across the nation and on tools available to practitioners and policymakers to aid local efforts.

Labor Markets and Human Capital

Given the attenuating effects of long-term unemployment on the broader economic recovery and the particular issues facing LMI communities, in the fall of 2011, the Community Development function designed an initiative to explore regional perspectives on this issue through a series of forums held throughout the country. Some of these regional forums consisted of small focus groups or listening sessions; others were larger in scope, with more formal agendas focusing on a particular demographic or employment sector. In most cases, forum participants represented either intermediary organizations that are involved in the delivery of workforce development services, local employers, or both. The objective of this initiative was to better understand the complex factors creating long-term unemployment conditions particularly in LMI communities and to identify promising workforce development strategies. In December 2012, the Board released "A Perspective from Main Street: Long-Term Unemployment and Workforce Develop-

ment,"[21] a paper that provides a summary of the key topics that emerged from the forums and examples of how those issues were reflected in different parts of the country and for different populations.

Community Data Initiative

In 2011, the Community Data Initiative (CDI) was launched with the goal of leveraging information-sharing and partnership roles with a rigorous analytical capacity to provide reliable market intelligence that helps identify and close data gaps for LMI communities. The Board and each of the Reserve Banks participate in this collaborative research project to provide systematic and relevant community conditions and trend information on a consistent basis.

Through the use of quarterly or biannual e-polling of selected district community stakeholders, the CDI captures current and emerging community development issues. In 2012, all 12 of the Reserve Banks were administering web-based polls and surveys. To provide a national context for the regional results of Reserve Bank polls, the Board continued to survey NeighborWorks® America affiliates and grantees. Board staff manage this System initiative, working with Reserve Banks, to aggregate the data with the mission of:

- implementing a more systematic approach to gathering and disseminating market intelligence on current and emerging challenges facing LMI communities
- enabling staff to differentiate between anecdotes and trends over time
- capturing regional dispersion of issues and variability of conditions over Reserve Bank districts
- providing specialized data of interest to a particular district and Board leadership, such as community indicators on affordable housing, workforce development, and small businesses credit

In 2012, Board staff began to utilize text analytics software to analyze open-ended text from some community stakeholder respondents, including the Board survey administered by NeighborWorks. Current and emerging trends from such analysis will inform survey question design and language used in Board communications, including speeches and press releases.

The CDI staff also continues to explore various graphical and trend analysis, as well as visual capture, of LMI community conditions' variability across Reserve Bank districts. The Board team is collaborating with Reserve Bank CDI working groups on the following topics: new statistical methodologies, reporting comparative and aggregate information, and deep-dive/drill-down sector-specific surveys on issues that continue to display fragile or no recovery capacity.

NeighborWorks-Board National Survey for 2012:Q4 closed on January 11, 2013, with 396 respondents across all 12 Reserve Bank districts. The survey provides national information on housing counselors experience with Treasury's Home Affordable Modification Program, workforce development issues, affordable rental housing issues, and a national ranking of the top three current issues impacting LMI communities currently, as well as the top three emerging issues (expected within the next six months). The survey findings serve as a baseline comparison for the Reserve Bank district web-based survey findings.

As the CDI data set continues to build over time, it has the potential to serve as a robust source of information to augment other Federal Reserve data collection efforts and to bring insight into the economic and financial issues of LMI communities.

Consumer Laws and Regulations

Throughout 2012, DCCA continued to administer the Board's regulatory responsibilities with respect to certain entities and specific statutory provisions of the consumer financial services and fair lending laws. DCCA also drafts regulations and official interpretations and issues regulatory interpretations and compliance guidance for the industry, the Reserve Banks, other federal agencies, and congressional staff.

Appraisal Requirements for "Higher-Risk Mortgage Loans"

In August, the Board and five other federal financial regulatory agencies jointly announced proposed rules to implement amendments to the Truth in Lending Act that would establish new appraisal requirements

[21] Board of Governors of the Federal Reserve System (2012), "A Perspective from Main Street: Long-Term Unemployment and Workforce Development (Board of Governors of the Federal Reserve System: Washington, D.C., December), www.federalreserve.gov/communitydev/pdfs/Workforce_errata_final2.pdf.

for “higher-risk mortgage loans.”[22] The proposal would implement provisions of the Dodd-Frank Act, and would apply to loans secured by a consumer’s home that have interest rates above a certain threshold. For such loans, the proposed rule would require creditors to use a licensed or certified appraiser to prepare a written report based on a physical inspection of the interior of the property. The proposed rule also would require creditors to disclose to applicants information about the purpose of the appraisal and provide consumers with a free copy of any appraisal report. Under the proposal, creditors also would have to obtain an additional appraisal at no cost to the consumer if the consumer is buying a home that the seller acquired for a lower price during the prior six months.

The public comment period closed in October. Consistent with the requirements of the Dodd-Frank Act, final regulations to implement these provisions were issued on January 18, 2013.[23]

[22] The proposal was issued jointly with the CFPB, FDIC, NCUA, OCC, and the Federal Housing Finance Agency (FHFA). See Board of Governors of the Federal Reserve System, CFPB, FDIC, FHFA, NCUA, and OCC (2012), “Agencies issue proposed rule on appraisals for higher-risk mortgages,” joint press release, August 15, www.federalreserve.gov/newsevents/press/bcreg/20120815a.htm.

[23] Board of Governors of the Federal Reserve System, CFPB, FDIC, FHFA, NCUA, and OCC (2013), “Agencies issue final rule on appraisals for higher-priced mortgage loans,” joint press release, January 18, www.federalreserve.gov/newsevents/press/bcreg/20130118a.htm.

Federal Reserve Banks

The Federal Reserve Banks provide payment services to depository and certain other institutions, distribute the nation's currency and coin to depository institutions, and serve as fiscal agents and depositories for the U.S. government and other entities. The Reserve Banks also contribute to setting national monetary policy and supervision of banks and other financial entities operating in the United States (discussed in the preceding sections of this report).

Federal Reserve Priced Services

Federal Reserve Banks provide a range of payment and related services to depository institutions, "priced services" that include collecting checks, operating an automated clearinghouse (ACH) service, transferring funds and securities, and providing a multilateral settlement service.

The Federal Reserve Banks, working with the financial industry, have made substantial progress in their effort to migrate to a more efficient electronic payment system by expanding the use of ACH payments and by converting from a paper-based check clearing process to an electronic one. Over the past several years, the Reserve Banks have capitalized on efficiencies gained from increased electronic processing by bundling payment services and offering information and risk management services, which help depository institutions manage effectively both their payment operations and associated operational and credit risk.

The Reserve Banks have also been engaged in a number of multiyear technology initiatives that will modernize their priced services processing platforms over the next several years. In 2012, the Banks successfully implemented a new electronic check-processing system; they also continued efforts to migrate the FedACH, Fedwire Funds, and Fedwire Securities services off a mainframe system and to a distributed computing environment.

Further, the Reserve Banks announced in October 2012 their intention to expand efforts to improve the speed and security of payment networks and services and to work more with the industry on standards and processes to further improve overall efficiency. As part of this effort, the Reserve Banks intend to engage on a deeper level with various end users in payment transactions to understand both needs and challenges.

Recovery of Direct and Indirect Costs

The Monetary Control Act of 1980 requires that the Federal Reserve establish fees for priced services provided to depository institutions so as to recover, over the long run, all direct and indirect costs actually incurred as well as the imputed costs that would have been incurred—including financing costs, taxes, and certain other expenses—and the return on equity (profit) that would have been earned if a private business firm had provided the services.[1] The imputed costs and imputed profit are collectively referred to as the *private-sector adjustment factor* (PSAF).[2] Over the past 10 years, Reserve Banks have recovered 99.5 percent of their priced services costs, including the PSAF (see table 1).[3]

---

[1] Financial data reported throughout this chapter—including revenue, other income, costs, income before taxes, and net income—will reference to the "Pro Forma Financial Statements for Federal Reserve Priced Services" at the end of this chapter.

[2] In addition to income taxes and the return on equity, the PSAF includes three other imputed costs: interest on debt, sales taxes, and an assessment for deposit insurance by the Federal Deposit Insurance Corporation (FDIC). Board of Governors assets and costs that are related to priced services are also allocated to priced services; in the pro forma financial statements for priced services at the end of this chapter, Board assets are part of long-term assets, and Board expenses are included in operating expenses. The discontinuation of the clearing balance program in July 2012 had a significant effect on the PSAF, as described in the pro forma financial statements.

[3] Effective December 31, 2006, the Reserve Banks implemented the Financial Accounting Standards Board's Statement of Financial Accounting Standards (SFAS) No. 158, Employers' Accounting for Defined Benefit Pension and Other Postretirement

Table 1. Priced Services Cost Recovery, 2003–2012
Millions of dollars, except as noted

Year	Revenue from services[1]	Operating expenses and imputed costs[2]	Targeted return on equity[3]	Total costs	Cost recovery (percent)[4, 5]
2003	881.7	931.3	104.7	1,036.0	85.1
2004	914.6	842.6	112.4	955.0	95.8
2005	993.8	834.4	103.0	937.4	106.0
2006	1,029.7	874.8	72.0	946.8	108.8
2007	1,012.3	912.9	80.4	993.3	101.9
2008	873.8	820.4	66.5	886.9	98.5
2009	675.4	707.5	19.9	727.5	92.8
2010	574.7	532.8	13.1	545.9	105.3
2011	478.6	444.4	16.8	461.2	103.8
2012	449.8	423.0	8.9	432.0	104.1
2003–2012	7,884.3	7,324.2	597.7	7,921.9	99.5

Note: Here and elsewhere in this chapter, components may not sum to totals or yield percentages shown because of rounding.

1 For the 10-year period, includes revenue from services of $7,370.1 million and other income and expense (net) of $514.2 million.

2 For the 10-year period, includes operating expenses of $7,037.0 million, imputed costs of $42.4 million, and imputed income taxes of $244.8 million.

3 Beginning in 2009, the PSAF has been adjusted to reflect the actual clearing balance levels maintained; previously, the PSAF was calculated based on a projection of clearing balance levels.

4 Revenue from services divided by total costs.

5 For the 10-year period, cost recovery is 92.1 percent, including the effect of accumulated other comprehensive income (AOCI) reported by the priced services under ASC 715. For details on changes to the estimation of priced services accumulated other comprehensive income and their effect on the pro forma financial statements, refer to note 4 to the "Pro Forma Financial Statements for Federal Reserve Priced Services" at the end of this chapter.

In 2012, Reserve Banks recovered 104.1 percent of total priced services costs, including the PSAF.[4] The Banks' operating costs and imputed expenses totaled $423.0 million. Revenue from operations totaled $449.3 million and other income was $0.5 million, resulting in net income from priced services of $26.8 million.[5]

Commercial Check-Collection Service

In 2012, Reserve Banks recovered 108.8 percent of the total costs of their commercial check-collection service, including the related PSAF. The Banks' operating expenses and imputed costs totaled $198.4 million. Revenue from operations totaled $220.0 million and other income totaled $0.3 million, resulting in net income of $21.9 million. In 2012, check-service revenue from operations decreased $39.2 million from 2011.[6] Reserve Banks handled 6.6 billion checks in 2012, a decrease of 2.3 percent from 2011 (see table 2). The decline in Reserve Bank check volume continues to be influenced by nationwide trends away from the use of checks.

By year-end 2012, 99.9 percent of check deposits processed by the Reserve Banks and 99.9 percent of checks presented by the Reserve Banks to paying banks were processed electronically. In addition, 99.2 percent of unpaid checks were returned electronically to a Reserve Bank and 95.0 percent were delivered electronically by the Reserve Bank to the bank of first deposit. The Reserve Banks in 2012 continued to reduce check-service operating costs by consolidating further their check-processing offices into one site that supports both paper and electronic check processing.[7]

Plans [Accounting Standards Codification (ASC) Topic 715 (ASC 715), *Compensation–Retirement Benefits*], which has resulted in the recognition of a $643.0 million reduction in equity related to the priced services' benefit plans through 2012. Including this reduction in equity, which represents a decline in economic value, results in cost recovery of 92.1 percent for the 10-year period. For details on how implementing ASC 715 affected the pro forma financial statements, refer to note 4 to the pro forma financial statements at the end of this chapter.

4 *Total cost* is the sum of operating expenses, imputed costs (income taxes, interest on debt, interest on float, sales taxes, and the FDIC assessment), and the targeted return on equity.

5 *Other income* is investment income earned on clearing balances net of the cost of earnings credits, an amount termed net income on clearing balances, and income from expired earning credits.

6 Section 17 of the Check-Clearing for the 21st Century Act requires the Federal Reserve Board's *Annual Report* to include costs of and revenue from inter-District commercial check transportation. In 2008, the Reserve Banks discontinued the transportation of commercial checks between their check-processing offices. As a result, in 2012, there were no costs or imputed revenues associated with the transportation of commercial checks between Reserve Bank check-processing offices.

7 The Reserve Banks completed in 2010 a multiyear initiative, which began in 2003, that reduced the number of offices at which they process paper checks from 45 to one. Since

Table 2. Activity in Federal Reserve Priced Services, 2010–2012
Thousands of items

Service	2012	2011	2010	Percent change	
				2011 to 2012	2010 to 2011
Commercial check	6,622,265	6,779,607	7,711,833	-2.3	-12.1
Commercial ACH	10,664,613	10,348,802	10,232,757	3.1	1.1
Fedwire funds transfer	134,409	129,734	127,762	3.6	1.5
National settlement	663	571	522	16.0	9.4
Fedwire securities	6,441	7,271	7,913	-11.4	-8.3

Note: Activity in commercial check is the total number of commercial checks collected, including processed and fine-sort items; in commercial ACH, the total number of commercial items processed; in Fedwire funds transfer and securities transfer, the number of transactions originated online and offline; and in national settlement, the number of settlement entries processed.

Commercial Automated Clearinghouse Services

The Automated Clearinghouse Service enables depository institutions and their customers to process large volumes of payments effectively through electronic, batch processes. In 2012, the Reserve Banks recovered 101.0 percent of the total costs of their commercial ACH services, including the related PSAF. Reserve Bank operating expenses and imputed costs totaled $111.4 million.

Revenue from ACH operations totaled $114.8 million and other income totaled $0.1 million, resulting in net income of $3.6 million. The Reserve Banks processed 10.7 billion commercial ACH transactions, an increase of 3.1 percent from 2011.

Fedwire Funds and National Settlement Services

In 2012, Reserve Banks recovered 98.8 percent of the costs of their Fedwire Funds and National Settlement Services, including the related PSAF. Reserve Bank operating expenses and imputed costs for these operations totaled $89.8 million in 2012. Revenue from these services totaled $90.5 million, and other income amounted to $0.1 million, resulting in a net income of $0.8 million.

Fedwire Funds Service

The Fedwire Funds Service allows its participants to use their balances at Reserve Banks to transfer funds to other participants in the service. In 2012, the number of Fedwire funds transfers originated by depository institutions increased 3.6 percent from 2011, to approximately 134.4 million. The average daily value of Fedwire funds transfers in 2012 was $2.4 trillion, a decrease of 9.7 percent from the previous year.

The Reserve Banks in 2012 introduced payment notification functionality, which allows a sending bank that is a Fedwire Funds Service participant to request an e-mail notification from a beneficiary's bank when the beneficiary's bank credits or otherwise pays the beneficiary of a particular funds transfer. This functionality facilitates transparency and responds to needs expressed by both depository institutions and their corporate customers.

National Settlement Service

The National Settlement Service is a multilateral settlement system that allows participants in private-sector clearing arrangements to settle transactions using Federal Reserve balances. In 2012, the service processed settlement files for 16 local and national private-sector arrangements, the same number of arrangements as were active in 2011. The Reserve Banks processed slightly more than 8,500 files that contained around 663,000 settlement entries for these arrangements in 2012. Activity in 2012 represents an increase from the 571,000 settlement entries processed in 2011.

Fedwire Securities Service

In 2012, the Reserve Banks recovered 100.3 percent of the total costs of the priced-service component of their Fedwire Securities Service, including the related PSAF. The Banks' operating expenses and imputed costs for providing this service totaled $23.5 million in 2012. Revenue from the service totaled $24.1 mil-

February 2010, the Cleveland Reserve Bank operated the only paper check-processing site for the System, while the Atlanta Reserve Bank served as the System's electronic check-processing site. As of December 31, 2012, the Atlanta Reserve Bank alone processes both paper and electronic checks for the System.

lion and there was no other income, resulting in a net income of $0.6 million.

The Fedwire Securities Service allows its participants to transfer electronically to other service participants certain securities issued by the U.S. Treasury, federal government agencies, government-sponsored enterprises, and certain international organizations.[8] In 2012, the number of non-Treasury securities transfers processed via the service decreased 11.4 percent from 2011, to approximately 6.4 million.

Float

In 2012, the Reserve Banks had daily average credit float of $ 767.1 million, compared with daily average credit float of $1,151.8 million in 2011.[9]

Currency and Coin

The Federal Reserve Board is the issuing authority for the nation's currency (in the form of Federal Reserve notes). In 2012, the Board paid the U.S. Treasury Department's Bureau of Engraving and Printing (BEP) approximately $687.7 million to produce 7.8 billion Federal Reserve notes. The Federal Reserve Banks distribute and receive currency and coin through depository institutions in response to public demand.

In 2012, the Reserve Banks distributed 37.4 billion Federal Reserve notes into circulation (payments), a 1.2 percent increase from 2011, and received 35.6 billion Federal Reserve notes from circulation, a 1.3 percent increase from 2011.

The value of Federal Reserve notes in circulation increased nearly 9 percent in 2012, to $1,126.7 billion at year-end, largely because of international demand for $100 notes. In 2012, the Reserve Banks also distributed 69.1 billion coins into circulation, a 1.7 percent increase from 2011, and received 58.7 billion coins from circulation, a 1.5 percent decrease from 2011.

Improvements to Efficiency and Risk Management

The Reserve Banks have increased operational efficiency and improved risk management. Advances in currency-processing equipment and sensor technology have increased productivity and improved note authentication and fitness measurement, thereby reducing the premature destruction of fit currency while maintaining the quality and integrity of currency in circulation.

Since 2009, policy changes and improvements to the Reserve Banks' high-speed currency-processing equipment have increased productivity almost 20 percent and Reserve Banks have reduced staffing levels in cash services approximately 8 percent. Adoption of a risk-based approach to business processes has increased efficiency by using technology more extensively and calibrating risk controls to the level of inherent risk. As a result of these changes, the Federal Reserve has increased its ability to adapt operations and implement new policies that improve its ability to meet currency demand efficiently. The Reserve Banks are investigating additional opportunities to improve processing technology to further increase productivity, reduce unit costs, and enhance risk management.

Other Improvements and Efforts

Reserve Banks continue to develop a new cash automation platform that will replace legacy software applications, automate business concepts and processes, and employ technologies to meet the cash business's current and future needs cost effectively. The new platform will also facilitate business continuity and contingency planning and enhance the support provided to Reserve Bank customers. In 2012, the Reserve Banks implemented one of the first major components of the new platform, the National Cash Data Warehouse, a central repository for the Reserve Banks' cash data. The full automation platform is scheduled to be complete in 2017.

The Board continues to work with the Treasury Department and its BEP and the U.S. Secret Service in preparing for issuing the new-design $100 note. During 2012, the BEP met the Board's order of nearly 1.6 billion new-design $100 notes and the Board ordered an additional 2.0 billion of these

---

8 The expenses, revenues, volumes, and fees reported here are for transfers of securities issued by federal government agencies, government-sponsored enterprises, and certain international organizations. Reserve Banks provide Treasury securities services in their role as the U.S. Treasury's fiscal agent. These services are not considered priced services. For details, see "Treasury Securities Services" on page 95.

9 Credit float occurs when the Reserve Banks present checks and other items to the paying bank prior to providing credit to the depositing bank (debit float occurs when the Reserve Banks credit the depositing bank before presenting checks and other items to the paying bank).

Table 3. Expenses of the Federal Reserve Banks for Fiscal Agency and Depository Services, 2010–2012
Thousands of dollars

Agency and service	2012	2011	2010
Department of the Treasury			
Treasury Securities Services			
Treasury retail securities	60,208	79,346	73,104
Treasury securities safekeeping and transfer	14,131	11,187	10,136
Treasury auction	30,648	29,258	30,750
Computer infrastructure development and support	4,990	1,969	1,980
Other services	3,340	4,036	1,646
Total	113,317	125,796	117,615
Payment, Collection, and Cash-Management Services			
Payment services	141,534	125,196	112,224
Collection services	41,456	38,707	37,611
Cash-management services	58,975	53,832	48,226
Computer infrastructure development and support	70,075	67,014	66,461
Other services	9,075	9,536	8,815
Total	321,115	294,285	273,337
Other Treasury			
Total	37,011	36,233	37,793
Total, Treasury	471,443	456,314	428,744
Other Federal Agencies			
Total, other agencies	34,569	27,893	27,700
Total reimbursable expenses	506,012	484,207	456,445

notes for 2013 to build inventories in preparation for issuance.

The Board and its consulting firm continue to partner with the BEP in developing a new, comprehensive quality-assurance program at the BEP. During 2012, the Board, the BEP, and the consultants formed cross-functional teams to improve product and technology development, quality-system management, standard operating procedures, process changes, training programs, inspection of incoming raw materials, supplier management, and equipment calibration and maintenance. This program will enable the BEP to more efficiently and effectively meet the Board's print order requirements and the production of more-technologically complex bank notes into the future.

Fiscal Agency and Government Depository Services

As fiscal agents and depositories for the federal government, the Federal Reserve Banks auction Treasury securities, process electronic and check payments for Treasury, collect funds owed to the federal government, maintain Treasury's bank account, and develop, operate, and maintain a number of automated systems to support Treasury's mission. The Reserve Banks also provide certain fiscal agency and depository services to other entities; these services are primarily related to book-entry securities. Treasury and other entities fully reimbursed the Reserve Banks for the costs of providing fiscal agency and depository services.

In 2012, fiscal agency expenses amounted to $506.0 million, a 4.5 percent increase from 2011 (see table 3). These costs increased as a result of requests from Treasury's Bureau of the Fiscal Service.[10] Support for Treasury programs accounted for 93.2 percent of the cost, and support for other entities accounted for 6.8 percent.

Treasury Securities Services

The Reserve Banks work closely with Treasury's Fiscal Service in support of the borrowing needs of the federal government. The Banks auction, issue, maintain, and redeem securities; provide customer service; and operate the automated systems supporting U.S. savings bonds and marketable Treasury securities (bills, notes, and bonds). Treasury securities services consist of retail securities programs (which primarily serve individual investors) and wholesale securities programs (which serve institutional customers).

[10] Treasury consolidated the Financial Management Service and Bureau of Public Debt into the new Bureau of the Fiscal Service, effective October 7, 2012.

Retail Securities Programs

Reserve Bank operating expenses for the retail securities programs were $60.2 million in 2012, a 24 percent decrease compared with $79.3 million in 2011. This cost decrease is largely explained by the Fiscal Service's decision to consolidate Reserve Bank savings bond operations, and to effect other operational changes. Treasury relied on a recently completed Reserve Bank initiative that takes advantage of developments in image processing to handle savings bond redemptions and has allowed the Reserve Banks to retire some savings-bond unique software that was built solely to support Treasury. In addition, the Reserve Banks continue to support Treasury's Retail E-Services initiative, which will create a new customer service and support environment for the Treasury and the Reserve Banks.

Wholesale Securities Programs

The Reserve Banks support wholesale securities programs through the sale, issuance, safekeeping, and transfer of marketable Treasury securities for institutional investors. In 2012, Reserve Bank operating expenses in support of Treasury securities auctions were $30.6 million, compared with $29.2 million in 2011. The Banks conducted 264 Treasury securities auctions, compared with 269 in 2011.

Operating expenses associated with Treasury securities safekeeping and transfer activities were $14.1 million in 2012, compared with $11.2 million in 2011. The cost increase is attributable to the Reserve Banks' ongoing technological effort to migrate securities services from a mainframe system to a distributed computing environment as well as lower government agency volume in 2012, which shifted more costs to Treasury.

Payment Services

The Reserve Banks work closely with Treasury's Fiscal Service and other government agencies to process payments to individuals and companies. For example, the Banks process federal payroll payments, Social Security and veterans' benefits, income tax refunds, vendor payments, and other types of payments.

Reserve Bank operating expenses for payments-related activity totaled $141.5 million in 2012, compared with $125.2 million in 2011. The significant increase in expenses is largely due to expanded Treasury requirements for the Go Direct, Do Not Pay (formerly known as the GoVerify program), and the Invoice Processing Platform (IPP) programs.

The Go Direct initiative incurred additional costs as Reserve Banks expanded operations to meet Treasury's 2013 deadline to convert federal benefit check payments to electronic channels. In 2012, expenses for Go Direct increased 17.2 percent, to more than $29.3 million, because of staff increases to support higher Go Direct call-center volumes.

In support of Treasury's Do Not Pay initiative, the Reserve Banks have built a single point of access, or portal, through which federal agencies can query multiple data sources before making federal payments. The Reserve Banks implemented a number of software releases, automated manual processes, and added a number of new agency participants. In 2012, expenses for Do Not Pay were $8.0 million, compared with $2.2 million in 2011.

The IPP is part of Treasury's all-electronic initiative and is an electronic invoicing and payment information system that allows vendors to enter invoice data electronically, either through a web-based portal or electronic submission. The IPP accepts, processes, and presents data from agencies and supplier systems related to all stages of transactions. During 2012, the Reserve Banks' IPP expenses increased 30.8 percent, to $11.9 million. This increase is primarily driven by IPP's support of expanded agency outreach and support in response to Treasury's initiative.

Treasury's payments-related expenses were offset somewhat by decreases in the Stored Value Card (SVC) program. The program provides stored value cards that military personnel can use to purchase goods and services on military bases. In 2012, the SVC program's expenses decreased 20.2 percent, to $14.5 million, because the military deferred replacing SVC mobile kiosks and implementing software projects.

Collection Services

The Reserve Banks also work closely with Treasury's Fiscal Service to collect funds owed the federal government, including various taxes, fees for goods and services, and delinquent debts. In 2012, Reserve Bank operating expenses related to collections services increased 7.1 percent, largely as a result of ongoing support for Treasury's Collections and Cash Management Modernization initiative.

The Reserve Banks also continued to operate Pay.gov, an application supporting Treasury's program that allows the public to use the Internet to authorize and initiate payments to federal agencies. During the year, the Pay.gov program expanded to include 75 new agency programs, and it processed more than 94 million online payments, a 22 percent increase from 2011. This expansion resulted in expenses' increasing 11 percent, to $11.7 million.

The Reserve Banks continued to support the government's centralized delinquent debt-collection program. Specifically, the Banks developed and maintained software that facilitates the collection of delinquent debts owed to federal agencies and states by matching federal payments against delinquent debts, including past-due child support payments owed to custodial parents.

Treasury Cash-Management Services

The Reserve Banks maintain Treasury's operating cash account and provide collateral-management and collateral-monitoring services for those Treasury programs that have collateral requirements. The Reserve Banks also support Treasury's efforts to modernize its financial management processes by developing software, operating help desks, and managing projects on behalf of the Fiscal Service.

In 2012, Reserve Bank operating expenses related to Treasury cash-management services totaled $59.0 million, compared with $53.8 million in 2011.

During 2012, the Reserve Banks continued to support Treasury's efforts to improve centralized government accounting and reporting functions. In particular, the Reserve Banks collaborated with the Fiscal Service on several ongoing software development efforts, such as the Central Accounting Reporting System (CARS), which is intended to provide Treasury with a modernized system for the collection and dissemination of financial management and accounting information transmitted from and to federal program agencies. In 2012, expenses for CARS were $22.1 million, compared with $16.5 million in 2011.

Services Provided to Other Entities

When permitted by federal statute or when required by the Secretary of the Treasury, the Reserve Banks provide fiscal agency and depository services to other domestic and international entities.

Reserve Bank operating expenses for services provided to other entities were $34.6 million in 2012, compared with $27.9 million in 2011, an increase of 23.9 percent. The expense increase in 2012 is attributable to the Reserve Banks' ongoing effort to migrate securities services from a mainframe system to a distributed computing environment.

Book-entry securities issuance and maintenance activities account for a significant amount of the work performed for other entities, with the majority performed for the Federal Home Loan Mortgage Association, the Federal National Mortgage Association, and the Government National Mortgage Association.

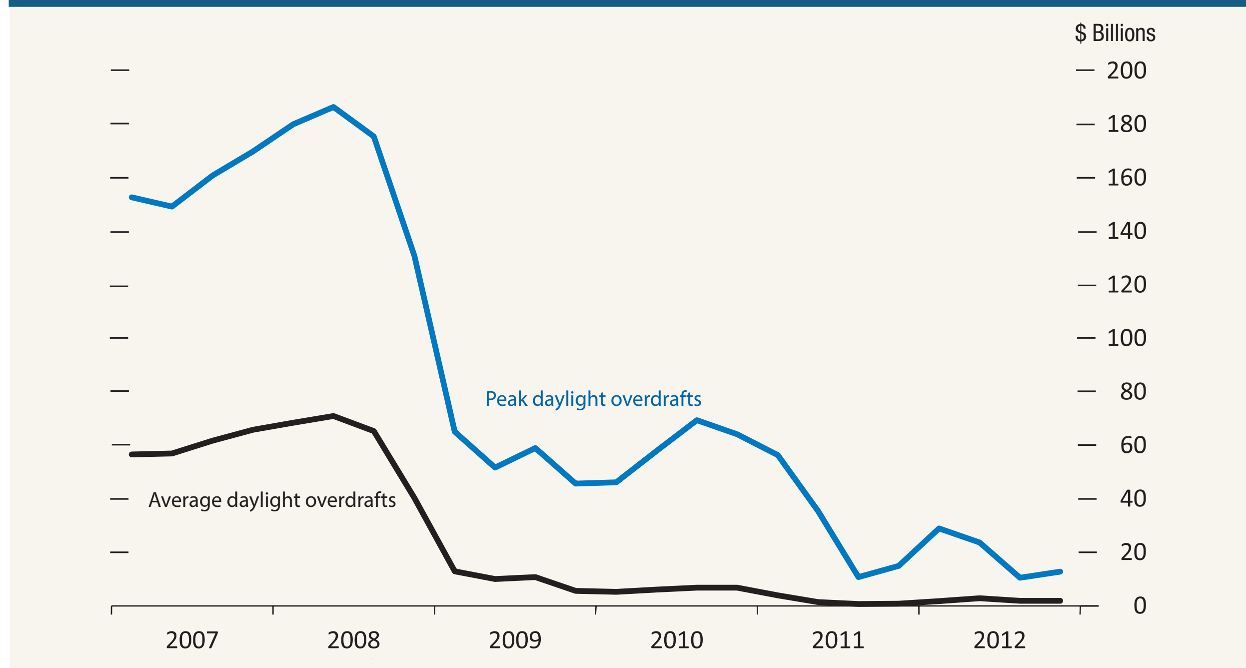
The Reserve Banks continue to process postal money orders primarily in image form, resulting in operational improvements, lower staffing levels, and lower costs to the U.S. Postal Service. In 2012, expenses for postal money orders were $4.0 million, compared with $4.1 million in 2011.

Use of Federal Reserve Intraday Credit

The Federal Reserve Board's Payment System Risk (PSR) policy governs the use of Federal Reserve Bank intraday credit, also known as daylight overdrafts. A daylight overdraft occurs when an institution's account activity creates a negative balance in the institution's Federal Reserve account at any time in the operating day. Daylight overdrafts enable an institution to send payments more freely throughout the day than if it were limited strictly by its available intraday funds balance. The PSR policy recognizes explicitly the role of the central bank in providing intraday balances and credit to healthy institutions; under the policy the Reserve Banks provide collateralized intraday credit at no cost.

Before late 2008, overnight balances were much lower and daylight overdrafts significantly higher than levels observed since late 2008. In 2007, for example, institutions held on average less than $20 billion in overnight balances, and total average daylight overdrafts were $60 billion. In contrast, institutions held historically high levels of overnight balances (on average about $1.5 trillion) at the Reserve Banks in 2012, while demand for daylight overdrafts on average remained historically low.

Figure 1. Aggregate Daylight Overdrafts, 2007–2012



Average daylight overdrafts across the System increased to $2.1 billion in 2012 from $1.7 billion in 2011, an increase of about 20 percent (see figure 1). Conversely, the average level of peak daylight overdrafts decreased to almost $20 billion in 2012 from $30 billion in 2011, a decrease of about 35 percent.

Daylight overdraft fees are also at historically low levels. In 2012, institutions paid less than $50,000 in daylight overdraft fees, down from almost $1 million in 2011. The decrease in fees is largely attributable to the March 2011 PSR policy revision that eliminated fees for collateralized daylight overdrafts.

FedLine Access to Reserve Bank Services

The Reserve Banks provide depository institutions with a variety of alternatives for electronically accessing the Banks' payment and information services through their FedLine Access Solutions. These FedLine channels are designed to meet the individual connectivity and contingency requirements of depository institution customers.

For the past few years, as a result of the declining number of depository institutions, Reserve Bank FedLine connections have decreased. At the same time, the number of employees within depository institutions who have credentials that establish them as trusted users increased, reflecting in part the expansion of electronic value-added services provided. Between 2007 and 2012, the total number of depository institutions in the U.S. declined 15.4 percent. The number of depository institutions with FedLine connections declined 5.9 percent, while the number of trusted users increased 11.0 percent over the same period.

In 2012, the Reserve Banks continued to expand usage of new service package options launched in 2011. The number of depository institutions using the FedComplete bundled payment services package increased from 60 to 146 at year-end 2012. Fed Transaction Analyzer, a risk-management tool to facilitate the analysis of payment transactions and to help automate risk and compliance-reporting requirements, was used by 816 depository institutions with 2,020 credentialed employees, increases of 571 and 1,457, respectively.

Information Technology

The Federal Reserve Banks continued to improve the efficiency, effectiveness, and security of information technology (IT) services and operations in 2012.

To improve the efficiency and overall quality of operations, major multiyear initiatives continue to consolidate the management and function of the Federal Reserve's IT operations and networking services. Substantial progress has been made, and the centralization of the remaining enterprise IT functions will be completed within the next two years.

In addition, Federal Reserve Information Technology (FRIT) continued to lead the Reserve Banks' transition to a more robust information security posture, and FRIT's chief information security officer (CISO) continued in his role maintaining System awareness of information security (IS) risk and coordinating IS activities among the Federal Reserve Banks.[11] Under the direction of the CISO, management of the Federal Reserve's information security risk has matured. In addition to the implementation of the first phase of a program to implement a number of robust security measures across the System, the ongoing transition to the Federal Reserve System's IS framework, which is based on guidance from the National Institute of Science and Technology and adapted to the Federal Reserve's environment, continues to progress.[12]

Examinations of the Federal Reserve Banks

The Reserve Banks and the consolidated variable interest entities (VIEs) are subject to several levels of audit and review.[13] The combined financial statements of the Reserve Banks (see "Federal Reserve Banks Combined Financial Statements" in the "Federal Reserve System Audits" section of this report) as well as the financial statements of each of the 12 Banks and those of the consolidated VIEs are audited annually by an independent public accountant retained by the Board of Governors.[14] In addition, the Reserve Banks, including the consolidated VIEs, are subject to oversight by the Board of Governors, which performs its own reviews.

The Reserve Banks use the framework established by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) to assess their internal controls over financial reporting, including the safeguarding of assets. Within this framework, the management of each Reserve Bank annually provides an assertion letter to its board of directors that confirms adherence to COSO standards. Similarly, each consolidated VIE annually provides an assertion letter to the board of directors of the New York Reserve Bank.

The Federal Reserve Board engaged Deloitte & Touche LLP (D&T) to audit the 2012 combined and individual financial statements of the Reserve Banks and those of the consolidated VIEs.[15]

In 2012, D&T also conducted audits of internal controls over financial reporting for each of the Reserve Banks, Maiden Lane LLC, Maiden Lane III LLC, and TALF LLC. Fees for D&T's services totaled $7 million, of which $1 million was for the audits of the consolidated VIEs. To ensure auditor independence, the Board requires that D&T be independent in all matters relating to the audits. Specifically, D&T may not perform services for the Reserve Banks or others that would place it in a position of auditing its own work, making management decisions on behalf of the Reserve Banks, or in any other way impairing its audit independence. In 2012, the Banks did not engage D&T for any non-audit services. One Bank leases office space to D&T.

The Board's reviews of the Reserve Banks include a wide range of off-site and on-site oversight activities, conducted primarily by its Division of Reserve Bank Operations and Payment Systems. Division personnel monitor on an ongoing basis the activities of each Reserve Bank and consolidated VIE, FRIT, and the Office of Employee Benefits of the Federal Reserve System (OEB), and they conduct a comprehensive on-site review of each Reserve Bank, FRIT, and OEB at least once every three years.

The comprehensive on-site reviews typically include an assessment of the internal audit function's effectiveness and its conformance to the Institute of Internal Auditors' (IIA) *International Standards for*

[11] FRIT supplies national infrastructure and business line technology services to the Federal Reserve Banks and provides thought leadership regarding the System's information technology architecture and business use of technology.

[12] The National Institute of Science and Technology is a nonregulatory federal agency within the U.S. Department of Commerce.

[13] The New York Reserve Bank is considered to be the controlling financial interest holder of each of the consolidated VIEs.

[14] Each VIE reimburses the Board of Governors—from the entity's available net assets—for the fees related to the audit of its financial statements.

[15] In addition, D&T audited the Office of Employee Benefits of the Federal Reserve System (OEB), the Retirement Plan for Employees of the Federal Reserve System (System Plan), and the Thrift Plan for Employees of the Federal Reserve System (Thrift Plan). The System Plan and the Thrift Plan provide retirement benefits to employees of the Board, the Federal Reserve Banks, and the OEB.

the Professional Practice of Internal Auditing, applicable policies and guidance, and the IIA's code of ethics.

The division also reviews the System Open Market Account (SOMA) and foreign currency holdings to determine whether the New York Reserve Bank, while conducting the related transactions, complies with the policies established by the Federal Open Market Committee (FOMC) and to assess SOMA-related IT project management and application development, vendor management, and system resiliency and contingency plans. In addition, D&T audits the year-end schedule of participated asset and liability accounts and the related schedule of participated income accounts. The FOMC is provided with the external audit reports and a report on the division's review.

Income and Expenses

Table 4 summarizes the income, expenses, and distributions of net earnings of the Reserve Banks for 2012 and 2011. Income in 2012 was $81,586 million, compared with $85,241 million in 2011.

Expenses totaled $9,397 million: $3,781 million in operating expenses; $3,875 million in interest paid to depository institutions on reserve balances and term deposits; $142 million in interest expense on securities sold under agreements to repurchase; $490 million in assessments for Board of Governors expenditure; $722 million for new currency costs; $387 million for Consumer Financial Protection Bureau costs and Office of Financial Research costs. Net additions to current net income totaled $18,380 million, which includes $13,496 million in realized gains on Treasury securities and federal agency and government-sponsored enterprise mortgage-backed securities (GSE MBS); $6,038 million in net income associated with consolidated VIEs; $38 million in other deductions; and $1,116 million in unrealized losses on foreign currency denominated assets revalued to reflect current market exchange rates. Dividends paid to member banks, set at 6 percent of paid-in capital by section 7(1) of the Federal Reserve Act, totaled $1,637 million.

Comprehensive net income before interest on Federal Reserve notes expense remitted to Treasury totaled $90,516 million in 2012 (net income of $90,569 million, reduced by other comprehensive loss of $53 million). Distributions to Treasury in the form of interest on Federal Reserve notes totaled $88,418 million in 2012. The distribution equals comprehensive income after the deduction of dividends paid and the amount necessary to equate the Reserve Banks' surplus to paid-in capital.

The "Statistical Tables" section of this report provides more detailed information on the Reserve Banks and the VIEs. Table 9 is a statement of condition for each Reserve Bank; table 10 details the income and expenses of each Reserve Bank for 2012; table 11 shows a condensed statement for each Reserve Bank for the years 1914 through 2012; and table 13 gives the number and annual salaries of officers and employees for each Reserve Bank. A detailed account of the assessments and expenditures of the Board of Governors appears in the Board of Governors Financial Statements (see "Federal Reserve System Audits").

SOMA Holdings and Loans

The Reserve Banks' average net daily holdings of securities and loans during 2012 amounted to $2,715,976 million, an increase of $139,094 million from 2011 (see table 5).

SOMA Securities Holdings

The average daily holdings of Treasury securities increased by $216,165 million, to an average daily amount of $1,774,043 million. The average daily holdings of GSE debt securities decreased by $31,450 million, to an average daily amount of $94,248 million. The average daily holdings of federal agency and GSE MBS decreased by $45,188 million, to an average daily amount of $872,819 million.

The increases in average daily holdings of Treasury securities and federal agency and GSE MBS are due to the purchases through a large-scale asset purchase program and reinvestment of principal payments from other SOMA holdings in federal agency and GSE MBS. The average daily holdings of GSE debt securities decreased as a result of principal payments received.

There were no significant holdings of securities purchased under agreements to resell in 2012 or 2011. Average daily holdings of foreign currency denominated assets in 2012 were $25,488 million, compared with $26,566 million in 2011. The average daily balance of central bank liquidity swap drawings was

Table 4. Income, Expenses, and Distribution of Net Earnings of the Federal Reserve Banks, 2012 and 2011
Millions of dollars

Item	2012	2011
Current income	81,586	85,241
SOMA interest income	80,860	83,874
Loan interest income	81	674
Other current income[1]	645	693
Current expenses	7,798	7,316
Operating expenses[2]	3,781	3,499
Interest paid on depository institutions deposits and term deposits	3,875	3,773
Interest expense on securities sold under agreements to repurchase	142	44
Current net income	73,788	77,925
Net additions to (deductions from) current net income	18,380	2,016
Profit on sales of Treasury securities	13,255	2,258
Profit on sales of federal agency and government-sponsored enterprise mortgage-backed securities	241	10
Profit (loss) on foreign exchange transactions	-1,116	152
Net income (loss) from consolidated VIEs	6,038	-356
Other additions[3]	-38	-48
Assessments by the Board of Governors	1,599	1,403
For Board expenditures	490	472
For currency costs	722	649
For Consumer Financial Protection Bureau costs[4]	385	242
For Office of Financial Research costs[4]	2	40
Net income before interest on Federal Reserve notes expense remitted to Treasury	90,569	78,538
Interest on Federal Reserve notes expense remitted to Treasury	88,418	75,424
Net income	2,151	3,114
Other comprehensive loss	-53	-1,162
Comprehensive income	2,098	1,952
Total distribution of net income	90,516	77,376
Dividends on capital stock	1,637	1,577
Transfer to surplus and change in accumulated other comprehensive income	461	375
Interest on Federal Reserve notes expense remitted to Treasury	88,418	75,424

[1] Includes income from priced services, compensation received for services provided, and securities lending fees.
[2] Includes a net periodic pension expense of $641 million in 2012 and $525 million in 2011.
[3] Includes dividends on preferred interests and unrealized loss on Term Asset-Backed Securities Loan Facility loans.
[4] The Board of Governors assesses the Reserve Banks to fund the operations of the Consumer Financial Protection Bureau and, for a two-year period beginning July 21, 2010, the Office of Financial Research.

$38,737 million in 2012 and $5,368 million in 2011. The average daily balance of securities sold under agreements to repurchase was $91,785 million, an increase of $19,626 million from 2011.

The average rates of interest earned on the Reserve Banks' holdings of Treasury securities decreased to 2.62 percent and the average rates on GSE debt securities increased to 2.79 percent in 2012. The average rate of interest earned on federal agency and GSE MBS decreased to 3.60 percent in 2012. The average interest rates for securities sold under agreements to repurchase increased to 0.15 percent in 2012. The average rate of interest earned on foreign currency denominated assets decreased to 0.55 percent while the average rate of interest earned on central bank liquidity swaps decreased to 0.62 percent in 2012.

Lending

In 2012, the average daily primary, secondary, and seasonal credit extended by the Reserve Banks to depository institutions increased by $10 million, to $72 million. The average rate of interest earned on primary, secondary, and seasonal credit decreased to 0.38 percent in 2012, from 0.43 percent in 2011. The average daily balance of Term Asset-Backed Securities Loan Facility (TALF) loans in 2012 was $4,497 million, which earned interest at an average rate of 1.78 percent.

On January 14, 2011, all outstanding draws under the American International Group, Inc. (AIG) revolving line of credit and the related accrued interest, capitalized interest, and capitalized commitment fees were

Table 5. System Open Market Account (SOMA) Holdings and Loans of the Federal Reserve Banks, 2012 and 2011
Millions of dollars, except as noted

Item	Average daily assets (+)/liabilities (–)		Current income (+)/expense (–)		Average interest rate (percent)	
	2012	2011	2012	2011	2012	2011
U.S. Treasury securities[1]	1,774,043	1,557,878	46,416	42,257	2.62	2.71
Government-sponsored enterprise debt securities[1]	94,248	125,698	2,626	3,053	2.79	2.43
Federal agency and government-sponsored enterprise mortgage-backed securities[2]	872,819	918,007	31,429	38,281	3.60	4.17
Foreign currency denominated assets[3]	25,488	26,566	139	249	0.55	0.94
Central bank liquidity swaps[4]	38,737	5,368	241	34	0.62	0.63
Other SOMA assets[5]	66	8	9	*	…	…
Total SOMA assets	2,805,401	2,633,525	80,860	83,874	2.88	3.18
Securities sold under agreements to repurchase	-91,785	-72,159	-142	-44	0.15	0.06
Other SOMA liabilities[6]	-2,209	-56	…	…	…	…
Total SOMA liabilities	-93,994	-72,215	-142	-44	0.15	0.06
Total SOMA holdings	**2,711,407**	**2,561,310**	**80,718**	**83,830**	**2.98**	**3.27**
Primary, secondary. and seasonal credit	72	62	*	*	0.38	0.43
Total loans to depository institutions	72	62	*	*	0.38	0.43
Credit extended to American International Group, Inc. (AIG), net[7, 8]	…	711	…	409	…	3.94
Term Asset-Backed Securities Loan Facility (TALF)[9]	4,497	14,799	80	265	1.78	1.79
Total loans to others	4,497	15,510	80	674	1.78	4.35
Total loans	**4,569**	**15,572**	**80**	**674**	**1.75**	**4.33**
Total SOMA holding and loans	**2,715,976**	**2,576,882**	**80,798**	**84,504**	**2.97**	**3.28**

1 Face value, net of unamortized premiums and discounts.

2 Face value, which is the remaining principal balance of the securities, net of unamortized premiums and discounts. Does not include unsettled transactions.

3 Includes accrued interest. Foreign currency denominated assets are revalued daily at market exchange rates.

4 Dollar value of foreign currency held under these agreements valued at the exchange rate to be used when the foreign currency is returned to the foreign central bank. This exchange rate equals the market exchange rate used when the foreign currency was acquired from the foreign central bank.

5 Cash and short-term investments related to the federal agency and government-sponsored enterprise mortgage-backed securities portfolio.

6 Represents the obligation to return cash margin posted by counterparties as collateral under commitments to purchase and sell federal agency and GSE MBS, as well as obligations that arise from the failure of a seller to deliver securities on the settlement date.

7 Average daily balance includes outstanding principal and capitalized interest net of unamortized deferred commitment fees and allowance for loan restructuring, and excludes undrawn amounts and credit extended to consolidated limited liability companies.

8 As a result of the closing of the AIG recapitalization plan, $381 million of deferred commitment fees and allowances were recognized as interest income. The average interest rate calculation for 2011 excludes these items.

9 Represents the remaining principal balance.

* Less than $500 thousand.

… Not applicable.

repaid in full as a result of the closing of the AIG recapitalization plan.

Investments of the Consolidated VIEs

Additional lending facilities established during 2008 and 2009, under authority of section 13(3) of the Federal Reserve Act, involved creating and lending to the consolidated VIEs (see table 6). Consistent with generally accepted accounting principles, the assets and liabilities of these VIEs have been consolidated with the assets and liabilities of the New York Reserve Bank in the preparation of the statements of condition included in this report. The proceeds at the maturity or the liquidation of the consolidated VIEs' assets are used to repay the loans extended by the New York Reserve Bank.

Net portfolio assets of the consolidated VIEs decreased from $35,693 million to $2,750 million. The sale of portfolio assets held by Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC during 2012 enabled the repayment in full, including accrued interest, of loans extended to those VIEs by the FRBNY. Funds advanced to those VIEs by other beneficial interests were also repaid in full.

Federal Reserve Bank Premises

Several Reserve Banks took action in 2012 to maintain and renovate their facilities. The multiyear renovation programs at the New York, St. Louis, and San Francisco Reserve Banks' headquarters buildings continued. The Dallas Reserve Bank completed

Table 6. Key Financial Data for Consolidated Variable Interest Entities (VIEs), 2012 and 2011
Millions of dollars

Item	TALF LLC		Maiden Lane LLC		Maiden Lane II LLC		Maiden Lane III LLC		Total VIEs	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Net portfolio assets of the consolidated VIEs and the net position of the New York Reserve Bank (FRBNY) and subordinated interest holders										
Net portfolio assets[1]	856	811	1,811	7,805	61	9,257	22	17,820	2,750	35,693
Liabilities of consolidated VIEs	0	0	-415	-684	0	-3	0	-3	-415	-690
Net portfolio assets available[2]	856	811	1,396	7,121	61	9,254	22	17,817	2,335	35,003
Loans extended to the consolidated VIEs by the FRBNY[3]	0	0	0	4,859	0	6,792	0	9,826	0	21,477
Other beneficial interests[3, 4]	113	109	0	1,385	0	1,106	0	5,542	113	8,142
Total loans and other beneficial interests	113	109	0	6,244	0	7,898	0	15,368	113	29,619
Cumulative change in net assets since the inception of the program[5]										
Allocated to FRBNY	71	32	1,396	877	51	1,130	15	1,641	1,533	3,680
Allocated to other beneficial interests	672	669	0	0	10	226	7	808	689	1,703
Cumulative change in net assets	743	701	1,396	877	61	1,356	22	2,449	2,222	5,383
Summary of consolidated VIE net income, including a reconciliation of total consolidated VIE net income to the consolidated VIE net income										
Portfolio interest income[6]	1	0	34	808	52	609	1,023	2,012	1,110	3,429
Interest expense on loans extended by FRBNY[7]	0	0	-10	-138	-11	-117	-46	-146	-67	-401
Interest expense–other	-3	-4	-45	-70	-7	-36	-98	-175	-153	-285
Portfolio holdings gains (losses)	0	0	552	434	1,393	-991	5,506	-3,363	7,451	-3,920
Professional fees	-1	0	-12	-43	-1	-8	-11	-20	-25	-71
Net income (loss) of consolidated VIEs	-3	-4	519	991	1,426	-543	6,374	-1,692	8,316	-1,248
Less: Net income (loss) allocated to other beneficial interests	4	44	0	114	238	-91	2,103	-558	2,345	-491
Net income (loss) allocated to FRBNY	-7	-48	519	877	1,188	-452	4,271	-1,134	5,971	-757
Add: Interest expense on loans extended by FRBNY, eliminated in consolidation[7]	0	0	10	138	11	117	46	146	67	401
Net income (loss) recorded by FRBNY	-7[8]	-48[8]	529	1,015	1,199	-335	4,317	-988	6,038	-356
Balances of loans extended to the consolidated VIEs by the FRBNY										
Balance at beginning of the year	0	0	4,859	25,845	6,792	13,485	9,826	14,071	21,477	53,401
Accrued and capitalized interest	0	0	10	138	11	117	46	146	67	401
Repayments	0	0	-4,869	-21,124	-6,803	-6,810	-9,872	-4,391	-21,544	-32,325
Balance at end of the year	0	0	0	4,859	0	6,792	0	9,826	0	21,477

1 TALF, Maiden Lane, Maiden Lane II, and Maiden Lane III holdings are recorded at fair value. Fair value reflects an estimate of the price that would be received upon selling an asset if the transaction were to be conducted in an orderly market on the measurement date.

2 Represents the net assets available for distribution to FRBNY and "other beneficiaries" of the consolidated VIEs.

3 Book value. Includes accrued interest.

4 The other beneficial interest holders are the U.S. Treasury for TALF LLC, JPMorgan Chase for Maiden Lane LLC, and AIG for Maiden Lane II LLC and Maiden Lane III LLC.

5 Represents the allocation of the change in net assets and liabilities of the consolidated VIEs that are available for distribution to FRBNY and the other beneficiaries of the consolidated VIEs. The differences between the fair value of the net assets available and the book value of the loans (including accrued interest) are indicative of gains or losses that would be incurred by the beneficiaries if the assets had been fully liquidated at prices equal to the fair value.

6 Interest income is recorded when earned and includes amortization of premiums, accretion of discounts, and paydown gains and losses.

7 Interest expense recorded by each consolidated VIE on the loans extended by FRBNY is eliminated when the VIEs are consolidated in FRBNY's financial statements and, as a result, the consolidated VIEs' net income (loss) recorded by FRBNY is increased by this amount.

8 In addition to the net income attributable to TALF LLC, FRBNY earned $46 million on TALF loans during the year ended December 31, 2012 (interest income of $80 million and a loss on the valuation of loans of $34 million). FRBNY earned $181 million on TALF loans during the year ended December 31, 2011 (interest income of $265 million and loss on the valuation of loans of $84 million).

security-enhancement projects at its headquarters building that included improvements to its main-entrance lobby and construction of a remote vehicle-screening facility.

The New York Reserve Bank completed the purchase of the 33 Maiden Lane property. The San Francisco Reserve Bank disposed of the building formerly used to house its Seattle Branch operations, and the Atlanta Reserve Bank initiated efforts to sell its Nashville Branch building. Additionally, the Cleveland and Dallas Reserve Banks consolidated certain operations performed at their Pittsburgh and San Antonio Branches, respectively, into other Reserve Bank offices. As a result, these Reserve Banks will maintain smaller Branch staffs. The Cleveland

Reserve Bank secured leased office space for its Pittsburgh Branch and is moving forward with plans to sell the former building, and the Dallas Reserve Bank is in the process of obtaining leased office space for its San Antonio Branch and will pursue the sale of the former building during 2013. The Chicago and Cleveland Reserve Banks secured leased space for their contingency requirements.

For more information on the acquisition costs and net book value of the Federal Reserve Banks and Branches, see table 14 in the "Statistical Tables" section of this report.

Pro Forma Financial Statements for Federal Reserve Priced Services

Table 7: Pro Forma Balance Sheet for Federal Reserve Priced Services, December 31, 2012 and 2011
Millions of dollars

Item	2012		2011	
Short-term assets (Note 2)				
Imputed reserve requirements on clearing balances	-		262.3	
Imputed investments	510.9		2,805.3	
Receivables	35.6		38.7	
Materials and supplies	0.9		1.4	
Prepaid expenses	9.4		7.7	
Items in process of collection	216.0		275.4	
Total short-term assets		772.8		3,390.9
Long-term assets (Note 3)				
Premises	171.2		180.8	
Furniture and equipment	33.8		38.2	
Leases, leasehold improvements, and long-term prepayments	78.6		74.6	
Prepaid pension costs	-		321.9	
Prepaid FDIC asset	20.3		21.7	
Deferred tax asset	287.5		138.5	
Total long-term assets		591.4		775.7
Total assets		1,364.1		4,166.6
Short-term liabilities				
Clearing balances	-		2,622.5	
Deferred-availability items	703.6		910.3	
Short-term debt	-		-	
Short-term payables	35.4		44.1	
Total short-term liabilities		738.9		3,576.9
Long-term liabilities				
Long-term debt	-		-	
Accrued benefit costs	549.8		381.3	
Total long-term liabilities		549.8		381.3
Total liabilities		1,288.7		3,958.2
Equity (including accumulated other comprehensive loss of $643.0 million and $288.9 million at December 31, 2012 and 2011, respectively)		75.4		208.3
Total liabilities and equity (Note 4)		1,364.1		4,166.6

Note: Components may not sum to totals because of rounding. The accompanying notes are an integral part of these pro forma priced services financial statements.

Table 8: Pro Forma Income Statement for Federal Reserve Priced Services, 2012 and 2011
Millions of dollars

Item	2012		2011	
Revenue from services provided to depository institutions (Note 5)		449.3		477.4
Operating expenses (Note 6)		406.1		421.3
Income from operations		43.2		56.1
Imputed costs (Note 7)				
Interest on float	(1.1)		-1.3	
Interest on debt	-		-	
Sales taxes	4.6		4.8	
FDIC Insurance	1.4	4.9	3.2	6.8
Income from operations after imputed costs		38.3		49.3
Other income and expenses (Note 8)				
Investment income	1.0		2.5	
Earnings credits	-0.5	0.5	-1.4	1.2
Income before income taxes		38.8		50.5
Imputed income taxes (Note 7)		12.0		16.3
Net income		26.8		34.1
Memo: Targeted return on equity (Note 7)		8.9		16.8

Note: Components may not sum to totals because of rounding. The accompanying notes are an integral part of these pro forma priced services financial statements.

Table 9: Pro Forma Income Statement for Federal Reserve Priced Services, by Service, 2012
Millions of dollars

Item	Total	Commercial check collection	Commercial ACH	Fedwire funds	Fedwire securities
Revenue from services (Note 5)	449.3	220.0	114.8	90.5	24.1
Operating expenses (Note 6)	406.1	186.7	108.4	88.1	22.9
Income from operations	43.2	33.3	6.4	2.4	1.1
Imputed costs (Note 7)	4.9	1.9	1.4	1.3	0.3
Income from operations after imputed costs	38.3	31.4	5.0	1.1	0.8
Other income and expenses, net (Note 8)	0.5	0.3	0.1	0.1	0.0
Income before income taxes	38.8	31.7	5.2	1.2	0.8
Imputed income taxes (Note 7)	12.0	9.8	1.6	0.4	0.3
Net income	26.8	21.9	3.6	0.8	0.6
Memo: Targeted return on equity (Note 7)	8.9	4.1	2.4	1.9	0.5
Cost recovery (percent) (Note 9)	104.1	108.8	101.0	98.8	100.3

Note: Components may not sum to totals because of rounding. The accompanying notes are an integral part of these pro forma priced services financial statements.

Notes to Pro Forma Financial Statements for Priced Services

(1) Discontinuation of Clearing Balance Program

Effective July 2012, the Board discontinued the contractual clearing balance program in connection with its simplification of reserve requirements. Clearing balances were a primary component of the pro forma balance sheet used to compute the imputed costs in the private sector adjustment factor (PSAF). The elimination of clearing balances reduced the size of the pro forma balance sheet substantially as well as the associated imputed expenses and investment income.

(2) Short-Term Assets

The imputed reserve requirement on clearing balances held at Reserve Banks by depository institutions reflects a treatment comparable to that of compensating balances held at correspondent banks by respondent institutions. The reserve requirement imposed on respondent balances must be held as vault cash or as balances maintained; thus, a portion of priced services clearing balances held with the Federal Reserve is shown as required reserves on the asset side of the balance sheet. Another portion of the clearing balances is used to finance short- and long-term assets. The remainder of clearing balances and deposit balances arising from float are assumed to be invested in a portfolio of investments, shown as imputed investments. As a result of the discontinuation of the clearing balance program in July 2012 there were no clearing balances or related reserve requirement balances on December 31, 2012. (See note 1)

Receivables are composed of fees due the Reserve Banks for providing priced services and the share of suspense- and difference-account balances related to priced services.

Items in process of collection are gross Federal Reserve cash items in process of collection (CIPC), stated on a basis comparable to that of a commercial bank. They reflect adjustments for intra-Reserve Bank items that would otherwise be double-counted on the combined Federal Reserve balance sheet and adjustments for items associated with nonpriced items (such as those collected for government agencies). Among the costs to be recovered under the Monetary Control Act is the cost of float, or net CIPC during the period (the difference between gross CIPC and deferred-availability items, which is the portion of gross CIPC that involves a financing cost), valued at the federal funds rate.

(3) Long-Term Assets

Long-term assets consist of long-term assets used solely in priced services and the priced-service portion of long-term assets shared with nonpriced services, including the net pension asset and deferred tax asset related to the priced services pension and postretirement benefits obligation.

Long-term assets also consist of an estimate of the assets of the Board of Governors used in the development of priced services and an imputed prepaid Federal Deposit Insurance Corporation (FDIC) asset.

(4) Liabilities and Equity

Under the matched-book capital structure for assets, short-term assets are financed with short-term payables, clearing balances, and imputed short-term debt, if needed. Long-term assets are financed with long-term liabilities, core clearing balances, imputed equity, and imputed long-term debt, if needed. Equity

is imputed at 10 percent of total risk-weighted assets to satisfy the FDIC requirements for a well-capitalized institution. No short- or long-term debt was imputed for 2012 or 2011.

Effective December 31, 2006, the Reserve Banks implemented the Financial Accounting Standard Board's (FASB) Statement of Financial Accounting Standards (SFAS) No. 158, Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans (codified in FASB Accounting Standards Codification (ASC) Topic 715 (ASC 715), Compensation–Retirement Benefits), which requires an employer to record the funded status of its pension and other benefit plans on its balance sheet. In order to reflect the funded status of its benefit plans, the Reserve Banks recognized the deferred items related to these plans, which include prior service costs and actuarial gains or losses, on the balance sheet. This resulted in an adjustment to the pension and other benefit plans related to priced services and the recognition of an associated deferred tax asset with an offsetting adjustment, net of tax, to accumulated other comprehensive income (AOCI), which is included in equity.

The Reserve Bank priced services recognized a pension liability in accrued benefit costs in 2012 and a net pension asset in 2011. The pension liability and net pension asset were $103.6 million and $321.9 million in 2012 and 2011, respectively. The change in the funded status of the pension and other benefit plans resulted in a corresponding increase in accumulated other comprehensive loss of $354.1 million in 2012.

The method for estimating the priced services portion of the SFAS 158/ASC715 adjustments to the pension and other benefit liabilities, AOCI, and deferred tax asset was refined in 2012 and incorporates AOCI component changes from year-to-year since the adoption of SFAS 158 in 2006. This estimation change does not directly affect the income statement or cost recovery.

(5) Revenue

Revenue represents fees charged to depository institutions for priced services, and is realized from each institution through one of two methods: direct charges to an institution's account or charges against its accumulated earnings credits (see note 7).

(6) Operating Expenses

Operating expenses consist of the direct, indirect, and other general administrative expenses of the Reserve Banks for priced services plus the expenses of the Board of Governors related to the development of priced services. Board expenses were $4.1 million in 2012 and $5.2 million in 2011.

In accordance with SFAS No. 87, Employers' Accounting for Pensions (codified in ASC 715), the Reserve Bank priced services recognized qualified pension-plan operating expenses of $49.1 million in 2012 and $45.2 million in 2011. Operating expenses also include the nonqualified pension expense of $0.3 million in 2012 and $3.1 million in 2011. The implementation of SFAS No. 158 (ASC 715) does not change the systematic approach required by generally accepted accounting principles to recognize the expenses associated with the Reserve Banks' benefit plans in the income statement. As a result, these expenses do not include amounts related to changes in the funded status of the Reserve Banks' benefit plans, which are reflected in AOCI (see note 4).

The income statement by service reflects revenue, operating expenses, imputed costs, other income and expenses, and cost recovery.

(7) Imputed Costs

Imputed costs consist of income taxes, return on equity, interest on debt, sales taxes, an FDIC assessment, and interest on float. Many imputed costs are derived from the PSAF model. The cost of debt and the effective tax rate are derived from bank holding company data, which serve as the proxy for the financial data of a representative private-sector firm, and are used to impute debt and income taxes in the PSAF model. The after-tax rate of return on equity is based on the returns of the equity market as a whole and is applied to the equity on the balance sheet to impute the profit that would have been earned had the services been provided by a private-sector firm. Beginning in 2009, given the uncertain long-term effect that payment of interest on reserve balances would have on the level of clearing balances, the equity used to determine the imputed profit has been adjusted to reflect the actual clearing balance levels maintained; previously, projections of clearing balance levels were used.

Interest is imputed on the debt assumed necessary to finance priced-service assets; there was no need to impute debt in 2012 or 2011. The imputed FDIC assessment reflects rate and assessment methodology changes in 2011.

Interest on float is derived from the value of float to be recovered, either explicitly or through per-item fees, during the period. Float costs include costs for the check, Fedwire Funds, ACH, and Fedwire Securities services.

Float cost or income is based on the actual float incurred for each priced service. Other imputed costs are allocated among priced services according to the ratio of operating expenses, less shipping expenses, for each service to the total expenses, less the total shipping expenses, for all services.

The following shows the daily average recovery of actual float by the Reserve Banks for 2012, in millions of dollars:

Total float	(767.1)
Unrecovered float	10.8
Float subject to recovery	(777.9)
Sources of recovery of float	
Direct charges	1.1
Per-item fees	(779.0)

Unrecovered float includes float generated by services to government agencies and by other central bank services. Float that is created by account adjustments due to transaction errors and the observance of nonstandard holidays by some depository institutions was recovered from the depository institutions through charging institutions directly. Float subject to recovery is valued at the federal funds rate. Certain check products are designed to generate credit float and therefore have lower per-item fees; this float has been subtracted from the cost base subject to recovery in 2012 and 2011.

(8) Other Income and Expenses

Other income and expenses consist of investment and interest income on the imputed investment of clearing balances and the cost of earnings credits or income from expired earnings credits. Investment income on clearing balances for 2012

and 2011 represents the average coupon-equivalent yield on three-month Treasury bills. The investment return is applied to the required portion of the clearing balance. Other income also includes imputed interest on the portion of clearing balances set aside as required reserves. Expenses for earnings credits granted to depository institutions on their clearing balances are based on a discounted average coupon-equivalent yield on three-month Treasury bills. Earnings credits expire 52 weeks after they are granted.

(9) Cost Recovery

Annual cost recovery is the ratio of revenue, including other income, to the sum of operating expenses, imputed costs, imputed income taxes, and targeted return on equity.

Other Federal Reserve Operations

Regulatory Developments: Dodd-Frank Act Implementation

The Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) (Pub. L. No. 111-203) is one of the most significant pieces of legislation affecting the U.S. financial regulatory framework in many years. Enacted on July 21, 2010, the Dodd-Frank Act seeks to address critical gaps and weaknesses in the U.S. regulatory framework that were revealed by the financial crisis. The act gives the Federal Reserve important responsibilities to issue rules and supervise financial companies to enhance financial stability and preserve the safety and soundness of the banking system.

Throughout 2012, the Federal Reserve continued to work diligently to implement the many regulatory changes required under the Dodd-Frank Act. As of December 31, 2012, the Board had issued 27 final rules required by the act and had proposed an additional 15 rules for public comment.[1] The Board also continued to implement various international frameworks developed under the auspices of the Basel Committee on Banking Supervision (BCBS).

The following is a summary of key regulatory developments announced by the Federal Reserve during 2012 in connection with the implementation of the Dodd-Frank Act and BCBS international frameworks.

Enhanced Prudential Standards for Financial Firms

Enhanced Prudential Standards for Foreign Banking Organizations

The act requires the Board to establish heightened prudential standards for nonbank financial companies supervised by the Board and for bank holding companies (BHCs) with total consolidated assets of $50 billion or more (collectively, covered companies). These standards must be more stringent than the standards that apply to other nonbank financial companies and BHCs that do not pose similar risks to the financial system. Foreign banking organizations that are or are treated as BHCs for purposes of the Bank Holding Company Act and that meet the $50 billion asset threshold are also subject to the heightened prudential standards.

On December 14, 2012, the Board invited comment on a proposal to establish enhanced prudential standards for foreign banking organizations with global consolidated assets of $50 billion or more and with a U.S. banking presence (foreign proposal). The proposed standards for foreign banking organizations are broadly consistent with the standards that the Board proposed for U.S. covered companies in December 2011. Differences between the standards proposed for foreign banking organizations and U.S. covered companies reflect the different regulatory framework and structure under which foreign banking organizations operate.

The foreign proposal would require a foreign banking organization with $50 billion or more in global consolidated assets and $10 billion or more in total nonbranch U.S. assets to organize its U.S. subsidiaries under a single U.S. intermediate holding company (IHC). IHCs of foreign banking organizations would be subject to the same risk-based and leverage capital standards applicable to U.S. BHCs, and IHCs with $50 billion or more in consolidated assets would be subject to the Board's capital plan rule. In addition, the U.S. operations of a foreign banking organization with combined U.S. assets of $50 billion or more would be required to meet enhanced liquidity risk-management standards, conduct liquidity stress tests, and hold a 30-day buffer of highly liquid assets. The proposal also imposes capital stress test, single-counterparty credit limit, overall risk-management, and early remediation requirements on U.S. operations of foreign banking organizations.

[1] These figures include Board actions since the enactment of the act on July 21, 2010.

Annual Stress Tests

The act requires the Board to conduct supervisory stress tests of covered companies and requires financial companies with more than $10 billion in total consolidated assets to conduct annual stress tests. Covered companies are also required to conduct semiannual company-run stress tests.

On October 9, 2012, the Board published two final rules implementing these stress testing regimes. One rule implemented the supervisory stress test and semiannual company-run stress test requirements for covered companies, while one rule implemented the annual company-run stress test requirements for BHCs with total consolidated assets of more than $10 billion but less than $50 billion, and for state member banks and savings and loan holding companies (SLHCs) with total consolidated assets of more than $10 billion.

The Board began conducting supervisory stress tests in the fall of 2012 for 18 BHCs that participated in the 2009 Supervisory Capital Assessment Program and subsequent Comprehensive Capital Analysis and Reviews. These companies and their state-member bank subsidiaries also conducted their own company-run stress tests in the fall of 2012. Other companies subject to the Board's final rules for Dodd-Frank Act stress testing will be required to comply with the final rule beginning in October 2013. Companies with between $10 billion and $50 billion in total assets that begin conducting their first company-run stress test in in the fall of 2013 will not have to publicly disclose the results of that first stress test.

Changes to Banking Regulation and Supervision

Regulatory Capital Framework

On June 12, 2012, the Board and other federal banking agencies approved a final rule to implement changes to the market risk capital rule, which requires institutions with significant trading activities to adjust their capital ratios to better account for the market risks of those activities.[2] The final market risk capital rule implements certain revisions made by the BCBS to its market risk framework. The final rule is intended to enhance sensitivity to risks arising from trading activities, reduce procyclicality in the market risk capital requirements, and increase transparency through enhanced disclosures. Consistent with section 939A of the Dodd-Frank Act, which requires all federal agencies to remove from their regulations references to and requirements of reliance on credit ratings, the final rule does not include those aspects of the BCBS market risk framework that rely on credit ratings. Instead, the final rule includes alternative standards of creditworthiness for determining specific risk capital requirements for certain debt and securitization positions.

Also on June 12, 2012, the Board and other federal banking agencies invited comment on three notices of proposed rulemakings that would implement in the United States the Basel III regulatory capital reforms adopted by the BCBS and make other revisions to the agencies' regulatory capital requirements. The proposals would establish an integrated regulatory capital framework to address shortcomings in regulatory capital requirements that became apparent during the financial crisis. The proposed rules would be consistent with section 171 of the Dodd-Frank Act, which directs the Board to establish minimum risk-based and leverage capital requirements for BHCs and SLHCs that are not less than the "generally applicable" capital requirements for insured depository institutions and not "quantitatively lower than" the "generally applicable" capital requirements in effect for insured depository institutions when the Dodd-Frank Act was enacted.

The first notice of proposed rulemaking (Basel III NPR) is focused primarily on reforms that would improve the overall quality and quantity of capital held by all depository institutions, BHCs with total consolidated assets of $500 million or more, and all SLHCs (collectively, banking organizations). Consistent with the international Basel framework, the Basel III NPR would establish a new minimum common equity tier 1 ratio and common equity tier 1 capital conservation buffer; raise the minimum tier 1 capital ratio; revise the definition of capital to ensure that regulatory capital instruments can absorb losses; establish limitations on capital distributions and certain discretionary bonus payments if common equity tier 1 capital buffers are not met; and introduce a supplementary leverage ratio for banking organizations that are subject to the advanced approaches risk-based capital rules. The proposal includes transition provisions designed to provide sufficient time for banking organizations to meet the new capital standards while supporting lending to the economy.

[2] The market risk capital rule applies to a BHC or bank with aggregate trading assets and liabilities equal to 10 percent of total assets, or $1 billion or more. Separately, the Board proposed to apply the market risk capital rule to SLHCs that meet the thresholds described in the rule.

The second notice of proposed rulemaking (Standardized Approach NPR) would revise the Board's rules for calculating risk-weighted assets to enhance their risk sensitivity and address weaknesses identified over recent years. Specifically, it would incorporate aspects of the BCBS's Basel II standardized framework (known as the International Convergence of Capital Measurement and Capital Standards), Basel III, and alternatives to credit ratings for the treatment of certain exposures, consistent with section 939A of the Dodd-Frank Act. The Standardized Approach NPR would apply to all banking organizations.

The third notice of proposed rulemaking (Advanced Approaches and Market Risk NPR) would revise the advanced approaches risk-based capital rule in a manner consistent with sections 171 and 939A of the Dodd-Frank Act and incorporate certain aspects of Basel III that the Board would apply only to advanced approaches banking organizations (generally, the largest, most complex banking organizations). In particular, the Advanced Approaches and Market Risk NPR would enhance the risk sensitivity of the current rules to better address counterparty credit risk and interconnectedness among financial institutions. The proposal also would codify the Board's market risk capital rule and, as described above, would apply consolidated capital requirements to SLHCs.

Registration of Securities Holding Companies (SHCs)

Section 618 of the Dodd-Frank Act permits a company that one or more securities broker or dealer registered with the Securities and Exchange Commission (SEC), and that is required by a foreign regulator or provision of foreign law to be subject to comprehensive consolidated supervision, to register with the Board as an SHC and become subject to supervision and regulation by the Board. An SHC that registers with the Board under section 618 is subject to the full examination, supervision, and enforcement regime applicable to a registered BHC, including capital requirements (although the statute allows the Board to modify its capital rules to account for differences in activities and structure of SHCs).

On May 30, 2012, the Board adopted a final rule to implement section 618 of the act. The final rule, which became effective July 20, 2012, specifies the information that an SHC must provide to the Board as part of registration, including information relating to organizational structure, capital, and financial condition. Under the final rule, an SHC's registration becomes effective no later than 45 days from the date the Board receives all required information. Consistent with the act, the restrictions on nonbanking activities in section 4 of the Bank Holding Company Act would not apply to a supervised SHC.

Bank Secrecy Act (BSA) Regulations

On November 29, 2012, the Board and the Financial Crimes Enforcement Network, a bureau of the U.S. Department of Treasury, proposed a rule to amend the definitions of "funds transfer" and "transmittal of funds" under regulations implementing the BSA. The proposed amendments would maintain the current scope of funds transfers and transmittals subject to the BSA in light of an ambiguity caused by amendments to the Electronic Fund Transfer Act made by the Dodd-Frank Act.

Financial Market Utilities (FMUs) and Payment, Clearing, and Settlement Activities

Title VIII of the act establishes a new supervisory framework for systemically important FMUs and systemically important payment, clearing, and settlement activities conducted between financial institutions. Under the framework, the Board is authorized to prescribe risk-management standards governing the operations of FMUs that are designated as systemically important by the Financial Stability Oversight Council (FSOC) (other than a designated FMU that is registered with the Commodity Futures Trading Commission as a derivatives clearing organization (DCO) or registered with the SEC as a clearing agency) as well as the conduct of payment, clearing, and settlement activities by financial institutions if such activities have been designated as systemically important by the FSOC. On July 18, 2012, the FSOC voted unanimously to designate eight FMUs as systemically important under the act.

On July 30, 2012, the Federal Reserve announced the approval of a final rule (Regulation HH) to implement certain provisions of title VIII of the act. The final rule creates risk-management standards governing the operations related to the payment, clearing, and settlement activities of FMUs designated as systemically important by the FSOC (other than registered DCOs or clearing agencies). The risk-management standards are based on the recognized international standards developed by the Committee on Payment and Settlement Systems and the Technical Committee of the International Organization of

Securities Commissions that were incorporated previously into the Board's Policy on Payment System Risk.

Regulation HH also establishes requirements for advance notice of proposed material changes to the rules, procedures, or operations of a designated FMU for which the Board is the supervisory agency as specified in title VIII of the act. The advance notice requirements set the threshold above which a proposed change would be considered material and thus require an advance notice to the Board, and also include provisions on the length of the review period.

Debit Interchange

Section 1075 of the act restricts the interchange fees that issuers may receive for electronic debit card transactions. Specifically, the interchange fee an issuer receives for a particular transaction must be reasonable and proportional to the cost incurred by the issuer with respect to the transaction. The Board's Regulation II, adopted in 2011, sets standards for determining whether an interchange fee is reasonable and proportional to the issuer's cost. In addition, the Board concurrently promulgated an interim final rule to permit an issuer to receive a fraud-prevention adjustment to the issuer's interchange fee.

On July 27, 2012, the Board announced the approval of a final rule that permits a debit card issuer subject to the interchange fee standards of Regulation II to receive a fraud-prevention adjustment. Under the fraud-prevention adjustment final rule, an issuer is eligible for an adjustment of no more than 1 cent per transaction (unchanged from the previous interim final rule) if it develops and implements policies and procedures that are reasonably designed to take effective steps to reduce the occurrence of, and costs to all parties from, fraudulent debit card transactions. The final rule simplifies the elements required to be included in an issuer's fraud-prevention policies and procedures. To receive an adjustment, an issuer is required to review its fraud-prevention policies and procedures, and their implementation, at least annually. An issuer also is required to update its policies and procedures as necessary in light of their effectiveness and cost-effectiveness and, as previously required, in light of changes in the types of fraud and available methods of fraud prevention.

The final rule retains and clarifies the requirement that an issuer that meets these standards and wishes to receive the adjustment must annually notify the payment card networks in which it participates of its eligibility to receive the adjustment. In addition, the final rule explicitly prohibits an issuer from receiving or charging a fraud-prevention adjustment if the issuer is substantially noncompliant with the Board's fraud-prevention standards and sets forth a timeframe within which such an issuer must stop receiving or charging a fraud-prevention adjustment.

Consumer Financial Protection

On August 15, 2012, the Board—jointly with the Consumer Financial Protection Bureau, the Federal Deposit Insurance Corporation, the Federal Housing Finance Agency, the National Credit Union Administration, and the Office of the Comptroller of the Currency—proposed a rule to implement section 129H of the Truth in Lending Act (TILA), added by the Dodd-Frank Act, which requires a creditor to obtain an appraisal before issuing a "higher-risk mortgage." Under the act, mortgage loans are higher-risk if they are secured by a consumer's home and have interest rates above a certain threshold.

For higher-risk mortgage loans, the proposed rule would require creditors to use a licensed or certified appraiser who prepares a written appraisal report based on a physical inspection of the interior of the property. The proposed rule also would require creditors to disclose to applicants information about the purpose of the appraisal and provide consumers with a free copy of any appraisal report. Creditors would have to obtain an additional appraisal at no cost to the consumer for a home-purchase higher-risk mortgage loan if the seller acquired the property for a lower price during the past six months. This requirement would address fraudulent property flipping by seeking to ensure that the value of the property being used as collateral for the loan legitimately increased.

The Board of Governors and the Government Performance and Results Act

Overview

The Government Performance and Results Act (GPRA) of 1993 requires that federal agencies, in consultation with Congress and outside stakeholders, prepare a strategic plan covering a multiyear period and submit an annual performance plan and performance report. The GPRA Modernization Act of 2010 refines those requirements to include quarterly performance reporting. Although the Board is not covered by GPRA, the Board follows the spirit of the act and, like federal agencies, prepares a performance plan and performance report.

Strategic Plan, Performance Plan, and Performance Report

The Board's 2012–2015 strategic plan articulates the Board's mission in the context of what it would take to meet Dodd-Frank Act mandates, close any cross-disciplinary knowledge gaps, develop appropriate policy, and continue effectively addressing the recovery of a fragile global economy. The plan sets forth major goals, outlines strategies for achieving those goals, identifies key quantitative measures of performance and discusses the evaluation of performance.

The performance plan includes specific targets for some of the performance measures identified in the strategic plan and describes the operational processes and resources needed to meet those targets. The performance report discusses the Board's performance against the strategic goals.

The strategic plan, performance plan, and performance report are available on the Board's website at www.federalreserve.gov/publications/gpra/default.htm.

Record of Policy Actions of the Board of Governors

Policy actions of the Board of Governors are presented pursuant to section 10 of the Federal Reserve Act. That section provides that the Board shall keep a record of all questions of policy determined by the Board and shall include in its annual report to Congress a full account of such actions. This chapter provides a summary of policy actions in 2012, as implemented through (1) rules and regulations, (2) policy statements and other actions, and (3) discount rates for depository institutions. Policy actions were approved on the date stated by all Board members in office, unless indicated otherwise.[1] More information on the actions is available from the "Reading Rooms" on the Board's Freedom of Information (FOI) Act web page or on request from the Board's FOI Office.

For information on Federal Open Market Committee policy actions relating to open market operations, see "Minutes of Federal Open Market Committee Meetings" on page 123.

Rules and Regulations

Regulation D (Reserve Requirements of Depository Institutions) and Regulation J (Collection of Checks and Other Items by Federal Reserve Banks and Funds Transfers through Fedwire)

On April 4, 2012, the Board approved final rules (Docket Nos. R-1433 and R-1434) to simplify the administration of reserve requirements; reduce administrative and operational costs for depository institutions, the Board, and Federal Reserve Banks; and clarify certain matters related to the Reserve Banks.[2] The amendments to Regulation D create a common two-week maintenance period for all depository institutions, establish a penalty-free band around reserve balance requirements in place of carryover and routine penalty waivers, discontinue certain as-of adjustments and replace others, and eliminate the contractual clearing balance program. Regulation J was amended to remove references to as-of adjustments and clarify other matters, including the handling of checks sent to Federal Reserve Banks. The Regulation D amendments related to the elimination of contractual clearing balances and as-of adjustments are effective July 12, 2012; the other Regulation D amendments are effective January 24, 2013. The Regulation J amendments are effective July 12, 2012.

Voting for this action: Chairman Bernanke, Vice Chair Yellen, and Governors Duke, Tarullo, and Raskin.

On October 25, 2012, the Board approved a final rule (Docket No. R-1433) to delay the effective date of certain Regulation D amendments to simplify the administration of reserve requirements, which were to take effect on January 24, 2013 (specifically, the creation of a common two-week maintenance period and the establishment of a penalty-free band around reserve balance requirements).[3] The delay will allow time for further development and testing of automated systems to ensure a smooth transition for affected institutions. The new effective date is June 27, 2013.

---

1 Governor Powell joined the Board on May 25, and Governor Stein joined the Board on May 30, 2012.

2 See *Federal Register* notices at www.gpo.gov/fdsys/pkg/FR-2012-04-12/html/2012-8562.htm and www.gpo.gov/fdsys/pkg/FR-2012-04-12/html/2012-8563.htm.

3 See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2012-11-05/html/2012-26731.htm.

Voting for this action: Chairman Bernanke, Vice Chair Yellen, and Governors Duke, Tarullo, Stein, and Powell. **Abstaining:** Governor Raskin.

Regulation H (Membership of State Banking Institutions in the Federal Reserve System) and Regulation Y (Bank Holding Companies and Change in Bank Control)

On June 7, 2012, the Board approved a final rule (Docket No. R-1401) to revise its market risk capital rule, which requires banking organizations with significant trading activities to adjust their capital requirements to reflect the market risk of those activities.[4] The Federal Deposit Insurance Corporation and the Office of the Comptroller of the Currency also implemented the revised rule for the institutions they supervise.

The rule implements certain revisions the Basel Committee on Banking Supervision made to the international framework for market risk capital standards between 2005 and 2010. Among other provisions, the final rule better captures positions for which the market risk capital rule is appropriate, reduces procyclicality in market risk capital requirements, enhances the market risk rule's sensitivity to risks that were not adequately captured in the previous version of the rule, and increases transparency through enhanced disclosures. The final rule also replaces credit ratings with alternative standards of creditworthiness, as required by the Dodd-Frank Act Wall Street Reform and Consumer Protection Act (the Dodd-Frank Act). The final rule is effective January 1, 2013.

Voting for this action: Chairman Bernanke, Vice Chair Yellen, and Governors Duke, Tarullo, Raskin, Stein, and Powell.

Regulation M (Consumer Leasing) and Regulation Z (Truth in Lending)

On October 25, 2012, the Board approved final rules (Docket Nos. R-1449 and R-1450) to increase the dollar threshold for exempt consumer credit and lease transactions from $51,800 to $53,000, in accordance with the Dodd-Frank Act.[5] The final rules were published jointly with the Consumer Financial Protection Bureau (CFPB). The dollar threshold is adjusted annually to reflect the annual percentage increase in the consumer price index. Transactions at or below the threshold are subject to the protections of the regulations. Although the Dodd-Frank Act generally transferred rulemaking authority under the Consumer Leasing Act and the Truth in Lending Act to the CFPB, the Board retains authority to issue rules for certain motor vehicle dealers. The final rules are effective January 1, 2013.

Voting for this action: Chairman Bernanke, Vice Chair Yellen, and Governors Duke, Tarullo, Raskin, Stein, and Powell.

Regulation HH (Designated Financial Market Utilities)

On July 26, 2012, the Board approved a final rule (Docket No. R-1412) to establish risk-management standards for certain financial market utilities (FMUs) designated as systemically important by the Financial Stability Oversight Council.[6] The final rule implements provisions of the Dodd-Frank Act that require the Board to establish such standards, as well as standards for determining when an FMU supervised by the Board must provide advance notice to the Board of proposed material changes to its rules, procedures, or operations. FMUs, such as payment systems, central securities depositories, and central counterparties, provide the infrastructure to clear and settle payments and other financial transactions. The final rule is effective September 14, 2012.

Voting for this action: Chairman Bernanke, Vice Chair Yellen, and Governors Duke, Tarullo, Raskin, Stein, and Powell.

Regulation II (Debit Card Interchange Fees and Routing)

On July 26, 2012, the Board approved a final rule (Docket No. R-1404) amending the provisions in Regulation II that govern adjustments to the debit card interchange fee standards to make an allowance for fraud-prevention costs incurred by debit card issuers subject to those standards.[7] Under the amendments, an issuer is eligible for an adjustment of no more than 1 cent per transaction (unchanged from the interim final rule), in addition to the interchange

---

[4] See Federal Register notice at www.gpo.gov/fdsys/pkg/FR-2012-08-30/html/2012-16759.htm.

[5] See *Federal Register* notices at www.gpo.gov/fdsys/pkg/FR-2012-11-21/html/2012-27996.htm and www.gpo.gov/fdsys/pkg/FR-2012-11-21/html/2012-27993.htm.

[6] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2012-08-02/html/2012-18762.htm.

[7] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2012-08-03/html/2012-18726.htm

transaction fee permitted by Regulation II, if that issuer develops and implements policies and procedures that are reasonably designed to take effective steps to reduce the occurrence of, and costs to all parties from, fraudulent debit card transactions. The final rule simplifies the elements required to be included in an issuer's fraud-prevention policies and procedures. The amendments also require an issuer that receives a fraud-prevention allowance to (1) review its fraud-prevention policies and procedures and their implementation at least annually and (2) update them as necessary in light of their effectiveness, their cost-effectiveness, and changes in the types of fraud and available methods of fraud prevention. The final rule also includes provisions relating to an issuer's notification of its eligibility for a fraud-prevention adjustment and prohibiting adjustments for issuers that are in substantial noncompliance with the Board's fraud-prevention standards. The final rule, which revises provisions already in effect under an interim final rule, is effective October 1, 2012.

Voting for this action: Chairman Bernanke, Vice Chair Yellen, and Governors Duke, Tarullo, Raskin, Stein, and Powell.

Regulation OO (Securities Holding Companies)

On May 25, 2012, the Board approved a final rule (Docket No. R-1430) to implement a provision of the Dodd-Frank Act that permits nonbank companies that own at least one registered securities broker or dealer (securities holding companies, or SHCs) and that are required by a foreign regulator or provision of foreign law to be subject to comprehensive consolidated supervision, but are not currently subject to such supervision, to register with the Board and subject themselves to supervision by the Board (covered SHCs).[8] The final rule outlines the requirements that covered SHCs must satisfy to make an effective election for Board supervision. Upon registration, these companies would be supervised as if they were bank holding companies; however, the restrictions on nonbanking activities in section 4 of the Bank Holding Company Act would not apply to them. The final rule is effective July 20, 2012.

Voting for this action: Chairman Bernanke, Vice Chair Yellen, and Governors Duke, Tarullo, and Raskin.

Regulation YY (Enhanced Prudential Standards)

On October 4, 2012, the Board approved final rules (Docket No. R-1438) to implement the Dodd-Frank Act's stress testing requirements for bank holding companies, state member banks, savings and loan holding companies (SLHCs), and nonbank financial companies designated for Board supervision by the Financial Stability Oversight Council.[9]

The act requires that the Board conduct supervisory stress tests of bank holding companies with total consolidated assets of $50 billion or more and nonbank financial companies supervised by the Board and also requires that these companies conduct semiannual company-run stress tests. In addition, the act requires that other financial companies that are regulated by a primary federal financial regulatory agency and have total consolidated assets of more than $10 billion conduct annual company-run stress tests. The final rules are effective November 15, 2012.

The Board began conducting supervisory stress tests under the final rules in the fall of 2012 for 18 bank holding companies that participated in the 2009 Supervisory Capital Assessment Program and subsequent Comprehensive Capital Analysis and Reviews. Also, these companies and their state member bank subsidiaries began conducting their own Dodd-Frank Act company-run stress tests in the fall of 2012. Other BHCs, state member banks, and SLHCs subject to the stress testing rules are required to comply with the rules beginning in October 2013. Companies with total consolidated assets between $10 billion and $50 billion that begin conducting their first company-run stress test in the fall of 2013 will not have to publicly disclose the results of that first stress test.

Voting for this action: Chairman Bernanke, Vice Chair Yellen, and Governors Duke, Tarullo, Raskin, Stein, and Powell.

8 See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2012-06-04/html/2012-13311.htm

9 See *Federal Register* notices at www.gpo.gov/fdsys/pkg/FR-2012-10-12/html/2012-24987.htm and www.gpo.gov/fdsys/pkg/FR-2012-10-12/html/2012-24988.htm.

Rules of Practice for Hearings

On November 5, 2012, the Board approved an amendment (Docket No. R-1451) to adjust the maximum amount of each statutory civil money penalty within its jurisdiction to account for inflation, as required under the Federal Civil Penalties Inflation Adjustment Act as amended by the Debt Collection Improvement Act.[10] The amendment is effective November 16, 2012.

Voting for this action: Chairman Bernanke, Vice Chair Yellen, and Governors Duke, Tarullo, Raskin, Stein, and Powell.

Policy Statements and Other Actions

Joint Guidance on the Effective Date of Section 716 of the Dodd-Frank Act

On March 28, 2012, the Board, acting with the Federal Deposit Insurance Corporation and the Office of the Comptroller of the Currency, approved joint guidance to clarify that the effective date of section 716 of the Dodd-Frank Act is July 16, 2013.[11] Section 716, the so-called swaps pushout provision, generally prohibits certain types of federal assistance to any entity defined to be a swaps entity with respect to any swap, security-based swap, or other activity of the swaps entity. Under section 716, "federal assistance" includes discount window lending or deposit insurance.

Voting for this action: Chairman Bernanke, Vice Chair Yellen, and Governors Duke, Tarullo, and Raskin.

Policy on Payment System Risk

On April 9, 2012, the Board approved technical changes to its Policy on Payment System Risk (Docket No. OP-1440) to conform with procedural changes made by the Department of the Treasury (Treasury) to the redemption of separately sorted savings bonds and to eliminate a reference to the contractual clearing balance program.[12] The Board's recent amendments to Regulation D eliminated this program. The policy revisions concerning separately sorted savings bond redemptions are effective April 11, 2012, and those related to the elimination of the contractual clearing balance program are effective July 12, 2012.

Voting for this action: Chairman Bernanke, Vice Chair Yellen, and Governors Duke, Tarullo, and Raskin.

Clarification of Volcker Rule Conformance Period

On April 16, 2012, the Board approved guidance (Docket No. OP-1441) clarifying that an entity covered by section 619 of the Dodd-Frank Act (the so-called Volcker Rule) has the full two-year period provided by statute, until July 21, 2014, to fully conform its activities and investments to the requirements of section 619 and any final implementing regulations, unless that period is extended by the Board.[13] The conformance period is intended to give markets and firms an opportunity to adjust to the prohibitions and restrictions on proprietary trading and on hedge fund and private equity fund activities imposed under section 619. (The Board, Office of the Comptroller of the Currency, Federal Deposit Insurance Corporation, Securities and Exchange Commission, and Commodity Futures Trading Commission had previously invited public comments on their proposal to implement the Volcker Rule.)

Voting for this action: Chairman Bernanke, Vice Chair Yellen, and Governors Duke, Tarullo, and Raskin.

Guidance on Stress Testing for Banking Organizations with Assets over $10 Billion

On May 9, 2012, the Board approved supervisory guidance (Docket No. OP-1421) outlining general principles for stress testing practices of banking organizations with total consolidated assets of more than $10 billion.[14] The guidance was issued jointly with the Federal Deposit Insurance Corporation and the Office of the Comptroller of the Currency.

The guidance highlights the importance of stress testing at banking organizations as an ongoing risk-management practice that supports a banking orga-

[10] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2012-11-16/html/2012-27857.htm.

[11] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2012-05-10/html/2012-11326.htm.

[12] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2012-04-17/html/2012-9211.htm.

[13] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2012-06-08/html/2012-13937.htm.

[14] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2012-05-17/html/2012-11989.htm.

nization's forward-looking assessment of its risks and better equips it to address a range of adverse outcomes. The guidance outlines general principles for a satisfactory stress testing framework and describes various stress testing approaches and how stress testing should be used at various levels within an organization. The guidance also discusses the importance of stress testing in capital and liquidity planning and the importance of strong internal governance and controls as part of an effective stress testing framework.

The Board approved final rules in October 2012 to implement the Dodd-Frank Act's stress testing requirements. (See Regulation YY on page 119.) Banking organizations are expected to follow the principles set forth in the guidance when conducting stress testing pursuant to the Dodd-Frank Act rules or other statutory or regulatory requirements. The guidance is effective July 23, 2012.

Voting for this action: Chairman Bernanke, Vice Chair Yellen, and Governors Duke, Tarullo, and Raskin.

Term Asset-Backed Securities Loan Facility

On June 27, 2012, the Board approved a reduction from $4.3 billion to $1.4 billion in the credit protection provided by Treasury, through its Troubled Asset Relief Program, for the Term Asset-Backed Securities Loan Facility (TALF).[15] The TALF program closed on June 30, 2010, with $43 billion in loans outstanding. Most TALF loans have been repaid or have matured, and the program has experienced no losses to date.

Voting for this action: Chairman Bernanke, Vice Chair Yellen, and Governors Duke, Tarullo, Raskin, Stein, and Powell.

Note: On January 15, 2013, the Board approved eliminating Treasury's credit protection for the TALF program. The Board and Treasury agreed that the credit protection was unnecessary because the accumulated fees collected through the program exceeded the amount of TALF loans outstanding, which had declined by then to $556 million.[16]

Revised Methodology for the Private Sector Adjustment Factor

On October 25, 2012, the Board approved modifications (Docket No. OP-1447) to the methodology for calculating the private sector adjustment factor (PSAF), which is used in setting fees for certain payment services provided to depository institutions.[17] The PSAF is an allowance for income taxes and other imputed expenses that would have been paid and profits that would have been earned if the Reserve Banks' priced services were provided by a private business. The Monetary Control Act requires that the Federal Reserve establish fees to recover the costs of providing payment services, including the PSAF, over the long run, to promote competition between the Reserve Banks and private-sector providers of payment services.

Beginning in 2013, the Board will estimate income tax and other imputed costs from the U.S. publicly traded firm market. Previously, the estimated income tax and other imputed costs were derived from top bank holding companies under the correspondent bank model, which relied on clearing balances held at Reserve Banks as a primary component. The Board eliminated the contractual clearing balance program earlier in 2012. (See Regulation D on page 117).

Voting for this action: Chairman Bernanke, Vice Chair Yellen, and Governors Duke, Tarullo, Raskin, Stein, and Powell.

Discount Rates for Depository Institutions in 2012

Under the Federal Reserve Act, the boards of directors of the Federal Reserve Banks must establish rates on discount window loans to depository institutions at least every 14 days, subject to review and determination by the Board of Governors.

Primary, Secondary, and Seasonal Credit

Primary credit, the Federal Reserve's main lending program for depository institutions, is extended at the primary credit rate, which is set above the usual level of short-term market interest rates. It is made available, with minimal administration and for very short terms, as a backup source of liquidity to

[15] See press release at www.federalreserve.gov/newsevents/press/monetary/20120628a.htm.

[16] See press release at www.federalreserve.gov/newsevents/press/monetary/20130115b.htm.

[17] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2012-11-08/html/2012-26918.htm.

depository institutions that, in the judgment of the lending Federal Reserve Bank, are in generally sound financial condition. Throughout 2012, the primary credit rate was ¾ percent.

Secondary credit is available in appropriate circumstances to depository institutions that do not qualify for primary credit. The secondary credit rate is set at a spread above the primary credit rate. Throughout 2012, the spread was set at 50 basis points; therefore, the secondary credit rate was 1¼ percent. Seasonal credit is available to smaller depository institutions to meet liquidity needs that arise from regular swings in their loans and deposits. The rate on seasonal credit is calculated every two weeks as an average of selected money-market yields, typically resulting in a rate close to the federal funds rate target. At year-end, the seasonal credit rate was 0.20 percent.[18]

Votes on Changes to Discount Rates for Depository Institutions

About every two weeks during 2012, the Board approved proposals by the 12 Reserve Banks to maintain the formulas for computing the secondary and seasonal credit rates. In 2012, the Board did not approve any changes in the primary credit rate.

[18] For current and historical discount rates, see www.frbdiscountwindow.org/.

Minutes of Federal Open Market Committee Meetings

The policy actions of the Federal Open Market Committee, contained in the minutes of its meetings, are presented in the Annual Report of the Board of Governors pursuant to the requirements of section 10 of the Federal Reserve Act. That section provides that the Board shall keep a complete record of the actions taken by the Board and by the Federal Open Market Committee on all questions of policy relating to open market operations, that it shall record therein the votes taken in connection with the determination of open market policies and the reasons underlying each policy action, and that it shall include in its annual report to Congress a full account of such actions.

The minutes of the meetings contain the votes on the policy decisions made at those meetings, as well as a summary of the information and discussions that led to the decisions. In addition, four times a year, starting with the October 2007 Committee meeting, a Summary of Economic Projections (SEP) is published as an addendum to the minutes.[1] The descriptions of economic and financial conditions in the minutes and the Summary of Economic Projections are based solely on the information that was available to the Committee at the time of the meetings.

Members of the Committee voting for a particular action may differ among themselves as to the reasons for their votes; in such cases, the range of their views is noted in the minutes. When members dissent from a decision, they are identified in the minutes and a summary of the reasons for their dissent is provided.

Policy directives of the Federal Open Market Committee are issued to the Federal Reserve Bank of New York as the Bank selected by the Committee to execute transactions for the System Open Market Account. In the area of domestic open market operations, the Federal Reserve Bank of New York operates under instructions from the Federal Open Market Committee that take the form of an Authorization for Domestic Open Market Operations and a Domestic Policy Directive. (A new Domestic Policy Directive is adopted at each regularly scheduled meeting.) In the foreign currency area, the Federal Reserve Bank of New York operates under an Authorization for Foreign Currency Operations, a Foreign Currency Directive, and Procedural Instructions with Respect to Foreign Currency Operations. Changes in the instruments during the year are reported in the minutes for the individual meetings.[2]

[1] In 2012, there were five SEPs due to a transition in the schedule.

[2] As of January 1, 2012, the Federal Reserve Bank of New York was operating under the Domestic Policy Directive approved at the December 13, 2011, Committee meeting. The other policy instruments (the Authorization for Domestic Open Market Operations, the Authorization for Foreign Currency Operations, the Foreign Currency Directive, and Procedural Instructions with Respect to Foreign Currency Operations) in effect as of January 1, 2012, were approved at the January 25–26, 2011, meeting.

Meeting Held on January 24–25, 2012

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors in Washington, D.C., on Tuesday, January 24, 2012, at 10:00 a.m., and continued on Wednesday, January 25, 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

Sarah Bloom Raskin

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

Thomas C. Baxter
Deputy General Counsel

Steven B. Kamin
Economist

David W. Wilcox
Economist

David Altig, Thomas A. Connors, Michael P. Leahy, William Nelson, Simon Potter, David Reifschneider, Glenn D. Rudebusch, and William Wascher
Associate Economists

Brian Sack
Manager, System Open Market Account

Michael S. Gibson
Director, Division of Banking Supervision and Regulation, Board of Governors

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

James A. Clouse
Deputy Director, Division of Monetary Affairs, Board of Governors

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

Daniel E. Sichel
Senior Associate Director, 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

Lawrence Slifman
Senior Adviser, Division of Research and Statistics, Board of Governors

Eric M. Engen[1] and Daniel M. Covitz
Associate Directors, Division of Research and Statistics, Board of Governors

Trevor A. Reeve
Associate Director, Division of International Finance, Board of Governors

Joshua Gallin[1]
Deputy Associate Director, Division of Research and Statistics, Board of Governors

[1] Attended Tuesday's session only.

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

Chiara Scotti
Senior Economist, Division of International Finance, Board of Governors

Louise Sheiner
Senior Economist, Division of Research and Statistics, Board of Governors

Lyle Kumasaka
Senior Financial Analyst, Division of Monetary Affairs, Board of Governors

Kurt F. Lewis
Economist, Division of Monetary Affairs, Board of Governors

Randall A. Williams
Records Management Analyst, Division of Monetary Affairs, Board of Governors

Kenneth C. Montgomery
First Vice President, Federal Reserve Bank of Boston

Jeff Fuhrer, Loretta J. Mester, Harvey Rosenblum, and Daniel G. Sullivan
Executive Vice Presidents, Federal Reserve Banks of Boston, Philadelphia, Dallas, and Chicago, respectively

Craig S. Hakkio, Mark E. Schweitzer, Christopher J. Waller, and Kei-Mu Yi
Senior Vice Presidents, Federal Reserve Banks of Kansas City, Cleveland, St. Louis, and Minneapolis, respectively

John Duca[2] and Andrew Haughwout[2]
Vice Presidents, Federal Reserve Banks of Dallas and New York, respectively

Julie Ann Remache
Assistant Vice President, Federal Reserve Bank of New York

Robert L. Hetzel
Senior Economist, Federal Reserve Bank of Richmond

Daniel Cooper[2]
Economist, Federal Reserve Bank of Boston

[2] Attended the discussion of the role of financial conditions in economic recovery.

Role of Financial Conditions in Economic Recovery: Lending and Leverage

Staff summarized research projects being conducted across the Federal Reserve System on the effects of changes in lending practices and household leverage on consumer spending in recent years. These projects provided a range of views regarding the size and importance of such effects. An analysis employing aggregate time-series data indicated that changes in income, household assets and liabilities, and credit availability can largely account for the movements in aggregate consumption seen since the mid-1990s; this finding suggests that changes in credit conditions may have been an important factor driving changes in the saving rate in recent years. A second analysis used data on borrowing, debt repayments, and other credit factors for individual borrowers; this study found that movements in leverage—resulting from voluntary loan repayments and from loan charge-offs—have had a substantial effect on the cash flow of many households over time, and thus presumably on their spending. However, a third study, which employed household-level data, suggested that movements in consumption before, during, and after the recession were driven primarily by employment, income, and net worth, leaving little variation to be explained by changes in leverage and credit availability.

In their discussion following the staff presentation, several meeting participants considered possible reasons for the differing results of the various analyses; participants also noted contrasts between these findings and those reported in some academic research. Several possible explanations for the varying conclusions were discussed, including differences across studies in model specification and data, as well as differences in the definition of deleveraging. In addition, it was noted that data limitations make it difficult to reach firm conclusions on this issue, at least at this time. Participants also considered the possible influence on aggregate consumer spending of changes in real interest rates and the distribution of income, the potential for policy actions to affect the fundamental factors driving household saving, and whether households' spending behavior is being affected by concerns about the future of Social Security.

Annual Organizational Matters

In the agenda for this meeting, it was reported that advices of the election of the following members and

alternate members of the Federal Open Market Committee for a term beginning January 24, 2012, had been received and that these individuals had executed their oaths of office.

The elected members and alternate members were as follows:

William C. Dudley
President of the Federal Reserve Bank of New York, with

Christine Cumming
First Vice President of the Federal Reserve Bank of New York, as alternate.

Jeffrey M. Lacker
President of the Federal Reserve Bank of Richmond, with

Eric Rosengren
President of the Federal Reserve Bank of Boston, as alternate.

Sandra Pianalto
President of the Federal Reserve Bank of Cleveland, with

Charles L. Evans
President of the Federal Reserve Bank of Chicago, as alternate.

Dennis P. Lockhart
President of the Federal Reserve Bank of Atlanta, with

James Bullard
President of the Federal Reserve Bank of St. Louis, as alternate.

John C. Williams
President of the Federal Reserve Bank of San Francisco, with

Esther L. George
President of the Federal Reserve Bank of Kansas City, as alternate.

By unanimous vote, the following officers of the Federal Open Market Committee were selected to serve until the selection of their successors at the first regularly scheduled meeting of the Committee in 2013:

Ben Bernanke
Chairman

William C. Dudley
Vice Chairman

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

Thomas Baxter
Deputy General Counsel

Richard M. Ashton
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

Glenn D. Rudebusch

Mark S. Sniderman

William Wascher

John A. Weinberg
Associate Economists

By unanimous vote, the Federal Reserve Bank of New York was selected to execute transactions for the System Open Market Account.

By unanimous vote, Brian Sack was selected to serve at the pleasure of the Committee as Manager, System Open Market Account, 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. Sack as Manager was satisfactory to the Board of Directors of the Federal Reserve Bank of New York.

By unanimous vote, the Authorization for Domestic Open Market Operations was amended to allow lend-

ing of securities on longer than an overnight basis to accommodate weekend, holiday, and similar trading conventions. The Guidelines for the Conduct of System Open Market Operations in Federal-Agency Issues remained suspended.

Authorization for Domestic Open Market Operations (Amended January 24, 2012)

1. The Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York, to the extent necessary to carry out the most recent domestic policy directive adopted at a meeting of the Committee:

   A. To buy or sell U.S. Government securities, including securities of the Federal Financing Bank, and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States in the open market, from or to securities dealers and foreign and international accounts maintained at the Federal Reserve Bank of New York, on a cash, regular, or deferred delivery basis, for the System Open Market Account at market prices, and, for such Account, to exchange maturing U.S. Government and Federal agency securities with the Treasury or the individual agencies or to allow them to mature without replacement;

   B. To buy or sell in the open market U.S. Government securities, and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States, for the System Open Market Account under agreements to resell or repurchase such securities or obligations (including such transactions as are commonly referred to as repo and reverse repo transactions) in 65 business days or less, at rates that, unless otherwise expressly authorized by the Committee, shall be determined by competitive bidding, after applying reasonable limitations on the volume of agreements with individual counterparties.

2. In order to ensure the effective conduct of open market operations, the Federal Open Market Committee authorizes the Federal Reserve Bank of New York to use agents in agency MBS-related transactions.

3. In order to ensure the effective conduct of open market operations, the Federal Open Market Committee authorizes the Federal Reserve Bank of New York to lend on an overnight basis U.S. Government securities and securities that are direct obligations of any agency of the United States, held in the System Open Market Account, to dealers at rates that shall be determined by competitive bidding. The Federal Reserve Bank of New York shall set a minimum lending fee consistent with the objectives of the program and apply reasonable limitations on the total amount of a specific issue that may be auctioned and on the amount of securities that each dealer may borrow. The Federal Reserve Bank of New York may reject bids which could facilitate a dealer's ability to control a single issue as determined solely by the Federal Reserve Bank of New York. The Federal Reserve Bank of New York may lend securities on longer than an overnight basis to accommodate weekend, holiday, and similar trading conventions.

4. In order to ensure the effective conduct of open market operations, while assisting in the provision of short-term investments for foreign and international accounts maintained at the Federal Reserve Bank of New York and accounts maintained at the Federal Reserve Bank of New York as fiscal agent of the United States pursuant to Section 15 of the Federal Reserve Act, the Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York:

   A. for System Open Market Account, to sell U.S. Government securities, and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States, to such accounts on the bases set forth in paragraph 1.A under agreements providing for the resale by such accounts of those securities in 65 business days or less on terms comparable to those available on such transactions in the market; and

   B. for New York Bank account, when appropriate, to undertake with dealers, subject to the conditions imposed on purchases and sales of securities in paragraph l.B, repurchase agreements in U.S. Government securities, and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States, and to

arrange corresponding sale and repurchase agreements between its own account and such foreign, international, and fiscal agency accounts maintained at the Bank.

Transactions undertaken with such accounts under the provisions of this paragraph may provide for a service fee when appropriate.

5. In the execution of the Committee's decision regarding policy during any intermeeting period, the Committee authorizes and directs the Federal Reserve Bank of New York, upon the instruction of the Chairman of the Committee, to adjust somewhat in exceptional circumstances the degree of pressure on reserve positions and hence the intended federal funds rate and to take actions that result in material changes in the composition and size of the assets in the System Open Market Account other than those anticipated by the Committee at its most recent meeting. Any such adjustment shall be made in the context of the Committee's discussion and decision at its most recent meeting and the Committee's long-run objectives for price stability and sustainable economic growth, and shall be based on economic, financial, and monetary developments during the intermeeting period. Consistent with Committee practice, the Chairman, if feasible, will consult with the Committee before making any adjustment.

The Committee voted to reaffirm the Authorization for Foreign Currency Operations, the Foreign Currency Directive, and the Procedural Instructions with Respect to Foreign Currency Operations as shown below. The votes to reaffirm these documents included approval of the System's warehousing agreement with the U.S. Treasury. Mr. Lacker dissented in the votes on the Authorization for Foreign Currency Operations and the Foreign Currency Directive to indicate his opposition to foreign currency intervention by the Federal Reserve. In his view, such intervention would be ineffective if it did not also signal a shift in domestic monetary policy; and if it did signal such a shift, it could potentially compromise the Federal Reserve's monetary policy independence.

Authorization for Foreign Currency Operations (Reaffirmed January 24, 2012)

1. The Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York, for System Open Market Account, to the extent necessary to carry out the Committee's foreign currency directive and express authorizations by the Committee pursuant thereto, and in conformity with such procedural instructions as the Committee may issue from time to time:

    A. To purchase and sell the following foreign currencies in the form of cable transfers through spot or forward transactions on the open market at home and abroad, including transactions with the U.S. Treasury, with the U.S. Exchange Stabilization Fund established by Section 10 of the Gold Reserve Act of 1934, with foreign monetary authorities, with the Bank for International Settlements, and with other international financial institutions:

    Australian dollars
    Brazilian reais
    Canadian dollars
    Danish kroner
    euro
    Japanese yen
    Korean won
    Mexican pesos
    New Zealand dollars
    Norwegian kroner
    Pounds sterling
    Singapore dollars
    Swedish kronor
    Swiss francs

    B. To hold balances of, and to have outstanding forward contracts to receive or to deliver, the foreign currencies listed in paragraph A above.

    C. To draw foreign currencies and to permit foreign banks to draw dollars under the reciprocal currency arrangements listed in paragraph 2 below, provided that drawings by either party to any such arrangement shall be fully

liquidated within 12 months after any amount outstanding at that time was first drawn, unless the Committee, because of exceptional circumstances, specifically authorizes a delay.

D. To maintain an overall open position in all foreign currencies not exceeding $25.0 billion. For this purpose, the overall open position in all foreign currencies is defined as the sum (disregarding signs) of net positions in individual currencies, excluding changes in dollar value due to foreign exchange rate movements and interest accruals. The net position in a single foreign currency is defined as holdings of balances in that currency, plus outstanding contracts for future receipt, minus outstanding contracts for future delivery of that currency, i.e., as the sum of these elements with due regard to sign.

2. The Federal Open Market Committee directs the Federal Reserve Bank of New York to maintain reciprocal currency arrangements ("swap" arrangements) for the System Open Market Account for periods up to a maximum of 12 months with the following foreign banks, which are among those designated by the Board of Governors of the Federal Reserve System under Section 214.5 of Regulation N, Relations with Foreign Banks and Bankers, and with the approval of the Committee to renew such arrangements on maturity:

Foreign bank	Amount of arrangement (millions of dollars equivalent)
Bank of Canada	2,000
Bank of Mexico	3,000

Any changes in the terms of existing swap arrangements, and the proposed terms of any new arrangements that may be authorized, shall be referred for review and approval to the Committee.

3. All transactions in foreign currencies undertaken under paragraph 1.A. above shall, unless otherwise expressly authorized by the Committee, be at prevailing market rates. For the purpose of providing an investment return on System holdings of foreign currencies or for the purpose of adjusting interest rates paid or received in connection with swap drawings, transactions with foreign central banks may be undertaken at non-market exchange rates.

4. It shall be the normal practice to arrange with foreign central banks for the coordination of foreign currency transactions. In making operating arrangements with foreign central banks on System holdings of foreign currencies, the Federal Reserve Bank of New York shall not commit itself to maintain any specific balance, unless authorized by the Federal Open Market Committee. Any agreements or understandings concerning the administration of the accounts maintained by the Federal Reserve Bank of New York with the foreign banks designated by the Board of Governors under Section 214.5 of Regulation N shall be referred for review and approval to the Committee.

5. Foreign currency holdings shall be invested to ensure that adequate liquidity is maintained to meet anticipated needs and so that each currency portfolio shall generally have an average duration of no more than 18 months (calculated as Macaulay duration). Such investments may include buying or selling outright obligations of, or fully guaranteed as to principal and interest by, a foreign government or agency thereof; buying such securities under agreements for repurchase of such securities; selling such securities under agreements for the resale of such securities; and holding various time and other deposit accounts at foreign institutions. In addition, when appropriate in connection with arrangements to provide investment facilities for foreign currency holdings, U.S. Government securities may be purchased from foreign central banks under agreements for repurchase of such securities within 30 calendar days.

6. All operations undertaken pursuant to the preceding paragraphs shall be reported promptly to the Foreign Currency Subcommittee and the Committee. The Foreign Currency Subcommittee consists of the Chairman and Vice Chairman of the Committee, the Vice Chairman of the Board of Governors, and such other member of the Board as the Chairman may designate (or in the absence of members of the Board serving on the Subcommittee, other Board members designated by the Chairman as alternates, and in the absence of the Vice Chairman of the Committee, the Vice Chairman's alternate). Meetings of the Subcommittee shall be called at the request of any mem-

ber, or at the request of the Manager, System Open Market Account ("Manager"), for the purposes of reviewing recent or contemplated operations and of consulting with the Manager on other matters relating to the Manager's responsibilities. At the request of any member of the Subcommittee, questions arising from such reviews and consultations shall be referred for determination to the Federal Open Market Committee.

7. The Chairman is authorized:

   A. With the approval of the Committee, to enter into any needed agreement or understanding with the Secretary of the Treasury about the division of responsibility for foreign currency operations between the System and the Treasury;

   B. To keep the Secretary of the Treasury fully advised concerning System foreign currency operations, and to consult with the Secretary on policy matters relating to foreign currency operations;

   C. From time to time, to transmit appropriate reports and information to the National Advisory Council on International Monetary and Financial Policies.

8. Staff officers of the Committee are authorized to transmit pertinent information on System foreign currency operations to appropriate officials of the Treasury Department.

9. All Federal Reserve Banks shall participate in the foreign currency operations for System Account in accordance with paragraph 3G(1) of the Board of Governors' Statement of Procedure with Respect to Foreign Relationships of Federal Reserve Banks dated January 1, 1944.

Foreign Currency Directive (Reaffirmed January 24, 2012)

1. System operations in foreign currencies shall generally be directed at countering disorderly market conditions, provided that market exchange rates for the U.S. dollar reflect actions and behavior consistent with IMF Article IV, Section 1.

2. To achieve this end the System shall:

   A. Undertake spot and forward purchases and sales of foreign exchange.

   B. Maintain reciprocal currency ("swap") arrangements with selected foreign central banks.

   C. Cooperate in other respects with central banks of other countries and with international monetary institutions.

3. Transactions may also be undertaken:

   A. To adjust System balances in light of probable future needs for currencies.

   B. To provide means for meeting System and Treasury commitments in particular currencies, and to facilitate operations of the Exchange Stabilization Fund.

   C. For such other purposes as may be expressly authorized by the Committee.

4. System foreign currency operations shall be conducted:

   A. In close and continuous consultation and cooperation with the United States Treasury;

   B. In cooperation, as appropriate, with foreign monetary authorities; and

   C. In a manner consistent with the obligations of the United States in the International Monetary Fund regarding exchange arrangements under IMF Article IV.

Procedural Instructions with Respect to Foreign Currency Operations (Reaffirmed January 24, 2012)

In conducting operations pursuant to the authorization and direction of the Federal Open Market Committee as set forth in the Authorization for Foreign Currency Operations and the Foreign Currency Directive, the Federal Reserve Bank of New York, through the Manager, System Open Market Account ("Manager"), shall be guided by the following procedural understandings with respect to consultations and clearances with the Committee, the Foreign Currency Subcommittee, and the Chairman of the Committee, unless otherwise directed by the Committee.

All operations undertaken pursuant to such clearances shall be reported promptly to the Committee.

1. The Manager shall clear with the Subcommittee (or with the Chairman, if the Chairman believes that consultation with the Subcommittee is not feasible in the time available):

   A. Any operation that would result in a change in the System's overall open position in foreign currencies exceeding $300 million on any day or $600 million since the most recent regular meeting of the Committee.

   B. Any operation that would result in a change on any day in the System's net position in a single foreign currency exceeding $150 million, or $300 million when the operation is associated with repayment of swap drawings.

   C. Any operation that might generate a substantial volume of trading in a particular currency by the System, even though the change in the System's net position in that currency might be less than the limits specified in 1.B.

   D. Any swap drawing proposed by a foreign bank not exceeding the larger of (i) $200 million or (ii) 15 percent of the size of the swap arrangement.

2. The Manager shall clear with the Committee (or with the Subcommittee, if the Subcommittee believes that consultation with the full Committee is not feasible in the time available, or with the Chairman, if the Chairman believes that consultation with the Subcommittee is not feasible in the time available):

   A. Any operation that would result in a change in the System's overall open position in foreign currencies exceeding $1.5 billion since the most recent regular meeting of the Committee.

   B. Any swap drawing proposed by a foreign bank exceeding the larger of (i) $200 million or (ii) 15 percent of the size of the swap arrangement.

3. The Manager shall also consult with the Subcommittee or the Chairman about proposed swap drawings by the System and about any operations that are not of a routine character.

By unanimous vote, the Committee reaffirmed its Program for Security of FOMC Information.

Statement on Longer-Run Goals and Monetary Policy Strategy

Following the Committee's disposition of organizational matters, participants considered a revised draft of a statement of principles regarding the FOMC's longer-run goals and monetary policy strategy. The revisions reflected discussion of an earlier draft during the Committee's December meeting as well as comments received over the intermeeting period. The Chairman noted that the proposed statement did not represent a change in the Committee's policy approach. Instead, the statement was intended to help enhance the transparency, accountability, and effectiveness of monetary policy.

In presenting the draft statement on behalf of the subcommittee on communications, Governor Yellen pointed out several key elements. First, the statement expresses the FOMC's commitment to explain its policy decisions as clearly as possible. Second, the statement specifies a numerical inflation goal in a context that firmly underscores the Federal Reserve's commitment to fostering both parts of its dual mandate. Third, the statement is intended to serve as an overarching set of principles that would be reaffirmed during the Committee's organizational meeting each year, and the bar for amending the statement would be high.

All participants but one supported adopting the revised statement of principles regarding longer-run goals and monetary policy strategy, which is reproduced below.

> "Following careful deliberations at its recent meetings, the Federal Open Market Committee (FOMC) has reached broad agreement on the following principles regarding its longer-run goals and monetary policy strategy. The Committee intends to reaffirm these principles and to make adjustments as appropriate at its annual organizational meeting each January.
>
> The FOMC is firmly committed to fulfilling its statutory mandate from the Congress of promoting maximum employment, stable prices, and moderate long-term interest rates. The Committee seeks to explain its monetary policy decisions to the public as clearly as possible. Such clarity facilitates well-informed decision-making by households and businesses, reduces

economic and financial uncertainty, increases the effectiveness of monetary policy, and enhances transparency and accountability, which are essential in a democratic society.

Inflation, employment, and long-term interest rates fluctuate over time in response to economic and financial disturbances. Moreover, monetary policy actions tend to influence economic activity and prices with a lag.

Therefore, the Committee's policy decisions reflect its longer-run goals, its medium-term outlook, and its assessments of the balance of risks, including risks to the financial system that could impede the attainment of the Committee's goals.

The inflation rate over the longer run is primarily determined by monetary policy, and hence the Committee has the ability to specify a longer-run goal for inflation. The Committee judges that inflation at the rate of 2 percent, as measured by the annual change in the price index for personal consumption expenditures, is most consistent over the longer run with the Federal Reserve's statutory mandate. Communicating this inflation goal clearly to the public helps keep longer-term inflation expectations firmly anchored, thereby fostering price stability and moderate long-term interest rates and enhancing the Committee's ability to promote maximum employment in the face of significant economic disturbances.

The maximum level of employment is largely determined by nonmonetary factors that affect the structure and dynamics of the labor market. These factors may change over time and may not be directly measurable. Consequently, it would not be appropriate to specify a fixed goal for employment; rather, the Committee's policy decisions must be informed by assessments of the maximum level of employment, recognizing that such assessments are necessarily uncertain and subject to revision. The Committee considers a wide range of indicators in making these assessments. Information about Committee participants' estimates of the longer-run normal rates of output growth and unemployment is published four times per year in the FOMC's Summary of Economic Projections. For example, in the most recent projections, FOMC participants' estimates of the longer-run normal rate of unemployment had a central tendency of 5.2 percent to 6.0 percent, roughly unchanged from last January but substantially higher than the corresponding interval several years earlier.

In setting monetary policy, the Committee seeks to mitigate deviations of inflation from its longer-run goal and deviations of employment from the Committee's assessments of its maximum level. These objectives are generally complementary. However, under circumstances in which the Committee judges that the objectives are not complementary, it follows a balanced approach in promoting them, taking into account the magnitude of the deviations and the potentially different time horizons over which employment and inflation are projected to return to levels judged consistent with its mandate."

All FOMC members voted to adopt this statement except Mr. Tarullo, who abstained because he questioned the ultimate usefulness of the statement in promoting better communication of the Committee's policy strategy.

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 Federal Open Market Committee (FOMC) met on December 13, 2011. 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 FOMC meeting. By unanimous vote, the Committee ratified the Desk's domestic transactions over the intermeeting period. There were no intervention operations in foreign currencies for the System's account over the intermeeting period.

Staff Review of the Economic Situation

The information reviewed at the January 24–25 meeting indicated that U.S. economic activity continued to expand moderately, while global growth appeared to be slowing. Overall conditions in the labor market improved further, although the unemployment rate remained elevated. Consumer price inflation was subdued, and measures of long-run inflation expectations remained stable.

The unemployment rate declined to 8.5 percent in December; however, both long-duration unemployment and the share of workers employed part time for economic reasons were still quite high. Private nonfarm employment continued to expand moderately, while state and local government employment decreased at a slower pace than earlier in 2011. Some indicators of firms' hiring plans improved. Initial claims for unemployment insurance edged lower, on balance, since the middle of December but remained at a level consistent with only modest employment growth.

Industrial production expanded in November and December, on net, and the rate of manufacturing capacity utilization moved up. Motor vehicle assemblies were scheduled to increase, on balance, in the first quarter of 2012, and broader indicators of manufacturing activity, such as the diffusion indexes of new orders from the national and regional manufacturing surveys, were at levels that suggested moderate growth in production in the near term.

Real personal consumption expenditures continued to rise moderately in November, boosted by spending for motor vehicles and other durables, although households' real disposable income edged down. In December, however, nominal retail sales excluding purchases at motor vehicle and parts outlets declined, and sales of motor vehicles also dropped slightly. Consumer sentiment improved further in early January but was still at a low level.

Activity in the housing market improved a bit in recent months but continued to be held down by the large overhang of foreclosed and distressed properties, uncertainty about future home prices, and tight underwriting standards for mortgage loans. Starts and permits for new single-family homes rose in November and December but remained only a little above the depressed levels seen earlier in 2011. Sales of new and existing homes also firmed somewhat in recent months, but home prices continued to trend lower.

Real business expenditures on equipment and software appeared to have decelerated in the fourth quarter. Nominal orders and shipments of nondefense capital goods excluding aircraft declined in November for a second month. Forward-looking indicators of firms' equipment spending were mixed: Some survey measures of business conditions and capital spending plans improved, but corporate bond spreads continued to be elevated and analysts' earnings expectations for producers of capital goods remained muted. Nominal business spending for nonresidential construction was unchanged in November and continued to be held back by high vacancy rates and tight credit conditions for construction loans. Inventories in most industries looked to be well aligned with sales, though motor vehicle stocks remained lean.

Monthly data for federal government spending pointed to a significant decline in real defense purchases in the fourth quarter. Real state and local government purchases seemed to be decreasing at a slower rate than during earlier quarters, as the pace of reductions in payrolls eased and construction spending leveled off in recent months.

The U.S. international trade deficit widened in November as exports fell and imports rose. Exports declined in most major categories, with the exception of consumer goods. Exports of industrial supplies and materials were especially weak, though the weakness was concentrated in a few particularly volatile categories and reflected, in part, declines in prices. The rise in imports largely reflected higher imports of petroleum products and automotive products, which more than offset decreases in most other broad categories of imports.

Overall U.S. consumer prices as measured by the price index for personal consumption expenditures were unchanged in November; as measured by the consumer price index, they were flat in December as well. Consumer energy prices decreased in recent months, while increases in consumer food prices slowed. Consumer prices excluding food and energy rose modestly in the past two months. Near-term inflation expectations from the Thomson Reuters/University of Michigan Surveys of Consumers were essentially unchanged in early January, and longer-term inflation expectations remained stable.

Available measures of labor compensation indicated that wage gains continued to be modest. Average hourly earnings for all employees posted a moderate gain in December, and their rate of increase from 12 months earlier remained slow.

Recent indicators of foreign economic activity pointed to a substantial deceleration in the fourth quarter of 2011. In the euro area, retail sales and industrial production were below their third-quarter averages in both October and November. Economic activity in much of Asia was disrupted by the effects

of severe flooding in Thailand, which affected supply chains in the region. Twelve-month inflation rates receded in several advanced and emerging market economies, and most central banks maintained policy rates or eased further while continuing to provide significant liquidity support.

Staff Review of the Financial Situation

Developments in Europe continued to be a central focus for investors over the intermeeting period as concerns persisted about the prospects for a durable solution to the European fiscal and financial difficulties. Nevertheless, market sentiment toward Europe appeared to brighten a bit, and U.S. economic data releases were somewhat better than investors expected, leading to some improvement in conditions in financial markets.

On balance over the period, the expected path for the federal funds rate implied by money market futures quotes was essentially unchanged. Yields on nominal Treasury securities rose slightly at intermediate and longer maturities. Indicators of inflation compensation derived from nominal and inflation-protected Treasury securities edged up.

U.S. financial institutions reportedly retained ready access to short-term funding markets; there were no significant dislocations in those markets over year-end. Dollar funding pressures for European banks eased slightly. While spreads of the London interbank offered rate (Libor) over overnight index swap (OIS) rates of the same maturity remained elevated, rates for unsecured overnight commercial paper (CP) issued by some entities with European parents declined substantially following the lowering of charges on the central bank liquidity swap lines with the Federal Reserve, the implementation by the European Central Bank (ECB) of its first three-year longer-term refinancing operation (LTRO), and the passage of year-end. In secured funding markets, spreads of overnight asset-backed CP rates over overnight unsecured CP rates also declined, and the general collateral repurchase agreement, or repo, market continued to function normally.

Indicators of financial stress eased somewhat over the intermeeting period, although they generally continued to be elevated. Market-based measures of possible spillovers from troubles at particular financial firms to the broader financial system were below their levels in the fall but remained above their levels prior to the financial crisis. Initial fourth-quarter earnings reports for large bank holding companies were mixed relative to market expectations, with poor capital market revenues weighing on the profits of institutions with significant trading operations. Although credit default swap (CDS) spreads of most large domestic bank holding companies remained elevated, they moved lower over the intermeeting period, and some institutions took advantage of easing credit conditions by issuing significant quantities of new long-term debt. Equity prices of most large domestic financial institutions outperformed the broader market, on net, over the intermeeting period. Nonetheless, the ratio of the market value of bank equity to its book value remained low for some large financial firms. Responses to the December Senior Credit Officer Opinion Survey on Dealer Financing Terms indicate that, since August, securities dealers have devoted increased time and attention to the management of concentrated credit exposures to other financial intermediaries, pointing to increased concern over counterparty risk.

Broad equity price indexes increased more than 6 percent, on net, over the intermeeting period, and option-implied equity volatility declined notably. Yields on investment-grade corporate bonds declined a bit relative to those on comparable-maturity Treasury securities, while spreads of speculative-grade corporate bond yields over yields on Treasury securities decreased noticeably. Indicators of the credit quality of nonfinancial corporations continued to be solid. Conditions in the secondary market for leveraged loans were stable, with median bid prices about unchanged. Financing conditions for large nonfinancial businesses generally remained favorable. Bond issuance by investment-grade nonfinancial corporations was robust, though below its elevated November pace, while issuance by lower-rated firms slowed, likely owing in part to seasonal factors. Issuance of leveraged loans was relatively modest in the fourth quarter compared with its rapid pace earlier in the year. Share repurchases and cash-financed mergers by nonfinancial firms maintained their recent strength in the third quarter, leaving net equity issuance deeply negative.

Financing conditions for commercial real estate (CRE) remained strained, and issuance of commercial mortgage-backed securities was very light in the fourth quarter. Responses to the January Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS) indicated that bank CRE lending standards continued to be extraordinarily tight, but some banks reported having reduced the spreads of loan rates over their cost of funds (compared with a

year ago) for the first time since 2007. Delinquency rates on commercial mortgages remained elevated, and CRE price indexes continued to fluctuate around levels substantially lower than their 2007 peaks.

Conditions in residential mortgage markets remained extremely tight. Although mortgage interest rates and yields on current-coupon agency MBS edged down to near their historical lows, mortgage refinancing activity continued to be subdued amid tight underwriting standards and low levels of home equity. Mortgage delinquency rates, while improving gradually, remained elevated relative to pre-crisis norms, and house prices continued to move lower. The price of subprime residential mortgage-backed securities (RMBS), as measured by the ABX index, rose over the intermeeting period, consistent with similar changes for other higher-risk fixed-income securities. RMBS prices were supported by reports of the sale of a significant portion of the RMBS held in the Maiden Lane II portfolio.

On the whole, conditions in consumer credit markets showed signs of improvement. Consumer credit increased in November, while delinquency rates on credit card loans in securitized pools held steady in November at historically low levels. Data on credit card solicitations and from responses to the January SLOOS suggested that lending standards on consumer loans continued to ease modestly.

Financing conditions for state and local governments were mixed. Gross long-term issuance of municipal bonds remained robust in December, with continued strength in new issuance for capital projects. CDS spreads for states inched down further over the intermeeting period, and yields on long-term general obligation municipal bonds fell notably. However, downgrades of municipal bonds continued to substantially outpace upgrades in the third quarter.

In the fourth quarter, bank credit continued to increase as banks accumulated agency MBS and growth of total loans picked up. Core loans—the sum of commercial and industrial (C&I) loans, real estate loans, and consumer loans—expanded modestly. Growth of C&I loans at domestic banks was robust but was partly offset by weakness at U.S. branches and agencies of European banks. Noncore loans rose sharply, on net, reflecting in part a surge in such loans at the U.S. branches and agencies of European institutions. Responses to the January SLOOS indicated that, in the aggregate, loan demand strengthened slightly and lending standards eased a bit further in the fourth quarter.

M2 increased at an annual rate of 5¼ percent in December, likely reflecting continued demand for safe and liquid assets given investor concerns over developments in Europe. In addition, demand deposits rose rapidly around year-end, reportedly because lenders in short-term funding markets chose to leave substantial balances with banks over the turn of the year. The monetary base increased in December, largely reflecting growth in currency. Reserve balances were roughly unchanged over the intermeeting period.

International financial markets seemed somewhat calmer over the intermeeting period than they had been in previous months, and the funding conditions faced by most European financial institutions and sovereigns eased somewhat in the wake of the ECB's first three-year LTRO. Short-term euro interest rates moved lower as euro-area institutions drew a substantial amount of three-year funds from the ECB, and dollar funding costs for European banks also appeared to decline. Spreads of yields on Italian and Spanish government debt over those on German bunds narrowed over the intermeeting period, with spreads on shorter-term debt falling particularly noticeably. The apparent improvement in market sentiment was not diminished by news late in the period that Standard & Poor's lowered its long-term sovereign bond ratings of nine euro-area countries and the European Financial Stability Facility or by news that negotiations over the terms of a voluntary private-sector debt exchange for Greece had not yet reached a conclusion.

The staff's broad index of the foreign exchange value of the dollar declined slightly over the intermeeting period. While the dollar fell against most other currencies, it appreciated against the euro. Foreign stock markets generally ended the period higher, with headline equity indexes in Europe and the emerging market economies up substantially, although emerging market equity and bond funds continued to experience outflows on net during the period.

Staff Economic Outlook

In the economic forecast prepared for the January FOMC meeting, the staff's projection for the growth in real gross domestic product (GDP) in the near term was revised down a bit. The revision reflected the apparent decline in federal defense purchases and

the somewhat shallower trajectory for consumer spending in recent months; the recent data on the labor market, production, and other spending categories were, on balance, roughly in line with the staff's expectations at the time of the previous forecast. The medium-term projection for real GDP growth in the January forecast was little changed from the one presented in December. Although the developments in Europe were expected to continue to weigh on the U.S. economy during the first half of this year, the staff still projected that real GDP growth would accelerate gradually in 2012 and 2013, supported by accommodative monetary policy, further improvements in credit availability, and rising consumer and business sentiment. The increase in real GDP was expected to be sufficient to reduce the slack in product and labor markets only slowly over the projection period, and the unemployment rate was anticipated to still be high at the end of 2013.

The staff's forecast for inflation was essentially unchanged from the projection prepared for the December FOMC meeting. With stable long-run inflation expectations and substantial slack in labor and product markets anticipated to persist over the forecast period, the staff continued to project that inflation would remain subdued in 2012 and 2013.

Participants' Views on Current Conditions and the Economic Outlook

In conjunction with this FOMC meeting, all participants—the five members of the Board of Governors and the presidents of the 12 Federal Reserve Banks—provided projections of output growth, the unemployment rate, and inflation for each year from 2011 through 2014 and over the longer run. 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. Starting with this meeting, participants also provided assessments of the path for the target federal funds rate that they view as appropriate and compatible with their individual economic projections. Participants' economic projections and policy assessments are described in more detail in the Summary of Economic Projections, which is attached as an addendum to these minutes.

In their discussion of the economic situation and outlook, meeting participants agreed that the information received since the Committee met in December suggested that the economy had been expanding moderately, notwithstanding some slowing in growth abroad. In general, labor market indicators pointed to some further improvement in labor market conditions, but progress was gradual and the unemployment rate remained elevated. Household spending had continued to advance at a moderate pace despite still-sluggish growth in real disposable income, but growth in business fixed investment had slowed. The housing sector remained depressed, with very low levels of activity; there were, however, signs of improvement in some local housing markets. Many participants observed that some indicators bearing on the economy's recent performance had shown greater-than-expected improvement, but a number also noted less favorable data; one noted that growth in final sales appeared to have slowed in the fourth quarter of last year even as output growth picked up. Inflation had been subdued in recent months, there was little evidence of wage or cost pressures, and longer-term inflation expectations had remained stable.

With respect to the economic outlook, participants generally anticipated that economic growth over coming quarters would be modest and, consequently, expected that the unemployment rate would decline only gradually. A number of factors were seen as likely to restrain the pace of economic expansion, including the slowdown in economic activity abroad, fiscal tightening in the United States, the weak housing market, further household deleveraging, high levels of uncertainty among households and businesses, and the possibility of increased volatility in financial markets until the fiscal and banking issues in the euro area are more fully addressed. Participants continued to expect these headwinds to ease over time and so anticipated that the recovery would gradually gain strength. However, participants agreed that strains in global financial markets continued to pose significant downside risks to the economic outlook. With unemployment expected to remain elevated, and with longer-term inflation expectations stable, almost all participants expected inflation to remain subdued in coming quarters—that is, to run at or below the 2 percent level that the Committee judges most consistent with its statutory mandate over the longer run.

In discussing the household sector, meeting participants noted that consumer spending had grown moderately in recent months. Consumer sentiment had improved since last summer, though its level was still quite low. Business contacts in the retail sector reported generally satisfactory holiday sales, but high-end retailers saw strong gains while lower-end

retailers saw mixed results. Contacts also reported widespread discounting. Major express delivery companies indicated very high volumes at year-end and into January. Several participants observed that consumer spending had outpaced growth in personal disposable income last year, and a few noted that households remained pessimistic about their income prospects and uncertain about the economic outlook. These observations suggested that growth of consumer spending might slow. However, a few other participants pointed to increasing job gains in recent months as contributing to an improving trend in real incomes and thus supporting continued moderate growth in consumer spending.

Reports from business contacts indicated that activity in the manufacturing, energy, and agricultural sectors continued to advance in recent months. Businesses generally reported that they remained cautious regarding capital spending and hiring; some contacts cited uncertainty about the economic outlook and about fiscal and regulatory policy. Nonetheless, business contacts had become somewhat more optimistic, with more contacts reporting plans to expand capacity and payrolls. Some companies indicated that they planned to relocate some production from abroad to the United States. A few participants noted that national and District surveys of firms' capital spending plans suggested that the recent slowing in business fixed investment was partly temporary. The combination of high energy prices and availability of new drilling technologies was promoting strong growth in investment outlays in the energy sector.

Participants generally saw the housing sector as still depressed. The level of activity remained quite weak, house prices were continuing to decline in most areas, and the overhang of foreclosed and distressed properties was still substantial. Nonetheless, there were some small signs of improvement. The inventory of unsold homes had declined, though in part because the foreclosure process had slowed, and issuance of permits for new single-family homes had risen from its lows. One participant again noted reports from some homebuilders suggesting that land prices were edging up and that financing was available from nonbank sources. Another participant cited reports from business contacts indicating that credit standards in mortgage lending were becoming somewhat less stringent. Yet another noted that recent changes to the Home Affordable Refinance Program, which were intended to streamline the refinancing of performing high-loan-to-value mortgages, were showing some success.

Participants generally expected that growth of U.S. exports was likely to be held back in the coming year by slower global economic growth. In particular, fiscal austerity programs in Europe and stresses in the European banking system seemed likely to restrain economic growth there, perhaps with some spillover to growth in Asia. One participant noted that shipping rates had declined of late, suggesting that a slowdown in international trade might be under way.

Participants agreed that recent indicators showed some further gradual improvement in overall labor market conditions: Payroll employment had increased somewhat more rapidly in recent months, new claims for unemployment insurance had trended lower, and the unemployment rate had declined. Some business contacts indicated that they planned to do more hiring this year than last. However, unemployment—including longer-term unemployment—remained elevated, and the numbers of discouraged workers and people working part time because they could not find full-time work were also still quite high. Participants expressed a range of views on the current extent of slack in the labor market. Very high long-duration unemployment might indicate a mismatch between unemployed workers' skills and employers' needs, suggesting that a substantial part of the increase in unemployment since the beginning of the recession reflected factors other than a shortfall in aggregate demand. In contrast, the quite modest increases in labor compensation of late, and the large number of workers reporting that they are working part time because their employers have cut their hours, suggested that underutilization of labor was still substantial. A few participants noted that the recent decline in the unemployment rate reflected declining labor force participation in large part, and judged that the decline in the participation rate was likely to be reversed, at least to some extent, as the recovery continues and labor demand picks up.

Meeting participants observed that financial conditions improved and financial market stresses eased somewhat during the intermeeting period: Equity prices rose, volatility declined, and bank lending conditions appeared to improve. Participants noted that the ECB's three-year refinancing operation had apparently contributed to improved conditions in European sovereign debt markets. Nonetheless, participants expected that global financial markets would remain focused on the evolving situation in Europe and anticipated that continued policy efforts would be necessary in Europe to fully address the area's fiscal and financial problems. U.S. banks

reported increases in commercial lending as some European lenders pulled back, and some banking contacts indicated that creditworthy companies' demand for credit had increased. A number of participants noted further improvement in the availability of loans to businesses, with a couple of them indicating that small business contacts had reported increased availability of bank credit. However, a few other participants commented that small businesses in their Districts continued to face difficulty in obtaining bank loans.

Participants observed that longer-run inflation expectations were still well anchored and also noted that inflation had been subdued in recent months, partly reflecting a decline in commodity prices and an easing of supply chain disruptions since mid-2011. In addition, labor compensation had risen only slowly and productivity continued to increase. One participant reported that a survey of business inflation expectations indicated firms were anticipating increases in unit costs on the order of 1¾ percent this year, just a bit higher than last year. Looking farther ahead, participants generally judged that the modest expansion in economic activity that they were projecting would be consistent with a gradual reduction in the current wide margins of slack in labor and product markets and with subdued inflation going forward. Some remained concerned that, with the persistence of considerable resource slack, inflation might continue to drift down and run below mandate-consistent levels for some time. However, a couple of participants were concerned that inflation could rise as the recovery continued and argued that providing additional monetary accommodation, or even maintaining the current highly accommodative stance of monetary policy over the medium run, would erode the stability of inflation expectations and risk higher inflation.

Committee participants discussed possible changes to the forward guidance that has been included in the Committee's recent post-meeting statements. Many participants thought it important to explore means for better communicating policymakers' thinking about future monetary policy and its relationship to evolving economic conditions. A couple of participants expressed concern that some press reports had misinterpreted the Committee's use of a date in its forward guidance as a commitment about its future policy decisions. Several participants thought it would be helpful to provide more information about the economic conditions that would be likely to warrant maintaining the current target range for the federal funds rate, perhaps by providing numerical thresholds for the unemployment and inflation rates. Different opinions were expressed regarding the appropriate values of such thresholds, reflecting different assessments of the path for the federal funds rate that would likely be appropriate to foster the Committee's longer-run goals. However, some participants worried that such thresholds would not accurately or effectively convey the Committee's forward-looking approach to monetary policy and thus would pose difficult communications issues, or that movements in the unemployment rate, by themselves, would be an unreliable measure of progress toward maximum employment. Several participants proposed either dropping or greatly simplifying the forward guidance in the Committee's statement, arguing that information about participants' assessments of the appropriate future level of the federal funds rate, which would henceforth be contained in the Summary of Economic Projections (SEP), made it unnecessary to include forward guidance in the post-meeting statement. However, several other participants emphasized that the information regarding the federal funds rate in the SEP could not substitute for a formal decision of the members of the FOMC. Participants agreed to continue exploring approaches for providing the public with greater clarity about the linkages between the economic outlook and the Committee's monetary policy decisions.

Committee Policy Action

Members viewed the information on U.S. economic activity received over the intermeeting period as suggesting that the economy had been expanding moderately and generally agreed that the economic outlook had not changed greatly since they met in December. While overall labor market conditions had improved somewhat further and unemployment had declined in recent months, almost all members viewed the unemployment rate as still elevated relative to levels that they saw as consistent with the Committee's mandate over the longer run. Available data indicated some slowing in the pace of economic growth in Europe and in some emerging market economies, pointing to reduced growth of U.S. exports going forward. With the economy facing continuing headwinds from the recent financial crisis and with growth slowing in a number of U.S. export markets, members generally expected a modest pace of economic growth over coming quarters, with the unemployment rate declining only gradually. Strains in global financial markets continued to pose significant downside risks to economic activity. Inflation had been subdued in recent

months, and longer-term inflation expectations remained stable. Members generally anticipated that inflation over coming quarters would run at or below the 2 percent level that the Committee judges most consistent with its mandate.

In their discussion of monetary policy for the period ahead, members agreed that it would be appropriate to maintain the existing highly accommodative stance of monetary policy. In particular, they agreed to keep the target range for the federal funds rate at 0 to ¼ percent, to continue the program of extending the average maturity of the Federal Reserve's holdings of securities as announced in September, and to retain the existing policies regarding the reinvestment of principal payments from Federal Reserve holdings of securities.

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 information and the modest changes to the economic outlook implied by the recent data. In light of the economic outlook, almost all members 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, longer than had been indicated in recent FOMC statements. In particular, several members said they anticipated that unemployment would still be well above their estimates of its longer-term normal rate, and inflation would be at or below the Committee's longer-run objective, in late 2014. It was noted that extending the horizon of the Committee's forward guidance would help provide more accommodative financial conditions by shifting downward investors' expectations regarding the future path of the target federal funds rate. Some members underscored the conditional nature of the Committee's forward guidance and noted that it would be subject to revision in response to significant changes in the economic outlook.

The Committee also stated that it is prepared to adjust the size and composition of its securities holdings as appropriate to promote a stronger economic recovery in a context of price stability. A few members observed that, in their judgment, current and prospective economic conditions—including elevated unemployment and inflation at or below the Committee's objective—could warrant the initiation of additional securities purchases before long. Other members indicated that such policy action could become necessary if the economy lost momentum or if inflation seemed likely to remain below its mandate-consistent rate of 2 percent over the medium run. In contrast, one member judged that maintaining the current degree of policy accommodation beyond the near term would likely be inappropriate; that member anticipated that a preemptive tightening of monetary policy would be necessary before the end of 2014 to keep inflation close to 2 percent.

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 approximately 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. The Committee also directs the Desk to maintain its existing policies of rolling over maturing Treasury securities into new issues and of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities in order to 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 December suggests that the economy has been expanding moderately, notwithstanding some slowing in global growth. While indicators point to some further improvement in overall labor market conditions, the unemployment rate remains elevated. Household spending has continued to advance, but growth in business fixed investment has slowed, and the housing sector remains depressed. Inflation has been subdued in recent months, 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 over coming quarters to be modest and consequently anticipates that the unemployment rate will decline only gradually toward levels that the Committee judges to be consistent with its dual mandate. Strains in global financial markets continue to pose significant downside risks to the economic outlook. The Committee also anticipates that over coming quarters, inflation will run at levels at or below those consistent with the Committee's dual mandate.
>
> To support a stronger economic recovery and to help ensure that inflation, over time, is at levels consistent with the 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 its program to extend the average maturity of its holdings of securities as announced in September. The Committee is maintaining its existing policies of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. The Committee will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as appropriate to promote a stronger economic recovery in a context of price stability."

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

Voting against this action: Jeffrey M. Lacker.

Mr. Lacker dissented because he preferred to omit the description of the time period over which economic conditions were likely to warrant exceptionally low levels of the federal funds rate. He expected that a preemptive tightening of monetary policy would be necessary to prevent an increase in inflation projections or inflation expectations prior to the end of 2014. More broadly, given the inclusion of FOMC participants' projections for the federal funds rate target in the Summary of Economic Projections, he saw no need to provide additional forward guidance in the Committee statement.

It was agreed that the next meeting of the Committee would be held on Tuesday, March 13, 2012. The meeting adjourned at 11:30 a.m. on January 25, 2012.

Notation Vote

By notation vote completed on December 30, 2011, the Committee unanimously approved the minutes of the FOMC meeting held on December 13, 2011.

William B. English
Secretary

Addendum: Summary of Economic Projections

In conjunction with the January 24–25, 2012, Federal Open Market Committee (FOMC) meeting, the members of the Board of Governors and the presidents of the Federal Reserve Banks, all of whom participate in the deliberations of the FOMC, submitted projections for growth of real output, the unemployment rate, and inflation for the years 2012 to 2014 and over the longer run. The economic projections were based on information available at the time of the meeting and participants' individual assumptions about factors likely to affect economic outcomes, including their assessments of appropriate monetary

policy. Starting with the January meeting, participants also submitted their assessments of the path for the target federal funds rate that they viewed as appropriate and compatible with their individual economic projections. 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. "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 interpretation of the Federal Reserve's objectives of maximum employment and stable prices.

As depicted in figure 1, FOMC participants projected continued economic expansion over the 2012–14 period, with real gross domestic product (GDP) rising at a modest rate this year and then strengthening further through 2014. Participants generally anticipated only a small decline in the unemployment rate this year. In 2013 and 2014, the pace of the expansion was projected to exceed participants' estimates of the longer-run sustainable rate of increase in real GDP by enough to result in a gradual further decline in the unemployment rate. However, at the end of 2014, participants generally expected that the unemployment rate would still be well above their estimates of the longer-run normal unemployment rate that they currently view as consistent with the FOMC's statutory mandate for promoting maximum employment and price stability. Participants viewed the upward pressures on inflation in 2011 from factors such as supply chain disruptions and rising commodity prices as having waned, and they anticipated that inflation would fall back in 2012. Over the projection period, most participants expected inflation, as measured by the annual change in the price index for personal consumption expenditures (PCE), to be at or below the FOMC's objective of 2 percent that was expressed in the Committee's statement of longer-run goals and policy strategy. Core inflation was projected to run at about the same rate as overall inflation.

As indicated in table 1, relative to their previous projections in November 2011, participants made small downward revisions to their expectations for the rate of increase in real GDP in 2012 and 2013, but they did not materially alter their projections for a noticeably stronger pace of expansion by 2014. With the unemployment rate having declined in recent months by more than participants had anticipated in the previous Summary of Economic Projections (SEP), they generally lowered their forecasts for the level of the unemployment rate over the next two years. Participants' expectations for both the longer-run rate of increase in real GDP and the longer-run unemployment rate were little changed from November. They did not significantly alter their forecasts for the rate of inflation over the next three years. However, in light of the 2 percent inflation that is the objective included in the statement of longer-run goals and

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

Variable	Central tendency[1]				Range[2]			
	2012	2013	2014	Longer run	2012	2013	2014	Longer run
Change in real GDP	2.2 to 2.7	2.8 to 3.2	3.3 to 4.0	2.3 to 2.6	2.1 to 3.0	2.4 to 3.8	2.8 to 4.3	2.2 to 3.0
November projection	2.5 to 2.9	3.0 to 3.5	3.0 to 3.9	2.4 to 2.7	2.3 to 3.5	2.7 to 4.0	2.7 to 4.5	2.2 to 3.0
Unemployment rate	8.2 to 8.5	7.4 to 8.1	6.7 to 7.6	5.2 to 6.0	7.8 to 8.6	7.0 to 8.2	6.3 to 7.7	5.0 to 6.0
November projection	8.5 to 8.7	7.8 to 8.2	6.8 to 7.7	5.2 to 6.0	8.1 to 8.9	7.5 to 8.4	6.5 to 8.0	5.0 to 6.0
PCE inflation	1.4 to 1.8	1.4 to 2.0	1.6 to 2.0	2.0	1.3 to 2.5	1.4 to 2.3	1.5 to 2.1	2.0
November projection	1.4 to 2.0	1.5 to 2.0	1.5 to 2.0	1.7 to 2.0	1.4 to 2.8	1.4 to 2.5	1.5 to 2.4	1.5 to 2.0
Core PCE inflation[3]	1.5 to 1.8	1.5 to 2.0	1.6 to 2.0		1.3 to 2.0	1.4 to 2.0	1.4 to 2.0	
November projection	1.5 to 2.0	1.4 to 1.9	1.5 to 2.0		1.3 to 2.1	1.4 to 2.1	1.4 to 2.2	

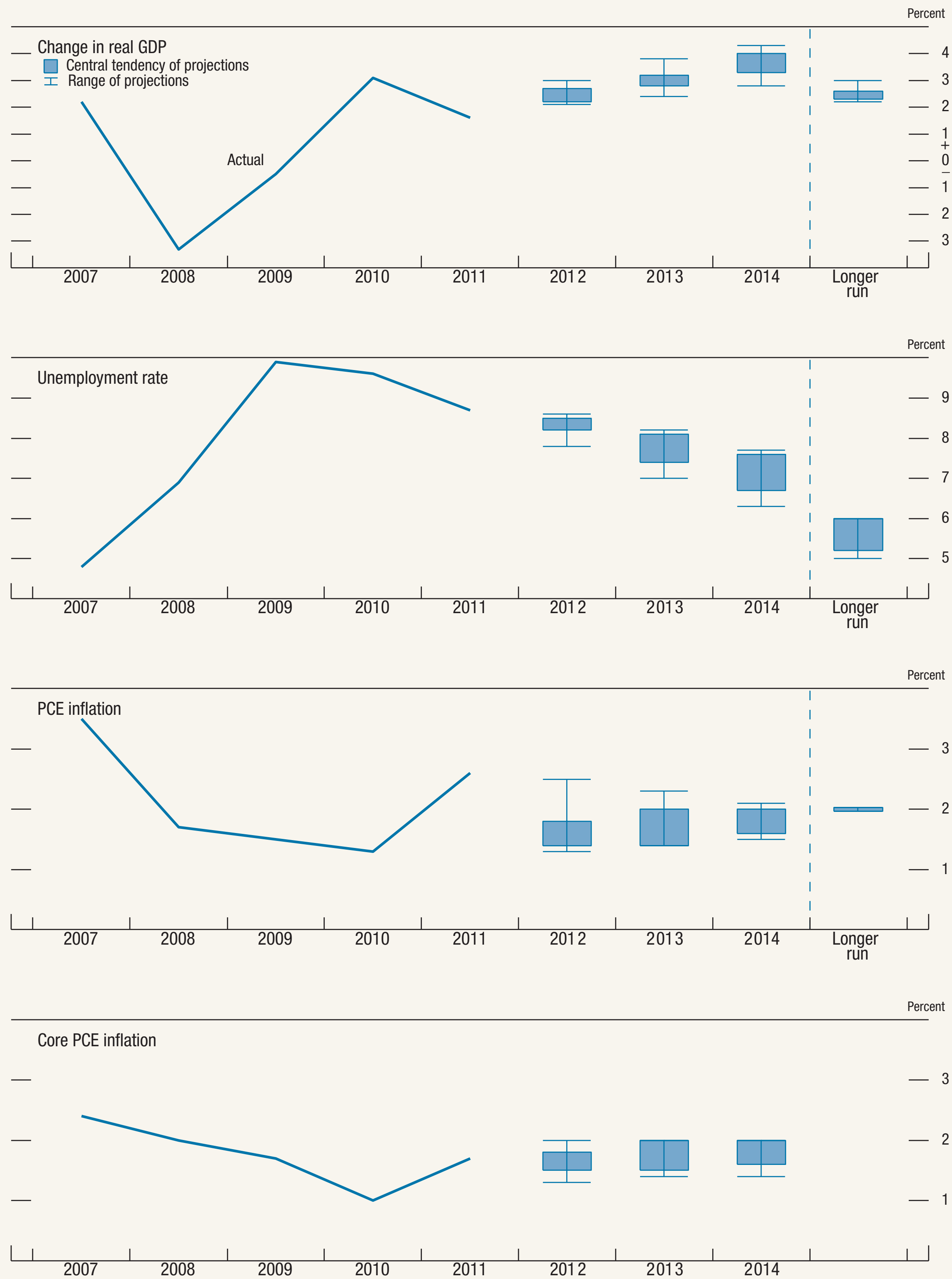
Note: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price 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 November projections were made in conjunction with the meeting of the Federal Open Market Committee on November 1–2, 2011.

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 notes to table 1. The data for the actual values of the variables are annual. The data for the change in real GDP, PCE inflation, and core PCE inflation shown for 2011 incorporate the advance estimate of GDP for the fourth quarter of 2011, which the Bureau of Economic Analysis released on January 27, 2012. This information was not available to FOMC meeting participants at the time of their meeting.

policy strategy adopted at the January meeting, the range and central tendency of their projections of longer-run inflation were all equal to 2 percent.

As shown in figure 2, most participants judged that highly accommodative monetary policy was likely to be warranted over coming years to promote a stronger economic expansion in the context of price stability. In particular, with the unemployment rate projected to remain elevated over the projection period and inflation expected to be subdued, six participants anticipated that, under appropriate monetary policy, the first increase in the target federal funds rate would occur after 2014, and five expected policy firming to commence during 2014 (the upper panel). The remaining six participants judged that raising the federal funds rate sooner would be required to forestall inflationary pressures or avoid distortions in the financial system. As indicated in the lower panel, all of the individual assessments of the appropriate target federal funds rate over the next several years were below the longer-run level of the federal funds rate, and 11 participants placed the target federal funds rate at 1 percent or lower at the end of 2014. Most participants indicated that they expected that the normalization of the Federal Reserve's balance sheet should occur in a way consistent with the principles agreed on at the June 2011 meeting of the FOMC, with the timing of adjustments dependent on the expected date of the first policy tightening. A few participants judged that, given their current assessments of the economic outlook, appropriate policy would include additional asset purchases in 2012, and one assumed an early ending of the maturity extension program.

A sizable majority of participants continued to judge the level of uncertainty associated with their projections for real activity and the unemployment rate as unusually high relative to historical norms. Many also attached a greater-than-normal level of uncertainty to their forecasts for inflation, but, compared with the November SEP, two additional participants viewed uncertainty as broadly similar to longer-run norms. As in November, many participants saw downside risks attending their forecasts of real GDP growth and upside risks to their forecasts of the unemployment rate; most participants viewed the risks to their inflation projections as broadly balanced.

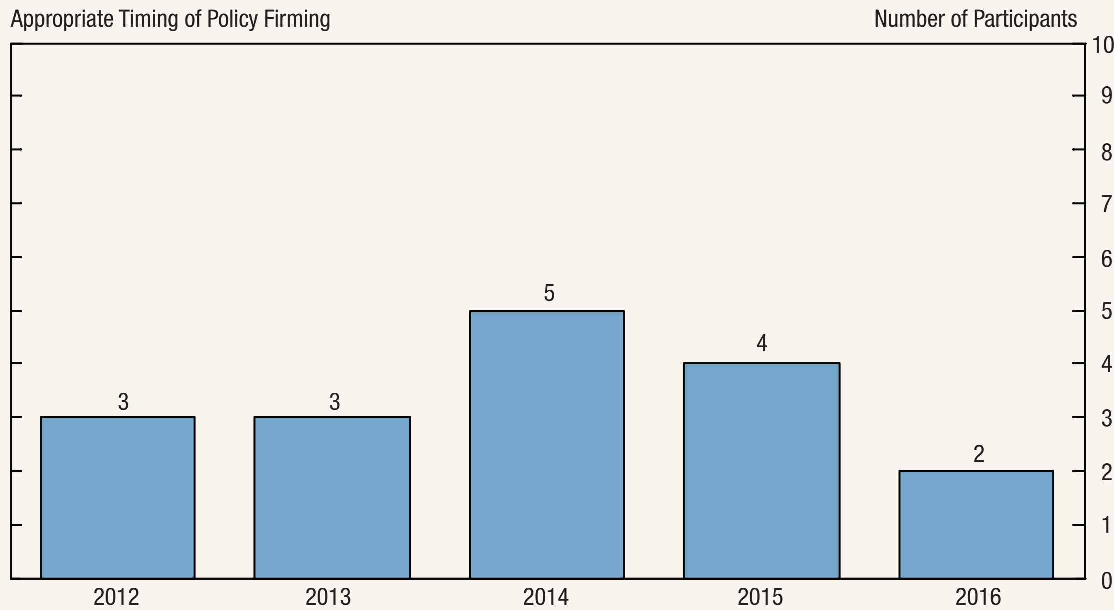
The Outlook for Economic Activity

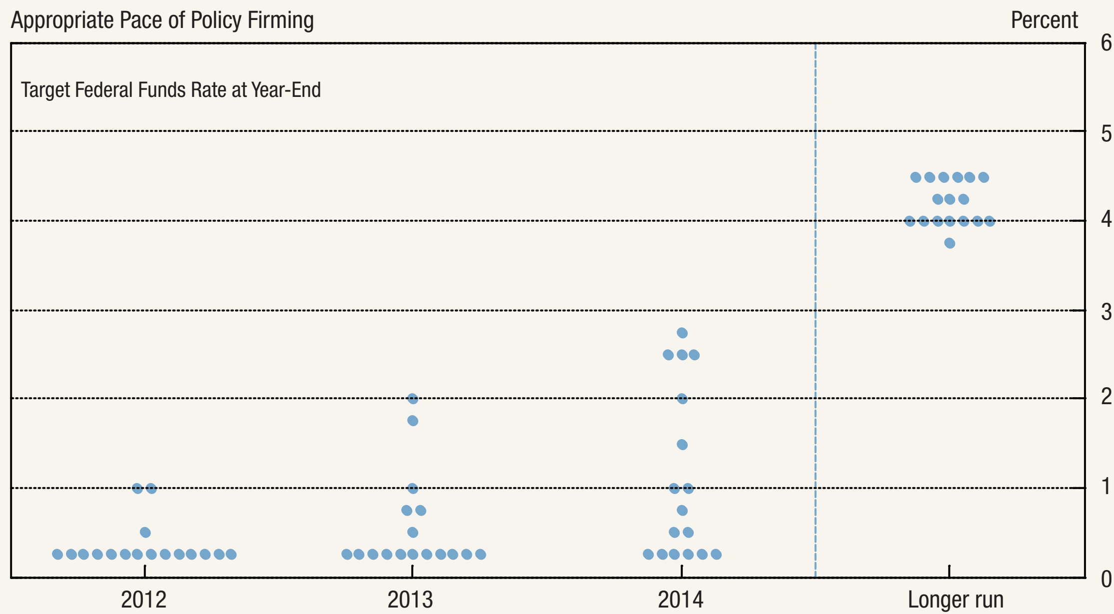
The central tendency of participants' forecasts for the change in real GDP in 2012 was 2.2 to 2.7 percent. This forecast for 2012, while slightly lower than the projection prepared in November, would represent a pickup in output growth from 2011 to a rate close to its longer-run trend. Participants stated that the economic information received since November showed continued gradual improvement in the pace of economic activity during the second half of 2011, as the influence of the temporary factors that damped activity in the first half of the year subsided. Consumer spending increased at a moderate rate, exports expanded solidly, and business investment rose further. Recently, consumers and businesses appeared to become somewhat more optimistic about the outlook. Financial conditions for domestic nonfinancial businesses were generally favorable, and conditions in consumer credit markets showed signs of improvement.

However, a number of factors suggested that the pace of the expansion would continue to be restrained. Although some indicators of activity in the housing sector improved slightly at the end of 2011, new homebuilding and sales remained at depressed levels, house prices were still falling, and mortgage credit remained tight. Households' real disposable income rose only modestly through late 2011. In addition, federal spending contracted toward year-end, and the restraining effects of fiscal consolidation appeared likely to be greater this year than anticipated at the time of the November projections. Participants also read the information on economic activity abroad, particularly in Europe, as pointing to weaker demand for U.S. exports in coming quarters than had seemed likely when they prepared their forecasts in November.

Participants anticipated that the pace of the economic expansion would strengthen over the 2013–14 period, reaching rates of increase in real GDP above their estimates of the longer-run rates of output growth. The central tendencies of participants' forecasts for the change in real GDP were 2.8 to 3.2 percent in 2013 and 3.3 to 4.0 percent in 2014. Among the considerations supporting their forecasts, participants cited their expectation that the expansion would be supported by monetary policy accommodation, ongoing improvements in credit conditions, rising household and business confidence, and strengthening household balance sheets. Many participants judged that U.S. fiscal policy would still be a drag on economic activity in 2013, but many anticipated that progress would be made in resolving the fiscal situation in Europe and that the foreign economic outlook would be more positive. Over time and in the absence of shocks, participants expected that the rate of increase of real GDP would converge to their estimates of its longer-run rate, with a central tendency

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





Note: In the upper panel, the height of each bar denotes the number of FOMC participants who judge that, under appropriate monetary policy and in the absence of further shocks to the economy, the first increase in the target federal funds rate from its current range of 0 to ¼ percent will occur in the specified calendar year. In the lower panel, each shaded circle indicates the value (rounded to the nearest ¼ percent) 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.

of 2.3 to 2.6 percent, little changed from their estimates in November.

The unemployment rate improved more in late 2011 than most participants had anticipated when they prepared their November projections, falling from 9.1 to 8.7 percent between the third and fourth quarters. As a result, most participants adjusted down their projections for the unemployment rate this year. Nonetheless, with real GDP expected to increase at a modest rate in 2012, the unemployment rate was projected to decline only a little this year, with the central tendency of participants' forecasts at 8.2 to 8.5 percent at year-end. Thereafter, participants expected that the pickup in the pace of the expansion in 2013 and 2014 would be accompanied by a further gradual improvement in labor market conditions. The central tendency of participants' forecasts for the unemployment rate at the end of 2013 was 7.4 to 8.1 percent, and it was 6.7 to 7.6 percent at the end of 2014. The central tendency of participants' estimates of the longer-run normal rate of unemployment that would prevail in the absence of further shocks was 5.2 to 6.0 percent. Most participants indicated that they anticipated that five or six years would be required to close the gap between the current unemployment rate and their estimates of the longer-run rate, although some noted that more time would likely be needed.

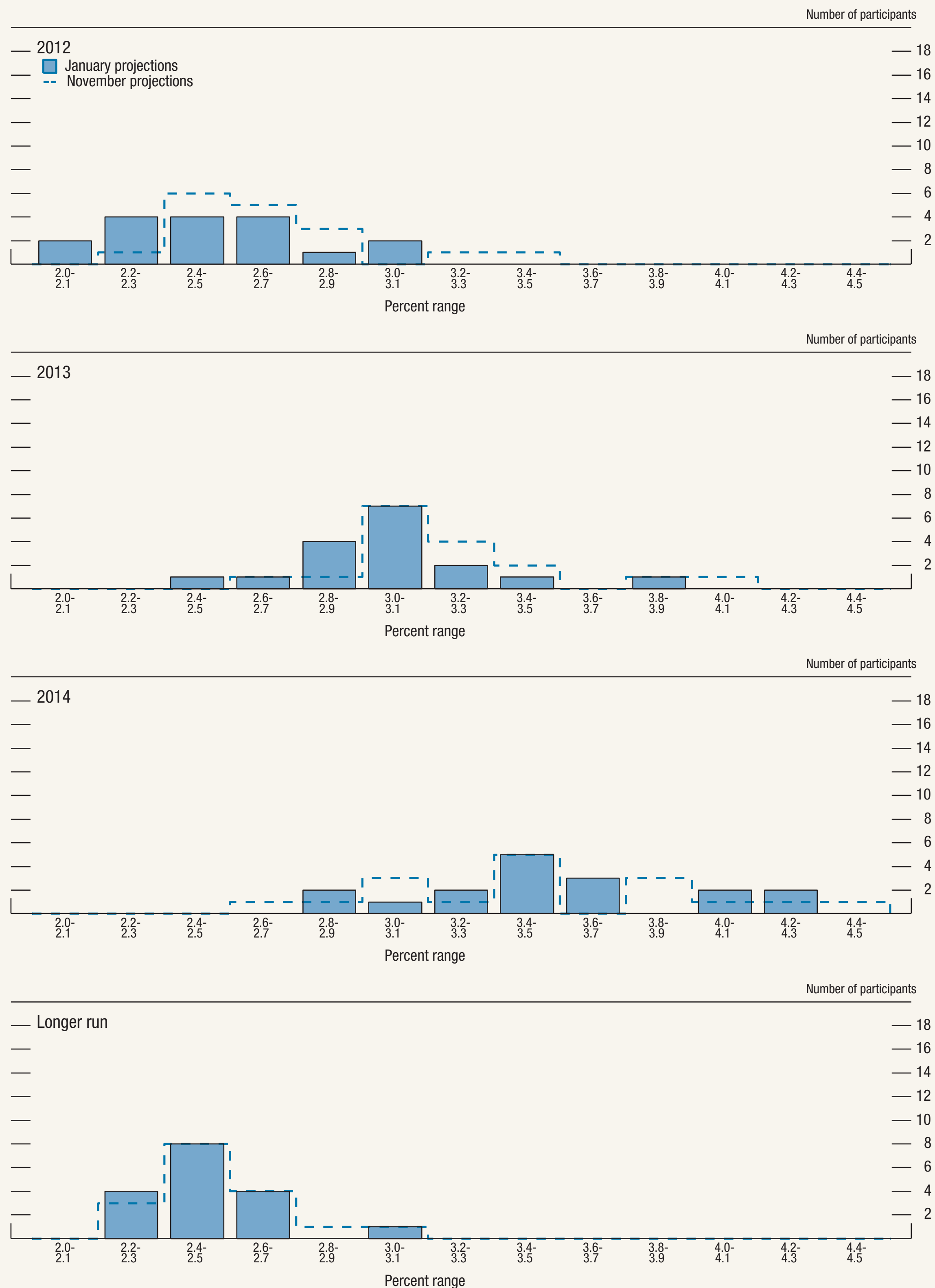
Figures 3.A and 3.B provide details on the diversity of participants' views regarding the likely outcomes for real GDP growth and the unemployment rate over the next three years and over the longer run. The dispersion in these projections reflected differences in participants' assessments of many factors, including appropriate monetary policy and its effects on economic activity, the underlying momentum in economic activity, the effects of the European situation, the prospective path for U.S. fiscal policy, the likely evolution of credit and financial market conditions, and the extent of structural dislocations in the labor market. Compared with their November projections, the range of participants' forecasts for the change in real GDP in 2012 narrowed somewhat and shifted slightly lower, as some participants reassessed the outlook for global economic growth and for U.S. fiscal policy. Many, however, made no material change to their forecasts for growth of real GDP this year. The dispersion of participants' forecasts for output growth in 2013 and 2014 remained relatively wide. Having incorporated the data showing a lower rate of unemployment at the end of 2011 than previously expected, the distribution of participants' projections for the end of 2012 shifted noticeably down relative to the November forecasts. The ranges for the unemployment rate in 2013 and 2014 showed less pronounced shifts toward lower rates and, as was the case with the ranges for output growth, remained wide. Participants made only modest adjustments to their projections of the rates of output growth and unemployment over the longer run, and, on net, the dispersions of their projections for both were little changed from those reported in November. The dispersion of estimates for the longer-run rate of output growth is narrow, with only one participant's estimate outside of a range of 2.2 to 2.7 percent. By comparison, participants' views about the level to which the unemployment rate would converge in the long run are more diverse, reflecting, among other things, different views on the outlook for labor supply and on the extent of structural impediments in the labor market.

The Outlook for Inflation

Participants generally viewed the outlook for inflation as very similar to that in November. Most indicated that, as they expected, the effects of the run-up in prices of energy and other commodities and the supply disruptions that occurred in the first half of 2011 had largely waned, and that inflation had been subdued in recent months. Participants also noted that inflation expectations had remained stable over the past year despite the fluctuations in headline inflation. Assuming no further supply shocks, most participants anticipated that both headline and core inflation would remain subdued over the 2012–14 period at rates at or below the FOMC's longer-run objective of 2 percent. Specifically, the central tendency of participants' projections for the increase in inflation, as measured by the PCE price index, in 2012 was 1.4 to 1.8 percent, and it edged up to a central tendency of 1.6 to 2.0 percent in 2014; the central tendencies of the forecasts for core PCE inflation were largely the same as those for the total measure.

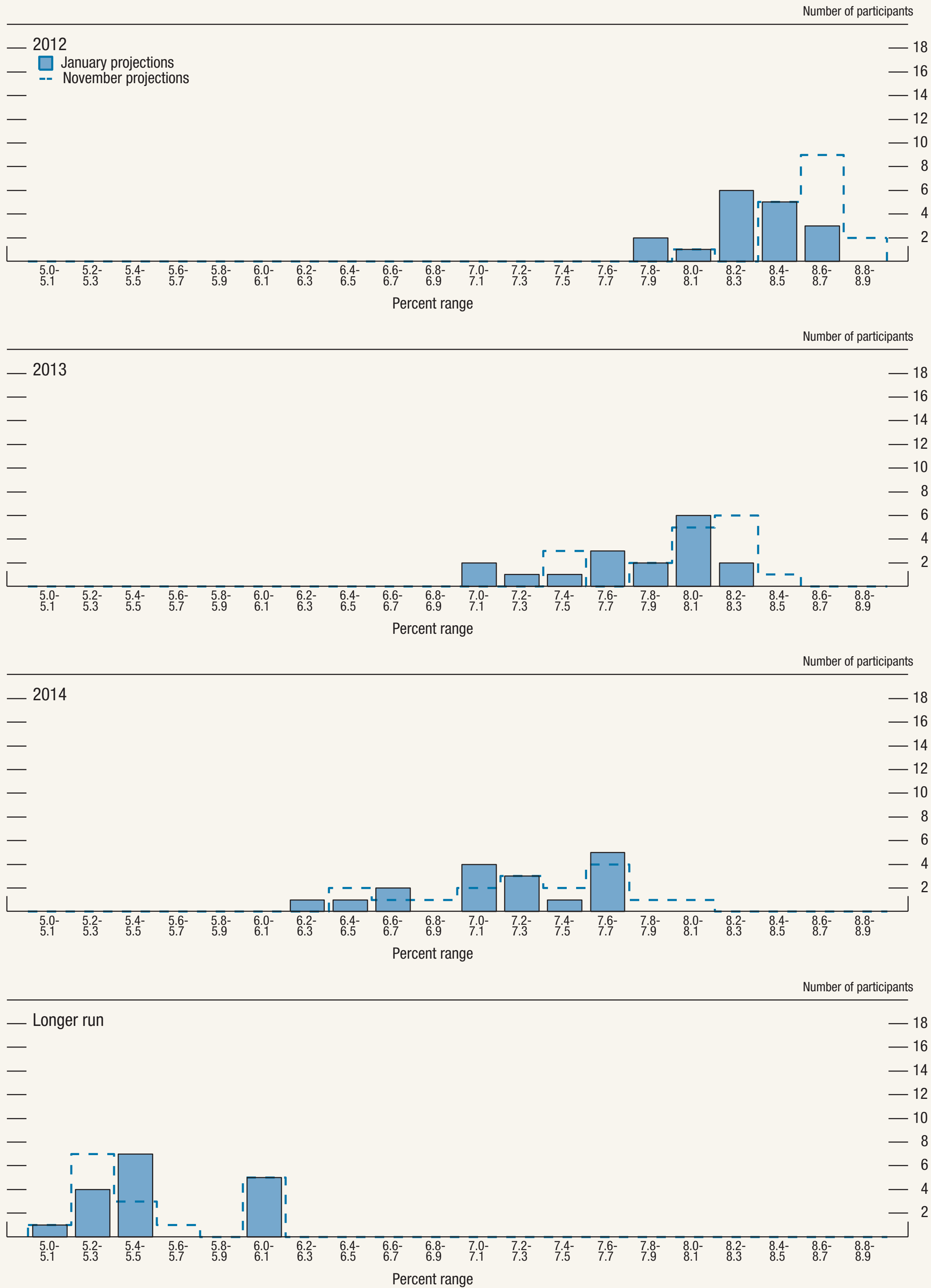
Figures 3.C and 3.D provide information about the diversity of participants' views about the outlook for inflation. Compared with their November projections, expectations for inflation in 2012 shifted down a bit, with some participants noting that the slowing in inflation at the end of 2011 had been greater than they anticipated. Nonetheless, the range of participants' forecasts for inflation in 2012 remained wide, and the dispersion was only slightly narrower in 2013. By 2014, the range of inflation forecasts narrowed more noticeably, as participants expected that, under appropriate monetary policy, inflation would begin to converge to the Committee's longer-run objective. In general, the dispersion of views on the outlook for inflation over the projection period represented differences in judgments regarding the

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



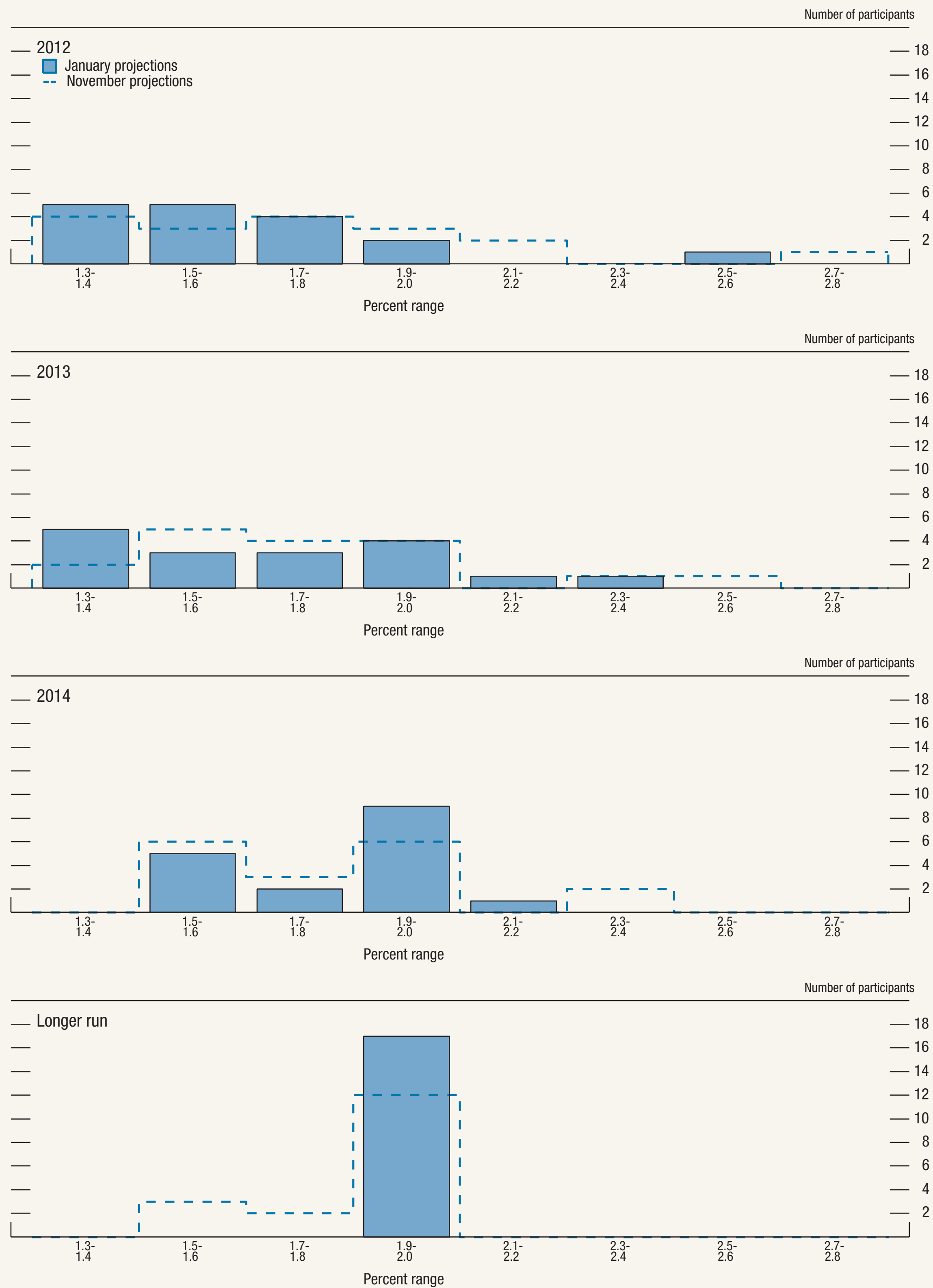
Note: Definitions of variables are in the general note to table 1.

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



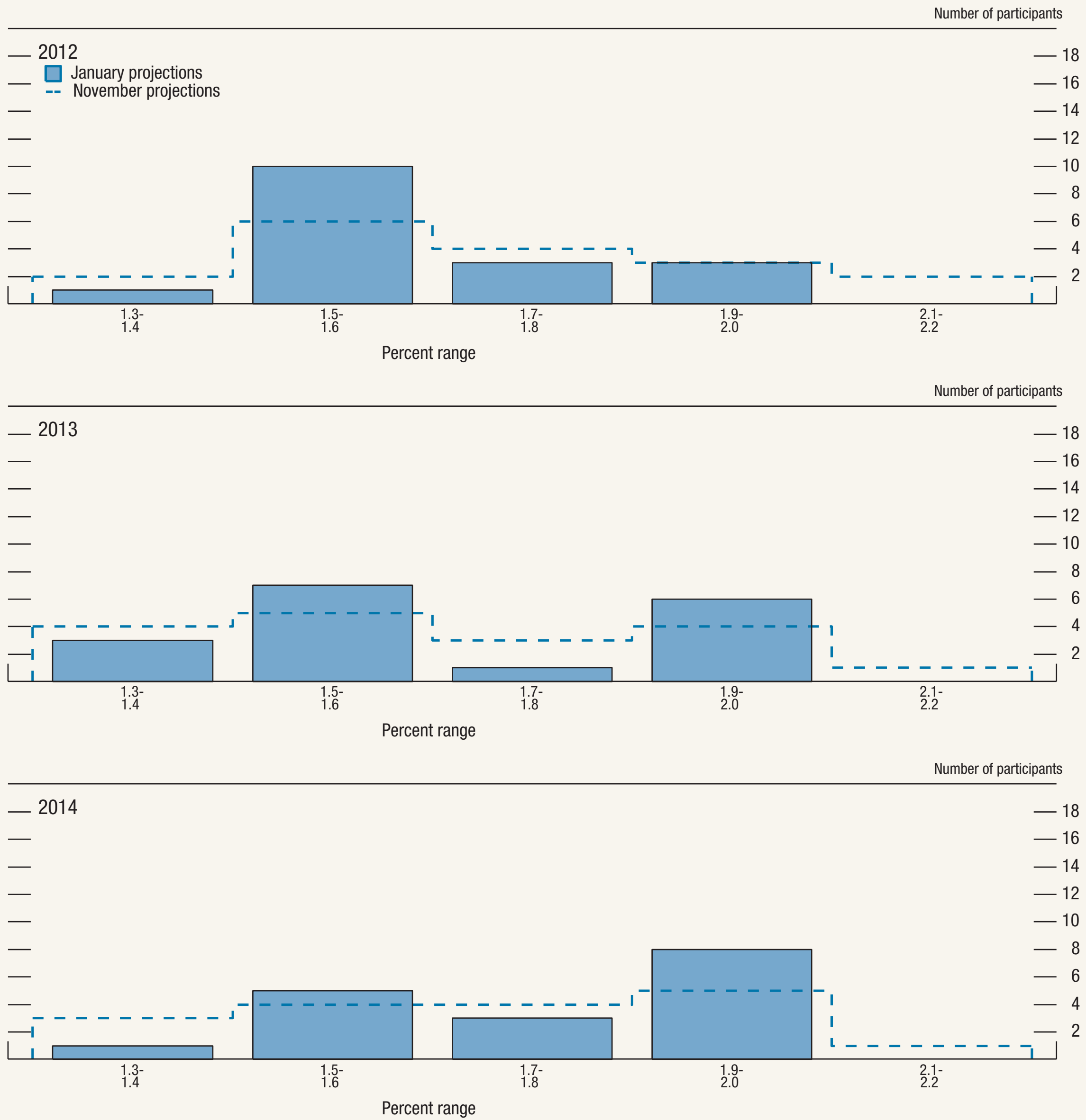
Note: Definitions of variables are in the general note to table 1.

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.

degree of slack in resource utilization and the extent to which slack influences inflation and inflation expectations. In addition, participants differed in their estimates of how the stance of monetary policy would influence inflation expectations.

Appropriate Monetary Policy

Most participants judged that the current outlook—for a moderate pace of economic recovery with the unemployment rate declining only gradually and inflation subdued—warranted exceptionally low levels of the federal funds rate at least until late 2014. In particular, five participants viewed appropriate policy firming as commencing during 2014, while six others judged that the first increase in the federal funds rate would not be warranted until 2015 or 2016. As a result, those 11 participants anticipated that the appropriate federal funds rate at the end of 2014 would be 1 percent or lower. Those who saw the first increase occurring in 2015 reported that they anticipated that the federal funds rate would be ½ percent at the end of that year. For the two participants who put the first increase in 2016, the appropriate target federal funds rate at the end of that year was 1½ and 1¾ percent. In contrast, six participants expected that an increase in the target federal funds rate would be appropriate within the next two years, and those participants anticipated that the target rate would need to be increased to around 1½ to 2¾ percent at the end of 2014.

Participants' assessments of the appropriate path for the federal funds rate reflected their judgments of the policy that would best support progress in achieving the Federal Reserve's mandate for promoting maximum employment and stable prices. Among the key factors informing participants' expectations about the appropriate setting for monetary policy were their assessments of the maximum level of employment, the Committee's longer-run inflation goal, the extent to which current conditions deviate from these mandate-consistent levels, and their projections of the likely time horizons required to return employment and inflation to such levels. Several participants commented that their assessments took into account the risks to the outlook for economic activity and inflation, and a few pointed specifically to the relevance of financial stability in their policy judgments. 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 could change if economic conditions were to evolve in an unexpected manner.

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. The longer-run nominal levels were in a range from 3¾ to 4½ percent, reflecting participants' judgments about the longer-run equilibrium level of the real federal funds rate and the Committee's inflation objective of 2 percent.

Participants also provided qualitative information on their views regarding the appropriate path of the Federal Reserve's balance sheet. A few participants' assessments of appropriate monetary policy incorporated additional purchases of longer-term securities in 2012, and a number of participants indicated that they remained open to a consideration of additional asset purchases if the economic outlook deteriorated. All but one of the participants continued to expect 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 payments on the securities holdings 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. Indeed, most participants saw sales of agency securities starting no earlier than 2015. However, those participants anticipating an earlier increase in the federal funds rate also called for earlier adjustments to the balance sheet, and one participant assumed an early end of the maturity extension program.

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 anticipated that economic conditions would warrant maintaining the current low level of the federal funds rate over the next two years. However, views on the appropriate level of the federal funds rate at the end of 2014 were more widely dispersed, with two-thirds of participants seeing the appropriate level of the federal funds rate as 1 percent or below and five seeing the appropriate rate as 2 percent or higher. Those participants who judged that a longer period of exceptionally low levels of the federal funds rate would be appropriate generally also anticipated that the pace of the economic expansion would be moderate and that the unemployment rate would decline only gradually, remaining well above its longer-run rate at the end of 2014. Almost all of these participants expected that inflation would be

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

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

relatively stable at or below the FOMC's longer-run objective of 2 percent until the time of the first increase in the federal funds rate. A number of them also mentioned their assessment that a longer period of low federal funds rates is appropriate when the federal funds rate is constrained by its effective lower bound. In contrast, the six participants who judged that policy firming should begin in 2012 or 2013 indicated that the Committee would need to act decisively to keep inflation at mandate-consistent levels and to limit the risk of undermining Federal Reserve credibility and causing a rise in inflation expectations. Several were projecting a faster pickup in economic activity, and a few stressed the risk of distortions in the financial system from an extended period of exceptionally low interest rates.

Uncertainty and Risks

Figure 4 shows that most participants continued to share the view that their projections for real GDP growth and the unemployment rate were subject to a higher level of uncertainty than was the norm during the previous 20 years.[3] Many also judged the level of uncertainty associated with their inflation forecasts to be higher than the longer-run norm, but that assessment was somewhat less prevalent among participants than was the case for uncertainty about real activity. Participants identified a number of factors that contributed to the elevated level of uncertainty about the outlook. In particular, many participants continued to cite risks related to ongoing developments in Europe. More broadly, they again noted difficulties in forecasting the path of economic recovery from a deep recession that was the result of a severe financial crisis and thus differed importantly from the experience with recoveries over the past 60 years. In that regard, participants continued to be uncertain about the pace at which credit conditions would ease and about prospects for a recovery in the housing sector. In addition, participants generally saw the outlook for fiscal and regulatory policies as still highly uncertain. Regarding the unemployment rate, several expressed uncertainty about how labor demand and supply would evolve over the forecast period. Among the sources of uncertainty about the outlook for inflation were the difficulties in assessing the current and prospective margins of slack in resource markets and the effect of such slack on prices.

Table 2. Average historical projection error ranges
Percentage points

Variable	2012	2013	2014
Change in real GDP[1]	±1.3	±1.7	±1.8
Unemployment rate[1]	±0.7	±1.4	±1.8
Total consumer prices[2]	±0.9	±1.0	±1.0

Note: Error ranges shown are measured as plus or minus the root mean squared error of projections for 1991 through 2010 that were released in the winter 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).

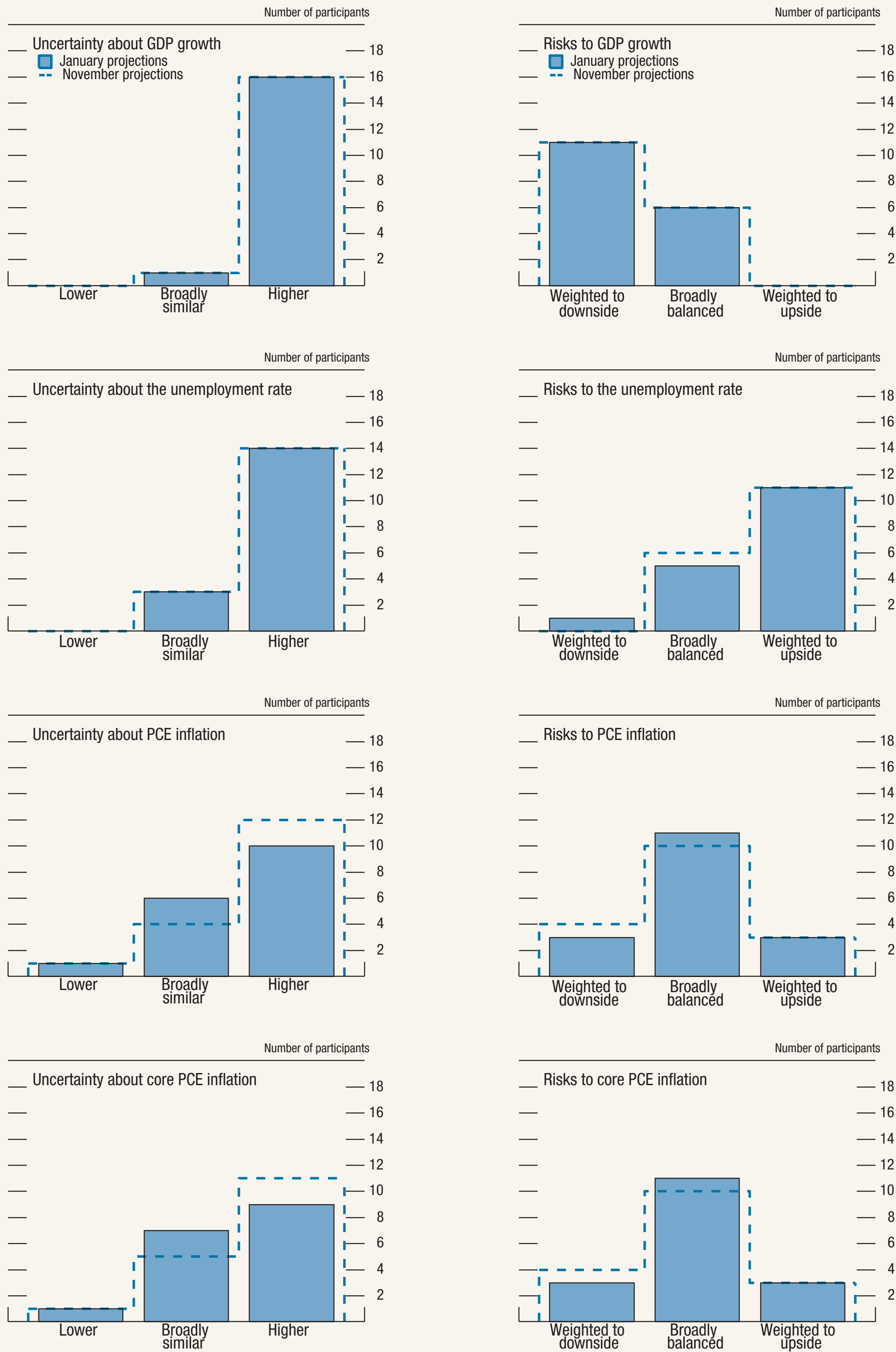
1 For definitions, refer to general note in table 1.

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.

A majority of participants continued to report that they saw the risks to their forecasts of real GDP growth as weighted to the downside and, accordingly, the risks to their projections for the unemployment rate as skewed to the upside. All but one of the remaining participants viewed the risks to both projections as broadly balanced, while one noted a risk that the unemployment rate might continue to decline more rapidly than expected. The most frequently cited downside risks to the projected pace of the economic expansion were the possibility of financial market and economic spillovers from the fiscal and financial issues in the euro area and the chance that some of the factors that have restrained the recovery in recent years could persist and weigh on economic activity to a greater extent than assumed in participants' baseline forecasts. In particular, some participants mentioned the downside risks to consumer spending from still-weak household balance sheets and only modest gains in real income, along with the possible effects of still-high levels of uncertainty regarding fiscal and regulatory policies that might damp businesses' willingness to invest and hire. A number of participants noted the risk of another disruption in global oil markets that could not only boost inflation but also reduce real income and spending. The participants who judged the risks to be broadly balanced also recognized a number of these downside risks to the outlook but saw them as counterbalanced by the possibility that the resilience of economic activity in late 2011 and the recent drop in the unemployment rate might signal greater underlying momentum in economic activity.

3 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 1991 to 2010. 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.

In contrast to their outlook for economic activity, most participants judged the risks to their projections of inflation as broadly balanced. Participants generally viewed the recent decline in inflation as having been in line with their earlier forecasts, and they noted that inflation expectations remain stable. While many of these participants saw the persistence of substantial slack in resource utilization as likely to keep inflation subdued over the projection period, a few others noted the risk that elevated resource slack might put more downward pressure on inflation than expected. In contrast, some participants noted the upside risks to inflation from developments in global oil and commodity markets, and several indicated that the current highly accommodative stance of monetary policy and the substantial liquidity currently in the financial system risked a pickup in inflation to a level above the Committee's objective. A few also pointed to the risk that uncertainty about the Committee's ability to effectively remove policy accommodation when appropriate could lead to a rise in inflation expectations.

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 1.7 to 4.3 percent in the current year, 1.3 to 4.7 percent in the second year, and 1.2 to 4.8 in the third year. The corresponding 70 percent confidence intervals for overall inflation would be 1.1 to 2.9 percent in the current year and 1.0 to 3.0 percent in the second and third years.

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.

Meeting Held on March 13, 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, March 13, 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

Sarah Bloom Raskin

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

Thomas C. Baxter
Deputy General Counsel

Steven B. Kamin
Economist

David W. Wilcox
Economist

David Altig, Thomas A. Connors, Michael P. Leahy, David Reifschneider, Glenn D. Rudebusch, William Wascher, and John A. Weinberg
Associate Economists

Brian Sack
Manager, System Open Market Account

Michael S. Gibson
Director, Division of Banking Supervision and Regulation, Board of Governors

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

James A. Clouse
Deputy Director, Division of Monetary Affairs, 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

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

Eric M. Engen, Michael T. Kiley, and Michael G. Palumbo
Associate Directors, Division of Research and Statistics, Board of Governors

Edward Nelson
Section Chief, Division of Monetary Affairs, Board of Governors

Harvey Rosenblum and Daniel G. Sullivan
Executive Vice Presidents, Federal Reserve Banks of Dallas and Chicago, respectively

Craig S. Hakkio, Geoffrey Tootell, and Kei-Mu Yi
Senior Vice Presidents, Federal Reserve Banks of Kansas City, Boston, and Minneapolis, respectively

Michael Dotsey, Joseph G. Haubrich, Lorie K. Logan, and David C. Wheelock
Vice Presidents, Federal Reserve Banks of Philadelphia, Cleveland, New York, and St. Louis, respectively

Marc Giannoni
Senior Economist, Federal Reserve Bank of New York

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 Federal Open Market Committee (FOMC) met on January 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 the intermeeting period. There were no intervention operations in foreign currencies for the System's account over the intermeeting period.

Staff Review of the Economic Situation

The information reviewed at the March 13 meeting suggested that economic activity was expanding moderately. Labor market conditions continued to improve and the unemployment rate declined further, although it remained elevated. Overall consumer price inflation was relatively subdued in recent months. More recently, prices of crude oil and gasoline increased substantially. Measures of long-run inflation expectations remained stable.

Private nonfarm employment rose at an appreciably faster average pace in January and February than in the fourth quarter of last year, and declines in total government employment slowed in recent months. The unemployment rate decreased to 8.3 percent in January and stayed at that level in February. Both the rate of long-duration unemployment and the share of workers employed part time for economic reasons continued to be high. Initial claims for unemployment insurance trended lower over the intermeeting period and were at a level consistent with further moderate job gains.

Manufacturing production increased considerably in January, and the rate of manufacturing capacity utilization stepped up. Factory output was boosted by a sizable expansion in the production of motor vehicles, but there also were solid and widespread gains in other industries. In February, motor vehicle assemblies remained near the strong pace recorded in January; they were scheduled to edge up, on net, through the second quarter. Broader indicators of manufacturing activity, such as the diffusion indexes of new orders from the national and regional manufacturing surveys, were at levels suggesting moderate increases in factory production in the coming months.

Households' real disposable income increased, on balance, in December and January as labor earnings rose solidly. Moreover, households' net worth grew in the fourth quarter of last year and likely was boosted further by gains in equity values thus far this year. Nevertheless, real personal consumption expenditures (PCE) were reported to have been flat in December and January. Although households' purchases of motor vehicles rose briskly, spending for other consumer goods and services was weak. In February, nominal retail sales excluding purchases at motor vehicle and parts outlets increased moderately, while motor vehicle sales continued to climb. Consumer sentiment was little changed in February, and households remained downbeat about both the economic outlook and their own income and finances.

Housing market activity improved somewhat in recent months but continued to be restrained by the substantial inventory of foreclosed and distressed properties, tight credit conditions for mortgage loans, and uncertainty about the economic outlook and future home prices. After increasing in December, starts of new single-family homes remained at that higher level in January, likely boosted in part by unseasonably warm weather; in both months, starts ran above permit issuance. Sales of new and existing homes stepped up further in recent months, though they still remained at quite low levels. Home prices were flat, on balance, in December and January.

Real business expenditures on equipment and software rose at a notably slower pace in the fourth quar-

ter of last year than earlier in the year. Moreover, nominal orders and shipments of nondefense capital goods declined in January. However, a number of forward-looking indicators of firms' equipment spending improved, including some survey measures of business conditions and capital spending plans. Nominal business spending for nonresidential construction firmed, on net, in December and January, but the level of spending was still subdued, in part reflecting high vacancy rates and tight credit conditions for construction loans. Inventories in most industries looked to be reasonably well aligned with sales in recent months, although stocks of motor vehicles continued to be lean.

Data for federal government spending in January and February indicated that real defense expenditures continued to step down after decreasing significantly in the fourth quarter. Real state and local government purchases looked to be declining at a slower pace than last year, as those governments' payrolls edged up in January and February and their nominal construction spending rose a little in January.

The U.S. international trade deficit widened in December and January, as imports increased more than exports. The expansion of imports was spread across most categories, with petroleum products and automotive products posting strong gains in January. The rise in exports was supported by shipments of capital goods and automotive products, while exports of consumer goods and industrial supplies declined on average. Data through December indicated that net exports made a moderate negative contribution to the rate of growth in real gross domestic product (GDP) in the fourth quarter of last year.

Overall U.S. consumer prices, as measured by the PCE price index, increased at a modest rate in December and January. Consumer energy prices rose in January after decreasing markedly in December, and survey data indicated that gasoline prices moved up considerably in February and early March. Meanwhile, increases in consumer food prices slowed in recent months. Consumer prices excluding food and energy also rose modestly in December and January. Near-term inflation expectations from the Thomson Reuters/University of Michigan Surveys of Consumers were unchanged in February, and longer-term inflation expectations in the survey remained in their recent range.

Measures of labor compensation generally indicated that nominal wage gains continued to be subdued. Increases in compensation per hour in the nonfarm business sector picked up somewhat over the four quarters of 2011. However, the employment cost index increased at a more modest pace than the compensation per hour measure over the past year, and the 12-month change in average hourly earnings for all employees remained muted in January and February.

Recent indicators suggested some improvement in foreign economic activity early this year after a significant slowing in the fourth quarter of last year. Aggregate output in the euro area contracted in the fourth quarter, but manufacturing purchasing managers indexes (PMIs) improved in January and February relative to their low fourth-quarter readings, and consumer and business confidence edged up. Floods caused steep production declines in the fourth quarter in Thailand and also had negative effects on output in other countries linked through Thai supply chains. However, economic activity in Thailand recovered sharply around year-end, and manufacturing PMIs moved up across Asia through February. Higher prices for energy and food put upward pressure on headline inflation in foreign economies, but measures of core inflation remained subdued.

Staff Review of the Financial Situation

On balance, U.S. financial conditions became somewhat more supportive of growth over the intermeeting period, and strains in global financial markets eased, as domestic and foreign economic data were generally better than market participants had expected and investors appeared to see diminished downside risks associated with the situation in Europe.

Measures of the expected path for the federal funds rate derived from overnight index swap (OIS) rates suggested that the near-term portion of the expected policy rate path was about unchanged, on balance, since the January FOMC meeting, but the path beyond the middle of 2014 shifted down a bit, reportedly reflecting in part the change in the forward rate guidance in the Committee's January statement. On balance, yields on Treasury securities were little changed over the intermeeting period. Indicators of inflation compensation over the next five years edged up, while changes in measures of longer-term inflation compensation were mixed.

Conditions in unsecured short-term dollar funding markets improved over the period, especially for

financial institutions with European parents. The spread of the three-month London interbank offered rate (LIBOR) over the OIS rate narrowed. In addition, spreads of rates on asset-backed commercial paper over those on AA-rated nonfinancial paper decreased significantly, and the amounts outstanding from programs with European sponsors remained stable. Moreover, the average maturity of unsecured U.S. commercial paper issued by European banks lengthened somewhat over the intermeeting period.

Responses to the March 2012 Senior Credit Officer Opinion Survey on Dealer Financing Terms indicated little change, on balance, over the past three months in credit terms for important classes of counterparties. Demand for securities financing was reported to have risen somewhat across asset types, but dealers indicated that the risk appetite of most clients had changed relatively little over the previous three months.

Broad U.S. equity price indexes rose significantly over the intermeeting period; equity prices of large banking organizations increased about in line with the broader market. Aggregate earnings per share for firms in the Standard & Poor's 500 index declined in the fourth quarter, but profit margins for large corporations remained wide by historical standards. Reflecting a narrowing of spreads over yields on comparable-maturity Treasury securities, yields on investment- and speculative-grade corporate bonds continued to decline over the period, moving toward the low end of their historical ranges. Prices in the secondary market for syndicated leveraged loans moved up further, supported by continued strong demand from institutional investors. The spreads of yields on A2/P2-rated unsecured commercial paper issued by nonfinancial firms over yields on A1/P1-rated issues narrowed slightly on balance.

Bond issuance by financial firms was strong in January and February, likely reflecting in part the refinancing of maturing debt that had been issued during the financial crisis under the Federal Deposit Insurance Corporation's Temporary Liquidity Guarantee Program. The issuance of bonds by domestic nonfinancial firms was solid in recent months, and indicators of credit quality remained firm. Growth of commercial and industrial (C&I) loans continued to be substantial and was widespread across domestic banks, though holdings of such loans at U.S. branches and agencies of European banks decreased further. Financing conditions in the commercial real estate sector continued to be tight, and issuance of commercial mortgage-backed securities remained low in the fourth quarter of last year. Gross public equity issuance by nonfinancial firms was still solid in January and February, boosted by continued strength in initial public offerings. Share repurchases and cash-financed mergers by nonfinancial firms maintained their strength in the fourth quarter, leading to a sharp decline in net equity issuance.

Although mortgage rates remained near their historical lows, conditions in residential mortgage markets generally remained depressed. Consumer credit rose in recent months, with the growth in nonrevolving credit led by continued rapid expansion of government-originated student loans. Issuance of consumer credit asset-backed securities remained at moderate levels in the fourth quarter of 2011 and in early 2012.

Gross long-term issuance of municipal bonds was subdued in the first two months of this year. Meanwhile, spreads on credit default swaps for debt issued by states were roughly flat over the intermeeting period.

Bank credit rose at a modest pace, on average, in January and February, mainly reflecting strong increases in securities holdings and C&I loans. Commercial real estate loans held by banks continued to decline, while noncore loans—a category that includes lending to nonbank financial institutions—grew at a slower pace than in previous months. The aggregate credit quality of loans on banks' books continued to improve across most asset classes in the fourth quarter.

M2 advanced at a rapid pace in January, apparently reflecting year-end effects, but its growth slowed in February. The rise in M2 was mainly attributable to continued strength in liquid deposits, reflecting investors' preferences for safe and liquid assets as well as very low yields on short-term instruments outside M2. Currency expanded robustly, and the monetary base also grew significantly over January and February.

Foreign equity markets ended the period higher, particularly in Japan, and benchmark sovereign bond yields declined. Spreads of yields on euro-area peripheral sovereign debt over those on German bunds generally continued to narrow, and foreign corporate credit spreads also declined further. The staff's broad nominal index of the foreign exchange

value of the dollar moved down modestly over the intermeeting period.

Funding conditions for euro-area banks eased over the period, as the European Central Bank (ECB) conducted its second three-year refinancing operation and widened the pool of eligible collateral for refinancing operations. Spreads of three-month euro LIBOR over the OIS rate narrowed, on balance, and European banks' issuance of unsecured senior debt and covered bonds increased. Dollar funding pressures continued to diminish, and the implied cost of dollar funding through the foreign exchange swap market fell moderately further. Reflecting the improved conditions in funding markets, demand for dollars at ECB lending operations declined and the outstanding amounts drawn under the Federal Reserve's dollar liquidity swap lines with other foreign central banks remained small. Several other central banks in advanced and emerging market economies eased policy further. In particular, the Bank of England increased the size of its existing gilt purchase program in February, and the Bank of Japan scaled up its Asset Purchase Program. The Bank of Japan also introduced a 1 percent inflation goal.

Staff Economic Outlook

In the economic projection prepared for the March FOMC meeting, the staff revised up its near-term forecast for real GDP growth a little. Although the recent data on aggregate spending were, on balance, about in line with the staff's expectations at the time of the previous forecast, indicators of labor market conditions and production improved somewhat more than the staff had anticipated. In addition, the decline in the unemployment rate over the past year was larger than what seemed consistent with the modest reported rate of real GDP growth. Against this backdrop, the staff reduced its estimate of the level of potential output, yielding a measure of the current output gap that was a little narrower and better aligned with the staff's estimate of labor market slack. In its March forecast, the staff's projection for real GDP growth over the medium term was somewhat higher than the one presented in January, mostly reflecting an improved outlook for economic activity abroad, a lower foreign exchange value for the dollar, and a higher projected path of equity prices. Nevertheless, the staff continued to forecast that real GDP growth would pick up only gradually in 2012 and 2013, supported by accommodative monetary policy, easing credit conditions, and improvements in consumer and business sentiment. The wide margin of slack in product and labor markets was expected to decrease gradually over the projection period, but the unemployment rate was expected to remain elevated at the end of 2013.

The staff also revised up its forecast for inflation a bit compared with the projection prepared for the January FOMC meeting, reflecting recent data indicating higher paths for the prices of oil, other commodities, and imports, along with a somewhat narrower margin of economic slack in the March forecast. However, with energy prices expected to level out in the second half of this year, substantial resource slack persisting over the forecast period, and stable long-run inflation expectations, the staff continued to project that inflation would be subdued in 2012 and 2013.

Participants' Views on Current Conditions and the Economic Outlook

In their discussion of the economic situation and outlook, meeting participants agreed that the information received since the Committee's previous meeting, while mixed, had been positive, on balance, and suggested that the economy had been expanding moderately. Labor market conditions had improved further: Payroll employment had continued to expand, and the unemployment rate had declined notably in recent months. Still, unemployment remained elevated. Household spending and business fixed investment had continued to advance. Despite signs of improvement or stabilization in some local housing markets, most participants agreed that the housing sector remained depressed. Inflation had been subdued in recent months, although prices of crude oil and gasoline had increased of late. Longer-term inflation expectations had remained stable, and most meeting participants saw little evidence of cost pressures.

With respect to the economic outlook, participants generally saw the intermeeting news as suggesting that economic growth over coming quarters would continue to be moderate and that the unemployment rate would decline gradually toward levels that the Committee judges to be consistent with its dual mandate. While a few participants indicated that their expectations for real GDP growth for 2012 had risen somewhat, most participants did not interpret the recent economic and financial information as pointing to a material revision to the outlook for 2013 and 2014. Financial conditions had improved notably since the January meeting: Equity prices were higher

and risk spreads had declined. Nonetheless, a number of factors continued to be seen as likely to restrain the pace of economic expansion; these included slower growth in some foreign economies, prospective fiscal tightening in the United States, the weak housing market, further household deleveraging, and high levels of uncertainty among households and businesses. Participants continued to expect most of the factors restraining economic expansion to ease over time and so anticipated that the recovery would gradually gain strength. In addition, participants noted that recent policy actions in the euro area had helped reduce financial stresses and lower downside risks in the short term; however, increased volatility in financial markets remained a possibility if measures to address the longer-term fiscal and banking issues in the euro area were not put in place in a timely fashion. Inflation had been subdued of late, although the recent increase in crude oil and gasoline prices would push up inflation temporarily. With unemployment expected to remain elevated, and with longer-term inflation expectations stable, most participants expected that inflation subsequently would run at or below the 2 percent rate that the Committee judges most consistent with its statutory mandate over the longer run.

In discussing the household sector, meeting participants generally commented that consumer spending had increased moderately of late. While a few participants suggested that recent improvements in labor market conditions and the easing in financial conditions could help lay the groundwork for a strengthening in the pace of household spending, several other participants pointed to factors that would likely restrain consumption: Growth in real disposable income was still sluggish, and consumer sentiment, despite some improvement since last summer, remained weak. A number of participants viewed the recent run-up in petroleum prices as likely to limit gains in consumer spending on non-energy items for a time; a couple of participants noted, however, that the unseasonably warm weather and the declining price of natural gas had helped cushion the effect of higher oil and gasoline prices on consumers' overall energy bills. Most participants agreed that, while recent housing-sector data had shown some tentative indications of upward movement, the level of activity in that sector remained depressed and was likely to recover only slowly over time. One participant, while agreeing that the housing market had not yet turned the corner, was more optimistic about the potential for a stronger recovery in the market in light of signs of reduced inventory overhang and stronger demand in some regions.

Reports from business contacts indicated that activity in the manufacturing, energy, and agriculture sectors continued to advance in recent months. In the retail sector, sales of new autos had strengthened, but reports from other retailers were mixed. A number of businesses had indicated that they were seeing some improvement in demand and that they had become somewhat more optimistic of late, with some reporting that they were adding to capacity. But most firms reportedly remained fairly cautious—particularly on hiring decisions—and continued to be uncertain about the strength of the recovery.

Participants touched on the outlook for fiscal policy and the export sector. Assessments of the outlook for government revenues and expenditures were mixed. State and local government spending had recently shown modest growth, following a lengthy period of contraction, and declines in public-sector employment appeared to have abated of late. However, it was noted that if agreement was not reached on a longer-term plan for the federal budget, an abrupt and sharp fiscal tightening would occur at the start of 2013. A number of participants observed that exports continued to be a positive factor for U.S. growth, while noting risks to the export picture from economic weakness in Europe or a greater-than-expected slowdown in China and emerging Asia.

Participants generally observed the continued improvement in labor market conditions since the January meeting. A couple of participants stated that the progress suggested by the payroll numbers was also apparent in a broad array of labor market indicators, and others noted survey measures suggesting further solid gains in employment going forward. One participant pointed to inflation readings and a high rate of long-duration unemployment as signs that the current level of output may be much closer to potential than had been thought, and a few others cited a weaker path of potential output as a characteristic of the present expansion. However, a number of participants judged that the labor market currently featured substantial slack. In support of that view, various indicators were cited, including aggregate hours, which during the recession had exhibited a decline that was particularly severe by historical standards and remained well below the series' pre-recession peak; the high number of persons working part time for economic reasons; and low ratios of job

openings to unemployment and of employment to population.

Most participants noted that the incoming information on components of final spending had exhibited less strength than the indicators of employment and production. Some participants expressed the view that the recent increases in payrolls likely reflected, in part, a reversal of the sharp cuts in employment during the recession, a scenario consistent with the weak readings on productivity growth of late. In this view, the recent pace of employment gains might not be sustained if the growth rate of spending did not pick up. Several participants noted that the unseasonably warm weather of recent months added one more element of uncertainty to the interpretation of incoming data, and that this factor might account for a portion of the recent improvement in indicators of employment and housing. In a contrasting view, the improvements registered in labor market indicators could be seen as raising the likelihood that GDP data for the recent period would undergo a significant upward revision.

Many participants noted that strains in global financial markets had eased somewhat, and that financial conditions were more supportive of economic growth than at the time of the January meeting. Among the evidence cited were higher equity prices and better conditions in corporate credit markets, especially the markets for high-yield bonds and leveraged loans. Banking contacts were reporting steady, though modest, growth in C&I loans. Many meeting participants believed that policy actions in the euro area, notably the Greek debt swap and the ECB's longer-term refinancing operations, had helped to ease strains in financial markets and reduced the downside risks to the U.S. and global economic outlook. Nonetheless, a number of participants noted that a longer-term solution to the banking and fiscal problems in the euro area would require substantial further adjustment in the banking and public sectors. Participants saw the possibility of disruptions in global financial markets as continuing to pose a risk to growth.

While the recent readings on consumer price inflation had been subdued, participants agreed that inflation in the near term would be pushed up by rising oil and gasoline prices. A few participants noted that the crude oil price increases in the latter half of 2010 and the early part of 2011 had been part of a broad-based rise in commodity prices; in contrast, non-energy commodity prices had been more stable of late, which suggested that the recent upward pressure on oil prices was principally due to geopolitical concerns rather than global economic growth. A couple of participants noted that recent readings on unit labor costs had shown a larger increase than earlier, but other participants pointed to other measures of labor compensation that continued to show modest increases. With longer-run inflation expectations still well anchored, most participants anticipated that after the temporary effect of the rise in oil and gasoline prices had run its course, inflation would be at or below the 2 percent rate that they judge most consistent with the Committee's dual mandate. Indeed, a few participants were concerned that, with the persistence of considerable resource slack, inflation might be below the mandate-consistent rate for some time. Other participants, however, were worried that inflation pressures could increase as the expansion continued; these participants argued that, particularly in light of the recent rise in oil and gasoline prices, maintaining the current highly accommodative stance of monetary policy over the medium run could erode the stability of inflation expectations and risk higher inflation.

Committee Policy Action

Members viewed the information on U.S. economic activity received over the intermeeting period as suggesting that the economy had been expanding moderately and generally agreed that the economic outlook, while a bit stronger overall, was broadly similar to that at the time of their January meeting. Labor market conditions had continued to improve and unemployment had declined in recent months, but almost all members saw the unemployment rate as still elevated relative to levels that they viewed as consistent with the Committee's mandate over the longer run. With the economy facing continuing headwinds, members generally expected a moderate pace of economic growth over coming quarters, with gradual further declines in the unemployment rate. Strains in global financial markets, while having eased since January, continued to pose significant downside risks to economic activity. Recent monthly readings on inflation had been subdued, and longer-term inflation expectations remained stable. Against that backdrop, members generally anticipated that the recent increase in oil and gasoline prices would push up inflation temporarily, but that subsequently inflation would run at or below the rate that the Committee judges most consistent with its mandate.

In their discussion of monetary policy for the period ahead, members agreed that it would be appropriate to maintain the existing highly accommodative stance of monetary policy. In particular, they agreed to keep the target range for the federal funds rate at 0 to ¼ percent, to continue the program of extending the average maturity of the Federal Reserve's holdings of securities as announced in September, and to retain the existing policies regarding the reinvestment of principal payments from Federal Reserve holdings of securities.

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, the improvement in financial conditions, and the modest changes to the economic outlook. With the economic outlook over the medium term not greatly changed, 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. Several members continued to anticipate, as in January, that the unemployment rate would still be well above their estimates of its longer-term normal level, and inflation would be at or below the Committee's longer-run objective, in late 2014. It was noted that the Committee's forward guidance is conditional on economic developments, and members concurred that the date given in the statement would be subject to revision in response to significant changes in the economic outlook. While recent employment data had been encouraging, a number of members perceived a nonnegligible risk that improvements in employment could diminish as the year progressed, as had occurred in 2010 and 2011, and saw this risk as reinforcing the case for leaving the forward guidance unchanged at this meeting. In contrast, one member judged that maintaining the current degree of policy accommodation much beyond this year would likely be inappropriate; that member anticipated that a tightening of monetary policy would be necessary well before the end of 2014 in order to keep inflation close to the Committee's 2 percent objective.

The Committee also stated that it is prepared to adjust the size and composition of its securities holdings as appropriate to promote a stronger economic recovery in a context of price stability. A couple of members indicated that the initiation of additional stimulus could become necessary if the economy lost momentum or if inflation seemed likely to remain below its mandate-consistent rate of 2 percent over the medium run.

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 approximately 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. The Committee also directs the Desk to maintain its existing policies of rolling over maturing Treasury securities into new issues and of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities in order to 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 2:15 p.m.:

> "Information received since the Federal Open Market Committee met in January suggests that the economy has been expanding moderately. Labor market conditions have improved further;

the unemployment rate has declined notably in recent months but remains elevated. Household spending and business fixed investment have continued to advance. The housing sector remains depressed. Inflation has been subdued in recent months, although prices of crude oil and gasoline have increased lately. 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 moderate economic growth over coming quarters and consequently anticipates that the unemployment rate will decline gradually toward levels that the Committee judges to be consistent with its dual mandate. Strains in global financial markets have eased, though they continue to pose significant downside risks to the economic outlook. The recent increase in oil and gasoline prices will push up inflation temporarily, but the Committee anticipates that subsequently inflation 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 its program to extend the average maturity of its holdings of securities as announced in September. The Committee is maintaining its existing policies of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. The Committee will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as appropriate to promote a stronger economic recovery in a context of price stability."

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

Voting against this action: Jeffrey M. Lacker.

Mr. Lacker dissented because he did not agree that economic conditions were likely to warrant exceptionally low levels of the federal funds rate at least through late 2014. In his view, with inflation close to the Committee's objective of 2 percent, the economy expanding at a moderate pace, and downside risks somewhat diminished, the federal funds rate will most likely need to rise considerably sooner to prevent the emergence of inflationary pressures. Mr. Lacker continues to prefer to provide forward guidance regarding future Committee policy actions through the inclusion of FOMC participants' projections of the federal funds rate in the Summary of Economic Projections (SEP).

Monetary Policy Communications

As it noted in its statement of principles regarding longer-run goals and monetary policy strategy released in January, the Committee seeks to explain its monetary policy decisions to the public as clearly as possible. With that goal in mind, participants discussed a range of additional steps that the Committee might take to help the public better understand the linkages between the evolving economic outlook and the Federal Reserve's monetary policy decisions, and thus the conditionality in the Committee's forward guidance. The purpose of the discussion was to explore potentially promising approaches for further enhancing FOMC communications; no decisions on this topic were planned for this meeting and none were taken.

Participants discussed ways in which the Committee might include, in its postmeeting statements, additional qualitative or quantitative information that could convey a sense of how the Committee might adjust policy in response to changes in the economic outlook. Participants also discussed whether modifications to the SEP that the Committee releases four times per year could be helpful in clarifying the linkages between the economic outlook and the Committee's monetary policy decisions. In addition, several participants suggested that it could be helpful to discuss at a future meeting some alternative economic scenarios and the monetary policy responses that

might be seen as appropriate under each one, in order to clarify the Committee's likely behavior in different contingencies. Finally, participants observed that the Committee introduced several important enhancements to its policy communications over the past year or so; these included the Chairman's postmeeting press conferences as well as changes to the FOMC statement and the SEP. Against this backdrop, some participants noted that additional experience with the changes implemented to date could be helpful in evaluating potential further enhancements.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, April 24–25, 2012. The meeting adjourned at 4:10 p.m. on March 13, 2012.

Notation Vote

By notation vote completed on February 14, 2012, the Committee unanimously approved the minutes of the FOMC meeting held on January 24–25, 2012.

William B. English
Secretary

Meeting Held on April 24–25, 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, April 24, 2012, at 1:00 p.m., and continued on Wednesday, April 25, 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

Sarah Bloom Raskin

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

Thomas C. Baxter
Deputy General Counsel

Steven B. Kamin
Economist

David W. Wilcox
Economist

David Altig, Thomas A. Connors, Michael P. Leahy, William Nelson, Simon Potter, David Reifschneider, and William Wascher
Associate Economists

Brian Sack
Manager, System Open Market Account

Michael S. Gibson
Director, Division of Banking Supervision and Regulation, Board of Governors

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

James A. Clouse
Deputy Director, Division of Monetary Affairs, Board of Governors

Matthew J. Eichner
Deputy Director, Division of Research and Statistics, Board of Governors

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

Thomas Laubach
Senior Adviser, Division of Research and Statistics, Board of Governors

Ellen E. Meade
Senior Adviser, Division of Monetary Affairs, Board of Governors

Daniel M. Covitz and David E. Lebow
Associate Directors, Division of Research and Statistics, Board of Governors

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

Gretchen C. Weinbach
Deputy Associate Director, Division of Monetary Affairs, Board of Governors

Jane E. Ihrig
Assistant Director, Division of Monetary Affairs, Board of Governors

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

Gregory L. Stefani
First Vice President, Federal Reserve Bank of Cleveland

Jeff Fuhrer, Loretta J. Mester, Harvey Rosenblum, and Daniel G. Sullivan
Executive Vice Presidents, Federal Reserve Banks of Boston, Philadelphia, Dallas, and Chicago, respectively

Troy Davig, Ron Feldman, Mark E. Schweitzer, and Christopher J. Waller
Senior Vice Presidents, Federal Reserve Banks of Kansas City, Minneapolis, Cleveland, and St. Louis, respectively

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

Andreas L. Hornstein and Lorie K. Logan
Vice Presidents, Federal Reserve Banks of Richmond and New York, respectively

Monetary Policy under Alternative Scenarios

A staff presentation provided an overview of an exercise that explored individual participants' views on appropriate monetary policy responses under alternative economic scenarios. Committee participants discussed the potential value and drawbacks of this type of exercise for both internal deliberations and external communications about monetary policy. Possible benefits include helping to clarify the factors that individual participants judge most important in forming their views about the economic outlook and their assessments of appropriate monetary policy. Two potential limitations of this approach are that the scenario descriptions must by necessity be incomplete, and the practical range of scenarios that can be examined may be insufficient to be informative, given the degree of uncertainty surrounding possible outcomes. Some participants stated that exercises using alternative scenarios, with appropriate adjustments, could potentially be helpful for internal deliberations and, thus, should be explored further. However, no decision was made at this meeting regarding future exercises along these lines.

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 Federal Open Market Committee (FOMC) met on March 13, 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 the intermeeting period. There were no intervention operations in foreign currencies for the System's account over the intermeeting period.

With Mr. Lacker dissenting, the Committee agreed to extend the reciprocal currency (swap) arrangements with the Bank of Canada and the Banco de México for an additional year beginning in mid-December 2012; these arrangements are associated with the Federal Reserve's participation in the North American Framework Agreement of 1994. The arrangement with the Bank of Canada allows for cumulative drawings of up to $2 billion equivalent, and the arrangement with the Banco de México allows for cumulative drawings of up to $3 billion equivalent. The vote to renew the System's participation in these swap arrangements was taken at this meeting because a provision in the Framework Agreement requires each party to provide six months' prior notice of an intention to terminate its participation. Mr. Lacker dissented because of his opposition, as indicated at the January meeting, to foreign exchange market intervention by the Federal Reserve, which such swap arrangements might facilitate, and because of his opposition to direct lending to foreign central banks.

Staff Review of the Economic Situation

The information reviewed at the April 24–25 meeting suggested that economic activity was expanding moderately. Payroll employment continued to move up, and the unemployment rate, while still elevated, declined a little further. Overall consumer price inflation increased somewhat, primarily reflecting higher

prices of crude oil and gasoline, but measures of long-run inflation expectations remained stable.

The unemployment rate declined to 8.2 percent in March. The share of workers employed part time for economic reasons also moved down, but the rate of long-duration unemployment remained elevated. Private nonfarm employment rose at a slower pace in March than in the preceding three months, while total government employment was little changed in recent months after declining last year. Some indicators of job openings and firms' hiring plans improved. After being roughly flat over most of the intermeeting period, initial claims for unemployment insurance rose moderately toward the end of the period but remained at a level consistent with further moderate job gains in the coming months.

Manufacturing production expanded, on net, in February and March, while the rate of manufacturing capacity utilization was essentially unchanged. In recent months, the production of motor vehicles continued to rise appreciably in response to both higher vehicle sales and dealers' additions to relatively low levels of inventories; output gains in other industries also were solid and widespread. Motor vehicle assemblies were scheduled to step up further in the second quarter, and broader indicators of manufacturing activity, such as the diffusion indexes of new orders from the national and regional manufacturing surveys, were at levels consistent with moderate increases in factory output in the second quarter.

Real personal consumption expenditures (PCE) rose briskly in February, even though households' real disposable incomes declined. In March, nominal retail sales excluding purchases of motor vehicles increased solidly, while motor vehicle sales fell off a little from their brisk pace in the previous month. Consumer sentiment was little changed, on balance, in March and early April and remained subdued.

Some measures of home prices rose in January and February, but activity in the housing market continued to be held down by the large inventory of foreclosed and distressed properties and by tight underwriting standards for mortgage loans. Starts of new single-family homes fell back in February and March to a level more in line with permit issuance; starts were apparently boosted by unseasonably warm weather in December and January. Moreover, sales of new and existing homes edged down, on net, in recent months.

Real business expenditures on equipment and software appeared to rise modestly in the first quarter. Nominal shipments of nondefense capital goods excluding aircraft increased in February and March after declining in January; new orders for these capital goods increased, on balance, in February and March, and they continued to run above the level of shipments. The buildup of unfilled orders in recent months, along with improvements in survey measures of capital spending plans and some other forward-looking indicators, pointed toward a pickup in the pace of expenditures for business equipment. In contrast, nominal business spending for nonresidential construction declined in January and February. Inventories in most industries looked to be fairly well aligned with sales in recent months, although motor vehicle stocks were still relatively lean.

Data for federal government spending in recent months indicated that real defense expenditures rose modestly in the first quarter. Real state and local government purchases appeared to be about flat last quarter, as the payrolls of these governments edged up in the first quarter and their nominal construction spending declined slightly, on net, in January and February.

The U.S. international trade deficit narrowed in February as exports rose and imports fell. The export gains were concentrated in services. Exports of goods declined largely because of a decrease in exports of automotive products. The drop in imports reflected significant declines in imports of petroleum products, automotive products, capital goods, and consumer goods. Imports from China were especially weak, which may in part reflect seasonal adjustment issues related to the timing of the Chinese New Year.

Overall U.S. consumer prices, as measured by the PCE price index, rose at a somewhat faster rate in February than in the preceding six months. In March, prices measured by the consumer price index increased at that same faster pace. Consumer energy prices climbed markedly in February and March, although survey data indicated that gasoline prices stepped down in the first half of April. Meanwhile, increases in consumer food prices were relatively subdued in recent months. Consumer prices excluding food and energy rose moderately in February and March. Near-term inflation expectations from the Thomson Reuters/University of Michigan Surveys of Consumers increased in March but then fell back in

early April, while longer-term inflation expectations in the survey remained stable.

Available measures of labor compensation indicated that nominal wage gains continued to be muted. Average hourly earnings for all employees rose modestly in March, and their rate of increase from 12 months earlier remained low.

Recent indicators suggested that foreign economic activity improved on balance in the first quarter, but there were important differences across economies. In the euro area, economic indicators pointed to weakening activity as financial stresses worsened, whereas in the emerging market economies, recent data were consistent with continued expansion. Readings on foreign inflation eased, although they were still relatively high in some Latin American countries.

Staff Review of the Financial Situation

Broad financial market conditions changed little, on balance, since the March FOMC meeting. However, asset prices fluctuated substantially over the period, apparently in response to the evolving views on the U.S. and global economic outlook and changing expectations regarding the future course of monetary policy.

Yields on nominal Treasury securities moved up early in the period, reportedly as investors read incoming information, including the March FOMC statement and minutes along with the results of the Comprehensive Capital Analysis and Review (CCAR), as suggesting a somewhat stronger economic outlook than previously expected. Over subsequent weeks, however, yields drifted lower in response to disappointing economic news and increased concerns about the strains in Europe. On net, nominal Treasury yields finished the period slightly lower and measures of the expected path for the federal funds rate derived from overnight index swap (OIS) rates moved down.

Conditions in unsecured short-term dollar funding markets were stable over most of the intermeeting period despite the increase in concerns about Europe in the latter part of the period. In secured funding markets, the overnight general collateral Treasury repurchase agreement rate declined for a time late in the period, reportedly in response to the seasonal reduction in Treasury bill issuance in April, but ended the period roughly unchanged.

Broad U.S. stock price indexes followed the general pattern observed across asset markets, rising early in the period on increased investor optimism and then falling later on, to end the period little changed on net. Equity prices of financial institutions increased, reportedly as investors interpreted the first-quarter earnings of several large banking organizations and the results of the CCAR as better than expected. Yields and spreads on investment-grade corporate bonds were about unchanged, but yields and spreads on speculative-grade corporate bonds increased somewhat.

Businesses continued to raise substantial amounts of funds in credit and capital markets over recent months. Bond issuance by financial firms picked up further in March from the strong pace recorded in the previous two months. Domestic nonfinancial firms' bond issuance and growth in commercial and industrial (C&I) loans were robust in the first quarter. Leveraged loan issuance was brisk over this period as well, reportedly supported by investor demand for newly issued collateralized loan obligations as well as by interest from pension funds and other institutional investors. Gross public equity issuance by nonfinancial firms stayed strong in March. In contrast, financial conditions in the commercial real estate (CRE) sector remained strained amid weak fundamentals and tight underwriting conditions, and issuance of commercial mortgage-backed securities in the first quarter of 2012 was below that of a year ago.

With respect to credit to households, developments over the intermeeting period were mixed. Although mortgage rates remained near their historical lows, mortgage refinancing activity was subdued, and conditions in residential mortgage markets continued to be weak. By contrast, consumer credit rose at a solid pace, on balance, in recent months; nonrevolving credit, particularly student loans, expanded. Issuance of consumer asset-backed securities (ABS) edged up in recent months, supported by auto-loan ABS issuance.

Gross issuance of long-term municipal bonds was subdued in the first quarter. The ratio of general obligation municipal bond yields to yields on

comparable-maturity Treasury securities was little changed over the intermeeting period, and the average spreads on credit default swaps for debt issued by states declined on net.

Bank credit slowed in March but expanded at a solid pace in the first quarter as a whole. The Senior Loan Officer Opinion Survey on Bank Lending Practices conducted in April indicated that, in the aggregate, domestic banks eased slightly their lending standards on core loans—C&I, real estate, and consumer loans—and experienced somewhat stronger demand for such loans in the first quarter of 2012. C&I loans at domestic banks continued to expand in March, with growth concentrated at large domestic banks. Banks' holdings of closed-end residential mortgage loans expanded, while home equity loans and CRE loans continued to decline. Consumer loans on banks' books rose modestly in March.

M2 expanded at a moderate pace in March, reflecting growth in liquid deposits and currency that was only partially offset by declines in small time deposits and in balances in retail money market funds.

Financial strains within the euro area increased over the intermeeting period. Spreads of yields on sovereign Italian and Spanish debt over those on comparable-maturity German bonds rose, amid official warnings that Spain would miss its fiscal target for this year and would need to make further budget cuts, as well as renewed concerns in the market about the prospects for Spanish banks. Although the spread of the three-month euro London interbank offered rate over the comparable OIS rate narrowed on balance over the period, euro-area bank equity indexes dropped sharply, driven by declines in the share prices of Spanish and Italian banks. Five-year credit default swap premiums rose for a broad range of euro-area banks, especially Spanish banks.

Against the background of these increased stresses within the euro area, foreign equity indexes declined and corporate credit spreads widened. The staff's broad nominal index of the foreign exchange value of the dollar was about unchanged over the intermeeting period as the dollar appreciated against most emerging market currencies but depreciated moderately against the yen and sterling. Amid some volatility, yields on benchmark sovereign bonds for Germany and Japan ended the period somewhat lower. Monetary policy abroad remained generally accommodative.

The total outstanding amount on the Federal Reserve's dollar liquidity swap lines declined to $32 billion, down from $65 billion at the time of the March FOMC meeting; demand for dollars fell at the lending operations of the European Central Bank, the Bank of Japan, and the Swiss National Bank.

Staff Economic Outlook

In the economic forecast prepared for the April FOMC meeting, the staff revised up slightly its near-term projection for real gross domestic product (GDP) growth, reflecting that the unemployment rate was a little lower, the level of overall payroll employment a bit higher, and consumer spending noticeably stronger than the staff had expected at the time of the previous forecast. However, the staff's medium-term projection for real GDP growth in the April forecast was little changed from the one presented in March. The staff continued to project that real GDP would accelerate gradually through 2014, supported by accommodative monetary policy, further improvements in credit availability, and rising consumer and business sentiment. Increases in economic activity were expected to be sufficient to decrease the wide margin of slack in the labor market slowly over the projection period, but the unemployment rate was anticipated to still be elevated at the end of 2014.

The staff's forecast for inflation over the projection period was just a bit above the forecast prepared for the March FOMC meeting, reflecting somewhat higher-than-expected data on core consumer prices and a slightly narrower margin of economic slack than in the March forecast. However, with the pass-through of the recent run-up in crude oil prices into consumer energy prices seen as nearly complete, oil prices expected to edge lower from current levels, substantial resource slack persisting over the projection period, and stable long-run inflation expectations, the staff continued to forecast 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 five 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 more detail in the Summary of Economic Projections (SEP), which is attached as an addendum to these minutes.

In their discussion of the economic situation and outlook, meeting participants agreed that the information received since the Committee's previous meeting suggested that the economy continued to expand moderately. Labor market conditions improved in recent months. So far this year, payroll employment had expanded at a faster pace than last year and the unemployment rate had declined further, although it remained elevated. Household spending and business fixed investment continued to expand. There were signs of improvement in the housing sector, but from a very low level of activity. Despite some volatility in financial markets over the intermeeting period, financial conditions in U.S. markets continued to improve; bank credit quality and loan demand both increased. Mainly reflecting the increase in the prices of crude oil and gasoline earlier this year, inflation had picked up somewhat. However, longer-term inflation expectations remained stable.

Participants' assessments of the economic outlook were little changed, with the intermeeting information generally seen as suggesting that economic growth would remain moderate over coming quarters and then pick up gradually. Reflecting the moderate pace of economic growth, most anticipated a gradual decline in the unemployment rate. The incoming information led some participants to become more confident about the durability of the recovery. However, others thought it was premature to infer a stronger underlying trend from the recent positive indicators, since those readings may partially reflect the effects of the mild winter weather or other temporary influences. A number of factors continued to be seen as likely limiting the economic expansion to a moderate pace in the near term; these included slow growth in some foreign economies, prospective fiscal tightening in the United States, slow household income growth, and—notwithstanding some recent signs of improvement—ongoing weakness in the housing market. Participants continued to expect most of the factors restraining economic expansion to ease over time and so anticipated that the recovery would gradually gain strength. The strains in global financial markets, though generally less pronounced than last fall, continued to pose a significant risk to the outlook, and the possibility of a sharp fiscal tightening in the United States was also considered a sizable risk. Most participants anticipated that inflation would fall back from recent elevated levels as the effects of higher energy prices waned, and still expected that inflation subsequently would run at or below the 2 percent rate that the Committee judges to be most consistent with its statutory mandate. However, other participants saw upside risks to the inflation outlook given the recent pickup in inflation and the highly accommodative stance of monetary policy.

In discussing the household sector, meeting participants generally noted that consumer spending continued to expand moderately, notwithstanding high gasoline prices. The recent strengthening in the pace of light motor vehicle sales was attributed to both pent-up demand and the desire for increased fuel efficiency in the wake of higher gasoline prices. Looking forward, increases in household wealth from the rise in equity prices, improving consumer sentiment, and a diminishing drag from household deleveraging were seen as helping to support continued increases in household expenditures, notwithstanding sluggish growth in real disposable income and restrictive fiscal policies.

Recent housing-sector indicators, including sales and starts, suggested some upward movement, but some participants saw the improvement as likely related to unusually warm winter weather in much of the country. Overall, the level of activity in the sector remained depressed. House prices appeared to be stabilizing but had not yet begun to rise in most markets. Most participants anticipated that the housing sector was likely to recover only slowly over time, but a few were more optimistic about the potential for a more rapid housing recovery given reports of stronger demand in some regions and of improved sentiment among builders, as well as signs that recent changes to the Home Affordable Refinance Program were contributing to the refinancing of performing high loan-to-value mortgages.

Reports from business contacts indicated that activity in the manufacturing, energy, and agriculture sectors continued to advance in recent months. Auto production had picked up in light of strengthening demand. Business contacts suggested that sentiment was improving, but many firms remained somewhat cau-

tious in their hiring and investment decisions, with most capital investment being undertaken to improve productivity or gain market share rather than to expand capacity. Reportedly, this caution reflected in part continued uncertainty about the strength and durability of the economic recovery, as well as about government policies.

Participants expected that the government sector would be a drag on economic growth over coming quarters. They generally saw the U.S. fiscal situation also as a risk to the economic outlook; if agreement is not reached on a plan for the federal budget, a sharp fiscal tightening could occur at the start of 2013. Several participants indicated that uncertainty about the trajectory of future fiscal policy could lead businesses to defer hiring and investment. It was noted that agreement on a longer-term plan to address the country's fiscal challenges would help to alleviate uncertainty and consequent negative effects on consumer and business sentiment.

Exports have supported U.S. growth so far this year; however, some participants noted risks to the export picture from economic weakness in Europe or from a more significant slowdown in the pace of expansion in China and emerging Asia.

Labor market conditions continued to improve, although unusually warm weather may have inflated payroll job figures somewhat earlier this year. Contacts in some parts of the country said that highly qualified workers were in short supply; overall, however, wage pressures had been limited so far. The decline in labor force participation, which has been sharpest for younger workers, has been a factor in the nearly 1 percentage point decline in the unemployment rate since last August, a drop that was larger than would have been predicted from the historical relationship between real GDP growth and changes in the unemployment rate. Assessing the extent to which the changes in labor force participation reflect cyclical factors that will be reversed once the recovery picks up, as opposed to changes in the trend rate of participation, was seen as important for understanding unemployment dynamics going forward. One participant cited research suggesting that about half of the decline in labor force participation had reflected cyclical factors, and thus, as participation picks up, unemployment may decline more slowly in coming quarters compared with the recent pace. Another posited that the strength in payroll job growth in recent months may be a one-time reaction to the sharp layoffs in 2008 and 2009 and that future job gains may be somewhat weaker unless the pace of economic growth increases. Participants expressed a range of views on the extent to which the unemployment rate was being boosted by structural factors such as mismatches between the skills of unemployed workers and those being demanded by hiring firms. A few participants acknowledged there could be structural factors at work, but said that in their view, slack remained high and weak aggregate demand was the major reason that unemployment was still elevated. Two noted the possibility that sustained high levels of long-term unemployment could result in higher structural unemployment, an outcome that might be forestalled by increased aggregate demand. A few participants noted that current measures of labor market slack would be overstated if structural factors accounted for a large portion of the current high levels of unemployment. As a result, such measures might be an unreliable guide as to how close the economy was to maximum employment. These participants pointed out that, over time, estimates of the potential level of output have declined, reducing, as a consequence, estimates of the level of economic slack. Some participants cited the recent rise in inflation, abstracting from the direct effect of the rise in energy prices, as supportive of the view that the level of slack was lower than some believe.

Participants judged that, in general, conditions in domestic credit markets had continued to improve since the March FOMC meeting. Bank credit quality and consumer and business loan demand were increasing, although commercial and residential real estate lending remained relatively weak. U.S. equity prices had risen early in the intermeeting period but subsequently declined, ending the period little changed on net; investment-grade corporate bond yields were flat to down slightly and remained at very low levels. Many U.S. financial institutions had been taking steps to bolster their resiliency, including increasing capital levels and liquidity buffers, and reducing their European exposures. 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. In contrast to improved conditions in domestic credit markets, investors' concerns about the sovereign debt and banking situation in the euro area intensified during the intermeeting period. Some participants said they thought the policy actions taken in Europe would most likely ease stress in financial markets, but some expressed the view that a longer-term solution to the banking and fiscal problems in the euro area would require substantial fur-

ther adjustment in the banking and public sectors. Participants expected that global financial markets would remain focused on the evolving situation in Europe.

Readings on consumer price inflation had picked up somewhat mainly because of increases in oil and gasoline prices earlier in the year. In recent weeks, oil prices had begun to fall and readings from the oil futures market suggested this may continue; non-energy commodity prices had remained relatively stable. Several participants noted that increases in labor costs continued to be subdued. With longer-run inflation expectations well anchored and the unemployment rate elevated, most participants anticipated that after the temporary effect of the rise in oil and gasoline prices had run its course, inflation would be at or below the 2 percent rate that the Committee judges to be most consistent with its mandate. Overall, most participants viewed the risks to their inflation outlook as being roughly balanced. However, some participants saw a risk that inflation pressures could increase as the expansion continued; they pointed to the fact that inflation was currently above target and were skeptical of models that rely on economic slack to forecast inflation partly because of the difficulty in measuring slack, especially in real time. These participants were concerned that maintaining the current highly accommodative stance of monetary policy over the medium run could erode the stability of inflation expectations and risk higher inflation. In this regard, one participant noted the potential risks and costs associated with additional balance sheet actions.

In their discussion of the economic outlook and policy, some participants noted the potential usefulness of simple monetary policy rules, of the type the Committee regularly reviews, as guides for monetary policy decisionmaking and for external communications about policy. These participants suggested that because such rules give an indication of how policy should systematically respond to changes in economic conditions they might help clarify the relationship between appropriate monetary policy and the evolution of the economic outlook. While acknowledging that there could be differences across participants in the type of rules they might favor—for example, one participant expressed a preference for rules based on growth rates rather than output gaps because of measurement issues—a few participants indicated that the likely degree of commonality across participants was suggestive that this might be a promising approach to explore. However, a few other participants were more skeptical. One thought that, while prescriptions from rules might provide useful benchmarks, applying the rules mechanically and with little thought about the embedded assumptions would be counterproductive. Another participant questioned the value of interest rate rules when the policy rate is constrained by the zero lower bound on nominal interest rates and unconventional policy options are being used, but others indicated they believed the rules could be appropriately adjusted to account for these factors. Interest was expressed in examining the usefulness of simple policy rules in a more normal environment, as well as in the current environment in which the policy rate is at the zero lower bound and large-scale asset purchases and the maturity extension program have been implemented. Participants planned to discuss further, at a future meeting, the potential merits and drawbacks of using simple rules as guides to monetary policy decision-making and for communications.

Committee Policy Action

Members viewed the information on U.S. economic activity received over the intermeeting period as suggesting that the economy had been expanding moderately and generally agreed that the economic outlook was broadly similar to that at the time of their March meeting. Labor market conditions had improved in recent months, and the unemployment rate had fallen, but almost all of the members saw the unemployment rate as still elevated relative to levels that they viewed as consistent with the Committee's mandate. Growth was expected to be moderate over coming quarters and then to pick up over time. Members expected the unemployment rate to decline gradually. Strains in global financial markets stemming from the sovereign debt and banking situation in Europe continued to pose significant downside risks to economic activity both here and abroad. The possibilities that U.S. fiscal policy would be more contractionary than anticipated and that uncertainty about fiscal policy could lead to a deferral of hiring and investment were other downside risks. Recent readings indicated that inflation remained above the Committee's 2 percent longer-run target, primarily reflecting the increase in oil and gasoline prices seen earlier in the year. With longer-term inflation expectations stable, most members anticipated that the increase in inflation would prove temporary and that subsequently inflation would run at or below the rate that the Committee judges to be most consistent with its mandate. However, one member thought that there were upside risks to inflation, especially if the

current degree of highly accommodative monetary policy were maintained much beyond this year.

In their discussion of monetary policy for the period ahead, the Committee members reached the collective judgment that it would be appropriate to maintain the existing highly accommodative stance of monetary policy. In particular, the Committee agreed to keep the target range for the federal funds rate at 0 to ¼ percent, to continue the program of extending the average maturity of the Federal Reserve's holdings of securities as announced last September, and to retain the existing policies regarding the reinvestment of principal payments from Federal Reserve holdings of securities.

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 modest changes to the economic outlook. With the economic outlook over the medium term not greatly changed, almost all of the 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. Most members continued to anticipate that the unemployment rate would still be well above their estimates of its longer-run level, and inflation would be at or below the Committee's longer-run objective, in late 2014. Some Committee members indicated that their policy judgment reflected in part their perception of 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 near the zero lower bound. The need to compensate for a substantial period during which the policy rate was constrained by the zero bound was also cited by a few members as a possible reason to maintain a very low level of the federal funds rate for a longer period than would otherwise be the case.

While almost all of the members agreed that the change in the outlook over the intermeeting period was insufficient to warrant an adjustment to the Committee's forward guidance, particularly given the uncertainty surrounding economic forecasts, it was 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. Some members recalled that gains in employment strengthened in early 2010 and again in early 2011 only to diminish as those years progressed; moreover, the uncertain effects of the unusually mild winter weather were cited as making it harder to discern the underlying trend in the economic data. They viewed these factors as reinforcing the case for leaving the forward guidance unchanged at this meeting and preferred adjusting the forward guidance only once they were more confident that the medium-term economic outlook or risks to the outlook had changed significantly. In contrast, another member thought that the forward guidance should be more responsive to changes in economic developments; that member suggested that the Committee would need to determine the appropriate threshold for altering the guidance.

The Committee also stated that it will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as appropriate to promote a stronger economic recovery in a context of price stability. Several members indicated that additional monetary policy accommodation could be necessary if the economic recovery lost momentum or the downside risks to the forecast became great enough.

Committee members discussed the desirability of providing more clarity about the economic conditions that would likely warrant maintaining the current target range for the federal funds rate and those that would indicate that a change in monetary policy was appropriate. Doing so might help the public better understand the conditionality in the Committee's forward guidance. The Committee also discussed the relationship between the Committee's statement, which expresses the collective view of the Committee, and the policy projections of individual participants, which are included in the SEP. The Chairman asked the subcommittee on communications to consider possible enhancements and refinements to the SEP that might help better clarify the link between economic developments and the Committee's view of the appropriate stance of monetary policy.

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 approximately 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. The Committee also directs the Desk to maintain its existing policies of rolling over maturing Treasury securities into new issues and of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities in order to 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 March suggests that the economy has been expanding moderately. Labor market conditions have improved in recent months; the unemployment rate has declined but remains elevated. Household spending and business fixed investment have continued to advance. Despite some signs of improvement, the housing sector remains depressed. Inflation has picked up somewhat, mainly reflecting higher prices of crude oil and gasoline. However, 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 then to pick up gradually. Consequently, the Committee anticipates that the unemployment rate will decline gradually toward levels that it judges to be consistent with its dual mandate. Strains in global financial markets continue to pose significant downside risks to the economic outlook. The increase in oil and gasoline prices earlier this year is expected to affect inflation only temporarily, and the Committee anticipates that subsequently inflation 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 its program to extend the average maturity of its holdings of securities as announced in September. The Committee is maintaining its existing policies of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. The Committee will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as appropriate to promote a stronger economic recovery in a context of price stability."

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

Voting against this action: Jeffrey M. Lacker.

Mr. Lacker dissented because he did not believe that economic conditions were likely to warrant exceptionally low levels of the federal funds rate through late 2014. In his view, an increase in the federal funds

rate was likely to be necessary by mid-2013 to prevent the emergence of inflationary pressures.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, June 19–20, 2012. Because some participants had expressed a preference for the two-day format over the one-day format for FOMC meetings, the Chairman raised the possibility of revising the FOMC meeting schedule to incorporate more two-day meetings to allow additional time for discussion. The meeting adjourned at 11:10 a.m. on April 25, 2012.

Notation Vote

By notation vote completed on April 2, 2012, the Committee unanimously approved the minutes of the FOMC meeting held on March 13, 2012.

William B. English
Secretary

Addendum: Summary of Economic Projections

In conjunction with the April 24–25, 2012, Federal Open Market Committee (FOMC) meeting, meeting participants—the members of the Board of Governors and the presidents of the 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. These assessments were based on information available at the time of the meeting and participants' individual assumptions about factors likely to affect economic outcomes. 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. "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 April indicated that, with appropriate monetary policy, the pace of economic recovery over the 2012–14 period would likely continue to be moderate. As depicted in figure 1, participants judged that real gross domestic product (GDP) would rise this year at a rate that slightly exceeds their estimates of its longer-run sustainable rate of increase, and then accelerate gradually through 2014. Taking into account the decline in the unemployment rate since the time of the previous Summary of Economic Projections (SEP) in January, participants generally anticipated only a small further reduction in the unemployment rate this year. They judged that the unemployment rate would then gradually move lower as economic growth picks up. Even so, participants generally projected that the unemployment rate at the end of 2014 would still be well above their estimates of the longer-run rate of unemployment that they currently view as being consistent with the FOMC's statutory mandate for promoting maximum employment and price stability. Most participants judged that inflation, as measured by the annual change in the price index for personal consumption expenditures (PCE), would be at or below the FOMC's longrun inflation objective of 2 percent under the assumption of appropriate monetary policy. Core inflation was generally projected to run at rates similar to those of overall inflation.

Relative to their previous projections in January, shown in table 1, participants revised up their projected rate of increase in real GDP in 2012 while marking down the pace of real growth over the next two years. With the unemployment rate having declined in recent months by more than participants

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

Variable	Central tendency[1]				Range[2]			
	2012	2013	2014	Longer run	2012	2013	2014	Longer run
Change in real GDP	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
January projection	2.2 to 2.7	2.8 to 3.2	3.3 to 4.0	2.3 to 2.6	2.1 to 3.0	2.4 to 3.8	2.8 to 4.3	2.2 to 3.0
Unemployment rate	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
January projection	8.2 to 8.5	7.4 to 8.1	6.7 to 7.6	5.2 to 6.0	7.8 to 8.6	7.0 to 8.2	6.3 to 7.7	5.0 to 6.0
PCE inflation	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
January projection	1.4 to 1.8	1.4 to 2.0	1.6 to 2.0	2.0	1.3 to 2.5	1.4 to 2.3	1.5 to 2.1	2.0
Core PCE inflation[3]	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	
January projection	1.5 to 1.8	1.5 to 2.0	1.6 to 2.0		1.3 to 2.0	1.4 to 2.0	1.4 to 2.0	

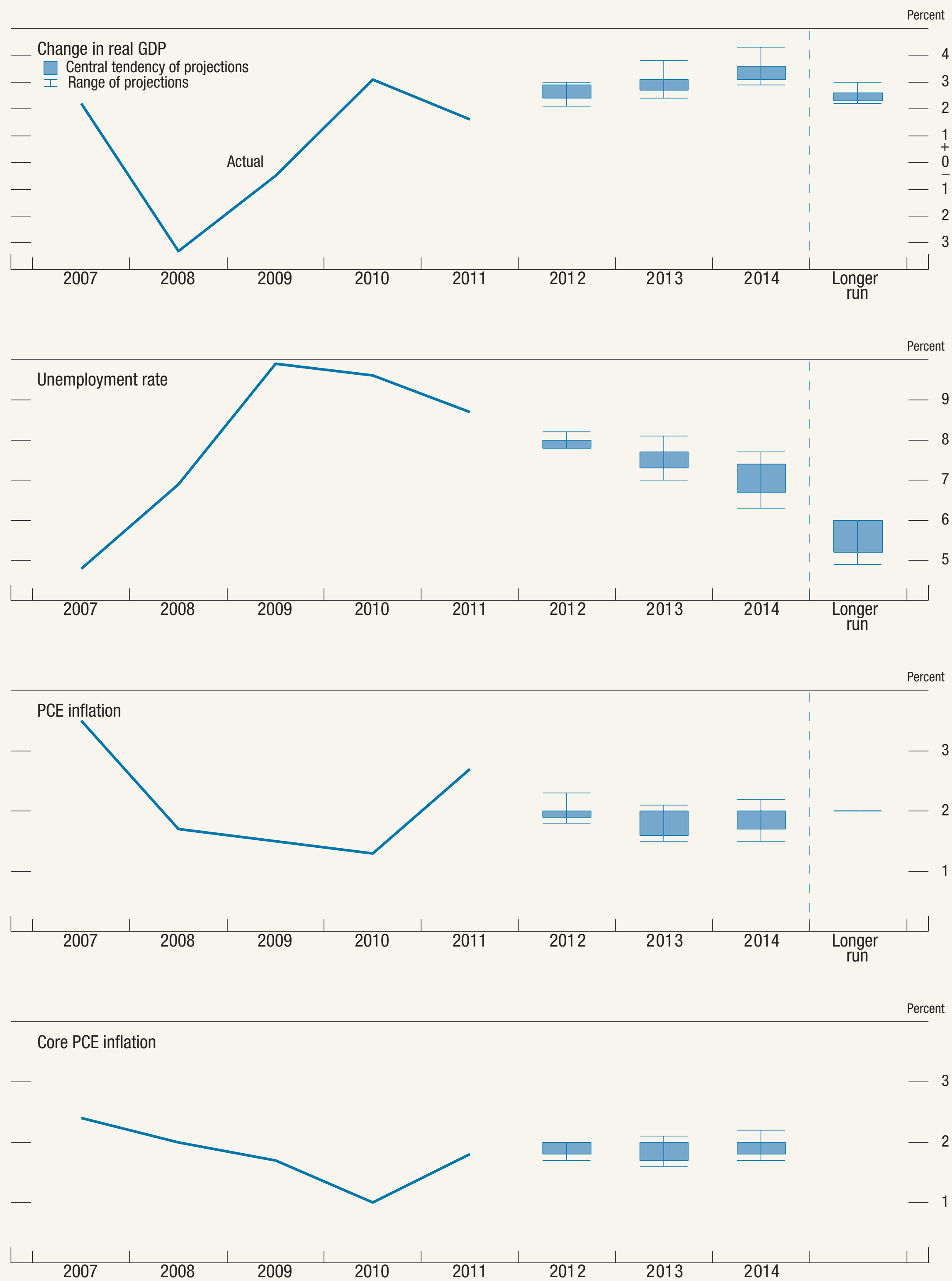
Note: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price 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 January projections were made in conjunction with the meeting of the Federal Open Market Committee on January 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 notes to table 1. The data for the actual values of the variables are annual.

had anticipated in the previous SEP, they generally lowered their projections for the level of the unemployment rate over coming years. Participants' expectations for both the longer-run rate of increase in real GDP and the longer-run unemployment rate were little changed from January. Their projection for the rate of inflation in 2012 moved up since January, reportedly in light of the recent increases in the prices of crude oil and gasoline, with much smaller increases in their projections for 2013 and 2014. The range and central tendency of the projections of longer-run inflation remained equal to 2 percent.

As shown in figure 2, most participants judged that highly accommodative monetary policy was likely to be warranted over coming years to promote a stronger economic recovery in the context of price stability. In particular, with inflation generally projected to be subdued over the projection period and the unemployment rate elevated, 11 participants thought that it would be appropriate for the first increase in the target federal funds rate to occur during 2014 or later, the same number as in the January SEP (upper panel). However, in contrast to their assessments in January, none of the participants indicated that 2016 was the appropriate year to first increase the target federal funds rate. The remaining 6 participants judged that it would be appropriate to raise the federal funds rate in 2012 or 2013 in order to avoid a buildup of inflationary pressures or the creation of imbalances in the financial system. Each participant's individual assessment of the appropriate year-end level of the target federal funds rate over the projection period was substantially below his or her projection of the longer-run level of the federal funds rate (lower panel). In addition, 9 participants placed the target federal funds rate at 1 percent or lower at the end of 2014.

All participants indicated that they expected the Federal Reserve's balance sheet would be normalized in a manner consistent with the principles that the FOMC agreed on at its June 2011 meeting, with the date that participants gave for the onset of the normalization process dependent on their expected timing of the first increase in the target federal funds rate. One participant reported that appropriate policy would include additional balance sheet actions in the near term to mitigate downside risks to economic growth.

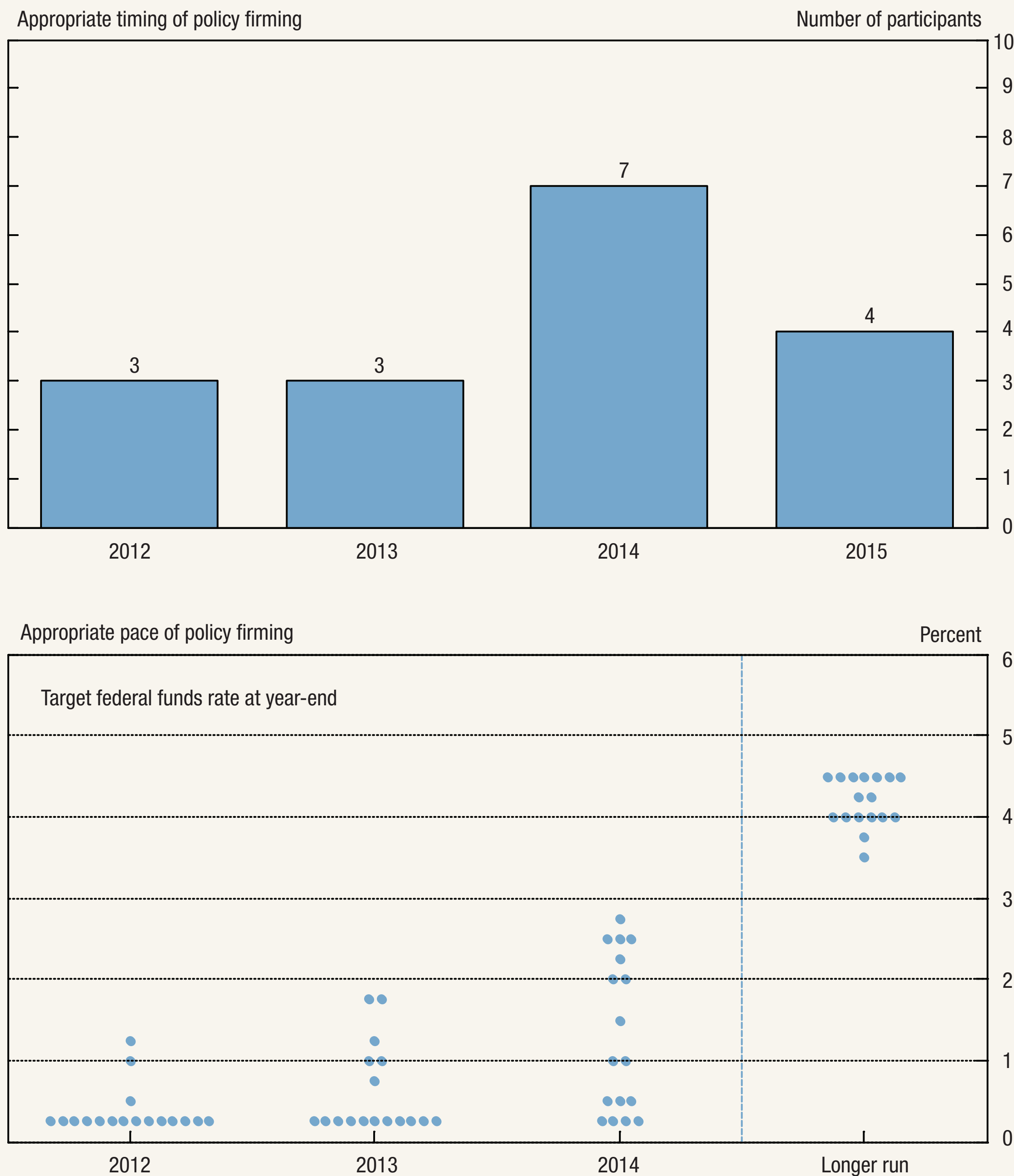
Most participants judged the level of uncertainty associated with their projections for real activity, the unemployment rate, and inflation to be unusually high relative to historical norms, although the number of participants doing so declined somewhat since the January SEP. About half of the participants now see the risks to real GDP growth as weighted to the downside and those to the unemployment rate as weighted to the upside, also down somewhat from the previous SEP. As in January, a majority of participants viewed the risks to their inflation projections as broadly balanced.

The Outlook for Economic Activity

Under appropriate monetary policy, participants continued to judge that the economy would expand at a moderate pace over the projection period. The central tendency of participants' projections for the change in real GDP growth in 2012 was 2.4 to 2.9 percent, a bit higher than in January. Growth at this rate would be a noticeable pickup from the pace of expansion in 2011 and a little above most participants' assessments of trend growth over the longer run. Most participants characterized the incoming data on consumer spending—especially for motor vehicles—as being at least somewhat stronger than had been anticipated in January, and several also pointed to some encouraging signs in recent readings on housing activity. A few participants indicated they had seen some improvements in household and business confidence. Participants projected that real GDP growth would pick up gradually over the 2013–14 period. Economic growth would be supported by monetary policy accommodation as well as some gradual improvements in credit conditions, the housing sector, and household balance sheets. The central tendencies of participants' projections of real growth in 2013 and 2014 were 2.7 to 3.1 percent and 3.1 to 3.6 percent, respectively, down somewhat from the central tendencies of the January projections. The central tendency of participants' projections for the longer-run rate of increase of real GDP was 2.3 to 2.6 percent, unchanged from January.

Participants cited several factors that would likely continue to restrain the pace of economic expansion over the projection period. In particular, tighter fiscal policy seemed likely to impart a significant drag on economic activity for a time. Moreover, uncertainty about the fiscal environment could hold back both household spending on durable goods and business capital expenditures. In addition, some participants noted that the recent stronger data might reflect temporary factors. For example, the pace of consumer spending was seen as likely to fall back some and be more in line with that of disposable personal income, and federal outlays were not expected to continue at their recent pace. Moreover, a couple of participants also pointed to the unseasonably warm winter weather as a possible contributor to the more favorable tone to the recent incoming data.

Figure 2. Overview of FOMC participants' assessments of appropriate monetary policy, April 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 ¼ percent will occur in the specified calendar year. In January 2012, the numbers of FOMC participants who judged that the first increase in the target federal funds rate would occur in 2012, 2013, 2014, 2015, and 2016 were, respectively, 3, 3, 5, 4, and 2. In the lower panel, each shaded circle indicates the value (rounded to the nearest ¼ percent) 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.

Most participants marked down their projections for the rate of unemployment over the projection period. The unemployment rate had declined from 8.7 percent, on average, in the final quarter of last year to 8.2 percent at the end of the first quarter of 2012, more than most participants anticipated when they prepared their January projections. With real GDP expected to increase at a moderate pace, the unemployment rate was projected to decline only a bit further this year, with the central tendency of participants' forecasts at 7.8 to 8.0 percent at year-end. Participants projected that in 2013 and 2014, the pickup in the pace of the expansion would be accompanied by a further gradual improvement in labor market conditions. The central tendency of participants' forecasts for the unemployment rate was 7.3 to 7.7 percent at the end of 2013 and 6.7 to 7.4 percent at the end of 2014. The central tendency of participants' estimates of the longer-run normal rate of unemployment that would prevail in the absence of further shocks to the economy was 5.2 to 6.0 percent, unchanged from January. Most participants anticipated that five or six years would be required to close the gap between the current unemployment rate and their estimates of the longer-run rate, although a few anticipated that less time would be needed.

The diversity of participants' projections for real GDP growth and the unemployment rate over the next three years and over the longer run is depicted in figures 3.A and 3.B. 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 likely evolution of credit and financial market conditions, the prospective path for U.S. fiscal policy, the effects of the European situation, and the extent to which current dislocations in the labor market were structural versus cyclical. Given the decline in the rate of unemployment in the first quarter, the distribution of participants' projections of this variable for the fourth quarter of 2012 shifted noticeably lower, and the range of these projections became considerably narrower, relative to the January assessments. The distributions of the unemployment rate projections for 2013 and 2014 exhibited less pronounced shifts toward lower rates. Participants made only minor adjustments to their projections of the rates of output growth and unemployment over the longer run, leaving the dispersions of their projections for both little changed. As in January, the dispersion of estimates for the longer-run rate of output growth is fairly narrow, with only one participant's estimate outside of a range of 2.2 to 2.7 percent. By comparison, participants' views about the level to which the unemployment rate would converge in the longer run are 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 outlook for inflation generally firmed a little since January. In particular, a majority of participants indicated that the incoming readings on inflation, especially for the prices of crude oil and gasoline, were a little higher than had been anticipated. Nonetheless, assuming no further shocks, most 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 under the assumption of appropriate monetary policy. Participants pointed to several factors that would help restrain inflation pressures over the projection period, including expected declines in commodity prices, modest increases in business costs, and the ongoing stability of inflation expectations. Specifically, the central tendency of participants' projections for inflation, as measured by the PCE price index, moved up in 2012 to 1.9 to 2.0 percent, and it edged up in 2013 and 2014 to 1.6 to 2.0 percent and 1.7 to 2.0 percent, respectively; the central tendencies of the forecasts for core PCE inflation were very close to those for the total measure. Participants indicated that it would take about five or six years, or less, for inflation to converge to its longer-run level.

Information about the diversity of participants' views regarding the outlook for inflation is provided in figures 3.C and 3.D. Relative to the assessments that were compiled in January and reflecting the recent incoming data, the projections for inflation shifted higher in 2012 and exhibited a noticeably narrower range. The dispersion of inflation projections also narrowed in 2013, although to a lesser degree, and was little changed in 2014. In general, the dispersion of views on the outlook for inflation over the projection period represented differences in judgments regarding a range of issues, including the current degree of slack in resource utilization and the extent to which such slack influences inflation and inflation expectations. In addition, participants differed in their estimates of how the stance of monetary policy would influence inflation expectations.

Appropriate Monetary Policy

About half of the participants judged that exceptionally low levels of the federal funds rate would remain appropriate at least until late 2014. In particular, seven participants viewed appropriate policy firming as commencing during 2014, while four others judged

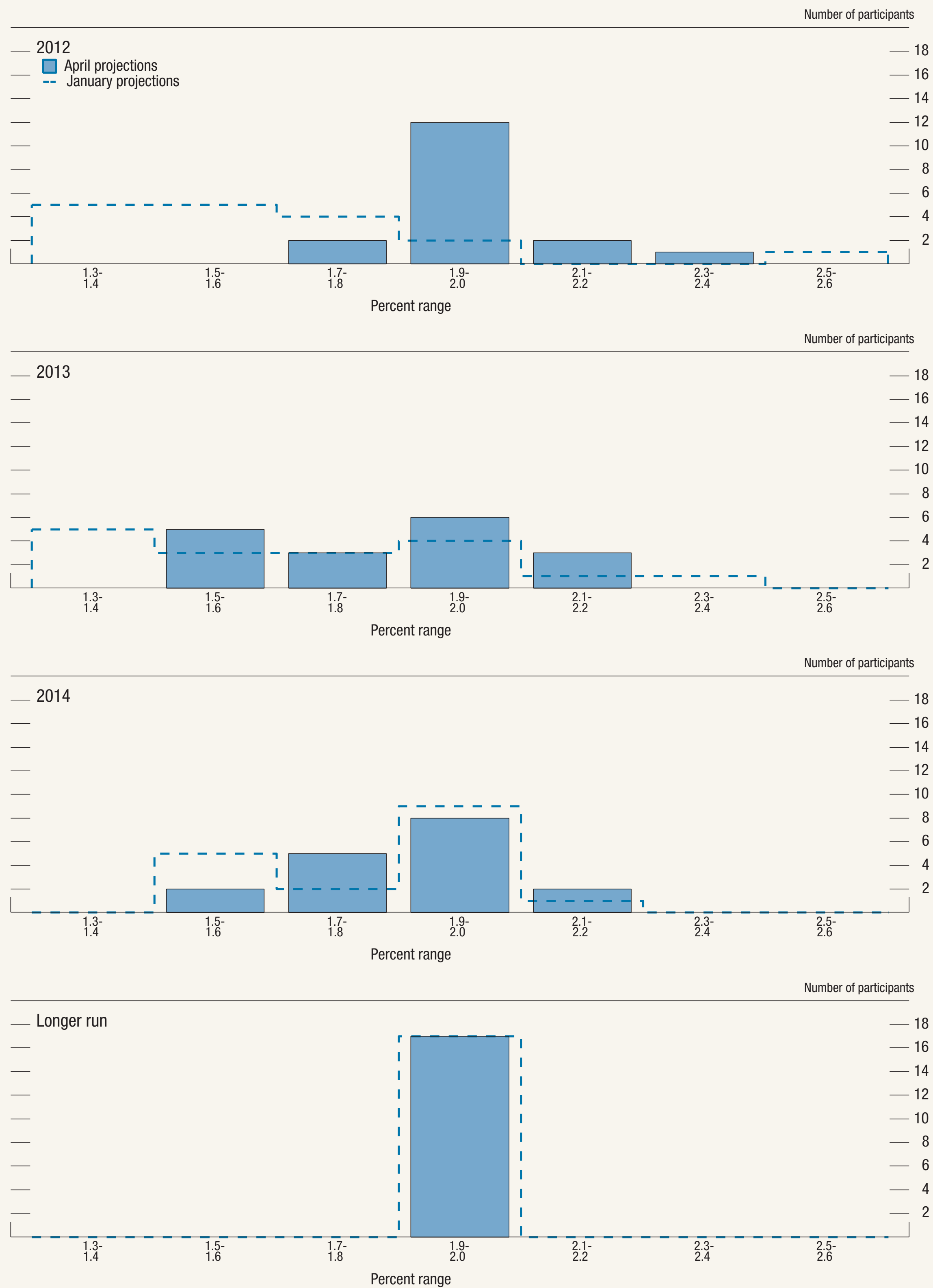
Figure 3.A. Distribution of participants' projections for the change in real GDP, 2012–14 and over the longer run

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

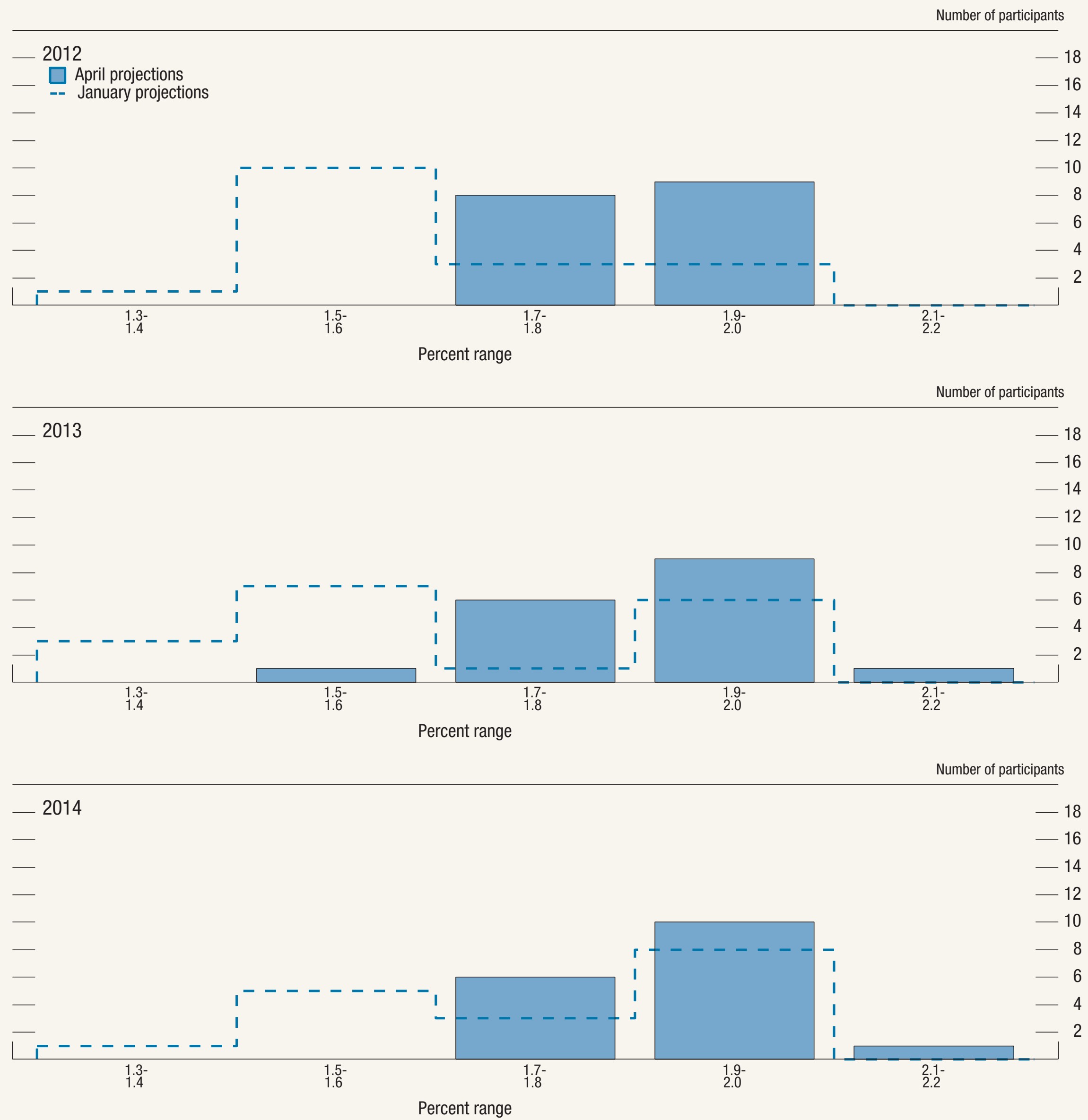
Note: Definitions of variables are in the general note to table 1.

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.

that the first increase in the target federal funds rate would not be warranted until 2015. Nine participants anticipated that the appropriate federal funds rate at the end of 2014 would be 1 percent or lower. Those who saw the first increase occurring in 2015 anticipated that the federal funds rate would be either 1 percent or 1½ percent at the end of that year. In contrast, six participants judged that an increase in the target federal funds rate would be appropriate in 2012 or 2013, and those participants anticipated that the target rate would need to be increased to around 2 to 2¾ percent by 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. Participants' estimates of the longer-run target federal funds rate ranged from 3½ to 4½ percent, reflecting the Committee's inflation objective of 2 percent and participants' individual judgments about the longer-run equilibrium level of the real federal funds rate.

Several key factors informed participants' individual expectations about the appropriate setting for monetary policy, including their assessments of the maximum level of employment, the Committee's longer-run inflation objective, the extent to which current conditions had deviated from these mandate-consistent levels and why the deviations had arisen, and their projections of the likely time periods required to return employment and inflation to levels they judge to be most consistent with the Committee's mandate. Several participants commented that their assessments took into account the risks and uncertainties associated with their outlooks for economic activity and inflation, and one pointed specifically to the potential effects of a protracted period of very low interest rates on financial stability. 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 would change if economic conditions were to evolve in an unexpected manner.

Participants also provided qualitative information on their views regarding the appropriate path of the Federal Reserve's balance sheet. All participants expect 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, the 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. Two participants judged that once begun, asset sales should proceed relatively quickly, while one participant's assessment of appropriate monetary policy incorporated an expansion of the maturity extension program in the near term. In addition, some participants indicated that they remained open to considering additional policy-related adjustments to the balance sheet if the economic outlook deteriorated.

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 is presented in figure 3.E. Participants' views on the appropriate level of the federal funds rate at the end of 2014 continued to be relatively widely dispersed, with seven participants seeing the appropriate level of the federal funds rate at that time as most likely to be 50 basis points or less and seven seeing the appropriate rate as 2 percent or higher. Relative to the other participants, the group of participants who judged that a longer period of exceptionally low levels of the federal funds rate would be appropriate tended to include those who anticipated a somewhat more gradual increase in the pace of the economic expansion and a slower decline in the unemployment rate over the projection period. Some of these participants also mentioned their assessment that a longer period of exceptionally low federal funds rates is appropriate when the federal funds rate has previously been constrained by its effective lower bound. In contrast, the six participants who judged that policy firming should begin in 2012 or 2013 included some who projected a somewhat faster pickup in economic activity over the near term. Participants seeing an earlier increase in the target federal funds rate tended to indicate that the Committee would need to begin removing policy accommodation relatively soon in order to keep inflation at mandate-consistent levels and to limit the risk of undermining the Federal Reserve's credibility and causing a rise in inflation expectations. One of these participants also stressed the risk of distortions in the financial system from an extended period of exceptionally low interest rates.

Uncertainty and Risks

Most participants judged that their projections for real GDP growth and the unemployment rate were subject to a higher level of uncertainty than was the

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.

norm during the previous 20 years (figure 4).[1] However, the number reporting elevated uncertainty moved down somewhat relative to the January SEP. Many participants also judged the levels of uncertainty associated with their inflation forecasts to be higher than the longer-run historical norm, but such an assessment continued to be somewhat less prevalent among participants than was the case for uncertainty about real activity. Several factors were said to be contributing to the elevated level of uncertainty about the economic outlook, including ongoing developments regarding the fiscal and financial situation in Europe. Many participants also cited considerable uncertainty about U.S. fiscal policy over coming quarters and its potential implications for economic activity. More broadly, participants again noted difficulties in projecting the path of the economic recovery because deep recessions brought on by severe financial crises differed importantly from most historical experience. In that regard, participants continued to be uncertain about the pace at which credit conditions would improve and about the prospects for recovery in the housing sector. In addition, participants generally saw the longer-term outlook for fiscal and regulatory policies as still highly uncertain. Some participants also expressed uncertainty about the extent to which the labor market was undergoing structural changes. Among the sources of uncertainty about the outlook for inflation were the difficulties in assessing the current and prospective margins of slack in resource markets and the effect of such slack on prices. Participants also cited uncertainty about the future path of global commodity prices, which were seen as depending on idiosyncratic supply and demand factors as well as on global growth.

Turning to the balance of risks that participants attached to their economic projections, about half reported that they judged the risks to their forecasts of both real GDP growth and the unemployment rate as broadly balanced, a few more than was the case in January. Nearly all of the remaining participants viewed the risks to real GDP growth as weighted to the downside and the risks to the unemployment rate as skewed to the upside. Participants identified several downside risks to the projected pace of economic expansion, including the fiscal and financial strains in the euro area and the possibility of an abrupt fiscal consolidation in the United States. In addition, some

Table 2. Average historical projection error ranges
Percentage points

Variable	2012	2013	2014
Change in real GDP[1]	±1.1	±1.6	±1.7
Unemployment rate[1]	±0.5	±1.2	±1.7
Total consumer prices[2]	±0.8	±1.0	±1.0

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 spring 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).

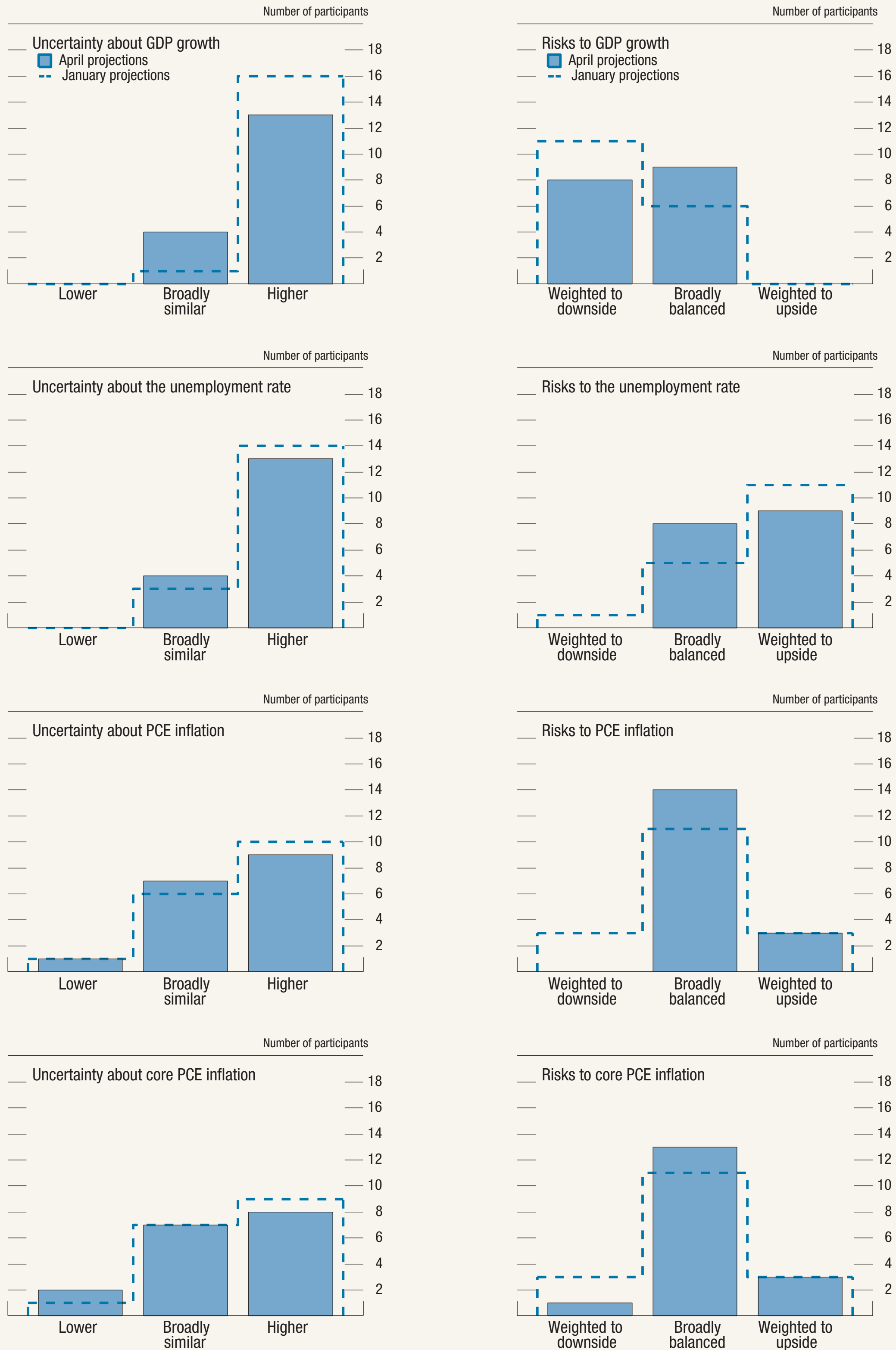
1 For definitions, refer to general note in table 1.

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.

of the factors that had restrained the U.S. recovery in recent years could persist for longer than currently expected and thus weigh on economic activity to a greater extent going forward than participants had assumed in their baseline forecasts. In particular, some participants mentioned the downside risks to consumer spending in light of meager gains in disposable personal income and households' still-weak balance sheets. Others cited the possible damping effects of high levels of uncertainty regarding regulatory policies on businesses' willingness to invest and hire. A few participants noted the risk of another disruption in global oil markets or greater tensions in the Middle East that could not only boost inflation but also reduce real incomes, consumer confidence, and spending. Some of the participants who judged the risks to be broadly balanced recognized some of these downside risks to the outlook, but they saw them as about counterbalanced by the chance that the recent signs of improvement in labor markets and consumer spending could signal the emergence of a more vigorous recovery.

Most participants judged the risks to their projections of inflation as broadly balanced, including a few more than held that view in January. However, a few saw the risks as tilted to the upside, pointing to the possibility of disruptions in global oil and commodity markets or to effects from the current stance of monetary policy. Two of these participants indicated that the current highly accommodative stance of monetary policy and the substantial liquidity currently in the financial system risked a pickup in inflation to a level above the Committee's longer-run objective, or cited the risk that uncertainty about the Committee's ability to effectively remove policy accommodation when appropriate could lead to a rise in inflation expectations.

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.



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 1.9 to 4.1 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 and 1.0 to 3.0 percent in the second and third years.

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.

Meeting Held on 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

---

[1] Attended Tuesday's morning session only.

[2] Attended Tuesday's session only.

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

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

---

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

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 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

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

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 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 partici-

pant 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

Addendum: 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 histori-

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	

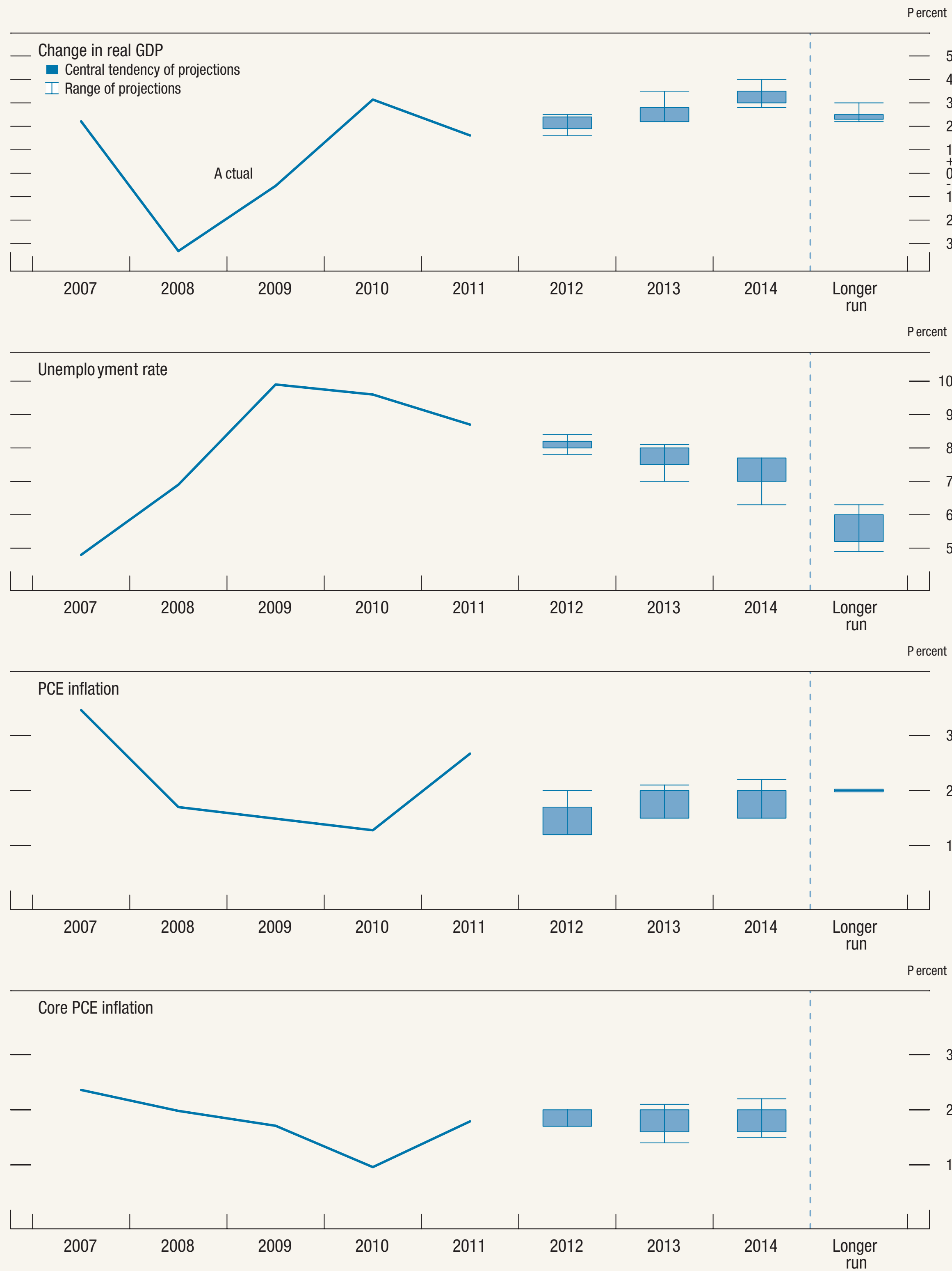
Note: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price 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.

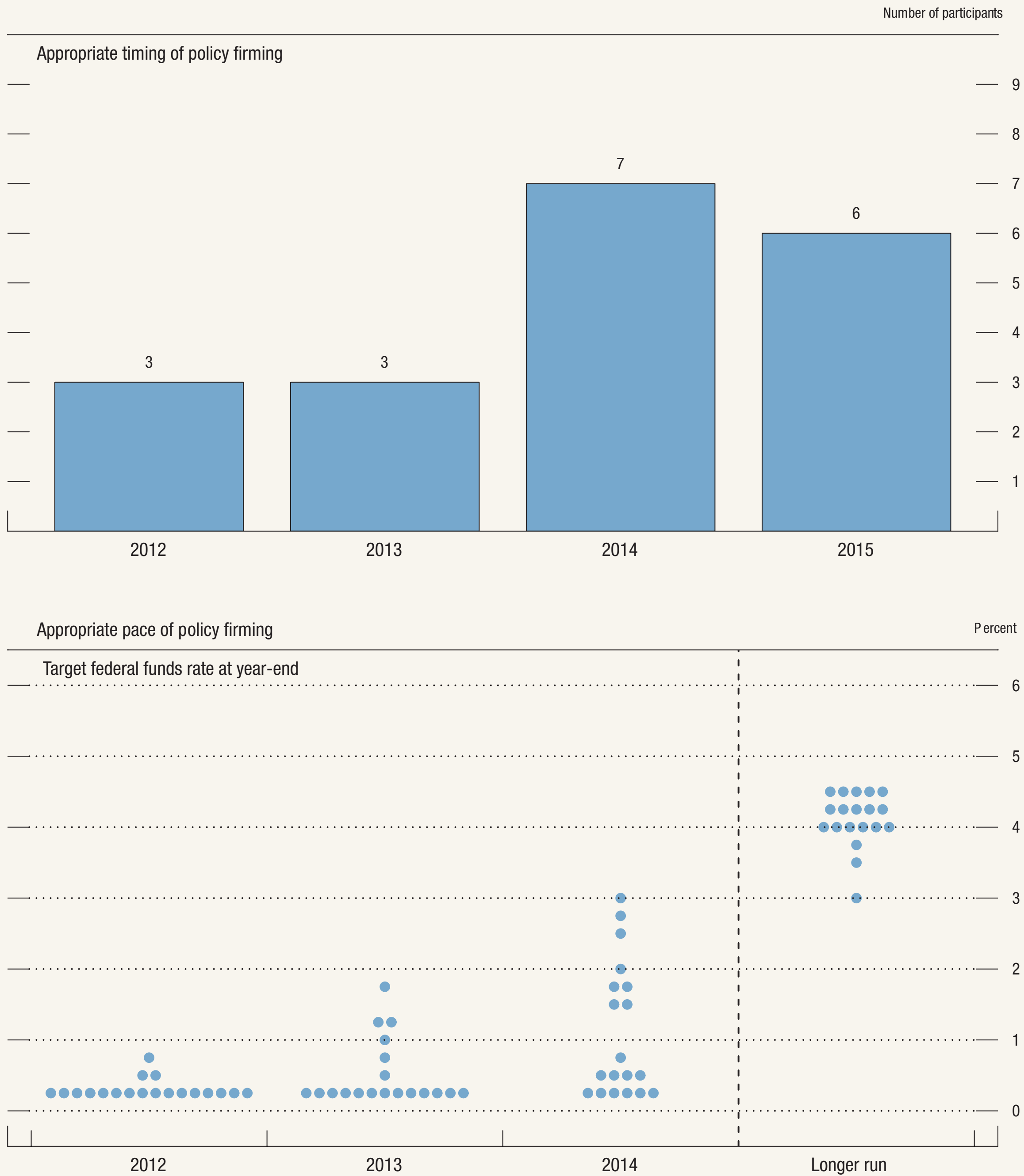
3 Longer-run projections for core PCE inflation are not collected.

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 ¼ 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 ¼ 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.

cal 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 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.

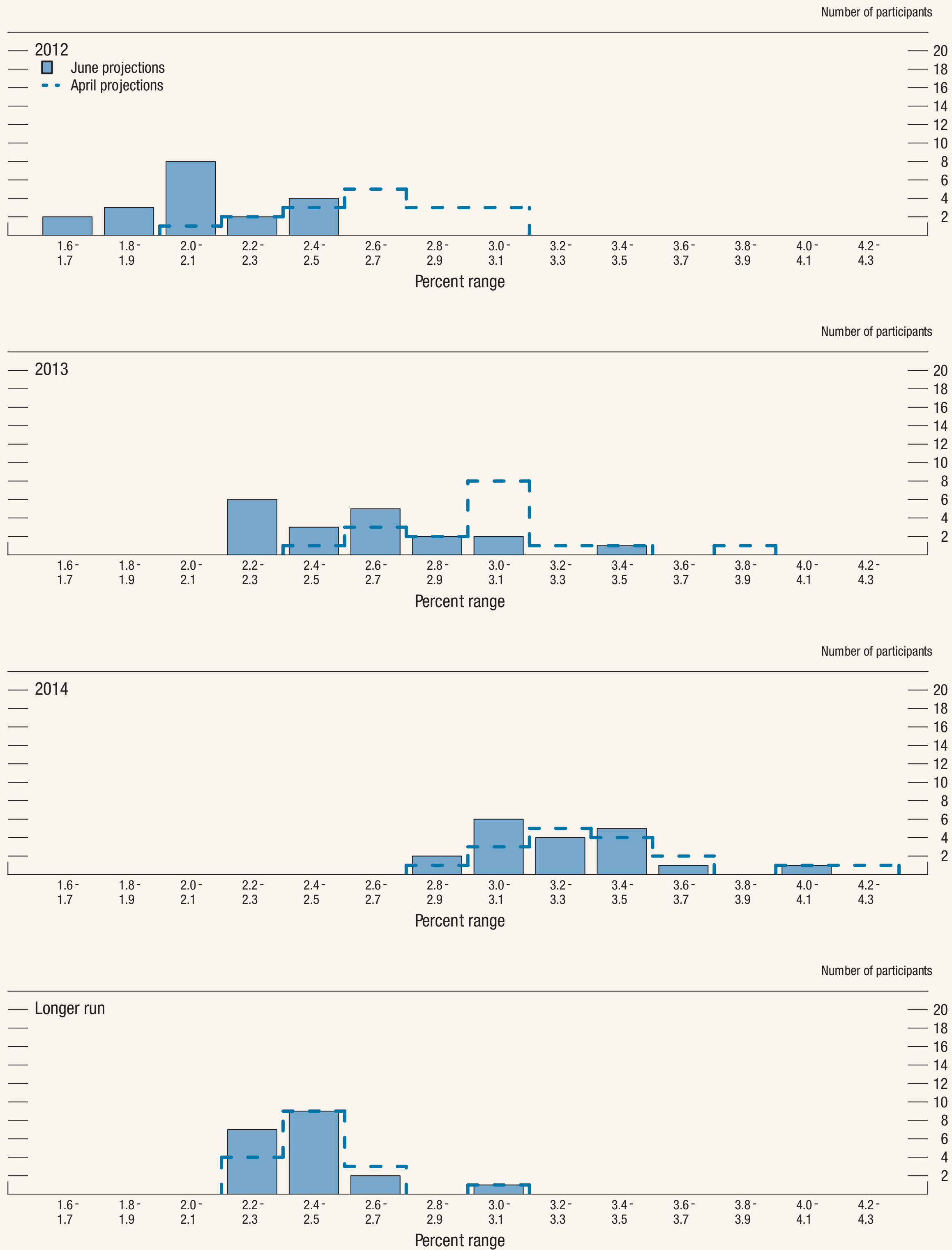
Consistent with the downward revisions to their projections for real GDP growth in 2012 and 2013, nearly all participants marked up their assessments for the rate of unemployment. Participants projected the unemployment rate at the end of 2012 to remain at or slightly below recent levels, with a central 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

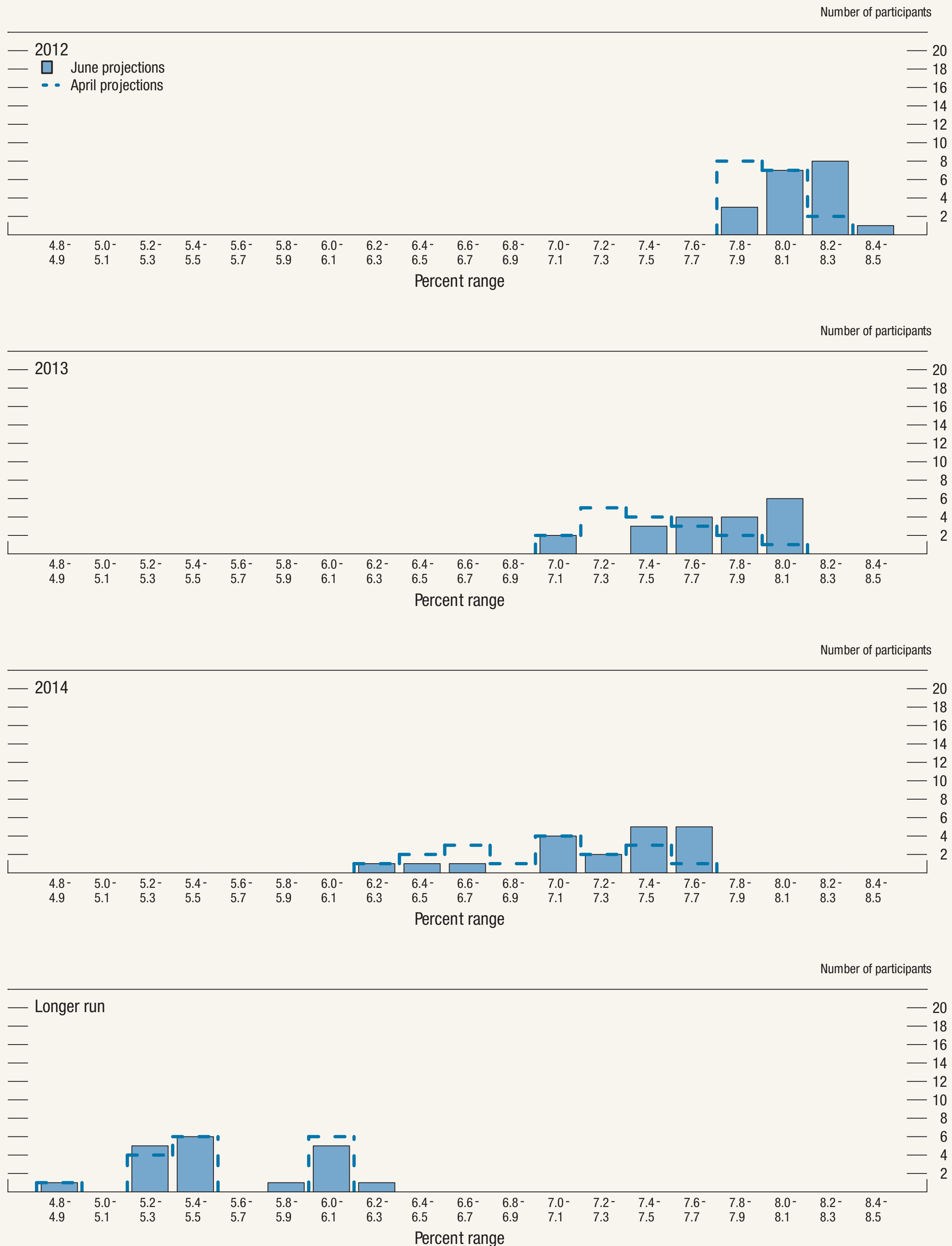
Participants' views about the medium-run outlook for inflation under the assumption of appropriate monetary policy were little changed from April. However, nearly all of them marked down their assessment of headline inflation in the near term, pointing to recent declines in the prices of crude oil and 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

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.

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 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.

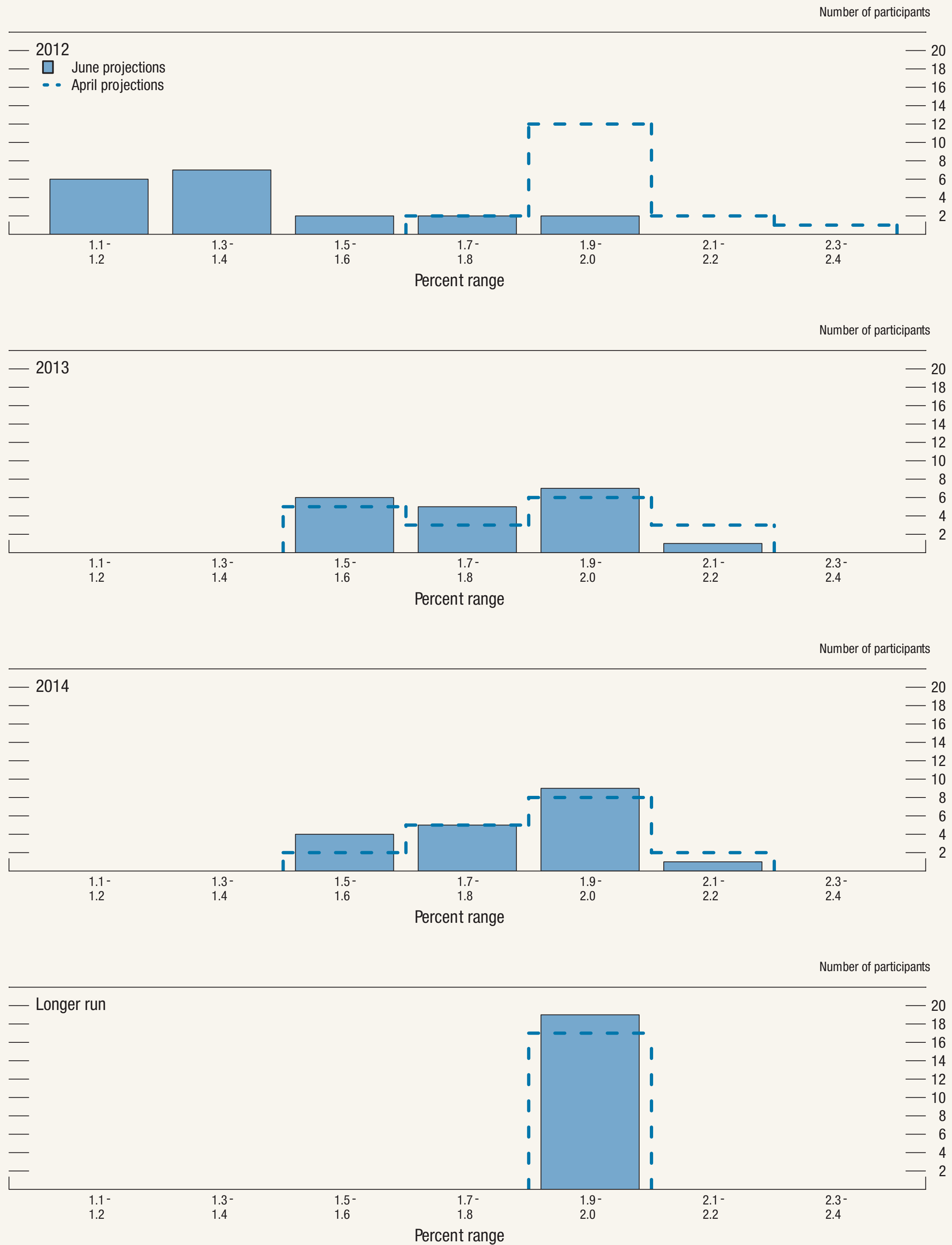
All participants reported levels for the appropriate target federal funds rate at the end of 2014 that were well below their estimates of the level expected to prevail in the longer run. Estimates of the longer-run target federal funds rate ranged from 3 to 4½ percent, reflecting the Committee's inflation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

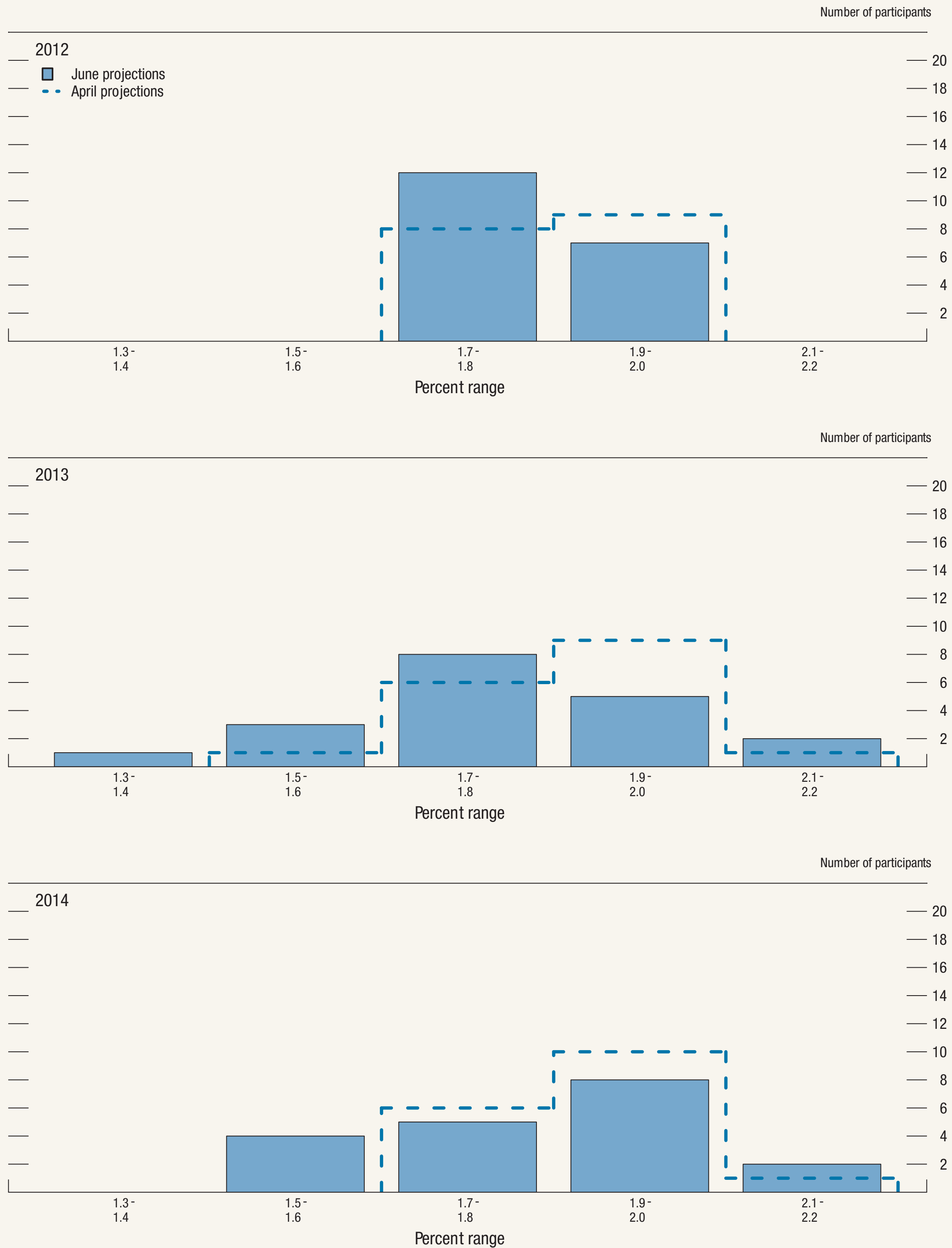
Figure 3.E details the distribution of participants' judgments regarding the appropriate level of the target federal funds rate at the end of each calendar year

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



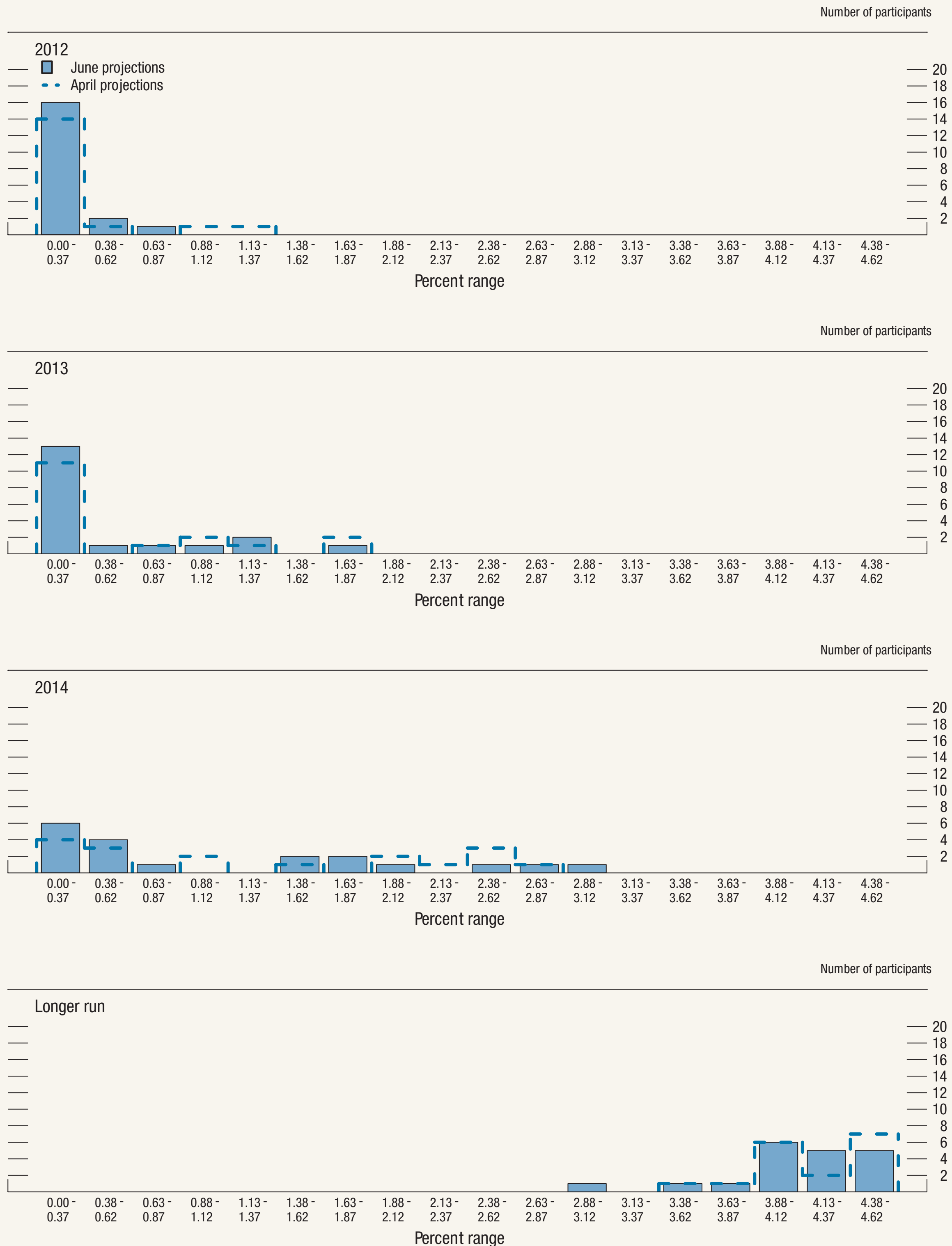
Note: Definitions of variables are in the general note to table 1.

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.

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 appropriate 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).[5] 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.

5 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.

Meeting Held on July 31–August 1, 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, July 31, 2012, at 1:00 p.m. and continued on Wednesday, August 1, 2012, at 9:00 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

Thomas C. Baxter
Deputy General Counsel

Steven B. Kamin
Economist

David W. Wilcox
Economist

David Altig, Thomas A. Connors, Michael P. Leahy, James J. McAndrews, William Nelson, David Reifschneider, and William Wascher
Associate Economists

Simon Potter
Manager, System Open Market Account

Michael S. Gibson
Director, Division of Banking Supervision and Regulation, Board of Governors

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

James A. Clouse
Deputy Director, Division of Monetary Affairs, 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

Thomas Laubach
Senior Adviser, Division of Research and Statistics, Board of Governors

Joyce K. Zickler
Senior Adviser, Division of Monetary Affairs, Board of Governors

Michael T. Kiley and David E. Lebow
Associate Directors, Division of Research and Statistics, Board of Governors

Karen M. Pence
Assistant Director, Division of Research and Statistics, Board of Governors

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

Elizabeth Klee
Senior Economist, Division of Monetary Affairs, Board of Governors

Robert J. Tetlow
Senior Economist, Division of Research and Statistics, Board of Governors

David A. Sapenaro
First Vice President, Federal Reserve Bank of St. Louis

Jeff Fuhrer and Daniel G. Sullivan
Executive Vice Presidents, Federal Reserve Banks of Boston and Chicago, respectively

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

Reuven Glick
Group Vice President, Federal Reserve Bank of San Francisco

Todd E. Clark, Lorie K. Logan, Keith Sill, and Mark A. Wynne
Vice Presidents, Federal Reserve Banks of Cleveland, New York, Philadelphia, and Dallas, respectively

Robert L. Hetzel and Samuel Schulhofer-Wohl
Senior Economists, Federal Reserve Banks of Richmond and Minneapolis, respectively

Simple Rules for Monetary Policy

A staff presentation summarized research on the efficacy of alternative simple monetary policy rules in fostering the Federal Reserve's monetary policy objectives of maximum employment and price stability. The presentation reviewed the characteristics of a variety of rules and noted a number of reasons why current conditions might warrant deviating from the prescriptions of simple rules designed for more normal times. The presentation also discussed how simple rules might be used as part of a comprehensive policy framework to provide clear and transparent benchmarks for monetary policy decisionmaking and the possibility that such rules could be helpful in communicating the connection between policy choices and the Federal Open Market Committee's (FOMC) objectives.

Meeting participants expressed a range of views regarding the appropriate role of policy rules in monetary policy decisionmaking. A number of participants indicated that such rules have played a useful role in informing the Committee's monetary policy deliberations. However, several participants pointed to specific considerations—including the possible mismeasurement of unobservable variables, such as potential output, and uncertainty about the appropriate economic models to use in estimating the magnitude of those variables—that might limit the usefulness of simple rules both internally and in public communications. Several participants saw value in examining the performance of rules across a range of economic models. Participants discussed the case for making adjustments to the prescriptions of simple policy rules in the current circumstances to take into account various considerations such as the effective lower bound for the federal funds rate, the effects of the Committee's balance sheet policies, and potential shifts in the dynamics of the economy. Some participants noted that adjustment of standard policy rules for balance sheet policies would tend to push up the federal funds rate prescription, while a number of participants indicated that other factors related to current circumstances may warrant maintaining an accommodative stance of policy for longer than would be prescribed by standard rules. With regard to the latter, some participants suggested that inertial policy rules—that is, rules under which any movements in the stance of policy tend to be fairly persistent—would be most appropriate in the current context.

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 June 19–20, 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 continuation of the maturity extension program authorized at the June 19–20, 2012, FOMC meeting. His report included a summary of analysis prepared by the staff on the potential implications of the size and composition of the Federal Reserve's securities portfolio for private-sector holdings of Treasury securities and agency MBS and for trading conditions in markets related to these securities. The Manager also reported on recent developments in European money markets and impli-

cations for the yields on the euro-denominated assets that the Federal Reserve holds in its foreign exchange reserves. By unanimous vote, the Committee ratified the Desk's domestic transactions over the intermeeting period. There were no intervention operations in foreign currencies for the System's account over the intermeeting period.

Staff Review of the Economic Situation

The information reviewed at the July 31–August 1 meeting indicated that economic activity increased at a slower pace in the second quarter than earlier in the year and that labor market conditions had improved little in recent months. In addition, revised data for 2009 through 2011 from the Bureau of Economic Analysis indicated that the recession had been slightly less deep and the early part of the subsequent recovery had been a bit more gradual than previously thought, leaving the level of real gross domestic product (GDP) at the end of last year essentially the same as estimated earlier. In the second quarter, consumer price inflation was markedly lower than in the first quarter, mostly reflecting substantial declines in consumer energy prices, while measures of longer-run inflation expectations remained stable.

Private nonfarm employment expanded in June at about the same modest pace as in the second quarter as a whole, and government employment decreased slightly. The unemployment rate was 8.2 percent in June, the same as its average during the first half of the year. The rate of long-duration unemployment stayed elevated, and the share of workers employed part time for economic reasons was still high. Indicators of job openings and firms' hiring plans were generally subdued. While initial claims for unemployment insurance trended down a bit over the intermeeting period, they remained at a level consistent with continued modest increases in employment in the coming months.

Manufacturing production decelerated significantly in the second quarter following a large gain in the first quarter, while the rate of manufacturing capacity utilization was unchanged on balance. The production of motor vehicles and parts increased considerably last quarter, but factory output outside of the motor vehicle sector was essentially flat. Automakers' schedules indicated that the pace of motor vehicle assemblies in the third quarter would be about the same as in the second quarter. Broader indicators of manufacturing output, such as the diffusion indexes of new orders from the national and regional manufacturing surveys, declined in recent months and were at levels consistent with only muted increases in production in the near term.

Real personal consumption expenditures increased at a slower rate in the second quarter than in the first quarter, primarily reflecting a decrease in spending for motor vehicles. Meanwhile, real disposable personal income rose at a faster pace than consumer spending in both the first and second quarters, boosted in part in recent months by lower energy prices. Consumer sentiment as measured by the Thomson Reuters/University of Michigan Surveys of Consumers (Michigan Survey) was more downbeat in June and July than earlier in the year.

Conditions in the housing market generally improved further in recent months, but activity remained at a low level against the backdrop of the large inventory of foreclosed and distressed properties and tight underwriting standards for mortgage loans. Both starts and permits of new single-family homes increased in the second quarter. Starts of new multifamily units were about the same last quarter as in the previous quarter, but permits rose, which pointed to higher multifamily construction in the coming months. Home prices increased in May for the fifth consecutive month. Sales of new homes in the second quarter were moderately higher than in the first quarter, but existing home sales decreased slightly.

Real business expenditures on equipment and software rose in the second quarter at a faster pace than in the first quarter. However, new orders for nondefense capital goods excluding aircraft decreased last quarter, and the backlog of unfilled orders decelerated sharply. Other recent forward-looking indicators, such as surveys of business conditions and capital spending plans, also suggested that increases in outlays for business equipment would slow in coming months. Real business spending for nonresidential construction increased somewhat in the second quarter but remained at a relatively low level. Meanwhile, business inventories generally appeared to be relatively well aligned with sales.

Real federal government purchases decreased a little in the second quarter, following a much sharper decline in the previous three quarters, as the continued contraction in defense spending eased. Real state and local government purchases continued to contract at a moderate rate last quarter.

The U.S. international trade deficit narrowed in May, as exports edged up and imports declined. The increase in exports primarily reflected higher exports of services and agricultural products. The decrease in imports was the result of a decline in oil imports, as both the price and the quantity of oil imports fell. Imports of consumer goods and industrial supplies also moved down, but imports of capital goods and automotive products increased. Based on an estimate of the trade data for June, the advance release of the national income and product accounts showed that real net exports of goods and services made a small negative arithmetic contribution to the increase in U.S. real GDP in the second quarter.

Overall U.S. consumer prices increased at a slower pace in the second quarter than in the first. Consumer energy prices declined significantly last quarter, and survey data indicated that gasoline prices fell somewhat further in the first few weeks of July. Meanwhile, consumer food prices posted only a small increase last quarter, but the recent sizable run-up in spot and futures prices of farm commodities, reflecting the effects of the drought and hot weather in the midwestern part of the United States, pointed to some temporary upward pressures on retail food prices later this year. Consumer prices excluding food and energy increased more moderately in the second quarter than in the first. Near-term inflation expectations from the Michigan Survey rose a little in June and July, while longer-term inflation expectations in the survey continued to be stable.

Available measures of labor compensation indicated that nominal wage gains remained restrained. The employment cost index rose at a modest pace again in the second quarter. Average hourly earnings for all employees also increased at a relatively slow rate last quarter.

Foreign economic growth continued to be subdued, as fiscal retrenchment and financial stresses in the euro area continued to weigh on economic activity in Europe and elsewhere. Recent indicators of production and confidence in the euro area remained weak, and the preliminary second-quarter estimate of real GDP in the United Kingdom showed a contraction. Real GDP in China accelerated somewhat in the second quarter following a relatively weak expansion in the first quarter, and recent monthly data suggested some further improvement. However, data for other emerging market economies generally pointed to a deceleration in economic activity last quarter. Foreign inflation eased in the second quarter and remains well contained, as earlier declines in the prices of energy and other commodities passed through to the retail level.

Staff Review of the Financial Situation

Several factors influenced developments in financial markets since the time of the June FOMC meeting. Generally weaker-than-expected economic data in the United States, concerns about the fiscal and banking situation in the euro area, and the outlook for global economic growth weighed on investor sentiment. However, the effects of these factors were offset to some extent by actual and expected easing of monetary policy in the United States and abroad and by better-than-anticipated profits at some S&P 500 firms.

Interest rates generally moved down, on net, over the intermeeting period. The yield on nominal 10-year Treasury securities declined to a historically low level, partly due to a lower expected path of the federal funds rate, the continuation of the maturity extension program announced at the June FOMC meeting, and perceptions of an increased likelihood that the Federal Reserve will ease monetary policy further. In addition, persistent concerns about euro-area developments were reportedly associated with increased safe-haven demands that contributed to the decline in Treasury yields. Anecdotal reports suggested that the decrease in shorter-term yields may also have reflected somewhat increased expectations that the Federal Reserve would reduce the interest rate paid on reserve balances in coming months. Near-term indicators of inflation expectations derived from nominal and inflation-protected Treasury securities fell modestly despite an increase in some commodity prices; such indicators changed little at longer horizons. The expected path for the federal funds rate derived from money market futures quotes shifted down.

Conditions in short-term unsecured dollar funding markets remained stable over the intermeeting period, although most peripheral euro-area institutions continued to have little, if any, access to such markets. In secured funding markets, Treasury general collateral repurchase agreement rates rose slightly on balance.

Broad indexes of U.S. equity prices rose somewhat, on net, over the intermeeting period, with significant gains prompted in part by comments from European officials that apparently raised investor expectations

for near-term European policy actions. Option-implied volatility on the S&P 500 index rose slightly. Stock prices for the large domestic bank holding companies posted mixed changes over the period, and credit default swap (CDS) spreads for those firms generally moved lower on net.

Yields on investment- and speculative-grade corporate bonds fell further over the intermeeting period, approaching record lows. Their spreads relative to comparable-maturity Treasury securities narrowed but were still above their average levels prior to the financial crisis. Nonfinancial firms continued to issue debt at a strong pace over the period. Gross investment-grade corporate bond issuance remained robust in June and July, while the volume of nonfinancial commercial paper outstanding rose early in the second quarter but decreased slightly in June. Commercial and industrial (C&I) loans advanced further over the intermeeting period. Issuance in the syndicated leveraged loan market remained solid in the second quarter; terms and structures of new leveraged loan deals reportedly loosened modestly on the margin. Gross public equity issuance by nonfinancial firms was anemic in June and July.

Financial conditions in the commercial real estate market remained somewhat strained against a backdrop of weak fundamentals and still-tight underwriting. That said, issuance of commercial mortgage-backed securities picked up in the second quarter.

Despite new historical lows for residential mortgage rates over the intermeeting period, refinancing activity remained relatively muted. Evidence from the Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS) conducted in July indicated that mortgage underwriting standards at banks generally have not eased much from their tightest post-crisis levels. Consumer credit expanded further in May as a result of rapid increases in student loans and, to a lesser extent, auto loans. Delinquency rates for consumer credit remained low, likely in part because of a compositional shift of credit supply over the past few years toward the least-risky borrowers.

Gross issuance of long-term municipal bonds was robust in June and July. Net issuance of long-term bonds turned positive in the second quarter after staying in negative territory for much of the past year. Yields on long-term general obligation municipal bonds generally followed Treasury yields lower, while default rates remained very low and CDS spreads for states were roughly unchanged on net.

Bank credit and total loans continued to expand modestly in the second quarter, largely because of the further robust increase in C&I loans. The gradual expansion in total loans was broadly consistent with the July SLOOS, in which domestic banks generally indicated that demand strengthened for many types of loans in the second quarter and that lending standards eased somewhat, on balance, across most major loan categories.

The staff's broad nominal index for the foreign exchange value of the dollar changed little, on net, over the intermeeting period, although the dollar appreciated against the euro. Financial markets in the euro area were volatile, as a deterioration in market sentiment gave way to periods of optimism following the euro-area summit in late June, the decision by the European Central Bank (ECB) to ease policy in early July, and indications from the ECB later in July that the central bank might take further steps to support the monetary union. On net, European stock markets finished the period higher. Yield spreads on Spanish and Italian 10-year bonds over their German equivalents, which rose sharply over most of July, fell back from their intermeeting peaks but remained elevated.

Several foreign central banks eased monetary policy over the intermeeting period. The ECB cut its benchmark policy rate by 25 basis points and reduced the rate on its overnight deposit facility to zero. The Bank of England increased the size of its asset purchase program and announced details on its new program designed to boost bank lending to the nonfinancial sector. The central banks of Brazil, China, and South Korea all reduced official rates as well. Amid policy easing in the euro area and United Kingdom, yields on German and U.K. sovereign bonds declined, with two-year German sovereign bonds trading at yields below zero.

Staff Economic Outlook

In the economic forecast prepared by the staff for the July 31–August 1 FOMC meeting, the near-term projection for real GDP growth was revised down somewhat. The revision primarily reflected a slower pace of consumer spending than the staff expected at the time of the previous projection, along with a deterioration in some forward-looking indicators. However, the staff's medium-term forecast for real GDP

growth was little changed, as the slightly weaker underlying pace of economic activity suggested by the recent data was roughly offset by the anticipated effects of the continuation of the maturity extension program announced following the June FOMC meeting, which had not been incorporated in the previous projection. With the restraint from fiscal policy assumed to increase next year, the staff projected that increases in real GDP would not significantly exceed the growth rate of potential output in 2013. Thereafter, economic activity was expected to accelerate gradually, supported by an eventual easing in fiscal policy restraint, gains in consumer and business sentiment, further improvements in credit conditions, and continued accommodative monetary policy. The expansion in economic activity was anticipated to reduce the substantial margin of slack in labor and product markets only slowly over the projection period, and the unemployment rate was expected to remain elevated at the end of 2014.

The staff's forecast for inflation was little changed from the projection prepared for the June FOMC meeting. With crude oil prices expected to decline a bit from their current levels, the boost to retail food prices from the current drought in the Midwest anticipated to be only temporary and relatively small, longer-run inflation expectations remaining 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 their discussion of the economic situation and the outlook, meeting participants agreed that the information received since the Committee met in June suggested that economic activity had decelerated in recent months to a slower pace than they had anticipated. Although business investment had continued to advance, consumer spending had slowed considerably since earlier in the year. Conditions in the housing sector appeared to have improved somewhat, but from a very low level. Indicators of manufacturing activity had softened. Recent monthly gains in payroll employment had continued to be small, and the unemployment rate in June remained at an elevated level. Consumer price inflation had been low in recent months, as declines in the costs of crude oil were passed through to retail energy prices. Longer-term inflation expectations had remained stable.

Regarding the economic outlook, most participants agreed that economic growth was likely to remain moderate over coming quarters and then pick up gradually. However, some participants indicated that they had lowered their near-term forecasts for economic growth in light of the weaker-than-expected increases in consumer spending and employment in recent months. In addition, some participants expressed concern about the persistent headwinds restraining the pace of the recovery, including the weak housing sector, still-tight borrowing conditions for some households and firms, and fiscal restraint at all levels of government. Many participants judged that a high level of uncertainty about possible spillovers from the fiscal and banking strains in the euro area and about the outlook for U.S. fiscal or regulatory policies was holding back household and business spending. And they saw the possibilities of an intensification of strains in the euro area and of a sharper-than-anticipated U.S. fiscal consolidation as significant downside risks to the economic outlook. Although participants generally agreed that improvements in recent years in the capital and liquidity of financial institutions and in the strength of household and business balance sheets have increased the resilience of the economy, some were concerned that at its current pace, the recovery was still vulnerable to adverse shocks. Given participants' forecasts of economic activity, they generally anticipated that the unemployment rate would decline only slowly toward levels that participants judge to be consistent with the Committee's mandate. Participants' assessments of the outlook for inflation were largely unchanged from those reported in June. Smoothing through the effects of fluctuations in food and energy prices, participants anticipated that inflation over the medium term would remain at or below the Committee's 2 percent longer-run objective.

Meeting participants again exchanged views on the extent of slack in labor and product markets. A number of participants expressed the view that structural changes in the labor market were not sufficient to explain the high level of unemployment. Those participants saw substantial slack in resource utilization and hence continued to judge that inflation was likely to remain subdued over the medium term as the economy continued to recover. However, several other participants interpreted the moderate pace of the recovery as pointing to a more substantial markdown in the trajectory of potential output. In particular, a couple of participants noted that they

would have expected inflation to have fallen more in recent years if the output gap had been as substantial as some measures suggested. One participant posited that the sharp decline in net worth and reduced credit availability in recent years not only weighed on aggregate demand, but also reduced aggregate supply by hampering new business formation and product innovation; another participant cited evidence that structural unemployment was elevated as a result of mismatches between the skills demanded by employers and those of the long-duration unemployed.

In discussing developments in the household sector, many participants noted the recent deceleration in overall consumer spending, although a couple cited new autos and tourism as areas of relative strength. Participants saw several factors as likely contributing to slower consumer spending, including the weakness in earned income and a high level of uncertainty among households about the economic outlook. Several pointed out that while households had made considerable progress in reducing their debt and rebuilding their savings, the deleveraging process was still ongoing, the level of housing debt remained high, and a significant number of mortgage borrowers continued to be underwater on their loans. Home sales and construction were generally viewed as gradually improving, supported in part by historically low mortgage interest rates. Many participants reported that house prices in their Districts were rising or had bottomed out, and several noted that their contacts saw signs of progress in reducing the overhang of unsold properties. However, it was noted that the reduction in inventories should be viewed cautiously because owners who are underwater on their mortgages may be withholding their homes from the market, implying a substantial "shadow" inventory.

Regarding the business sector, many participants reported that, with the exception of motor vehicle production, manufacturing activity in their Districts was slow or had declined in recent months. Nonetheless, forward-looking surveys of orders and manufacturing production in a couple of Districts were more positive. Energy-related activity continued to expand, and investment projects in that sector were reported to be moving forward. However, contacts in several Districts indicated that export demand had weakened as a result of the slowdown in economic activity in Europe; Asia; and some emerging market countries, including China. More generally, some participants reported that their business contacts regarded the economic outlook to be highly uncertain, in part due to unresolved fiscal and regulatory matters. Although several participants noted that the uncertainty had not led businesses in their Districts to reduce payrolls or cut back spending, others cited reports of shortfalls from business plans that could lead to cost-cutting, of restructuring to position firms for leaner operations, or even of postponed investment and hiring. Two participants provided an update on the situation in the agricultural sector in light of the drought in the Midwest: With crop yields projected to be down markedly and prices rising, livestock producers appeared likely to suffer losses as a result of higher input costs while crop producers would need to rely on higher prices and crop insurance to stabilize their income.

The incoming information on inflation over the intermeeting period was largely in line with participants' expectations. Consumer prices had decelerated as a result of the pass-through of lower crude oil costs to retail prices of gasoline and fuel oil. Crude oil prices had turned up again more recently, but one participant noted that global inventories of oil were elevated and, with world demand easing, prices should be restrained going forward. Participants acknowledged that the drought would likely result in a temporary run-up in consumer food prices later this year. Nonetheless, inflation was expected to remain subdued, on balance, over coming quarters. In explaining that outlook, participants cited the lack of upward pressure from labor costs and prices of imported commodities as well as the stability of inflation expectations. A couple of participants referred to information from business contacts suggesting that inflation was unlikely to decline further, and a few expressed concerns that maintaining a highly accommodative stance of monetary policy for an extended period could erode the stability of inflation expectations over time and hence posed upside risks to the inflation outlook.

Financial markets remained sensitive to ongoing developments related to the sovereign debt and banking situation in the euro area, and participants continued to view the possibility of an intensification of strains in global financial markets as a significant downside risk to the domestic economic outlook. Several participants indicated that recent trends in euro-area equity indexes and sovereign debt yields had not been encouraging, and some noted that the uncertainty prevailing in global financial markets was showing through in a cautious posture of investors. Nonetheless, participants generally agreed that conditions in domestic credit markets remained more

favorable than they were a year ago. One participant pointed out that credit risk spreads—while still above pre-recession norms—may have been boosted by safe-haven demands for Treasury securities and indicated that broader financial market conditions seemed reasonably accommodative. Banks were reported to be seeing an increase in their residential mortgage business along with a continued rise in C&I lending, especially to large firms; consumer credit was also increasing.

Participants discussed a number of policy tools that the Committee might employ if it decided to provide additional monetary accommodation to support a stronger economic recovery in a context of price stability. One of the policy options discussed was an extension of the period over which the Committee expected to maintain its target range for the federal funds rate at 0 to ¼ percent. It was noted that such an extension might be particularly effective if done in conjunction with a statement indicating that a highly accommodative stance of monetary policy was likely to be maintained even as the recovery progressed. Given the uncertainty attending the economic outlook, a few participants questioned whether the conditionality of the forward guidance was sufficiently clear, and they suggested that the Committee should consider replacing the calendar date with guidance that was linked more directly to the economic factors that the Committee would consider in deciding to raise its target for the federal funds rate, or omit the forward guidance language entirely.

Participants also exchanged views on the likely benefits and costs of a new large-scale asset purchase program. Many participants expected that such a program could provide additional support for the economic recovery both by putting downward pressure on longer-term interest rates and by contributing to easier financial conditions more broadly. In addition, some participants noted that a new program might boost business and consumer confidence and reinforce the Committee's commitment to making sustained progress toward its mandated objectives. Participants also discussed the merits of purchases of Treasury securities relative to agency MBS. However, others questioned the possible efficacy of such a program under present circumstances, and a couple suggested that the effects on economic activity might be transitory. In reviewing the costs that such a program might entail, some participants expressed concerns about the effects of additional asset purchases on trading conditions in markets related to Treasury securities and agency MBS, but others agreed with the staff's analysis showing substantial capacity for additional purchases without disrupting market functioning. Several worried that additional purchases might alter the process of normalizing the Federal Reserve's balance sheet when the time came to begin removing accommodation. A few participants were concerned that an extended period of accommodation or an additional large-scale asset purchase program could increase the risks to financial stability or lead to a rise in longer-term inflation expectations. Many participants indicated that any new purchase program should be sufficiently flexible to allow adjustments, as needed, in response to economic developments or to changes in the Committee's assessment of the efficacy and costs of the program.

Some participants commented on other possible tools for adding policy accommodation, including a reduction in the interest rate paid on required and excess reserve balances. While a couple of participants favored such a reduction, several others raised concerns about possible adverse effects on money markets. It was noted that the ECB's recent cut in its deposit rate to zero provided an opportunity to learn more about the possible consequences for market functioning of such a move. In light of the Bank of England's Funding for Lending Scheme, a couple of participants expressed interest in exploring possible programs aimed at encouraging bank lending to households and firms, although the importance of institutional differences between the two countries was noted.

Committee Policy Action

The information received over the intermeeting period indicated that economic activity had decelerated in recent months, with a notable slowing in consumer spending. Employment gains continued to be modest, and the unemployment rate was unchanged at a level that almost all members saw as elevated relative to levels consistent with the Committee's mandate. Inflation had declined from its rate earlier in the year, mainly reflecting lower prices of crude oil and gasoline, and inflation expectations had been stable. Members generally expected that economic growth would be moderate over coming quarters and then would pick up very gradually. While most members did not view the medium-run economic outlook as having changed significantly since the June meeting, several noted that they had lowered their expectations for economic growth over coming quarters. Furthermore, members generally attached an unusually high level of uncertainty to their assessments of

the economic outlook and continued to judge that the risks to economic growth were tilted to the downside because of strains in financial markets stemming from the sovereign debt and banking situation in Europe as well as the potential for a significant slowdown in global economic growth and for a sharper-than-anticipated fiscal contraction in the United States. A number of members noted that if the recent modest rate of economic growth were to persist, the economy would be less able to weather a material adverse shock without slipping back into recession. Most members continued to anticipate that, with longer-term inflation expectations stable and the existing slack in resource utilization being taken up very gradually, inflation would run over the medium term at a rate at or below the Committee's objective of 2 percent. In contrast, one member thought that the economy may be operating near its current potential and, thus, that maintaining the Committee's current highly accommodative policy stance well into 2014 would pose upside risks to the inflation outlook.

The Committee had provided additional accommodation at its previous meeting by announcing the continuation of the maturity extension program through the end of the year, and more time was seen as necessary to evaluate the effects of that decision. Nonetheless, many members expected that at the end of 2014, the unemployment rate would still be well above their estimates of its longer-term normal rate and that inflation would be at or below the Committee's longer-run objective of 2 percent. A number of them indicated that additional accommodation could help foster a more rapid improvement in labor market conditions in an environment in which price pressures were likely to be subdued. Many members judged that additional monetary accommodation would likely be warranted fairly soon unless incoming information pointed to a substantial and sustainable strengthening in the pace of the economic recovery. Several members noted the benefits of accumulating further information that could help clarify the contours of the outlook for economic activity and inflation as well as the need for further policy action. One member judged that additional accommodation would likely not be effective in improving the economic outlook and viewed the potential costs associated with such action as unacceptably high. At the conclusion of the discussion, members agreed that they would closely monitor economic and financial developments and carefully weigh the potential benefits and costs of various tools in assessing whether additional policy action would be warranted.

With respect to the statement to be released following the meeting, members agreed that it should acknowledge the deceleration in economic activity, the small gains in employment, and the slowing in inflation reflected in the economic data over the intermeeting period. Because most saw no significant changes in the medium-run outlook, they agreed to continue to indicate that the Committee anticipates a very gradual pickup in economic activity over time and a slow decline in unemployment, with inflation at or below the rate that it judges most consistent with its dual mandate. Many members expressed support for extending the Committee's forward guidance, but they agreed to defer a decision on this matter until the September meeting in order to consider such an adjustment in the context of updates to participants' individual economic projections and the Committee's further consideration of its policy options. The statement also reiterated the Committee's intention to extend the average maturity of its securities holdings as announced in June. Consistent with the concerns expressed by many members about the slow pace of the economic recovery, the downside risks to economic growth, and the considerable slack in resource utilization, the Committee decided that the statement should conclude by indicating that it will provide additional accommodation as needed to promote a stronger economic recovery and sustained improvement in labor market conditions in a context of price stability.

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 announced in June 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 2:15 p.m.:

"Information received since the Federal Open Market Committee met in June suggests that economic activity decelerated somewhat over the first half of this year. Growth in employment has been slow in recent months, and the unemployment rate remains elevated. Business fixed investment has continued to advance. Household spending has been rising at a somewhat slower pace than earlier in the year. Despite some further signs of improvement, the housing sector remains depressed. Inflation has declined since earlier this year, 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 as announced in June, and it 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 will closely monitor incoming information on economic and financial developments and will provide additional accommodation as needed 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 did not believe that exceptionally low levels for the federal funds rate were likely to be warranted for the length of time specified in the Committee's statement. In his view, significant uncertainty regarding the evolution of economic conditions over the next few years made the future path of interest rates difficult to forecast, and the Committee's statement implied more confidence on this score than justified by the current outlook.

Consensus Forecast Experiment

In light of the discussion at the previous FOMC meeting, the subcommittee on communications developed an initial experimental exercise intended to shed light on the feasibility and desirability of con-

structing an FOMC consensus forecast. At this meeting, participants discussed various aspects of the exercise, such as the possible monetary policy assumptions on which to condition an FOMC consensus forecast, the measurement of the degree of uncertainty surrounding each of the projected variables in the forecast, and the potential for communications benefits. In conclusion, participants generally expressed support for a second exercise to be undertaken in conjunction with the September FOMC meeting.

It was agreed that the next meeting of the Committee would be held on Wednesday–Thursday, September 12–13, 2012. The meeting adjourned at 2:15 p.m. on August 1, 2012.

Notation Vote

By notation vote completed on July 10, 2012, the Committee unanimously approved the minutes of the FOMC meeting held on June 19–20, 2012.

William B. English
Secretary

Meeting Held on September 12–13, 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 Wednesday, September 12, 2012, at 10:30 a.m. and continued on Thursday, September 13, 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

Thomas C. Baxter
Deputy General Counsel

Steven B. Kamin
Economist

David W. Wilcox
Economist

David Altig, Thomas A. Connors, Michael P. Leahy, William Nelson, David Reifschneider, Glenn D. Rudebusch, William Wascher, and John A. Weinberg
Associate Economists

Simon Potter
Manager, System Open Market Account

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

Jon W. Faust
Special Adviser to the Board, Office of Board Members, Board of Governors

James A. Clouse
Deputy Director, Division of Monetary Affairs, Board of Governors

Maryann F. Hunter
Deputy Director, Division of Banking Supervision and Regulation, Board of Governors

Andreas Lehnert[1]
Deputy Director, Office of Financial Stability Policy and Research, 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

Thomas Laubach
Senior Adviser, Division of Research and Statistics, Board of Governors

Ellen E. Meade and Joyce K. Zickler
Senior Advisers, Division of Monetary Affairs, Board of Governors

[1] Attended Wednesday's session only.

Brian J. Gross[2]
Special Assistant to the Board, Office of Board Members, Board of Governors

Eric M. Engen, Michael G. Palumbo, and Wayne Passmore
Associate Directors, Division of Research and Statistics, Board of Governors

Fabio M. Natalucci
Deputy Associate Director, Division of Monetary Affairs, Board of Governors

Edward Nelson
Section Chief, Division of Monetary Affairs, Board of Governors

Jeremy B. Rudd
Senior Economist, Division of Research and Statistics, Board of Governors

Kelly J. Dubbert
First Vice President, Federal Reserve Bank of Kansas City

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

Cletus C. Coughlin, Troy Davig, Mark E. Schweitzer, and Kei-Mu Yi
Senior Vice Presidents, Federal Reserve Banks of St. Louis, Kansas City, Cleveland, and Minneapolis, respectively

Lorie K. Logan, Jonathan P. McCarthy, Giovanni Olivei, and Nathaniel Wuerffel[3]
Vice Presidents, Federal Reserve Banks of New York, New York, Boston, and New York, respectively

Michelle Ezer[4]
Markets Officer, Federal Reserve Bank of New York

Potential Effects of a Large-Scale Asset Purchase Program

The staff presented an analysis of various aspects of possible large-scale asset purchase programs, including a comparison of flow-based purchase programs to programs of fixed size. The presentation reviewed the modeling approach used by the staff in estimating the financial and macroeconomic effects of such purchases. While significant uncertainty surrounds such estimates, the presentation indicated that asset purchases could be effective in fostering more rapid progress toward the Committee's objectives. The staff noted that, for a flow-based program, the public's understanding of the conditions under which the Committee would end purchases would shape expectations of the magnitude of the Federal Reserve's holdings of longer-term securities, and thus also influence the financial and economic effects of such a program. The staff also discussed the potential implications of additional asset purchases for the evolution of the Federal Reserve's balance sheet and income. The presentation noted that significant additional asset purchases should not adversely affect the ability of the Committee to tighten the stance of policy when doing so becomes appropriate. In their discussion of the staff presentation, a few participants noted the uncertainty surrounding estimates of the effects of large-scale asset purchases or the need for additional work regarding the implications of such purchases for the normalization of policy.

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 Federal Open Market Committee (FOMC) met on July 31–August 1, 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 June 19–20, 2012, FOMC meeting. By unanimous vote, the Committee ratified the Desk's domestic transactions over the intermeeting period. There were no intervention operations in foreign currencies for the System's account over the intermeeting period.

Staff Review of the Economic Situation

The information reviewed at the September 12–13 meeting suggested that economic activity continued to increase at a moderate pace in recent months. Employment rose slowly, and the unemployment rate was still high. Consumer price inflation stayed subdued, while measures of long-run inflation expectations remained stable.

---

2 Attended Thursday's session only.

3 Attended after the discussion on potential effects of a large-scale asset purchase program.

4 Attended the discussion on potential effects of a large-scale asset purchase program.

Private nonfarm employment increased in July and August at only a slightly faster pace than in the second quarter, and the rate of decline in government employment eased somewhat. The unemployment rate was 8.1 percent in August, just a bit lower than its average during the first half of the year, and the labor force participation rate edged down further. The share of workers employed part time for economic reasons remained large, and the rate of long-duration unemployment continued to be high. Indicators of job openings and firms' hiring plans were little changed, on balance, and initial claims for unemployment insurance were essentially flat over the intermeeting period.

Manufacturing production increased at a faster pace in July than in the second quarter, and the rate of manufacturing capacity utilization rose slightly. However, automakers' schedules indicated that the pace of motor vehicle assemblies would be somewhat lower in the coming months than it was in July, and broader indicators of manufacturing activity, such as the diffusion indexes of new orders from the national and regional manufacturing surveys, generally remained quite muted in recent months at levels consistent with only meager gains in factory output in the near term.

Following a couple of months when real personal consumption expenditures (PCE) were roughly flat, spending increased in July, and the gains were fairly widespread across categories of consumer goods and services. Incoming data on factors that tend to support household spending were somewhat mixed. Real disposable incomes increased solidly in July, boosted in part by lower energy prices. The continued rise in house values through July, and the increase in equity prices during the intermeeting period, suggested that households' net worth may have improved a little in recent months. However, consumer sentiment remained more downbeat in August than earlier in the year.

Housing market conditions continued to improve, but construction activity was still at a low level, reflecting the restraint imposed by the substantial inventory of foreclosed and distressed properties and by tight credit standards for mortgage loans. Starts of new single-family homes declined in July, but permits increased, which pointed to further gains in single-family construction in the coming months. Both starts and permits for new multifamily units rose in July. Home prices increased for the sixth consecutive month in July, and sales of both new and existing homes also rose.

Real business expenditures on equipment and software appeared to be decelerating. Both nominal shipments and new orders for nondefense capital goods excluding aircraft declined in July, and the backlog of unfilled orders decreased. Other forward-looking indicators, such as downbeat readings from surveys of business conditions and capital spending plans, also pointed toward only muted increases in real expenditures for business equipment in the near term. Nominal business spending for new nonresidential construction declined in July after only edging up in the second quarter. Inventories in most industries looked to be roughly aligned with sales in recent months.

Real federal government purchases appeared to decrease further, as data for nominal federal spending in July pointed to continued declines in real defense expenditures. Real state and local government purchases also appeared to still be trending down. State and local government payrolls contracted in July and August, although at a somewhat slower rate than in the second quarter, and nominal construction spending by these governments decreased slightly in July.

The U.S. international trade deficit was about unchanged in July after narrowing significantly in June. Exports declined in July, as decreases in the exports of industrial supplies, automotive products, and consumer goods were only partially offset by greater exports of agricultural products. Imports also declined in July, reflecting lower imports of capital goods and petroleum products and somewhat higher imports of automotive products. The trade data for July pointed toward real net exports having a roughly neutral effect on the growth of U.S. real gross domestic product (GDP) in the third quarter after they made a positive contribution to the increase in real GDP in the second quarter.

Overall U.S. consumer prices, as measured by the PCE price index, were flat in July. Consumer food prices were essentially unchanged, but the substantial increases in spot and futures prices of farm commodities in recent months, reflecting the effects of the drought in the Midwest, pointed toward some temporary upward pressures on retail food prices later this year. Consumer energy prices declined slightly in July, but survey data indicated that retail gasoline prices rose in August. Consumer prices

excluding food and energy also were flat in July. Near-term inflation expectations from the Thomson Reuters/University of Michigan Surveys of Consumers increased somewhat in August, while longer-term inflation expectations in the survey edged up but remained within the narrow range that they have occupied for many years. Long-run inflation expectations from the Federal Reserve Bank of Philadelphia Survey of Professional Forecasters continued to be stable in the third quarter.

Measures of labor compensation indicated that increases in nominal wages remained modest. The rise in compensation per hour in the nonfarm business sector was muted over the year ending in the second quarter, and with small gains in productivity, unit labor costs rose only slightly. The employment cost index increased a little more slowly than the measure of compensation per hour over the same period. More recently, the gains in average hourly earnings for all employees in July and August were small.

Overall foreign economic growth appeared to be subdued in the third quarter after slowing in the second quarter. In the euro area, policy developments contributed to an improvement in financial conditions; recent indicators pointed to further decreases in production, however, and both business and consumer confidence continued to decline. Indicators of activity in the emerging market economies generally weakened. In China, export growth slowed, while retail sales and investment spending changed little. The rate of economic growth rose in Brazil but was still sluggish, and increases in economic activity in Mexico were below the faster pace seen earlier in the year. Consistent with the slowing in foreign economic growth, readings on foreign inflation continued to moderate.

Staff Review of the Financial Situation

Sentiment in financial markets improved somewhat since the time of the August FOMC meeting. Investors' concerns about the situation in Europe seemed to ease somewhat, and market participants also appeared to have increased their expectations of additional monetary policy accommodation.

On balance, the nominal Treasury yield curve steepened over the intermeeting period, with yields on longer-dated Treasury securities rising notably. Following the August FOMC statement, Treasury yields moved up, reportedly in part because investors had factored in some probability that the anticipated liftoff date for the federal funds rate in the forward-guidance language would be moved back at that meeting. Treasury yields subsequently rose further as concerns about the situation in the euro area moderated. Later in the period, Treasury yields retraced some of their earlier gains as market participants' expectations of additional policy action increased following the release of the minutes of the August FOMC meeting, the Chairman's speech at the economic symposium in Jackson Hole, and the weaker-than-expected August employment report. On net, the expected path of the federal funds rate derived from overnight index swap rates was little changed. Indicators of inflation expectations derived from nominal and inflation-protected Treasury securities edged up over the period but stayed in the ranges observed over recent quarters.

Conditions in unsecured short-term dollar funding markets remained stable over the intermeeting period. In secured funding markets, conditions were also little changed.

In the September Senior Credit Officer Opinion Survey on Dealer Financing Terms, respondents reported no significant changes in credit terms for important classes of counterparties over the past three months, although a few noted a slight easing in terms for some clients. The use of leverage by hedge funds was reported to have remained basically unchanged. However, respondents noted greater demand for funding of agency and non-agency residential MBS.

Broad price indexes for U.S. equities rose moderately, on net, over the intermeeting period, prompted by generally better-than-expected readings on economic activity released early in the period, somewhat reduced concerns about the situation in Europe, and some additional anticipation of monetary policy easing later in the period. Option-implied volatility on the S&P 500 index fell in early August to levels not seen since the middle of 2007; it subsequently partially retraced. Equity prices for large domestic banks rose about in line with the broad equity price indexes, and credit default swap (CDS) spreads for the largest bank holding companies continued to move down.

Yields on investment-grade corporate bonds were little changed at near-record low levels over the intermeeting period, while yields on speculative-grade corporate bonds edged down. The spread of yields on corporate bonds over those on comparable-maturity

Treasury securities narrowed. Net debt issuance by nonfinancial firms continued to be strong over the period. Investment- and speculative-grade bond issuance increased in August from an already robust pace in preceding months, and commercial and industrial (C&I) loans rose further. In the syndicated leveraged loan market, gross issuance of institutional loans continued to be solid in July and August. Issuance of collateralized loan obligations remained on pace to post its strongest year since 2007. The rate of gross public equity issuance by nonfinancial firms increased slightly in August but was still at a subdued level.

Financial conditions in the commercial real estate (CRE) market were still somewhat strained against a backdrop of weak fundamentals and tight underwriting standards. Nevertheless, issuance of commercial mortgage-backed securities continued at a solid pace over the intermeeting period.

Mortgage rates remained at very low levels over the intermeeting period. Refinancing activity increased but was still restrained by tight underwriting conditions, capacity constraints at mortgage originators, and low levels of home equity. Nonrevolving consumer credit continued to expand briskly in June, largely due to robust growth in student loans originated by the federal government, while revolving credit remained subdued. Delinquency rates for consumer credit were still low, mostly reflecting a shift in lending toward higher-credit-quality borrowers.

Gross issuance of long-term municipal bonds picked up in August from the subdued pace in July, but net issuance continued to decline. CDS spreads for debt issued by state governments moved lower over the intermeeting period, and the ratio of yields on long-term general obligation municipal bonds to yields on comparable-maturity Treasury securities decreased, on balance.

Bank credit continued to expand at a moderate pace over the intermeeting period, as growth in C&I loans remained brisk while CRE and home equity loans both trended down further. The August Survey of Terms of Business Lending indicated that overall interest-rate spreads on C&I loans were little changed; spreads on loans drawn on recently established commitments narrowed materially, although they remained wide.

M2 growth was rapid in July, likely reflecting investors' heightened demand for safe and liquid assets amid concerns about the situation in Europe, but it slowed to a moderate pace in August as those concerns eased somewhat. The monetary base rose in July and August as reserve balances and currency expanded.

Sentiment improved in foreign financial markets as the European Central Bank (ECB) outlined a plan to make additional sovereign bond purchases in conjunction with the European Financial Stability Facility and the European Stability Mechanism. Spreads of shorter-term yields on peripheral euro-area sovereign bonds over those on comparable-maturity German bunds declined substantially over the period. The staff's broad nominal index of the foreign exchange value of the dollar declined and benchmark sovereign yields in the major advanced foreign economies increased as safe-haven demands eased with the lessening of concerns about the European situation. Most global benchmark indexes for equity prices moved up, and the equity prices of European banks rose sharply. Funding conditions for euro-area banks improved, although these conditions remained fragile, and draws on the Federal Reserve's liquidity swap facility with the ECB fell.

The staff also reported on potential risks to financial stability, including those owing to the developments in Europe and to the current environment of low interest rates. Although the support for economic activity provided by low interest rates enhances financial stability, low interest rates also could eventually contribute to excessive borrowing or risk-taking and possibly leave some aspects of the financial system vulnerable to a future rise in interest rates. The staff surveyed a wide range of asset markets and financial institutions for signs of excessive valuations, leverage, or risk-taking that could pose systemic risks. Valuations for broad asset classes did not appear stretched, or supported by excessive leverage. The staff also did not find evidence that excessive risk-taking was widespread, although such behavior had appeared in a few smaller and less liquid markets.

Staff Economic Outlook

In the economic projection prepared by the staff for the September FOMC meeting, the forecast for real GDP growth in the near term was broadly similar, on balance, to the previous projection. The near-term forecast incorporated a larger negative effect of the drought on farm output in the second half of this year than the staff previously anticipated, but this effect was mostly offset by the staff's expectation of a

smaller drag from net exports. The staff's medium-term projection for real GDP growth, which was conditioned on the assumption of no changes in monetary policy, was revised up a little, mostly reflecting a slight improvement in the outlook for the European situation and a somewhat higher projected path for equity prices. Nevertheless, with fiscal policy assumed to be tighter next year than this year, the staff expected that increases in real GDP would not materially exceed the growth of potential output in 2013. In 2014, economic activity was projected to accelerate gradually, supported by an easing in fiscal policy restraint, increases in consumer and business confidence, further improvements in financial conditions and credit availability, and accommodative monetary policy. The expansion in economic activity was expected to narrow the significant margin of slack in labor and product markets only slowly over the projection period, and the unemployment rate was anticipated to still be elevated at the end of 2014.

The staff's near-term forecast for inflation was revised up from the projection prepared for the August FOMC meeting, reflecting increases in consumer energy prices that were greater than anticipated. However, the staff's projection for inflation over the medium term was little changed. With crude oil prices expected to gradually decline from their current levels, the boost to retail food prices from the drought anticipated to be only temporary and comparatively small, long-run inflation expectations assumed to remain stable, and substantial resource slack persisting over the projection period, the staff continued to forecast that inflation would be subdued through 2014.

The staff viewed the uncertainty around the forecast for economic activity as elevated and the risks skewed to the downside, largely reflecting concerns about the situation in Europe and the possibility of a more severe tightening in U.S. fiscal policy than anticipated. Although the staff saw the outlook for inflation as uncertain, the risks were viewed as balanced and not unusually high.

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 2015 and over the longer run, under each participants' 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, meeting participants regarded the information received during the intermeeting period as indicating that economic activity had continued to expand at a moderate pace in recent months. However, recent gains in employment were small and the unemployment rate remained high. Although consumer spending had continued to advance, growth in business fixed investment appeared to have slowed. The housing sector showed some further signs of improvement, albeit from a depressed level. Consumer price inflation had been subdued despite recent increases in the prices of some key commodities, and longer-term inflation expectations had remained stable.

Regarding the economic outlook, participants generally agreed that the pace of the economic recovery would likely remain moderate over coming quarters but would pick up over the 2013–15 period. In the near term, the drought in the Midwest was expected to weigh on economic growth. Moreover, participants observed that the pace of economic recovery would likely continue to be held down for some time by persistent headwinds, including continued weakness in the housing market, ongoing household sector deleveraging, still-tight credit conditions for some households and businesses, and fiscal consolidation at all levels of government. Many participants also noted that a high level of uncertainty regarding the European fiscal and banking crisis and the outlook for U.S. fiscal and regulatory policies was weighing on confidence, thereby restraining household and business spending. However, others questioned the role of uncertainty about policy as a factor constraining aggregate demand. In addition, participants still saw significant downside risks to the outlook for economic growth. Prominent among these risks were a possible intensification of strains in the euro zone, with potential spillovers to U.S. financial markets and institutions and thus to the broader U.S. economy; a larger-than-expected U.S. fiscal tighten-

ing; and the possibility of a further slowdown in global economic growth. A few participants, however, mentioned the possibility that economic growth could be more rapid than currently anticipated, particularly if major sources of uncertainty were resolved favorably or if faster-than-expected advances in the housing sector led to improvements in household balance sheets, increased confidence, and easier credit conditions. Participants' forecasts for economic activity, which in most cases were conditioned on an assumption of additional, near-term monetary policy accommodation, were also associated with an outlook for the unemployment rate to remain close to recent levels through 2012 and then to decline gradually toward levels judged to be consistent with the Committee's mandate.

In the household sector, incoming data on retail sales were somewhat stronger than expected. Participants noted, however, that households were still in the process of deleveraging, confidence was low, and consumers appeared to remain particularly pessimistic about the prospects for the future, raising doubts that the somewhat stronger pace of spending would persist. Although the level of activity in the housing sector remained low, the somewhat faster pace of home sales and construction provided some encouraging signs of improvement. A number of participants also observed that house prices were rising. It was noted that such increases, coupled with historically low mortgage rates, could lead to a stronger upturn in housing activity, although constraints on the capacity for loan origination and still-tight credit terms for some borrowers continued to weigh on mortgage lending.

Business contacts in many parts of the country were reported to be highly uncertain about the outlook for the economy and for fiscal and regulatory policies. Although firms' balance sheets were generally strong, these uncertainties had led them to be particularly cautious and to remain reluctant to hire or expand capacity. Reports on manufacturing activity were mixed, with production related to autos and housing the most notable areas of relative strength. In one District, business surveys pointed to further growth; however, readings on forward-looking indicators of orders around the country were less positive. In addition, business contacts noted that export demand was showing signs of weakness as a result of the slowdown in economic activity in Europe. The energy sector continued to expand. In the agricultural sector, high grain prices and crop insurance payments were supporting farm incomes, helping offset declines in production and reduced profits on livestock. The drought was expected to reduce farm inventories and have a transitory impact on broader measures of economic growth.

Participants generally expected that fiscal policy would continue to be a drag on economic activity over coming quarters. In addition to ongoing weakness in spending at the federal, state, and local government levels, uncertainties about tax and spending policies reportedly were restraining business decision-making. Participants also noted that if an agreement was not reached to tackle the expiring tax cuts and scheduled spending reductions, a sharp consolidation of fiscal policy would take place at the beginning of 2013.

The available indicators pointed to continued weakness in overall labor market conditions. Growth in employment had been disappointing, with the average monthly increases in payrolls so far this year below last year's pace and below the pace that would be required to make significant progress in reducing the unemployment rate. The unemployment rate declined around the turn of the year but had not fallen significantly since then. In addition, the labor force participation rate and employment-to-population ratios were at or near post-recession lows.

Meeting participants again discussed the extent of slack in labor markets. A few participants reiterated their view that the persistently high level of unemployment reflected the effect of structural factors, including mismatches across and within sectors between the skills of the unemployed and those demanded in sectors in which jobs were currently available. It was also suggested that there was an ongoing process of polarization in the labor market, with the share of job opportunities in middle-skill occupations continuing to decline while the shares of low and high skill occupations increased. Both of these views would suggest a lower level of potential output and thus reduced scope for combating unemployment with additional monetary policy stimulus. Several participants, while acknowledging some evidence of structural changes in the labor market, stated again that weak aggregate demand was the principal reason for the high unemployment rate. They saw slack in resource utilization as remaining wide, indicating an important role for additional policy accommodation. Several participants noted the risk that continued high levels of unemployment, even if initially cyclical, might ultimately induce adverse structural changes. In particular, they

expressed concerns about the risk that the exceptionally high level of long-term unemployment and the depressed level of labor participation could ultimately lead to permanent negative effects on the skills and prospects of those without jobs, thereby reducing the longer-run normal level of employment and potential output.

Sentiment in financial markets improved notably during the intermeeting period. Participants indicated that recent decisions by the ECB helped ease investors' anxiety about the near-term prospects for the euro. However, participants also observed that significant risks related to the euro-area banking and fiscal crisis remained, and that a number of important issues would have to be resolved in order to achieve further progress toward a comprehensive solution to the crisis. Participants noted that indicators of financial stress in the United States were not especially high and overall conditions in U.S. financial markets remained favorable. Longer-term interest rates were low and supportive of economic growth, while equity prices had risen. One participant noted that, while there were few current signs of excessive risk-taking, low interest rates could ultimately lead to financial imbalances that would be challenging to detect before they became serious problems.

The incoming information on inflation over the intermeeting period was largely in line with participants' expectations. Despite recent increases in the prices of some key commodities, consumer price inflation remained subdued. With longer-term inflation expectations stable and the unemployment rate elevated, participants generally anticipated that inflation over the medium run would likely run at or below the 2 percent rate that the Committee judges to be most consistent with its mandate. Most participants saw the risks to the outlook for inflation as roughly balanced. A few participants felt that maintaining a highly accommodative stance of monetary policy over an extended period could unmoor longer-term inflation expectations and, against a backdrop of higher energy and commodity prices, posed upside risks to inflation. Other participants, by contrast, saw inflation risks as tilted to the downside, given their expectations for sizable and persistent resource slack.

Participants again exchanged views on the likely benefits and costs of a new large-scale asset purchase program. Many participants anticipated that such a program would provide support to the economic recovery by putting downward pressure on longer-term interest rates and promoting more accommodative financial conditions. A number of participants also indicated that it could lift consumer and business confidence by emphasizing the Committee's commitment to continued progress toward its dual mandate. In addition, it was noted that additional purchases could reinforce the Committee's forward guidance regarding the federal funds rate. Participants discussed the effectiveness of purchases of Treasury securities relative to purchases of agency MBS in easing financial conditions. Some participants suggested that, all else being equal, MBS purchases could be preferable because they would more directly support the housing sector, which remains weak but has shown some signs of improvement of late. One participant, however, objected that purchases of MBS, when compared to purchases of longer-term Treasury securities, would likely result in higher interest rates for many borrowers in other sectors. A number of participants highlighted the uncertainty about the overall effects of additional purchases on financial markets and the real economy. Some participants thought past purchases were useful because they were conducted during periods of market stress or heightened deflation risk and were less confident of the efficacy of additional purchases under present circumstances. A few expressed skepticism that additional policy accommodation could help spur an economy that they saw as held back by uncertainties and a range of structural issues. In discussing the costs and risks that such a program might entail, several participants reiterated their concern that additional purchases might complicate the Committee's efforts to withdraw monetary policy accommodation when it eventually became appropriate to do so, raising the risk of undesirably high inflation in the future and potentially unmooring inflation expectations. One participant noted that an extended period of accommodation resulting from additional asset purchases could lead to excessive risk-taking on the part of some investors and so undermine financial stability over time. The possible adverse effects of large purchases on market functioning were also noted. However, most participants thought these risks could be managed since the Committee could make adjustments to its purchases, as needed, in response to economic developments or to changes in its assessment of their efficacy and costs.

Participants also discussed issues related to the provision of forward guidance regarding the future path of the federal funds rate. It was noted that clear communication and credibility allow the central bank to help shape the public's expectations about policy, which is crucial to managing monetary policy when the fed-

eral funds rate is at its effective lower bound. A number of participants questioned the effectiveness of continuing to use a calendar date to provide forward guidance, noting that a change in the calendar date might be interpreted pessimistically as a downgrade of the Committee's economic outlook rather than as conveying the Committee's determination to support the economic recovery. If the public interpreted the statement pessimistically, consumer and business confidence could fall rather than rise. Many participants indicated a preference for replacing the calendar date with language describing the economic factors that the Committee would consider in deciding to raise its target for the federal funds rate. Participants discussed the benefits of such an approach, including the potential for enhanced effectiveness of policy through greater clarity regarding the Committee's future behavior. That approach could also bolster the stimulus provided by the System's holdings of longer-term securities. It was noted that forward guidance along these lines would allow market expectations regarding the federal funds rate to adjust automatically in response to incoming data on the economy. Many participants thought that more-effective forward guidance could be provided by specifying numerical thresholds for labor market and inflation indicators that would be consistent with maintaining the federal funds rate at exceptionally low levels. However, reaching agreement on specific thresholds could be challenging given the diversity of participants' views, and some were reluctant to specify explicit numerical thresholds out of concern that such thresholds would necessarily be too simple to fully capture the complexities of the economy and the policy process or could be incorrectly interpreted as triggers prompting an automatic policy response. In addition, numerical thresholds could be confused with the Committee's longer-term objectives, and so undermine the Committee's credibility. At the conclusion of the discussion, most participants agreed that the use of numerical thresholds could be useful to provide more clarity about the conditionality of the forward guidance but thought that further work would be needed to address the related communications challenges.

Committee Policy Action

Committee members saw the information received over the intermeeting period as suggesting that economic activity had continued to expand at a moderate pace in recent months. However, growth in employment had been slow, 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 judged that without additional policy accommodation, economic growth might not be strong enough to generate sustained improvement in labor market conditions. Moreover, while the sovereign and banking crisis in Europe had eased some recently, members still saw strains in global financial conditions as posing significant downside risks to the economic outlook. The possibility of a larger-than-expected fiscal tightening in the United States and slower global growth were also seen as downside risks. Inflation had been subdued, even though the prices of some key commodities had increased recently. Members generally continued to anticipate that, with longer-term inflation expectations stable and given the existing slack in resource utilization, inflation over the medium term would run at or below the Committee's longer-run objective of 2 percent.

In their discussion of monetary policy for the period ahead, members generally expressed concerns about the slow pace of improvement in labor market conditions and all members but one agreed that the outlook for economic activity and inflation called for additional monetary accommodation. Members agreed that such accommodation should be provided through both a strengthening of the forward guidance regarding the federal funds rate and purchases of additional agency MBS at a pace of $40 billion per month. Along with the ongoing purchases of $45 billion per month of longer-term Treasury securities under the maturity extension program announced in June, these purchases will increase the Committee's holdings of longer-term securities by about $85 billion each month through the end of the year, and should put downward pressure on longer-term interest rates, support mortgage markets, and help make broader financial conditions more accommodative. Members also agreed to maintain the Committee's existing policy of reinvesting principal payments from its holdings of agency debt and agency MBS into agency MBS. The Committee agreed that it would closely monitor incoming information on economic and financial developments in coming months, and that if the outlook for the labor market did not improve substantially, it would continue its purchases of agency MBS, undertake additional asset purchases, and employ its other policy tools as appropriate until such improvement is achieved in a context of price stability. This flexible approach was seen as allowing the Committee to tailor its policy response over time to incoming information while incorporating conditional features that

clarified the Committee's intention to improve labor market conditions, thereby enhancing the effectiveness of the action by helping to bolster business and consumer confidence. While members generally viewed the potential risks associated with these purchases as manageable, the Committee agreed that in determining the size, pace, and composition of its asset purchases, it would, as always, take appropriate account of the likely efficacy and costs of such purchases. With regard to the forward guidance, the Committee agreed on an extension through mid-2015, in conjunction with language in the statement indicating that it expects that a highly accommodative stance of policy will remain appropriate for a considerable time after the economic recovery strengthens. That new language was meant to clarify that the maintenance of a very low federal funds rate over that period did not reflect an expectation that the economy would remain weak, but rather reflected the Committee's intention to support a stronger economic recovery. One member dissented from the policy decision, on the grounds that he opposed additional asset purchases and preferred to omit the calendar date from the forward guidance; in his view, it would be better to use qualitative language to describe the factors that would influence the Committee's decision to increase the target federal funds rate.

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 announced in June 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 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. The Desk is also directed to begin purchasing agency mortgage-backed securities at a pace of about $40 billion per month. The Committee directs the Desk to engage in dollar roll and coupon swap 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 August suggests that economic activity has continued to expand at a moderate pace in recent months. Growth in employment has been slow, and the unemployment rate remains elevated. Household spending has continued to advance, but growth in business fixed investment appears to have slowed. The housing sector has shown some further signs of improvement, albeit from a depressed level. Inflation has been subdued, although the prices of some key commodities have increased recently. Longer-term inflation expectations have remained stable.
>
> Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee is concerned that, without further policy accommodation, economic growth might not be strong enough to generate sustained improvement in labor market conditions. Furthermore, strains in global financial markets continue to pose significant downside risks to the economic outlook. The Committee also anticipates that inflation over the medium term likely would run at or below its 2 percent objective.
>
> 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 agreed today to increase policy

accommodation by purchasing additional agency mortgage-backed securities at a pace of $40 billion per month. The Committee also will continue through the end of the year its program to extend the average maturity of its holdings of securities as announced in June, and it 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. These actions, which together will increase the Committee's holdings of longer-term securities by about $85 billion each month through the end of the year, should put downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative.

The Committee will closely monitor incoming information on economic and financial developments in coming months. If the outlook for the labor market does not improve substantially, the Committee will continue its purchases of agency mortgage-backed securities, undertake additional asset purchases, and employ its other policy tools as appropriate until such improvement is achieved in a context of price stability. In determining the size, pace, and composition of its asset purchases, the Committee will, as always, take appropriate account of the likely efficacy and costs of such purchases.

To support continued progress toward maximum employment and price stability, the Committee expects that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the economic recovery strengthens. In particular, the Committee also decided today to keep the target range for the federal funds rate at 0 to ¼ percent and currently anticipates that exceptionally low levels for the federal funds rate are likely to be warranted at least through mid-2015."

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 believed that additional monetary stimulus at this time was unlikely to result in a discernible improvement in economic growth without also causing an unwanted increase in inflation. Moreover, he expressed his opposition to the purchase of more MBS, because he viewed it as inappropriate for the Committee to choose a particular sector of the economy to support; purchases of Treasury securities instead would have avoided this effect. Finally, he preferred to omit the description of the time period over which exceptionally low levels for the federal funds rate were likely to be warranted.

Consensus Forecast Experiment

In light of the discussion at the previous FOMC meeting, the subcommittee on communications developed a second experimental exercise intended to shed light on the feasibility and desirability of constructing an FOMC consensus forecast. At this meeting, participants discussed possible formulations of the monetary policy assumptions on which to condition an FOMC consensus forecast and alternative approaches for participants to express their endorsement of the consensus forecast. In conclusion, participants agreed to have a broad discussion of the experiences gathered from the two experimental exercises in conjunction with the October FOMC meeting.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, October 23–24, 2012. The meeting adjourned at 12:10 p.m. on September 13, 2012.

Notation Vote

By notation vote completed on August 21, 2012, the Committee unanimously approved the minutes of the FOMC meeting held on July 31–August 1, 2012.

William B. English
Secretary

Addendum: Summary of Economic Projections

In conjunction with the September 12−13, 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 2015 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 September indicated that, under appropriate monetary policy, the pace of economic recovery over the 2012–15 period would gradually pick up and inflation would remain subdued (table 1 and figure 1). Participants judged that the growth rate of real gross domestic product (GDP) would increase somewhat in 2013 and that economic growth in 2014 and 2015 would modestly exceed participants' estimates of the longer-run sustainable rate of growth, while the unemployment rate would decline gradually through 2015. 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 next few years. In particular, 13 participants thought that it would be appropriate for the first increase in the target federal funds rate to occur during 2015 or later. The majority of participants judged that appropriate monetary policy would involve a decision by the Committee, at the September meeting or before long, to undertake significant additional asset purchases.

As in June, participants in September judged the uncertainty associated with the outlook for real activity and the unemployment rate to be unusually high compared with historical norms, with the risks weighted mainly toward slower economic growth and a higher unemployment rate. While a number of participants viewed the uncertainty surrounding their projections for inflation to be unusually high in comparison with historical norms, many judged it to be broadly similar to historical norms, and most considered the risks to inflation to be roughly balanced.

The Outlook for Economic Activity

Conditional on their individual assumptions about appropriate monetary policy, participants judged that the economy would grow at a moderate pace over coming quarters and then pick up somewhat in 2013 before expanding in 2014 and 2015 at a rate modestly above what participants saw as the longer-run rate of output growth. The central tendency of their projections for the change in real GDP in 2012

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

Variable	Central tendency[1]					Range[2]				
	2012	2013	2014	2015	Longer run	2012	2013	2014	2015	Longer run
Change in real GDP	1.7 to 2.0	2.5 to 3.0	3.0 to 3.8	3.0 to 3.8	2.3 to 2.5	1.6 to 2.0	2.3 to 3.5	2.7 to 4.1	2.5 to 4.2	2.2 to 3.0
June projection	1.9 to 2.4	2.2 to 2.8	3.0 to 3.5	n.a.	2.3 to 2.5	1.6 to 2.5	2.2 to 3.5	2.8 to 4.0	n.a.	2.2 to 3.0
Unemployment rate	8.0 to 8.2	7.6 to 7.9	6.7 to 7.3	6.0 to 6.8	5.2 to 6.0	8.0 to 8.3	7.0 to 8.0	6.3 to 7.5	5.7 to 6.9	5.0 to 6.3
June projection	8.0 to 8.2	7.5 to 8.0	7.0 to 7.7	n.a.	5.2 to 6.0	7.8 to 8.4	7.0 to 8.1	6.3 to 7.7	n.a.	4.9 to 6.3
PCE inflation	1.7 to 1.8	1.6 to 2.0	1.6 to 2.0	1.8 to 2.0	2.0	1.5 to 1.9	1.5 to 2.1	1.6 to 2.2	1.8 to 2.3	2.0
June projection	1.2 to 1.7	1.5 to 2.0	1.5 to 2.0	n.a.	2.0	1.2 to 2.0	1.5 to 2.1	1.5 to 2.2	n.a.	2.0
Core PCE inflation[3]	1.7 to 1.9	1.7 to 2.0	1.8 to 2.0	1.9 to 2.0		1.6 to 2.0	1.6 to 2.0	1.6 to 2.2	1.8 to 2.3	
June projection	1.7 to 2.0	1.6 to 2.0	1.6 to 2.0	n.a.		1.7 to 2.0	1.4 to 2.1	1.5 to 2.2	n.a.	

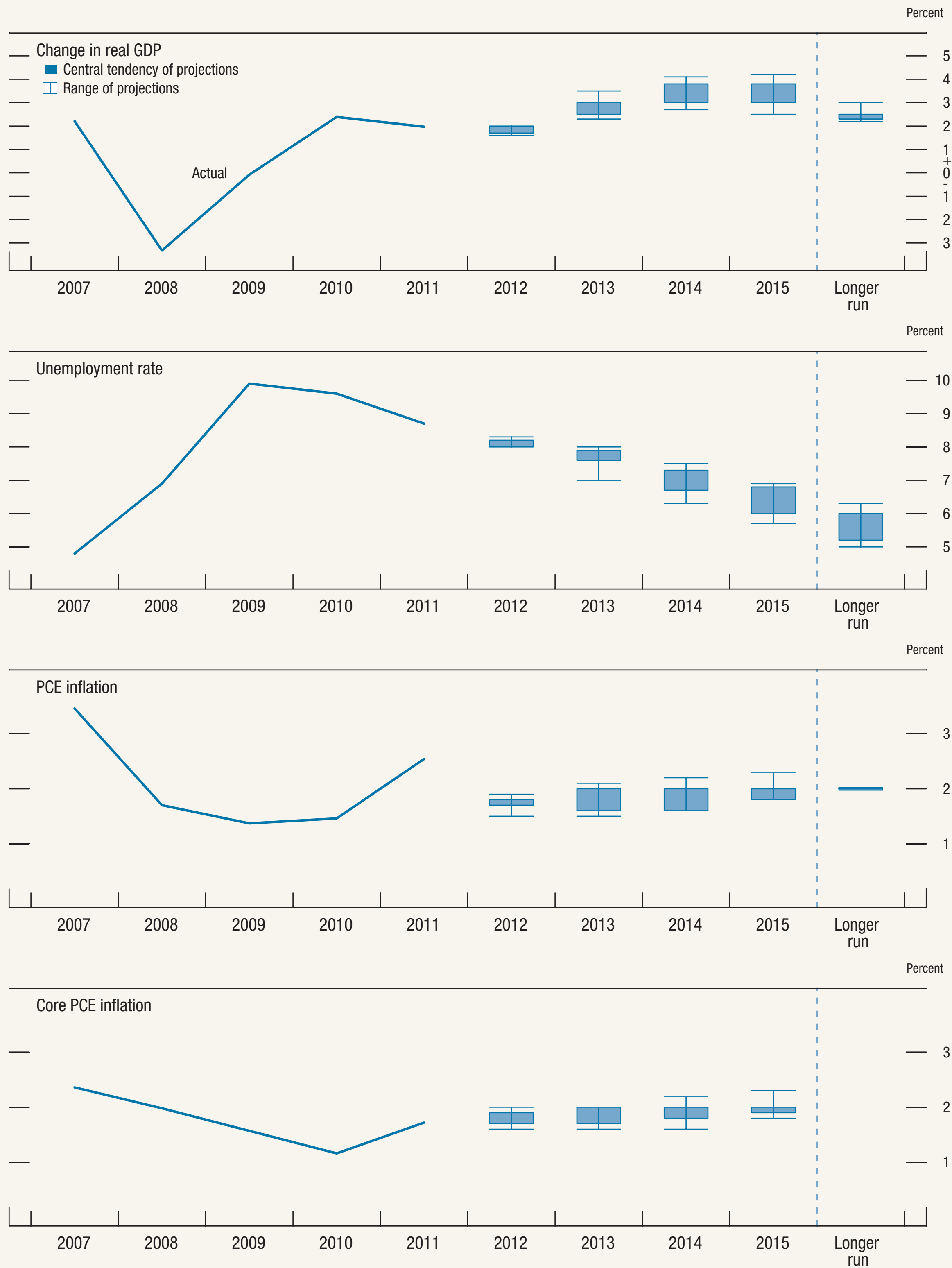
Note: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price 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 June projections were made in conjunction with the meeting of the Federal Open Market Committee on June 19–20, 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.

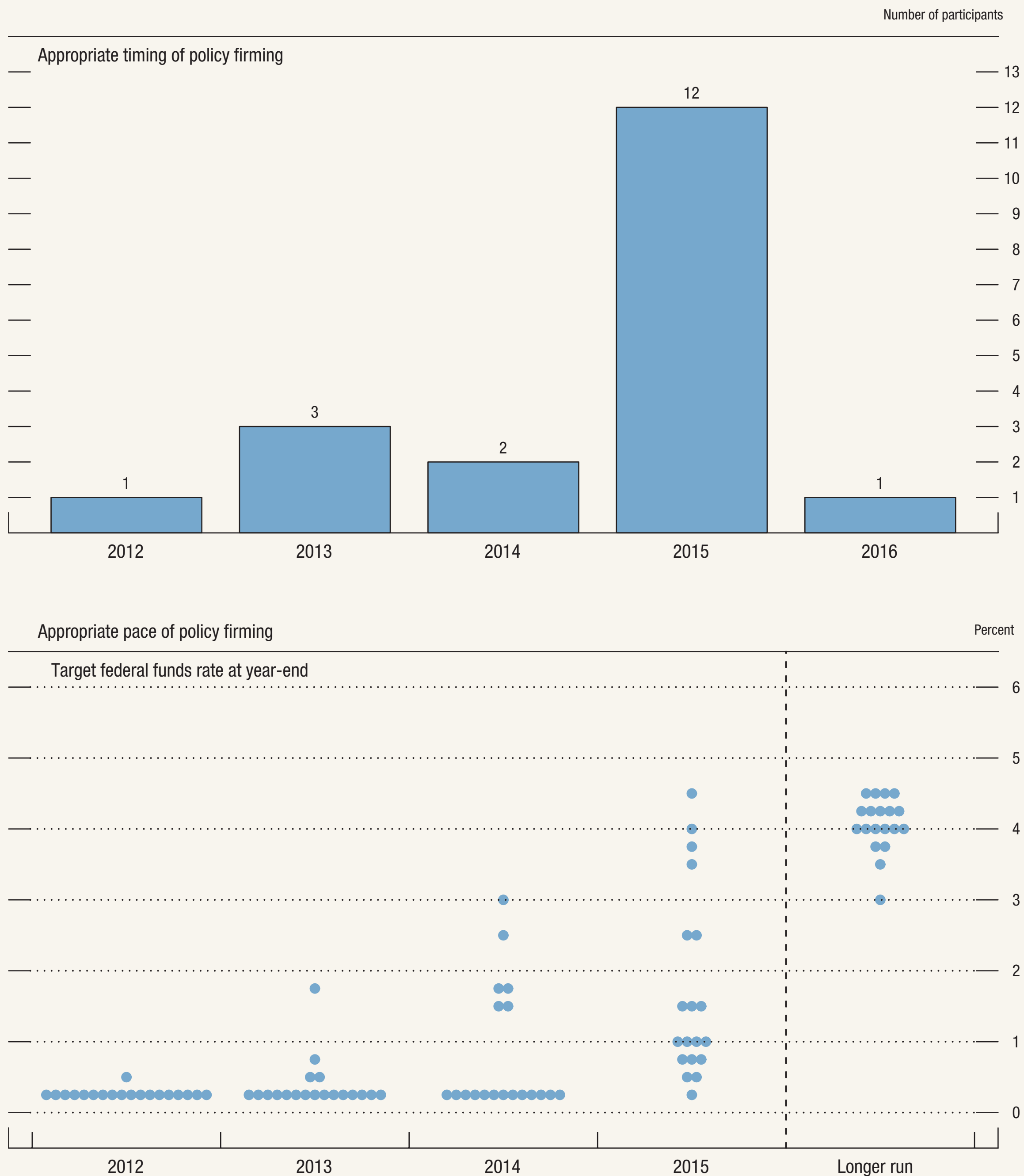
3 Longer-run projections for core PCE inflation are not collected.

Figure 1. Central tendencies and ranges of economic projections, 2012–15 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, September 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 ¼ percent will occur in the specified calendar year. In June 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 6. In the lower panel, each shaded circle indicates the value (rounded to the nearest ¼ 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.

was 1.7 to 2.0 percent, somewhat lower than in June. Many participants characterized the incoming data as having been to the weak side of their expectations at the time of the June meeting; several participants also cited the severe drought as a factor causing them to mark down their projections for economic growth in 2012. However, participants' projections for 2013 and 2014 were generally slightly higher than in June; this reflected, in part, a greater assumed amount of monetary policy accommodation than in their June submissions as well as some improvement since then in the outlook for economic activity in Europe. The central tendency of participants' projections for real GDP growth in 2013 was 2.5 to 3.0 percent, followed by central tendencies for both 2014 and 2015 of 3.0 to 3.8 percent. The central tendency for the longer-run rate of increase of real GDP remained at 2.3 to 2.5 percent, unchanged from June. While most participants noted that the increased degree of monetary policy accommodation assumed in their projections would help promote a faster recovery, participants cited several headwinds that would be likely to hold back the pace of economic expansion over the forecast period, including slower growth abroad, a still-weak housing market, the difficult fiscal and financial situation in Europe, and fiscal restraint in the United States.

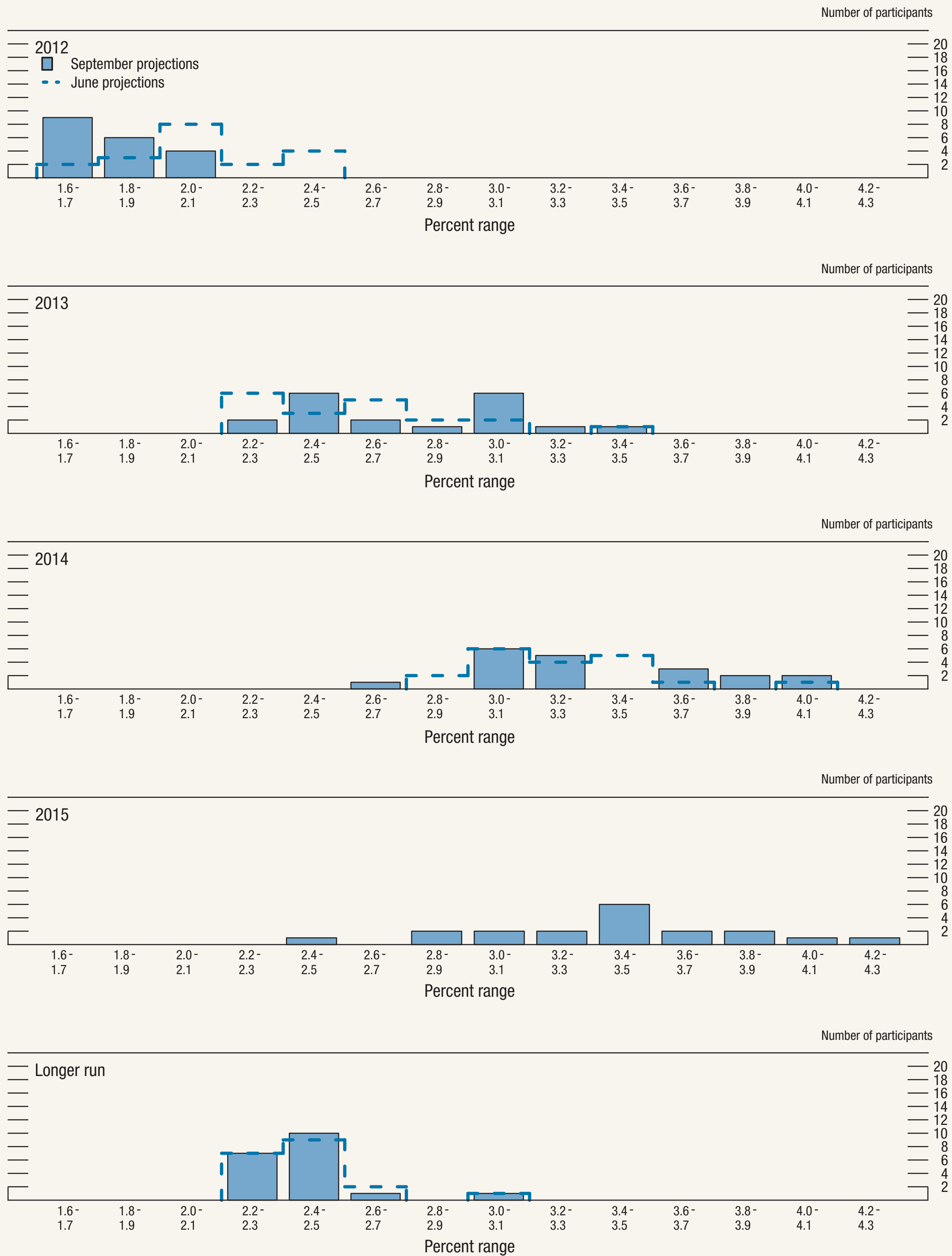
Participants projected the unemployment rate at the end of 2012 to remain close to recent levels, with a central tendency of 8.0 to 8.2 percent, the same as in their June submissions. Participants anticipated gradual improvement from 2013 through 2015; even so, they generally thought that the unemployment rate at the end of 2015 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 7.6 to 7.9 percent at the end of 2013, 6.7 to 7.3 percent at the end of 2014, and 6.0 to 6.8 percent at the end of 2015. 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 June. 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, while a few judged that less time would be needed.

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 rate of improvement in the housing sector, 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, the likely evolution of credit and financial market conditions, and longer-term trends in productivity and the labor force. With much of the data for the first eight months of 2012 now in hand, the dispersion of participants' projections of real GDP growth and the unemployment rate this year narrowed in September compared with June. The range of participants' forecasts for the change in real GDP in 2013 and 2014, however, was little changed from June, on balance. The distribution of projections for the unemployment rate was not much altered for 2013, while for 2014 it narrowed a bit and shifted down slightly. The range for the unemployment rate for 2015 was 5.7 to 6.9 percent. As in June, the dispersion of estimates for the longer-run rate of output growth was fairly narrow, with the values being mostly from 2.2 to 2.7 percent. The range of participants' estimates of the longer-run rate of unemployment was 5.0 to 6.3 percent, a similar range to that in June; this range reflected different judgments among participants about several factors, including the outlook for labor force participation and the structure of the labor market.

The Outlook for Inflation

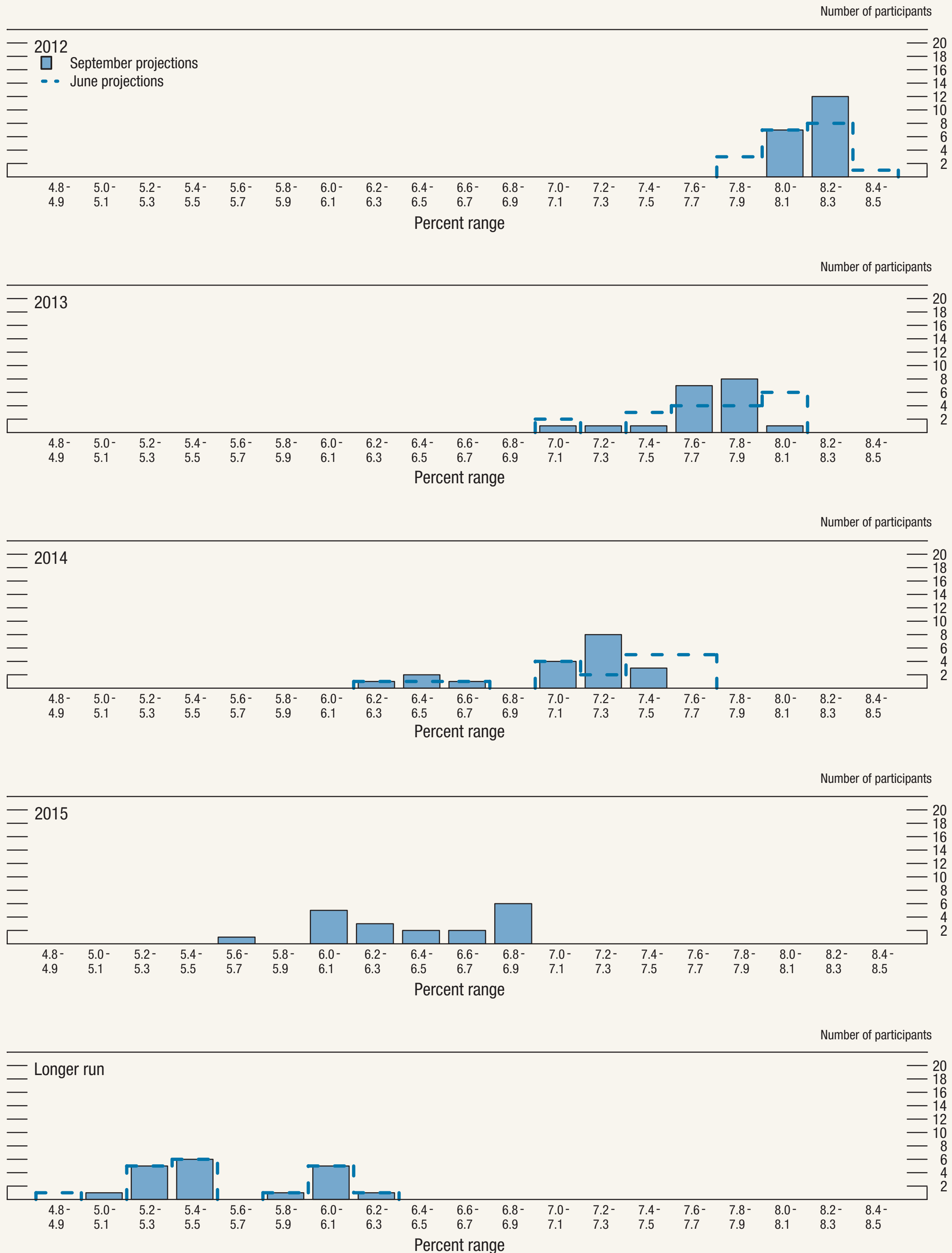
Participants' views on the broad outlook for inflation under the assumption of appropriate monetary policy were little changed from June. For 2012 as a whole, most anticipated that overall inflation would be only slightly above its average annual rate of 1.6 percent over the first half of the year; a number of participants pointed to higher food prices in response to the drought, along with recent increases in oil prices, as temporary sources of upward pressure on the headline rate. Almost all participants judged that both headline and core inflation would remain subdued over the 2013–15 period, running at rates at or below the FOMC's longer-run objective of 2 percent. In pointing to factors likely to restrain price pressures, several participants cited sizable resource slack and stable inflation expectations, while a few noted the subdued behavior of labor compensation. Specifically, the central tendency of participants' projections for inflation, as measured by the PCE price index, moved up and tightened to 1.7 to 1.8 percent for 2012 and was little changed for 2013 and 2014 at 1.6 to 2.0 percent. For 2015, the central tendency was 1.8 to 2.0 percent. The central tendencies of the forecasts for core inflation were broadly

Figure 3.A. Distribution of participants' projections for the change in real GDP, 2012–15 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, 2012–15 and over the longer run



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

similar to those for the headline measure for 2013 through 2015.

Figures 3.C and 3.D provide information about the diversity of participants' views about the outlook for inflation. Participants' projections for headline inflation for 2012, which in June had ranged from 1.2 to 2 percent, narrowed in September to the range of 1.5 to 1.9 percent; about three-fourths of participants' projections took values of 1.7 to 1.8 percent, broadly in line with recent inflation readings. The distributions of participants' projections for headline inflation in 2013 and 2014 were very similar to those for June, while the range of projections for core inflation narrowed slightly for both years. The distributions for core and overall inflation in 2015 were concentrated near the Committee's longer-run inflation objective of 2 percent.

Appropriate Monetary Policy

As indicated in figure 2, most participants judged that exceptionally low levels of the federal funds rate would remain appropriate for several more years. In particular, 12 participants thought that the first increase in the target federal funds rate would not be warranted until 2015, and 1 viewed a start to firming in 2016 as appropriate (upper panel). The 12 participants who expected that the target federal funds rate would not move above its effective lower bound until 2015 thought the federal funds rate would be 1.6 percent or lower at the end of that year, while the one participant who expected that policy firming would commence in 2016 saw the funds rate target at 75 basis points at the end of that year. Six participants judged that policy firming in 2012, 2013, or 2014 would be consistent with 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 and from 2½ to 4½ percent at the end of 2015. In total, 14 participants judged that appropriate monetary policy called for a more-accommodative path for the federal funds rate than in their June submissions, involving either a lower target for the federal funds rate at the end of the initial year of policy firming, or a shift out in the first year of firming.

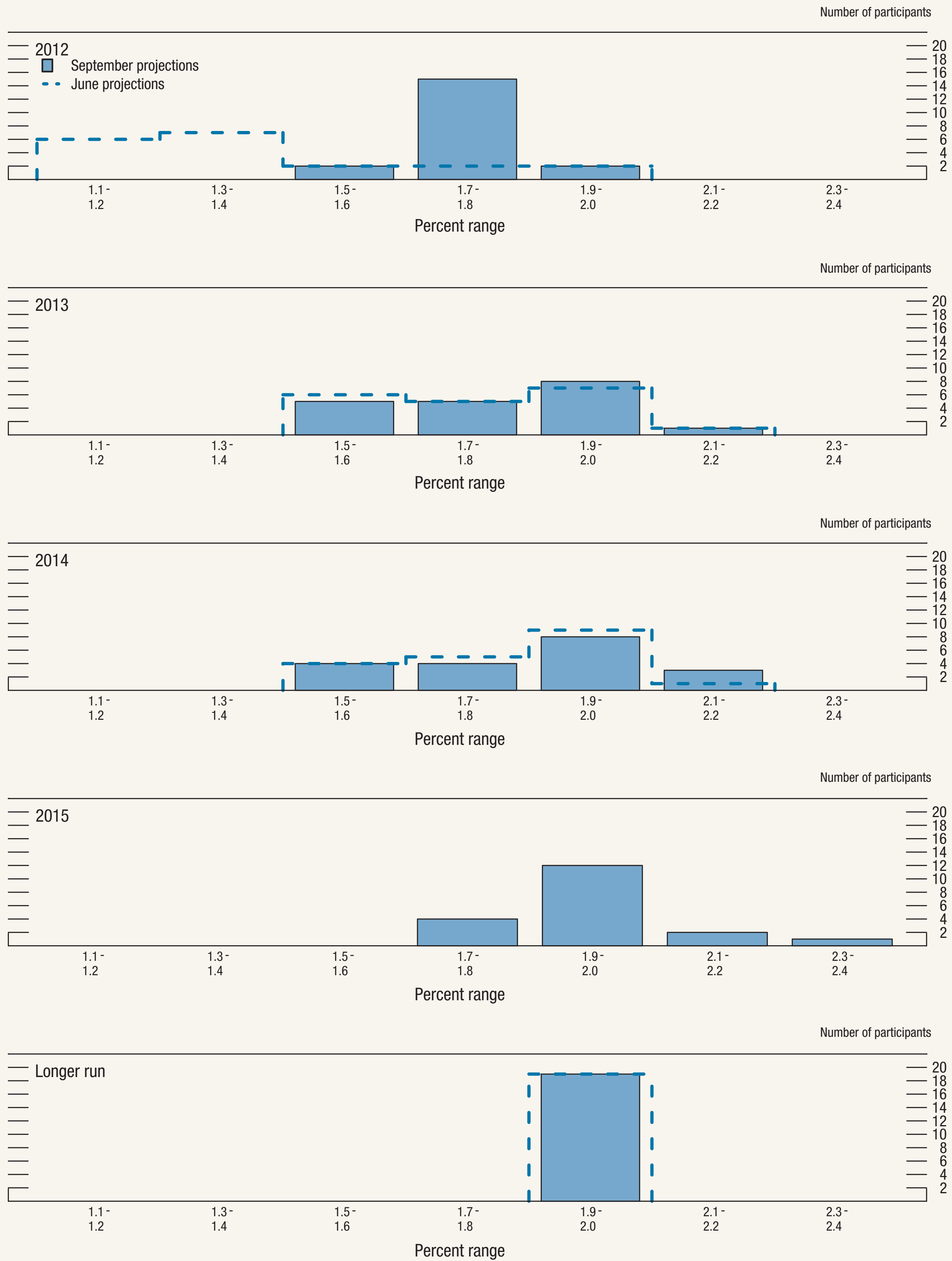
All participants reported levels for the appropriate target federal funds rate at the end of 2014 that were well below their estimates of the level expected to prevail in the longer run, and most saw the appropriate target federal funds rate as still well below its longer-run value at the end of 2015. 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. Eleven participants indicated that appropriate policy would involve a decision by the Committee, at the September meeting or soon thereafter, to undertake significant additional asset purchases. Several participants envisioned this program as entailing purchases of agency mortgage-backed securities. Almost all participants assumed that, at the appropriate time, the Committee would carry out the normalization of the balance sheet according to the principles approved at the June 2011 FOMC meeting. In general, participants linked their preferred start dates for the normalization process to their views for the appropriate timing of the first increase in the target federal funds rate.

The key factors informing participants' individual assessments of the appropriate setting for monetary policy included their judgments regarding labor market conditions that would be consistent with the maximum level of employment, the extent to which employment currently deviated from the maximum level of employment, the extent to which inflation deviated from the Committee's longer-term objective of 2 percent, and participants' projections of the likely time horizon necessary to return employment and inflation to mandate-consistent levels. Several participants noted that their assessments of appropriate monetary policy reflected the subpar pace of labor market improvement and the persistent shortfall of output from potential since the 2007–09 recession. A few participants noted that their settings of appropriate federal funds rate policy took into account unusual factors prevailing in recent years, such as the likelihood that the neutral level of the federal funds rate was somewhat below its historical norm and the fact that policy rate setting had been constrained by the effective lower bound on nominal interest rates. Two participants expressed concern that a protracted period of very accommodative monetary policy could lead to imbalances in the financial system. Participants also noted that because the appropriate stance of monetary policy is conditional 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.

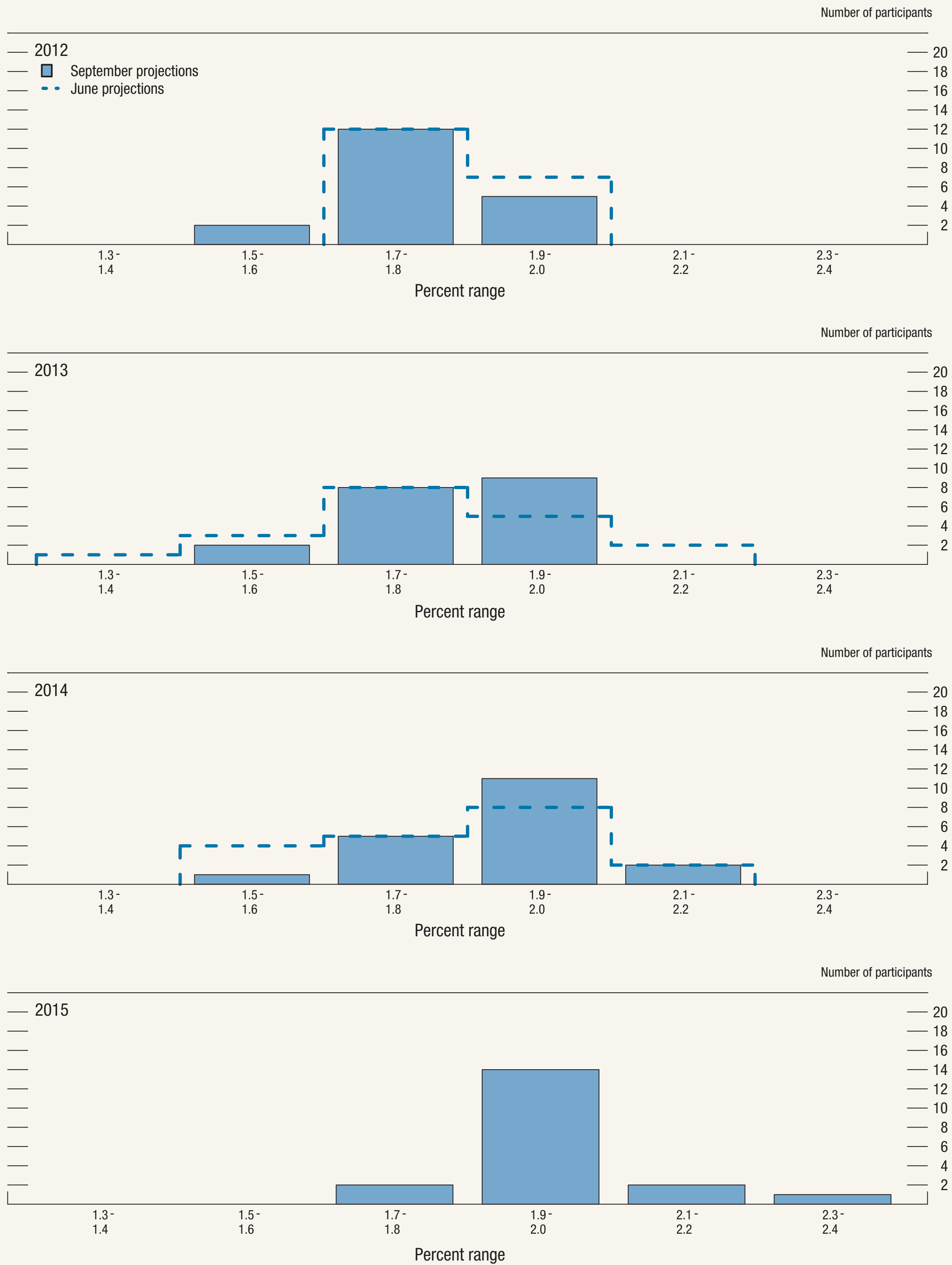
Figure 3.E details the distribution of participants' judgments regarding the appropriate level of the target federal funds rate at the end of each calendar year

Figure 3.C. Distribution of participants' projections for PCE inflation, 2012–15 and over the longer run



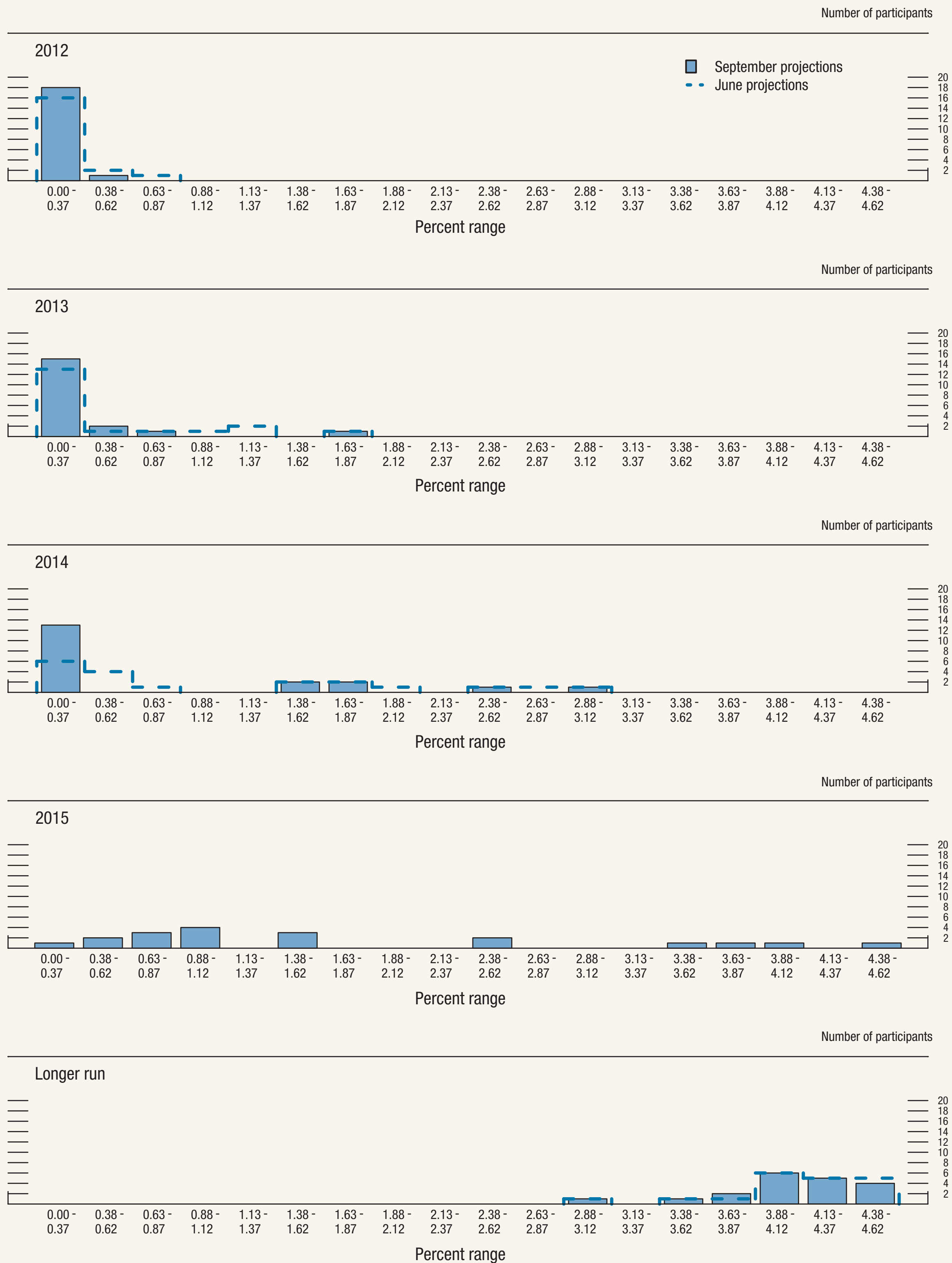
Note: Definitions of variables are in the general note to table 1.

Figure 3.D. Distribution of participants' projections for core PCE inflation, 2012–15



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, 2012–15 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.

from 2012 to 2015 and over the longer run. As previously noted, most participants judged that economic conditions would warrant maintaining the current low level of the federal funds rate through the end of 2014. Views on the appropriate level of the federal funds rate at the end of 2015 were more widely dispersed, with 10 participants seeing the appropriate level of the federal funds rate as 1 percent or lower and 6 of them seeing the appropriate rate as 2½ percent or higher. Those who judged that a longer period of very accommodative monetary policy would be appropriate generally were participants who projected a sizable gap between the unemployment rate and the longer-run normal level of the unemployment rate until 2015 or later. In contrast, the 6 participants who judged that policy firming should begin in 2012, 2013, or 2014 indicated that the Committee would need to act relatively soon in order to keep inflation near the FOMC's longer-run objective of 2 percent and to prevent a rise in inflation expectations.

Table 2. Average historical projection error ranges
Percentage points

Variable	2012	2013	2014	2015
Change in real GDP[1]	±0.6	±1.4	±1.7	±1.7
Unemployment rate[1]	±0.2	±0.9	±1.5	±1.9
Total consumer prices[2]	±0.5	±0.9	±1.1	±1.0

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 fall 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 may be found 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.

Uncertainty and Risks

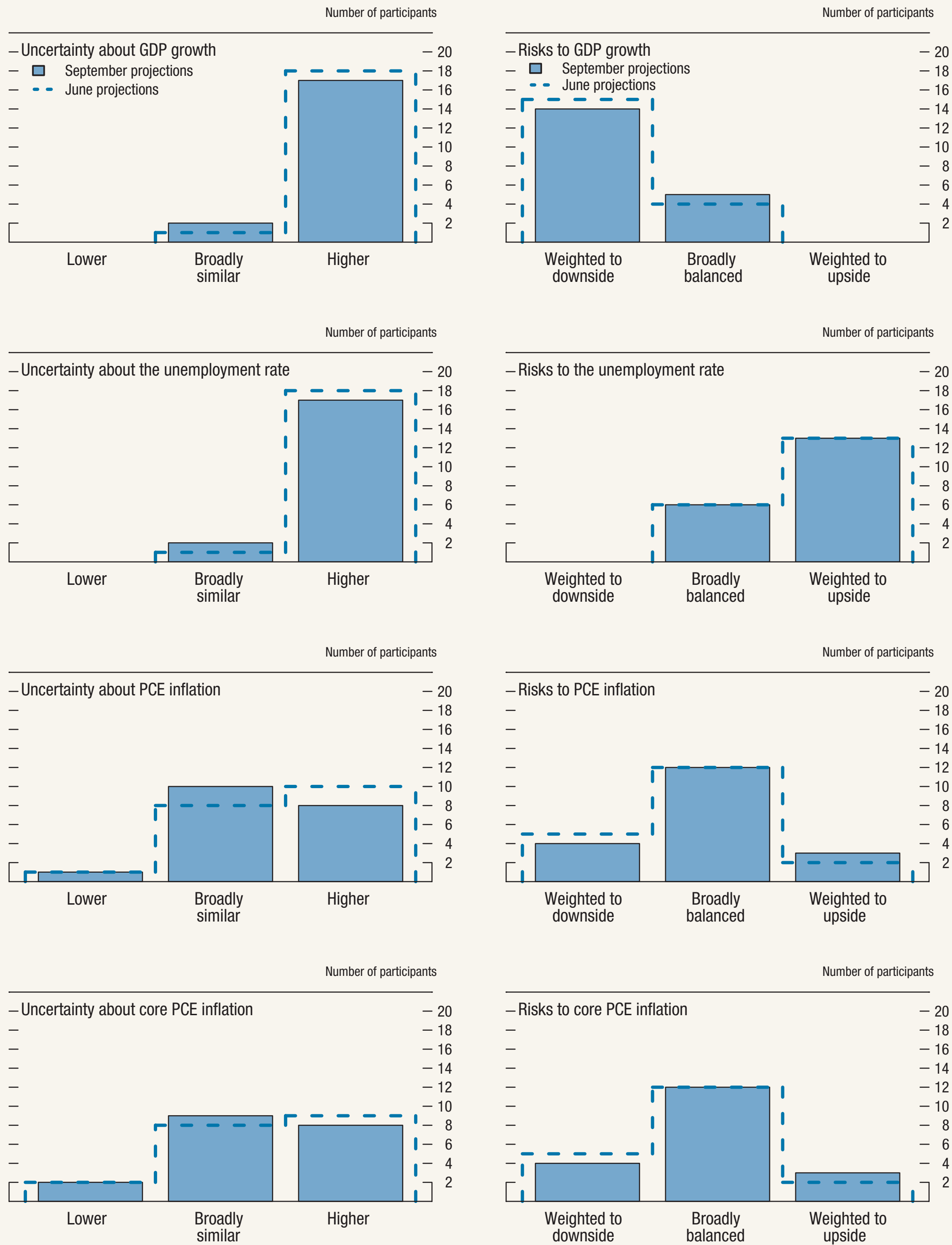
Nearly all participants judged that their current level of uncertainty about real GDP growth and unemployment was higher than was the norm during the previous 20 years (figure 4).[5] Eight participants judged the level of uncertainty associated with their forecasts of total PCE inflation to be higher as well, while another 10 participants viewed uncertainty about inflation as broadly similar to historical norms. The main factors cited as contributing to 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 June, 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. A number of participants commented that in the aftermath of the financial crisis, they were more uncertain about the level of potential output and its rate of growth. A couple of participants noted that some of the uncertainty about potential output arose from the risk that continuation of long-term unemployment might impair the skill level of the labor force or cause some workers to retire earlier than would otherwise have been the case, thereby reducing potential output in the medium term.

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 further, particularly over the near term, and issues associated with fiscal policy 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, four participants saw the risks to inflation as tilted to the downside, with a couple of them noting that slack in resource markets could turn out to be greater than they were anticipating. Three 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, and uncertainty about the Committee's ability to shift to a less accommodative policy stance when it becomes appropriate to do so.

5 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 1991 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 2.4 to 3.6 percent in the current year, 1.6 to 4.4 percent in the second year, and 1.3 to 4.7 percent in the third and fourth years. The corresponding 70 percent confidence intervals for overall inflation would be 1.5 to 2.5 percent in the current year, 1.1 to 2.9 percent in the second year, 0.9 to 3.1 percent in the third year, and 1.0 to 3.0 percent in the fourth 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.

Meeting Held on October 23–24, 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, October 23, 2012, at 1:00 p.m. and continued on Wednesday, October 24, 2012, at 9:00 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, 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

Thomas C. Baxter
Deputy General Counsel

Steven B. Kamin
Economist

David W. Wilcox
Economist

David Altig, Thomas A. Connors, Michael P. Leahy, William Nelson, David Reifschneider, Mark S. Sniderman, and William Wascher
Associate Economists

Simon Potter
Manager, System Open Market Account

Michael S. Gibson
Director, Division of Banking Supervision and Regulation, Board of Governors

James A. Clouse
Deputy Director, Division of Monetary Affairs, Board of Governors

Andreas Lehnert
Deputy Director, Office of Financial Stability Policy and Research, Board of Governors

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

Eric M. Engen, Michael T. Kiley, and Michael G. Palumbo
Associate Directors, Division of Research and Statistics, Board of Governors

Joshua Gallin
Deputy Associate Director, Division of Research and Statistics, Board of Governors

Marnie Gillis DeBoer
Assistant Director, Division of Monetary Affairs, Board of Governors

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

Jeremy B. Rudd
Senior Economist, Division of Research and Statistics, Board of Governors

Helen E. Holcomb
First Vice President, Federal Reserve Bank of Dallas

Jeff Fuhrer and Loretta J. Mester
Executive Vice Presidents, Federal Reserve Banks of Boston and Philadelphia, respectively

Troy Davig, Spencer Krane, and Kevin Stiroh
Senior Vice Presidents, Federal Reserve Banks of Kansas City, Chicago, and New York, respectively

William Gavin, Evan F. Koenig, Lorie K. Logan, and Paolo A. Pesenti
Vice Presidents, Federal Reserve Banks of St. Louis, Dallas, New York, and New York, respectively

Thomas D. Tallarini, Jr.
Assistant Vice President, Federal Reserve Bank of Minneapolis

Andreas L. Hornstein
Senior Advisor, Federal Reserve Bank of Richmond

Eric T. Swanson
Senior Research Advisor, Federal Reserve Bank of San Francisco

Thresholds and Forward Guidance

A staff presentation focused on the potential effects of using specific threshold values of inflation and the unemployment rate to provide forward guidance regarding the timing of the initial increase in the federal funds rate. The presentation reviewed simulations from a staff macroeconomic model to illustrate the implications for policy and the economy of announcing various threshold values that would need to be attained before the Federal Open Market Committee (FOMC) would consider increasing its target for the federal funds rate. Meeting participants discussed whether such thresholds might usefully replace or perhaps augment the date-based guidance that had been provided in the policy statements since August 2011. Participants generally favored the use of economic variables, in place of or in conjunction with a calendar date, in the Committee's forward guidance, but they offered different views on whether quantitative or qualitative thresholds would be most effective. Many participants were of the view that adopting quantitative thresholds could, under the right conditions, help the Committee more clearly communicate its thinking about how the likely timing of an eventual increase in the federal funds rate would shift in response to unanticipated changes in economic conditions and the outlook. Accordingly, thresholds could increase the probability that market reactions to economic developments would move longer-term interest rates in a manner consistent with the Committee's view regarding the likely future path of short-term rates. A number of other participants judged that communicating a careful qualitative description of the indicators influencing the Committee's thinking about current and future monetary policy, or providing more information about the Committee's policy reaction function, would be more informative than either quantitative thresholds or date-based forward guidance. Several participants were concerned that quantitative thresholds could confuse the public by giving the impression that the FOMC focuses on a small number of economic variables in setting monetary policy, when the Committee in fact uses a wide range of information. Some other participants worried that the public might mistakenly interpret quantitative thresholds as equivalent to the Committee's longer-run objectives or as triggers that, when reached, would prompt an immediate rate increase; but it was noted that the Chairman's post-meeting press conference and other venues could be used to explain the distinction between thresholds and these other concepts.

Participants generally agreed that the Committee would need to resolve a number of practical issues before deciding whether to adopt quantitative thresholds to communicate its thinking about the timing of the initial increase in the federal funds rate. These issues included whether to specify such thresholds in terms of realized or projected values of inflation and the unemployment rate and, in either case, what values for those thresholds would best balance the Committee's objectives of promoting maximum employment and price stability. Another open question was whether to supplement thresholds expressed in terms of the unemployment rate and inflation with additional indicators of economic and financial conditions that might signal a need either to raise the federal funds rate before a threshold is crossed or to delay until well afterward. A final question was whether the statement should also provide forward guidance about the likely path of the federal funds rate after the initial increase. It was noted that such guidance could have significant effects on financial conditions and the economy. At the conclusion of the discussion, the Chairman asked the staff to pro-

vide additional background material, taking into account the range of participants' views.

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 September 12–13, 2012. The Manager also reported on System open market operations over the intermeeting period, focusing on the ongoing reinvestment into agency-guaranteed mortgage-backed securities (MBS) of principal payments received on SOMA holdings of agency debt and agency-guaranteed MBS and the purchases of MBS authorized at the September FOMC meeting. By unanimous vote, the Committee ratified the Desk's domestic transactions over the intermeeting period. There were no intervention operations in foreign currencies for the System's account over the intermeeting period.

Staff Review of the Economic Situation

The information reviewed at the October 23–24 meeting suggested that economic activity continued to increase at a moderate pace in recent months. The unemployment rate declined but was still elevated. Consumer price inflation picked up, reflecting higher consumer energy costs, but longer-run inflation expectations remained stable.

Private nonfarm employment expanded modestly in September, and government employment increased. The unemployment rate fell to 7.8 percent, and the labor force participation rate rose slightly. The share of workers employed part time for economic reasons increased somewhat and continued to be elevated, while the rate of long-duration unemployment edged down further but remained high. Other indicators of labor market conditions, such as surveys of firms' job openings and hiring plans and initial claims for unemployment insurance, did not show decided improvement over the intermeeting period.

Manufacturing production declined in the third quarter, and the rate of manufacturing capacity utilization edged down. Automakers' schedules pointed to a similar rate of motor vehicle assemblies in the fourth quarter as in the third quarter. Broader indicators of factory production, such as the diffusion indexes of new orders from the national and regional manufacturing surveys, remained subdued in recent months at levels consistent with only tepid increases in manufacturing output in the near term.

Real personal consumption expenditures rose at a solid pace in August. In September, nominal retail sales, excluding purchases at motor vehicle and parts outlets, increased considerably. Light motor vehicle sales also expanded. Recent data on factors that tend to support household spending were mixed. Real disposable income declined in August, largely reflecting the effect of higher consumer energy prices. In contrast, consumer sentiment rose in September and early October, and continued modest increases in house prices added to households' net worth.

Housing market conditions improved more generally in recent months. Starts and permits of both new single-family homes and multifamily units picked up in August and September. However, construction activity remained at a relatively low level, reflecting the restraint imposed by tight credit standards for mortgage borrowing and by the large inventory of foreclosed and distressed properties. Sales of existing homes continued to expand, on balance, in recent months, but new home sales were flat.

Real business expenditures on equipment and software appeared to edge down in the third quarter. Nominal shipments for nondefense capital goods excluding aircraft continued to decrease in August; the backlog of unfilled orders for these capital goods also declined. Other forward-looking indicators, such as subdued readings from surveys of business conditions and capital spending plans, also pointed toward roughly flat real expenditures for business equipment in the near term. Nominal business spending for new nonresidential construction decreased further in August. Meanwhile, inventories in most industries were about in line with sales. In the farm sector, however, drought conditions likely reduced inventory accumulation last quarter and subtracted from overall economic growth.

Real federal government purchases appeared to edge up in the third quarter, as data for nominal federal spending in August and September pointed to a slight increase in real defense expenditures. Real state and local government purchases likely moved essentially sideways in the third quarter. State and local government payrolls expanded, but nominal construction spending continued to decline in recent months.

The U.S. international trade deficit widened in August, as imports fell less than exports. Imports edged down, on net, with higher purchases of services and petroleum products more than offset by declines in all of the other major categories. Across export categories, exports of industrial supplies posted a particularly large decline, as the volume of petroleum product exports dropped sharply.

Consumer prices picked up in August and September, primarily reflecting sharp increases in retail gasoline prices. However, survey data indicated that retail gasoline prices were about flat in early October. Consumer food prices rose modestly in recent months. The somewhat better-than-expected crop harvest caused spot and futures prices of farm commodities to retrace some of their rise during the summer; however, farm commodity prices remained elevated and continued to point toward some temporary upward pressures on retail food prices later this year. Increases in consumer prices excluding food and energy were subdued in August and September. Near-term inflation expectations from the Thomson Reuters/University of Michigan Surveys of Consumers declined in September and early October, while longer-term inflation expectations in the survey moved down to near the lower end of the narrow range where they have remained for some time.

Available measures of labor compensation indicated that increases in nominal wages stayed relatively modest. The gains in average hourly earnings for all employees in the third quarter were subdued.

Foreign economic growth remained sluggish, restrained by weak activity in Europe and the associated spillovers—including through trade—to the rest of the world. Euro-area production indicators signaled continued contraction, and the area's unemployment rate in August stayed at a historical high. In Japan, exports and output declined in the summer months, and growth of real gross domestic product (GDP) for the first half of the year was revised down significantly. Data for exports from emerging market economies, especially in Asia, showed a drop, although recently released data for China indicated a pickup in economic activity in the third quarter. Foreign inflation rose slightly in some emerging market economies in response to higher food prices but was still generally well contained. Monetary policy remained accommodative in most advanced and emerging market economies.

Staff Review of the Financial Situation

Market participants reportedly read the September FOMC statement as pointing to a significant increase in monetary policy accommodation. As a result, financial conditions generally eased appreciably early in the intermeeting period. However, toward the end of the period investor sentiment deteriorated somewhat, in part because of concerns about corporate profitability.

Short- and medium-term nominal Treasury yields ended the intermeeting period up slightly, and long-term yields were about unchanged on net. At the same time, real yields on Treasury inflation-protected securities (TIPS) decreased somewhat, leaving inflation compensation higher. In part, the rise in inflation compensation may have reflected upward pressure on nominal Treasury yields associated with some unwinding of safe-haven demands.

The expected path of the federal funds rate based on money market futures was little changed between the September and October FOMC meetings. Market-based measures of uncertainty about the path of the federal funds rate over medium-to-long horizons declined over the period. The survey of primary dealers conducted prior to the October meeting showed that the expected size of the SOMA at the end of 2013 had risen significantly.

Indicators of the condition of domestic financial institutions were mixed over the intermeeting period. Indexes of equity prices for those institutions were modestly lower. But spreads on credit default swaps for large financial institutions declined in recent months, and third-quarter earnings of large bank holding companies that had reported by the time of the FOMC meeting were generally in line with expectations.

Conditions in unsecured dollar funding markets appeared to improve some. In secured funding markets, rates on repurchase agreements spiked around quarter-end but subsequently more than retraced that move, ending the intermeeting period down slightly.

Broad equity price indexes were a little lower, on balance, as gains following the September FOMC meeting and generally better-than-expected economic data releases were more than offset by concerns about cor-

porate profitability. Option-implied volatility for the S&P 500 index fell noticeably following the September FOMC meeting but increased, on net, over the intermeeting period.

Yields on investment-grade corporate bonds reached a record low level, and their spreads to yields on comparable-maturity Treasury securities narrowed on net. Yields and spreads on speculative-grade corporate bonds also decreased.

The pace of investment- and speculative-grade bond issuance by nonfinancial firms picked up significantly in September from the already robust pace in previous months. In the syndicated leveraged loan market, issuance through the first three quarters of 2012 lagged that of the same period in 2011 but nonetheless remained solid. The pace of gross public equity issuance by nonfinancial firms moved up some in September from the subdued levels observed in prior months, but overall issuance in the third quarter stayed low compared with the first half of 2012.

Financial conditions in the commercial real estate sector remained weak amid elevated vacancy and delinquency rates. However, some indicators pointed to modest improvement in this sector, and issuance of commercial mortgage-backed securities was solid in the third quarter.

Residential mortgage rates declined over the intermeeting period. The decline in mortgage rates reflected a sizable drop in MBS yields following the September FOMC statement. Refinancing activity increased further in September and early October. House prices continued to rise, and some indicators of credit quality on residential real estate loans improved. The fraction of seriously delinquent existing mortgages remained elevated, but the rate at which mortgages entered delinquency continued to trend down in July.

Consumer credit expanded briskly in August. Nonrevolving credit continued to increase at a robust pace, mainly reflecting growth in student and auto loans. Revolving credit also rose in August but was little changed, on balance, over the past few months. Delinquency rates for consumer credit remained low, and issuance of consumer asset-backed securities was strong in the third quarter, close to the pace seen earlier this year.

Bank credit continued to expand at a moderate rate in the third quarter, with further growth in loans augmented by larger gains in securities holdings. Results from the October Senior Loan Officer Opinion Survey on Bank Lending Practices indicated that modest fractions of domestic banks, on net, continued to report having eased their lending standards on some categories of business and household loans. In addition, for the second straight quarter, reports of stronger demand were relatively widespread for many types of loans.

M2 growth picked up somewhat in September, as strong growth in liquid deposits and currency offset ongoing declines in small time deposits and retail money market funds.

The staff's broad nominal index of the foreign exchange value of the dollar was little changed, on net, over the intermeeting period. The dollar rose against the currencies of most advanced economies but declined against the euro and most Asian emerging market currencies. Of note, the Chinese renminbi appreciated further against the dollar. A number of central banks eased monetary policy during the period, including those of Australia, Brazil, Japan, Korea, and Thailand. Foreign equity indexes, which generally rose following the September FOMC statement, ended the intermeeting period higher in most markets, although stock prices in the euro area were down on net. Ten-year sovereign yields in Germany and the United Kingdom moved down just a few basis points. After declining significantly between late July and early September, the yield spread of 10-year sovereign debt in Italy over comparable German bunds declined only slightly further over the intermeeting period, and the Spanish sovereign spread edged up.

Staff Economic Outlook

In the economic forecast prepared by the staff for the October FOMC meeting, real GDP growth in the near term was revised up relative to the previous projection. The upward revision to the near-term forecast primarily reflected better-than-expected incoming information for consumer spending, residential construction, and labor market conditions that more than offset the recent data for business fixed investment and industrial production that were weaker than anticipated. The staff's medium-term projection for real GDP growth also was revised up, mostly reflecting the monetary policy actions announced by the FOMC after the September meeting and the resulting improved outlook for financial conditions. Nonetheless, with fiscal policy assumed to be tighter

next year than this year, the staff anticipated that real GDP growth would not materially exceed increases in potential output in 2013. In 2014, economic activity was projected to accelerate gradually, supported by a lessening in fiscal policy restraint, gains in consumer and business confidence, further improvements in financial conditions and credit availability, and accommodative monetary policy. Progress in reducing unemployment over the projection period was expected to be relatively slow.

The staff's near-term forecast for inflation was little changed, on balance, from the projection prepared for the September FOMC meeting, notwithstanding recent increases in consumer energy prices. The staff's projection for inflation over the medium term was also essentially unchanged. Crude oil prices were anticipated to decline slowly from their current levels, the boost to retail food prices from the drought was expected to be only temporary and relatively small, long-run inflation expectations were assumed to remain stable, and significant resource slack was projected to persist over the projection period. As a result, the staff continued to forecast that inflation would be subdued through 2014.

Participants' Views on Current Conditions and the Economic Outlook

In their discussion of the economic situation and the outlook, meeting participants viewed the information received since the Committee met in September as indicating that economic activity continued to expand at a moderate pace. Employment was still rising slowly, and the unemployment rate remained elevated. Household spending advanced more quickly in recent months than during the spring, and housing activity showed further signs of improvement. However, business fixed investment slowed noticeably. Inflation recently picked up somewhat, reflecting higher energy prices, while longer-run inflation expectations remained stable.

Participants generally saw the economic outlook as little changed, on balance, from their projections prepared for the September Summary of Economic Projections (SEP), agreeing that the pace of the economic recovery was likely to stay moderate over coming quarters. The recent news on household spending, consumer sentiment, and the housing market was encouraging, and most participants expected that highly accommodative monetary policy would provide support for the recovery in the period ahead. However, many participants saw the uncertainty attending the unresolved U.S. fiscal situation and the ongoing fiscal and financial strains in the euro area as factors likely to restrain the pace of economic growth in coming months. Moreover, many participants cited significant downside risks to the outlook that might arise from more widespread weakness in global economic activity or an intensification of strains in global financial markets. Regarding inflation, the recent run-up in consumer energy prices was expected to subside over the next few months, while the effects of the drought were likely to show through to retail food prices. Over the medium term, most participants anticipated that inflation would run at or below the Committee's 2 percent objective.

Concerning developments in the household sector, participants observed that the recent news on consumer spending and confidence had been positive, with surveys reporting that households had become noticeably more optimistic about the outlook for unemployment and income. Sales of motor vehicles remained an area of strength, in part due to favorable credit conditions. The increase in consumer spending appeared to be relatively broadly based across the country, although retailers in a few areas reported that they had seen slower sales recently and expressed concerns about the near-term outlook. Among the factors mentioned that might support consumer confidence and a continuation of the somewhat stronger pace of spending were an expected decline in retail energy prices and continued gradual improvement in labor market conditions. In addition, lower mortgage rates had spurred a rise in refinancing activity, which, along with the increases in household wealth attributable to higher home values and equity prices, would provide support for consumer spending going forward.

Participants generally agreed that a recovery in housing activity now appeared to be under way, citing increases in house prices, sales, and construction in many areas. Most saw the low levels of mortgage interest rates as an important factor contributing to increased housing demand. Although the recovery in the housing sector appeared to be taking hold, several participants cited obstacles to more rapid improvement. For example, several participants reported that lenders' capacity for processing home-purchase mortgages was tight and backlogs were long, in part due to the current heavy pace of refi-

nancings. These participants also noted that underwriting standards remained quite tight, particularly for borrowers with lower credit quality.

In contrast to the more favorable news on consumer spending and housing, contacts generally reported slower activity in the business sector. Some participants expressed concern about weaker manufacturing output and new orders in recent months, particularly in capital goods industries, although several pointed out that manufacturers' expectations for future orders and production were more positive. A few participants noted that shipping activity was down, and one participant added that energy production had decelerated. In contrast, a few participants had received reports of a pickup in nonresidential construction, and one indicated that high-tech firms were expecting gains in business going forward. In many instances, participants' business contacts stated that they were delaying or cutting back on hiring and capital spending because of the uncertain outlook for government spending, taxes, or regulatory policies. One participant, however, reported that contacts said that insufficient demand remained their principal concern. Several participants mentioned that the cautious posture of businesses was apparent in national and regional surveys of plans of both large and small firms. Some participants noted that the outlook for business spending would likely be difficult to assess until the direction of U.S. fiscal policy becomes clearer. A few suggested the possibility that a near-term resolution of the fiscal situation might lead to a significant increase in spending as projects now being deferred were undertaken; another worried that the uncertainty attending the outlook for fiscal policy might weigh on business planning for some time. In addition to the uncertainty about the fiscal outlook, manufacturing contacts attributed the weakness in orders and production to softer export demand; one participant added that agricultural exports had also softened. Several participants noted that their contacts were concerned not only about the economic slowdown in Europe, but also about whether the recent slowing in economic activity in Asia might persist.

In their comments on labor market developments, participants generally viewed the recent decline in the unemployment rate and continued modest gains in payroll employment, taken together, as consistent with a gradually improving job market. However, with economic growth anticipated to stay moderate, some participants expressed concern that the pace of job creation would generate only a slow decline in joblessness. Several pointed to a steep drop in the index of hiring plans by small businesses. A couple of participants mentioned that some firms planned to increase their use of part-time or temporary workers rather than full-time permanent employees, at least partly in order to limit health insurance costs.

Participants saw recent price developments as consistent with inflation remaining at or below the Committee's 2 percent objective over the medium run. Although energy prices had risen sharply in recent months, reflecting earlier increases in crude oil costs and supply disruptions, gasoline prices were anticipated to move back down in coming months as those pressures eased. Similarly, effects of the drought were expected to show through to retail food prices over the next few quarters but then subside. By various estimates, underlying inflation trends remained subdued, and indicators of longer-term inflation expectations were generally viewed as stable.

In their discussion of financial developments over the intermeeting period, participants commented on the effects of the policy actions taken at the September meeting to strengthen the Committee's forward guidance and to purchase additional MBS. The initial effects were generally viewed as consistent with a marked easing in financial conditions. For example, yields on MBS dropped noticeably, leading to a decline in mortgage interest rates, and corporate bond yields generally moved lower. Yields on nominal Treasury securities were little changed. Some participants suggested that more time would be required to assess the ultimate effects of the additional MBS purchases on primary mortgage rates and on financial conditions more broadly. The stability in nominal Treasury yields, paired with a decline in TIPS yields, implied a modest increase in inflation compensation, on net, over the intermeeting period. A couple of participants saw this increase as a sign that the open-ended asset purchases posed a risk to the stability of longer-term inflation expectations. However, others saw the effect on expected inflation as relatively muted or likely the result of reduced risks of undesirably low inflation. Participants remained concerned about risks to financial markets associated with the situation in the euro area and uncertain U.S. fiscal prospects, but a couple noted that measures of financial market uncertainty were still relatively low. Several participants pointed out that recent policy announcements by the European Central Bank were received favorably in markets. A number of participants mentioned other signs of greater optimism in financial markets, including a rise in merger and

acquisition activity and a moderation in pressures on large U.S. financial institutions. A few participants observed that low interest rates had increased demand for riskier financial products, and a couple of participants saw a risk that holding interest rates low for a prolonged period could lead to financial imbalances and imprudent risk-taking. One participant, however, commented that risk aversion still seemed quite high, citing the very low yields on longer-term TIPS and a large estimated risk premium in equity markets.

Participants also discussed the efficacy and potential costs of the Committee's asset purchases. A number of participants offered the assessment that the Committee's policy actions, to date, had been effective in making financial conditions more accommodative and that lower interest rates were providing support to aggregate spending, most notably in areas such as housing, autos, and other consumer durables. In particular, some pointed out that the favorable developments in mortgage markets over the intermeeting period suggested that the MBS purchases were likely to reinforce the nascent recovery in the housing market. Several added that, based on the experience with earlier asset purchases, the broader effects on economic activity from more-accommodative financial conditions were likely to accrue over time. Looking ahead, a number of participants indicated that additional asset purchases would likely be appropriate next year after the conclusion of the maturity extension program in order to achieve a substantial improvement in the labor market. In that regard, a couple of participants noted the likely usefulness of clarifying the range of indicators that would be evaluated in assessing the outlook for the labor market. Participants generally agreed that in determining the appropriate size, pace, and composition of further purchases, they would need to carefully assess the efficacy of asset purchases in fostering stronger economic activity and consider the potential risks and costs of such purchases. Several participants questioned the effectiveness of the current purchases or whether a continuation of them would be warranted if the recent moderate pace of economic recovery were sustained. In addition, several participants expressed concerns that sizable asset purchases might eventually have adverse consequences for the functioning of asset markets or that they might complicate the Committee's ability to remove policy accommodation at the appropriate time and normalize the size and composition of the Federal Reserve's balance sheet. A couple of participants noted that an extended period of policy accommodation posed an upside risk to inflation.

Committee Policy Action

Members viewed the information on U.S. economic activity received over the intermeeting period as suggesting that the economy was, on balance, expanding moderately, with a pickup in household spending and further improvement in housing markets offset to some extent by a slowdown in the business sector. Although the unemployment rate declined in recent months, monthly gains in nonfarm payroll jobs remained modest, and many members noted that, without sufficient policy accommodation, economic growth might not be strong enough to generate sustained improvement in the labor market. Inflation rose recently because of a temporary run-up in energy prices. However, longer-term inflation expectations were stable, and over the medium run, inflation was anticipated to run at or below the Committee's 2 percent objective.

In their discussion of monetary policy for the period ahead, Committee members generally agreed that their overall assessments of the economic outlook were little changed since their previous meeting. Accordingly, all but one member judged that maintaining the current, highly accommodative stance of monetary policy was warranted in order to foster a stronger economic recovery in a context of price stability. The Committee judged that continuing both the purchases of MBS at a pace of $40 billion per month and the existing program to extend the average maturity of its Treasury securities holdings remained appropriate. The Committee also agreed to maintain its policy of reinvesting principal payments from its holdings of agency debt and agency MBS into agency MBS. One member opposed further asset purchases because he viewed them as unlikely to help the Committee achieve its goals and because he thought that purchases of MBS represented inappropriate credit allocation. Many members saw the adjustments in the Committee's forward guidance at the September meeting as having been effective in communicating its intention to maintain a highly accommodative stance of monetary policy for a considerable time after the economic recovery strengthens and judged that the guidance remained appropriate at this meeting. However, one member continued to object to the calendar-date-based forward guidance for the federal funds rate. With respect to the statement to be released following the meeting, mem-

bers made only relatively small modifications to update the description of recent developments in consumer and business spending and in inflation. With the economic outlook little changed, they agreed that the remainder of the statement would reiterate the policy actions and intentions adopted at the September meeting.

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 announced in June 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 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. The Desk is also directed to continue purchasing agency mortgage-backed securities at a pace of about $40 billion per month. The Committee directs the Desk to engage in dollar roll and coupon swap 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 2:15 p.m.:

"Information received since the Federal Open Market Committee met in September suggests that economic activity has continued to expand at a moderate pace in recent months. Growth in employment has been slow, and the unemployment rate remains elevated. Household spending has advanced a bit more quickly, but growth in business fixed investment has slowed. The housing sector has shown some further signs of improvement, albeit from a depressed level. Inflation recently picked up somewhat, reflecting higher energy prices. Longer-term inflation expectations have remained stable.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee remains concerned that, without sufficient policy accommodation, economic growth might not be strong enough to generate sustained improvement in labor market conditions. Furthermore, strains in global financial markets continue to pose significant downside risks to the economic outlook. The Committee also anticipates that inflation over the medium term likely would run at or below its 2 percent objective.

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 will continue purchasing additional agency mortgage-backed securities at a pace of $40 billion per month. The Committee also will continue through the end of the year its program to extend the average maturity of its holdings of Treasury securities, and it 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. These actions, which together will increase the Committee's holdings of longer-term securities by about $85 billion each month through the end of the year, should put downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative.

The Committee will closely monitor incoming information on economic and financial developments in coming months. If the outlook for the labor market does not improve substantially, the Committee will continue its purchases of agency mortgage-backed securities, undertake addi-

> tional asset purchases, and employ its other policy tools as appropriate until such improvement is achieved in a context of price stability. In determining the size, pace, and composition of its asset purchases, the Committee will, as always, take appropriate account of the likely efficacy and costs of such purchases.
>
> To support continued progress toward maximum employment and price stability, the Committee expects that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the economic recovery strengthens. In particular, the Committee also decided today to keep the target range for the federal funds rate at 0 to ¼ percent and currently anticipates that exceptionally low levels for the federal funds rate are likely to be warranted at least through mid-2015."

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 for the same reasons he had cited at the September FOMC meeting, including his view of the likely ineffectiveness of asset purchases and their potential inflationary effects, as well as the inappropriateness of credit allocation inherent in purchasing MBS. He also continued to disagree with the description of the time period over which a highly accommodative stance of monetary policy would remain appropriate and exceptionally low levels for the federal funds rate were likely to be warranted.

Discussion of Communications regarding Economic Projections

A staff presentation reviewed the results of the consensus forecast experiments that the Committee conducted in conjunction with its August and September meetings. The briefing highlighted the important role of the assumed path for monetary policy in constructing a consensus forecast and reviewed several alternative approaches for setting such a path. As a possible alternative to a consensus forecast, the staff presentation also discussed potential enhancements to the SEP. In their discussion, participants agreed that FOMC communications could be enhanced by clarifying the linkage between participants' economic forecasts, including the underlying policy assumptions, and the Committee's policy decision as expressed in the postmeeting statement. However, most participants judged that, given the diversity of their views about the economy's structure and dynamics, it would be difficult for the Committee to agree on a fully specified longer-term path for monetary policy to incorporate into a quantitative consensus forecast in a timely manner, especially under present conditions in which the policy decision comprises several elements. Participants agreed to continue to explore ways to increase transparency and clarity in the Committee's policy communications, and they indicated a willingness to look into modifications to the SEP. At the end of the discussion, the Chairman asked the subcommittee on communications to explore potential approaches to providing more information about the Committee's collective judgment regarding the economic outlook and appropriate monetary policy through the SEP.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, December 11–12, 2012. The meeting adjourned at 12:50 p.m. on October 24, 2012.

Notation Vote

By notation vote completed on October 3, 2012, the Committee unanimously approved the minutes of the FOMC meeting held on September 12–13, 2012.

William B. English
Secretary

Meeting Held on December 11–12, 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, December 11, 2012, at 11:00 a.m. and continued on Wednesday, December 12, 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

Michelle A. Smith
Assistant Secretary

Scott G. Alvarez
General Counsel

Steven B. Kamin
Economist

David W. Wilcox
Economist

David Altig, Thomas A. Connors, Michael P. Leahy, William Nelson, David Reifschneider, and William Wascher
Associate Economists

Simon Potter
Manager, System Open Market Account

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

Jon W. Faust
Special Advisor to the Board, Office of Board Members, Board of Governors

James A. Clouse and Stephen A. Meyer
Deputy Directors, Division of Monetary Affairs, Board of Governors

Maryann F. Hunter
Deputy Director, Division of Banking Supervision and Regulation, Board of Governors

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

Ellen E. Meade and Joyce K. Zickler
Senior Advisers, Division of Monetary Affairs, Board of Governors

Eric M. Engen, Thomas Laubach, and David E. Lebow
Associate Directors, Division of Research and Statistics, Board of Governors

Michael T. Kiley[1]
Associate Director, Office of Financial Stability Policy and Research, Board of Governors

Joshua Gallin
Deputy Associate Director, Division of Research and Statistics, Board of Governors

Jane E. Ihrig
Deputy Associate Director, Division of Monetary Affairs, Board of Governors

Beth Anne Wilson
Deputy Associate Director, Division of International Finance, Board of Governors

---

1 Attended Tuesday's session only.

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

Jennifer E. Roush
Senior Economist, Division of Monetary Affairs, Board of Governors

Marie Gooding
First Vice President, Federal Reserve Bank of Atlanta

Loretta J. Mester and Daniel G. Sullivan
Executive Vice Presidents, Federal Reserve Banks of Philadelphia and Chicago, respectively

Troy Davig, Mark E. Schweitzer, Geoffrey Tootell, Christopher J. Waller, and Kei-Mu Yi
Senior Vice Presidents, Federal Reserve Banks of Kansas City, Cleveland, Boston, St. Louis, and Minneapolis, respectively

Mary Daly
Group Vice President, Federal Reserve Bank of San Francisco

Evan F. Koenig, Lorie K. Logan, Julie Ann Remache, Alexander L. Wolman, and Nathaniel Wuerffel
Vice Presidents, Federal Reserve Banks of Dallas, New York, New York, Richmond, and New York, respectively

Argia M. Sbordone
Assistant Vice President, Federal Reserve Bank of New York

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 Federal Open Market Committee (FOMC) met on October 23–24, 2012. He also reported on System open market operations over the intermeeting period, 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; the operations related to the maturity extension program authorized at the June 19–20, 2012, FOMC meeting; and the purchases of MBS authorized at the September 12–13, 2012, FOMC meeting. By unanimous vote, the Committee ratified the Open Market Desk's domestic transactions over the intermeeting period. There were no intervention operations in foreign currencies for the System's account over the intermeeting period.

The Committee considered a proposal to extend its liquidity swap arrangements with foreign central banks past February 1, 2013. All but one member approved the following resolution:

> "The Federal Open Market Committee directs the Federal Reserve Bank of New York to extend the existing temporary dollar liquidity swap arrangements with the Bank of Canada, the Bank of England, the Bank of Japan, the European Central Bank, and the Swiss National Bank through February 1, 2014. In addition, the Federal Open Market Committee directs the Federal Reserve Bank of New York to extend the existing temporary foreign currency liquidity swap arrangements with the Bank of Canada, the Bank of England, the Bank of Japan, the European Central Bank, and the Swiss National Bank through February 1, 2014."

Mr. Lacker dissented because of his opposition to arrangements that support Federal Reserve lending in foreign currencies, which he viewed as amounting to fiscal policy.

Options for the Continuation of Asset Purchases

The staff reviewed several options for purchasing longer-term securities after the planned completion at the end of the month of the maturity extension program. The presentation focused on the potential effects for the U.S. economy, based in part on simulations of a staff macroeconomic model, and for the Federal Reserve's balance sheet and income of continuing to buy MBS and longer-term Treasury securities over various time frames. In their discussion of the staff presentation, some participants asked about the possible consequences of the alternative purchase programs for the expected path of Federal Reserve remittances to the Treasury Department, and a few indicated the need for additional consideration of the implications of such purchases for the eventual normalization of the stance of monetary policy and the size and composition of the Federal Reserve's balance sheet.

Staff Review of the Economic Situation

The information reviewed at the December 11–12 meeting indicated that economic activity continued to increase at a moderate pace in recent months. Employment expanded further, and the unemployment rate declined slightly, on balance, from Septem-

ber to November but was still elevated. Consumer price inflation slowed as consumer energy costs fell, while measures of longer-run inflation expectations remained stable.

Private nonfarm employment increased at a slightly faster rate in October and November than in the third quarter, but government employment decreased somewhat. The unemployment rate declined to 7.7 percent in November, and the labor force participation rate in that month was at the same level as in the third quarter. The relatively large share of workers employed part time for economic reasons trended up a bit, on net, while the share of long-duration unemployment in total unemployment was essentially flat and remained elevated. Indicators of firms' job openings and hiring plans were little changed on balance. Initial claims for unemployment insurance were boosted in early November by the effects of Hurricane Sandy but returned within weeks to a level that was about the same as before the hurricane.

Manufacturing production declined in October, as output was held down at the end of the month by the disruptions and damage caused by Hurricane Sandy; the rate of manufacturing capacity utilization also declined. Automakers' schedules indicated that the pace of motor vehicle assemblies would rise somewhat in the coming months. Broader indicators of factory output, such as the diffusion indexes of new orders from the national and regional manufacturing surveys, continued to be subdued at levels consistent with only small gains in production in the near term.

Real personal consumption expenditures rose at a modest pace in the third quarter, but spending declined in October, likely in response in part to some disruptions caused by the hurricane. Probably reflecting those disruptions, sales of light motor vehicles fell in October but then increased notably in November. Some factors that tend to influence household spending became less supportive: Real disposable personal income moved up only slightly in the third quarter and declined in October. Moreover, consumer sentiment fell back in early December to about its level during the summer. In contrast, household net worth increased in the third quarter, partially a result of higher equity and home values.

Conditions in the housing market continued to improve gradually, but construction activity was still at a low level, restrained by the considerable inventory of foreclosed and distressed homes and the tight credit standards for mortgages. Starts and permits of new single-family homes were essentially flat in October after rising significantly in the preceding month. Starts of new multifamily units rose in October, although permits declined somewhat following their brisk increase in the previous month. Meanwhile, home prices advanced further and sales of existing homes continued to expand, but new home sales were little changed.

Real business expenditures on equipment and software decreased in the third quarter. In October, nominal new orders for nondefense capital goods excluding aircraft moved up a little, but shipments of these capital goods edged down and the level of orders remained below that of shipments. In addition, other forward-looking indicators of equipment investment by firms, such as surveys of business conditions and capital spending plans, were still subdued. Real business expenditures for nonresidential structures also decreased in the third quarter, although nominal construction spending by firms increased in October. Inventories in most industries appeared to be roughly aligned with sales in recent months.

Real federal government purchases increased markedly in the third quarter, led by a sharp rise in defense spending. However, data for nominal federal spending in October pointed toward a decline in real defense expenditures in the fourth quarter. Real state and local government purchases were little changed in the third quarter. State and local government payrolls decreased on net over October and November, and nominal construction spending by these governments edged lower in October.

The U.S. international trade deficit widened in October, and both exports and imports fell sharply from the previous month. The decrease in exports was widespread across categories, while the reduction in imports importantly reflected lower purchases of consumer goods and non-oil industrial supplies, although petroleum imports increased.

Consumer prices moved up more slowly in October than in the preceding few months, primarily because of a small decline in energy prices after several months of large gains. Moreover, survey data indicated that retail gasoline prices decreased further in November. Consumer food prices rose a little faster in October, as the effects of last summer's drought started to show through at the retail level. Increases in consumer prices excluding food and energy remained subdued. Near-term inflation expectations

from the Thomson Reuters/University of Michigan Surveys of Consumers edged up, on balance, in November and early December, while longer-term inflation expectations in the survey were little changed and continued to run within the relatively narrow range that has prevailed for some time.

Measures of labor compensation indicated that gains in nominal wages remained slow. Compensation per hour in the nonfarm business sector increased slightly over the year ending in the third quarter, and with a moderate rise in productivity, unit labor costs were essentially unchanged. The employment cost index rose only a bit faster than the measure of compensation per hour over the same period. In October and November, increases in average hourly earnings for all employees were small.

Economic activity abroad remained subdued, especially in the advanced foreign economies. The euro-area economy contracted further in the third quarter, and consumer and business confidence remained low. Economic activity in Japan also declined in the third quarter, and a sharp drop in exports restrained economic growth in Canada. In emerging market economies, by contrast, recent data on exports and manufacturing improved somewhat. In most countries, inflation was still well contained, and monetary policy abroad generally remained accommodative.

Staff Review of the Financial Situation

U.S. financial conditions were little changed, on balance, over the intermeeting period. In early November, market concerns about the fiscal outlook and ongoing federal budget negotiations seemed to intensify, prompting a notable reduction in equity prices and yields on Treasury securities. But these concerns reportedly eased somewhat over subsequent weeks, and the initial move in equity prices was reversed. In contrast, yields on intermediate- and long-term nominal Treasury securities declined, on net, perhaps reflecting some increase in safe-haven demand associated with concerns about the potential economic effects of a substantial tightening in fiscal policy. Indicators of inflation compensation derived from nominal and inflation-protected Treasury securities showed mixed changes and remained within the ranges observed over recent years.

The expected path of the federal funds rate derived from overnight index swap rates flattened somewhat, on balance, over the intermeeting period, as longer-dated rates declined. Market-based measures of uncertainty about the path of the federal funds rate beyond the near term also declined. The survey of primary dealers conducted prior to the December meeting showed that they expected the FOMC to maintain purchases of longer-term securities after year-end at about the current pace of $85 billion per month.

Conditions in unsecured and secured short-term dollar funding markets remained stable, on net, over the intermeeting period, with reports of only limited disruptions to trading or operations following Hurricane Sandy. Yields on Treasury bills maturing beyond the year-end were noticeably lower than those on shorter-term bills; market participants pointed to the anticipated ending of the Federal Reserve's maturity extension program and the expiration of the Federal Deposit Insurance Corporation's unlimited insurance of noninterest-bearing transaction deposits at the end of the year as factors contributing to this pattern of yields.

In the December Senior Credit Officer Opinion Survey on Dealer Financing Terms, respondents reported little change in credit terms over the past three months for important classes of dealer counterparties. While respondents reported that the use of leverage by counterparties had remained basically unchanged, they noted greater demand for funding of various types of securitization products.

Broad U.S. equity price indexes edged up, on net, over the intermeeting period, while equity prices of large domestic banks decreased a little. Nevertheless, the credit default swap spreads of most large domestic bank holding companies continued to move lower. Option-implied volatility for the S&P 500 index over the next month declined moderately, on balance, while measures of equity market volatility for longer maturities remained above their historical averages, excluding the financial crisis period.

Yields on investment-grade corporate bonds were little changed over the intermeeting period, and their spreads over yields on comparable-maturity Treasury securities widened modestly. Yields on speculative-grade corporate bonds fell to historical lows, and their spreads decreased slightly.

The pace of bond issuance by nonfinancial firms increased further in October and November after rising robustly in the third quarter, as some firms reportedly sought to issue new debt before the end of the year. Commercial and industrial (C&I) loans out-

standing also expanded notably in October and November. Nonfinancial commercial paper outstanding increased somewhat in November following a small decline in October. In the syndicated leveraged loan market, institutional issuance surged in October before subsiding somewhat in November, although it remained at a still-robust level.

Financial conditions in the commercial real estate (CRE) sector were still generally strained amid elevated vacancy and delinquency rates. However, prices for CRE properties continued to increase in the third quarter, and issuance of commercial mortgage-backed securities remained at a solid pace in the current quarter.

Residential mortgage rates declined modestly over the intermeeting period, largely in line with the decline in MBS yields. Refinancing expanded a bit further in October and November. House prices continued to increase despite a rise in the proportion of properties sold through foreclosures or short sales. The share of existing mortgages that were seriously delinquent fell in the third quarter but remained elevated.

Consumer credit continued to expand briskly in September, led by sizable increases in auto and student loans. Revolving credit decreased in September but was little changed, on net, over the previous few months. Issuance of consumer asset-backed securities continued to rise at a strong pace. Delinquency rates on consumer credit generally remained low, with the notable exception of student loans.

Bank credit was about flat, on balance, over October and November. Growth in C&I loans and consumer loans was offset by a decline in banks' residential real estate loans. The November Survey of Terms of Business Lending indicated some easing in loan pricing and terms.

M2 growth was rapid in October but slowed in November. Liquid deposits continued to grow at a strong pace, as yields available on alternative money market instruments remained low. Reserves increased over the intermeeting period, in part because of the settlement of the ongoing MBS purchases announced at the September FOMC meeting.

In many foreign financial markets, asset prices fluctuated as sentiment regarding negotiations over both the U.S. fiscal situation and official support for vulnerable euro-area countries shifted during the period. Spreads on Greek sovereign bonds over comparable German bunds fell, on balance, reflecting in part the agreement by European officials and the International Monetary Fund to grant further aid to Greece. However, spreads on Italian and Spanish bonds were little changed on balance over the period. On net, foreign equity prices rose slightly. The foreign exchange value of the dollar edged lower on balance. However, the dollar appreciated against the Brazilian *real* and the Japanese yen, which were held down by weak economic data and, in the case of the yen, by market reaction to statements suggesting that the country's likely next government would urge the Bank of Japan to seek a higher rate of inflation. Yields on foreign benchmark sovereign bonds declined, as central banks maintained or extended monetary accommodation. The Bank of Japan expanded its asset purchase program and announced a new lending scheme. The Bank of England announced that it would transfer cash holdings from its asset purchase fund to the U.K. Treasury, a measure that may exert some further downward pressure on gilt yields to the extent that gilt issuance by the government is reduced. The Reserve Bank of Australia and several emerging market central banks also eased monetary policy.

The staff also reported on potential risks to financial stability, including those associated with a disorderly resolution of the so-called fiscal cliff, a delayed increase in the federal debt ceiling, or a future deterioration of financial conditions in Europe. In addition, in monitoring for possible adverse effects of the current environment of low interest rates, the staff surveyed a wide range of asset markets and financial institutions for signs of excessive valuations, leverage, or risk-taking that could pose systemic risks. Valuations for broad asset classes did not appear stretched, or supported by excessive leverage. Indicators of risk-taking and leverage had moderately increased, on balance, over the past couple of years but remained notably below their levels before the financial crisis.

Staff Economic Outlook

In the economic projection prepared by the staff for the December FOMC meeting, real gross domestic product (GDP) growth in the near term was revised down slightly relative to the previous forecast. This downward revision primarily reflected weaker-than-expected data for consumer spending and household income that more than offset the somewhat better-than-anticipated news regarding employment and business equipment investment. The staff's medium-

term forecast for real GDP growth also was revised down a little, as some of the recent weakness in household spending and income was carried forward in the projection. In addition, financial conditions were anticipated to be a little less supportive than expected in the staff's previous forecast. With federal fiscal policy assumed to be tighter next year than this year, the staff expected that the increase in real GDP would not materially exceed the growth rate of potential output in 2013. In 2014 and 2015, economic activity was projected to accelerate slowly, supported by a lessening in fiscal policy restraint, gains in consumer and business confidence, further improvements in financial conditions and credit availability, and accommodative monetary policy. The expansion in economic activity was anticipated to result in only a gradual decline in slack in labor and product markets over the forecast period, and progress in reducing unemployment was expected to be relatively slow.

The staff's projection for inflation in both the near term and the medium term was essentially unchanged from the forecast prepared for the previous FOMC meeting. With crude oil prices expected to continue to decrease slowly, the boost to retail food prices from last summer's drought anticipated to be only temporary and fairly small, long-run inflation expectations assumed to remain stable, and considerable resource slack persisting over the forecast period, the staff projected that inflation would be subdued through 2015.

The staff viewed the uncertainty around the projection for economic activity as somewhat elevated and the risks as skewed to the downside, largely reflecting the possibility of a more severe tightening in U.S. fiscal policy than expected, along with continued concerns about the economic and financial situation in Europe. Although the staff saw the outlook for inflation as uncertain, the risks were viewed as balanced and not unusually high.

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 2015 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, participants regarded the information received during the intermeeting period as indicating that economic activity and employment continued to expand at a moderate pace, apart from weather-related disruptions. The unemployment rate had declined somewhat since the summer but remained elevated. Although household spending had continued to advance, growth in business fixed investment had slowed. The housing sector had shown further signs of improvement. Consumer price inflation had been running somewhat below the Committee's longer-run objective of 2 percent, apart from temporary variations that largely reflected fluctuations in energy prices, and longer-term inflation expectations had remained stable.

In their assessments of the economic outlook, many participants thought that the pace of economic expansion would remain moderate in 2013 before picking up gradually in 2014 and 2015. This outlook was little changed from their projections at recent meetings. Hurricane Sandy was expected to weigh on economic growth in the current quarter, but rebuilding could provide some temporary impetus early in 2013. Participants' forecasts, which generally were conditioned on the view that it would be appropriate to maintain a highly accommodative monetary policy for a considerable time, included an outlook for a continued gradual decline in the unemployment rate toward levels judged to be consistent with the Committee's mandate over the longer run, with inflation running near the Committee's 2 percent longer-run goal.

Participants observed that growth in economic activity continued to be restrained by several persistent headwinds, including ongoing deleveraging on the part of households and still-tight credit conditions for some borrowers, and that a major headwind facing the economy at present appeared to be uncertainty about U.S. fiscal policy and the outcome of the ongoing negotiations on federal spending and taxes. While participants generally saw it as likely that the Congress and the Administration would avert the full

force of the tax increases and spending cuts scheduled to occur in 2013, almost all indicated that heightened uncertainty about fiscal policy probably was affecting economic activity adversely. For example, it likely had reduced household and business confidence and led firms to defer hiring and investment spending. Some participants noted that an early and constructive resolution to fiscal policy negotiations had the potential to release pent-up demand and therefore be followed by a boost to spending, investment, and employment; however, a few pointed out that an extended breakdown of negotiations could have significant adverse effects on economic growth. Other factors weighing on the economic outlook included the slowdown in global economic growth and continued uncertainty regarding the European fiscal and banking situation.

In their discussion of the household sector, many participants noted a recent drop in consumer sentiment and a softening in consumer spending. Some participants thought this reflected uncertainty about fiscal policy, including the prospect of higher taxes, and several noted that growth of households' real disposable income remained weak despite recent gains in employment. While indicators of spending were mixed, purchases of autos and other durables remained relatively strong. A couple of participants observed that businesses in a few areas had reported strong holiday-related activity. Many pointed out that reductions in households' debt, together with rising home prices, had led to an improvement in household balance sheets; it was noted that household net worth was approaching levels seen before the financial crisis.

Business contacts in many parts of the country were also said to be highly uncertain about the outlook for U.S. fiscal policy, and participants noted that this uncertainty appeared to have weighed on investment and hiring decisions. Although firms' balance sheets were generally strong and liquidity was ample, some business contacts reported that they had shifted toward a higher proportion of part-time employees and postponed plans to expand capacity. A number of participants suggested that the business sector was well positioned to expand spending and hiring quickly upon a positive resolution of the fiscal cliff negotiations. In a few regions, contacts reported concerns about the expense associated with new regulations, including those related to health care, and in some cases indicated a shift to the hiring of part-time workers in order to avoid these costs. There were reports of weaker manufacturing, particularly in the Northeast in the aftermath of Hurricane Sandy, and a slackening in economic activity in the Southwest related in part to cutbacks in defense spending. Export orders had softened, reflecting the slowdown in global growth. The energy sector continued to expand. In the agricultural sector, farm incomes were high, notwithstanding the drought, although elevated grain prices were cutting into profits on livestock.

Meeting participants generally agreed that the recovery in the housing sector had continued. Many commented that the headwinds facing the housing market appeared to have dissipated somewhat. The capacity constraints on the processing of new home-mortgage applications appeared to be easing, and gradually rising home prices had reduced the proportion of households with underwater mortgages. It was noted that the mix of new home sales seemed to have shifted from homes already completed to homes not yet built.

In discussing labor market developments, participants generally viewed the recent data as having been somewhat better than expected, with moderate gains in payroll employment and a decline in the unemployment rate. However, the unemployment rate remained elevated, and part of the decline in unemployment in November was attributable to a drop in labor force participation. A few participants noted that some exits from the labor force may have been related to the loss or prospective loss of eligibility for emergency unemployment insurance benefits. Several pointed to indicators suggesting that rates of hiring remained depressed relative to those observed before the financial crisis. A couple of participants noted that vacancies remained at a high level in terms of their historical relationship to the rate of unemployment, suggesting that at least some firms were having a hard time finding suitable workers; indeed, business contacts in a couple of regions had reported difficulty in locating and retaining workers with requisite skills. However, one participant suggested that employer–worker mismatch likely reflected longer-term problems and had probably not worsened materially as a result of the recent deep recession and slow recovery.

Incoming information pointed to stable, low inflation that was running a little below the Committee's longer-run goal of 2 percent. Crude oil prices had moved down since the October meeting amid accumulating inventories and market concerns about a weaker global outlook. Despite some reports of labor shortages in certain industries, compensation pres-

sures had remained subdued, and unit labor costs were little changed over the previous four quarters. Most participants saw the risks to the inflation outlook as broadly balanced, and many noted that longer-term inflation expectations were well anchored. One participant, however, expressed concern that considerable uncertainty surrounded the relationship between unemployment and inflation, raising questions about the extent to which resource slack would keep inflation restrained over the medium term.

In their discussion of financial developments, a few participants commented that recent steps taken by European authorities had reduced volatility in sovereign debt markets over the intermeeting period; however, concerns remained about the fiscal and economic outlook in Europe. Many noted the ongoing deleveraging in the private nonfinancial sector of the U.S. economy and indicated that it was difficult to judge when that process would be complete. A few participants, observing that low interest rates had increased the demand for riskier financial products, pointed to the possibility that holding interest rates low for a prolonged period could lead to financial imbalances and imprudent risk-taking. One participant suggested that there were several historical episodes in the United States and other countries that might be used to build a better understanding of the financial strains that could develop from a long period of very low long-term interest rates. Pointing to a recent decision of the Financial Stability Oversight Council, one participant commented that further money market mutual fund reform would help reduce risk in the financial system.

Participants exchanged views on the likely benefits and costs of additional asset purchases in the context of an assessment of the ongoing purchases of MBS and possible additional purchases of longer-term Treasury securities to follow the conclusion of the maturity extension program. Regarding the benefits, it was noted that asset purchases provide support to the economic recovery by putting downward pressure on longer-term interest rates and promoting more-accommodative financial conditions. Participants discussed the effectiveness of purchasing different types of assets and the potential for the effects on yields from purchases in the market for one class of securities to spill over to other markets. If these spillovers are significant, then purchases of longer-term Treasury securities might be preferred, in light of the depth and liquidity of that market. However, if markets are more segmented, purchases of MBS might be preferred because they would provide more support to real activity through the housing sector. One participant commented that the best approach would be to continue purchases in both the Treasury and MBS markets, given the uncertainty about the precise channels through which asset purchases operated. Others emphasized the advantages of MBS purchases, including by noting the apparent effectiveness of recent MBS purchases on the housing market, while another participant objected and thought that Federal Reserve purchases should not direct credit to a specific sector. With regard to the possible costs and risks of purchases, a number of participants expressed the concern that additional purchases could complicate the Committee's efforts to eventually withdraw monetary policy accommodation, for example, by potentially causing inflation expectations to rise or by impairing the future implementation of monetary policy. Participants also discussed the implications of continued asset purchases for the size of the Federal Reserve's balance sheet. Depending on the path for the balance sheet and interest rates, the Federal Reserve's net income and its remittances to the Treasury could be significantly affected during the period of policy normalization. Participants noted that the Committee would need to continue to assess whether large purchases were having adverse effects on market functioning and financial stability. They expressed a range of views on the appropriate pace of purchases, both now and as the outlook evolved. It was agreed that both the efficacy and the costs would need to be carefully monitored and taken into account in determining the size, pace, and composition of asset purchases.

Meeting participants discussed the possibility of replacing the calendar date in the forward guidance for the federal funds rate with specific quantitative thresholds of 6½ percent for the unemployment rate and 2½ percent for projected inflation between one and two years ahead. Most participants favored replacing the calendar-date forward guidance with economic thresholds, and several noted that the consistency between the "mid-2015" reference in the Committee's October statement and the specific quantitative thresholds being considered at the current meeting provided an opportunity for a smooth transition. However, possible advantages of waiting a while to introduce the change to the Committee's forward guidance were also mentioned, including that a delay might simplify communications by keeping the introduction of thresholds separate from the announcement of additional asset purchases. Among the benefits of quantitative thresholds that were cited

was that they could help the public more readily understand how the likely timing of an eventual increase in the federal funds rate would shift in response to unanticipated changes in economic conditions and the outlook. Accordingly, thresholds could increase the probability that market reactions to economic developments would move longer-term interest rates in a manner consistent with the Committee's view regarding the likely future path of short-term interest rates. A few participants expressed a preference for using a qualitative description of the economic indicators influencing the Committee's thinking about current and future monetary policy rather than quantitative guidance because they felt that qualitative guidance would be at least as effective as numerical thresholds while avoiding some potential disadvantages, including the possibility that the numerical thresholds would be mistakenly interpreted as the Committee's longer-run objectives. A few participants commented that the quantitative thresholds might be interpreted as triggers that, when reached, would prompt an immediate increase in short-term rates. However, a number of participants indicated that the Chairman's press conference and other avenues of communication could be used to emphasize, for example, the distinction between thresholds and the longer-run objectives as well as between thresholds and triggers. Participants also discussed the importance of clarifying that the thresholds would not be followed mechanically and that a variety of indicators of labor market conditions and inflation pressures, as well as financial developments, would be taken into account in setting policy.

Committee Policy Action

Committee members viewed the information received over the intermeeting period as suggesting that economic activity and employment continued to expand at a moderate pace in recent months, abstracting from weather-related disruptions. Household spending had continued to advance and the housing sector had shown further signs of improvement, but growth in the business sector had slowed. Anecdotal evidence indicated that uncertainty about U.S. fiscal policy weighed heavily on sentiment in the household and business sectors. Although the unemployment rate had declined somewhat since the summer, it was still elevated relative to levels that members viewed as normal in the longer run. Members generally agreed that the economic outlook was little changed since the previous meeting and judged that, without sufficient policy accommodation, economic growth might not be strong enough to generate sustained improvement in labor market conditions. Furthermore, strains in global financial markets continued to pose significant downside risks to the economic outlook. Inflation had been subdued, apart from some temporary variations that largely reflected fluctuations in energy prices. With longer-term inflation expectations stable, inflation over the medium term was anticipated to run at or below the Committee's longer-run objective of 2 percent.

In their discussion of monetary policy for the period ahead, all members but one judged that continued provision of monetary accommodation was warranted in order to support further progress toward the Committee's goals of maximum employment and price stability. The Committee judged that such accommodation should be provided in part by continuing to purchase MBS at a pace of $40 billion per month and by purchasing longer-term Treasury securities, initially at a pace of $45 billion per month, following the completion of the maturity extension program at the end of the year. The Committee also maintained its existing policy of reinvesting principal payments from its holdings of agency debt and agency MBS into agency MBS and decided that, starting in January, it will resume rolling over maturing Treasury securities at auction. While almost all members thought that the asset purchase program begun in September had been effective and supportive of growth, they also generally saw that the benefits of ongoing purchases were uncertain and that the potential costs could rise as the size of the balance sheet increased. Various members stressed the importance of a continuing assessment of labor market developments and reviews of the program's efficacy and costs at upcoming FOMC meetings. In considering the outlook for the labor market and the broader economy, a few members expressed the view that ongoing asset purchases would likely be warranted until about the end of 2013, while a few others emphasized the need for considerable policy accommodation but did not state a specific time frame or total for purchases. Several others thought that it would probably be appropriate to slow or to stop purchases well before the end of 2013, citing concerns about financial stability or the size of the balance sheet. One member viewed any additional purchases as unwarranted.

With regard to its forward guidance about the federal funds rate, the Committee decided to indicate in the statement language that it expects the highly accommodative stance of monetary policy to remain appro-

priate for a considerable time after the asset purchase program ends and the economic recovery strengthens. In addition, all but one member agreed to replace the date-based guidance with economic thresholds indicating that the exceptionally low range for the federal funds rate would remain appropriate at least as long as the unemployment rate remains above 6½ percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee's longer-run goal, and longer-term inflation expectations continue to be well anchored. The Committee thought it would be helpful to indicate in the statement that it viewed the economic thresholds as consistent with its earlier, date-based guidance. The new language noted that the Committee would also consider other information when determining how long to maintain the highly accommodative stance of monetary policy, including additional measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. One member dissented from the policy decision, opposing the new economic threshold language in the forward guidance, as well as the additional asset purchases and continued intervention in the MBS market.

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 complete the maturity extension program it announced in June 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. Following the completion of this program, the Committee directs the Desk to resume its policy of rolling over maturing Treasury securities into new issues. From the beginning of January, the Desk is directed to purchase longer-term Treasury securities at a pace of about $45 billion per month. 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. The Desk is also directed to continue purchasing agency mortgage-backed securities at a pace of about $40 billion per month. The Committee directs the Desk to engage in dollar roll and coupon swap 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 October suggests that economic activity and employment have continued to expand at a moderate pace in recent months, apart from weather-related disruptions. Although the unemployment rate has declined somewhat since the summer, it remains elevated. Household spending has continued to advance, and the housing sector has shown further signs of improvement, but growth in business fixed investment has slowed. Inflation has been running somewhat below the Committee's longer-run objective, apart from temporary variations that largely reflect fluctuations in energy prices. Longer-term inflation expectations have remained stable.
>
> Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee remains concerned that, without sufficient policy accommodation, economic growth might not be strong enough to generate sustained improvement in labor market conditions. Furthermore, strains in global financial markets continue to pose significant downside risks to the economic outlook.

The Committee also anticipates that inflation over the medium term likely will run at or below its 2 percent objective.

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 will continue purchasing additional agency mortgage-backed securities at a pace of $40 billion per month. The Committee also will purchase longer-term Treasury securities after its program to extend the average maturity of its holdings of Treasury securities is completed at the end of the year, initially at a pace of $45 billion per month. 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 and, in January, will resume rolling over maturing Treasury securities at auction. Taken together, these actions should maintain downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative.

The Committee will closely monitor incoming information on economic and financial developments in coming months. If the outlook for the labor market does not improve substantially, the Committee will continue its purchases of Treasury and agency mortgage-backed securities, and employ its other policy tools as appropriate, until such improvement is achieved in a context of price stability. In determining the size, pace, and composition of its asset purchases, the Committee will, as always, take appropriate account of the likely efficacy and costs of such purchases.

To support continued progress toward maximum employment and price stability, the Committee expects that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the asset purchase program ends and the economic recovery strengthens. In particular, the Committee decided to keep the target range for the federal funds rate at 0 to ¼ percent and currently anticipates that this exceptionally low range for the federal funds rate will be appropriate at least as long as the unemployment rate remains above 6½ percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored. The Committee views these thresholds as consistent with its earlier date-based guidance. In determining how long to maintain a highly accommodative stance of monetary policy, the Committee will also consider other information, including additional measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. When the Committee decides to begin to remove policy accommodation, it will take a balanced approach consistent with its longer-run goals of maximum employment and inflation of 2 percent."

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 objected to the asset purchases and to the characterization of the conditions under which an exceptionally low range for the federal funds rate would remain appropriate. He continued to view asset purchases as unlikely to add to economic growth without unacceptably increasing the risk of future inflation, and to see purchases of MBS as inappropriate credit allocation. With regard to the funds rate, Mr. Lacker was concerned that linking the forward guidance to a specific numerical level of the unemployment rate would inhibit the effectiveness of the Committee's communications and increase the potential for inflationary policy errors; he preferred qualitative guidance instead.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, January 29–30, 2013. The meeting adjourned at 11:25 a.m. on December 12, 2012.

Notation Vote

By notation vote completed on November 9, 2012, the Committee unanimously approved the minutes of the FOMC meeting held on October 23–24, 2012.

William B. English
Secretary

Addendum: Summary of Economic Projections

In conjunction with the December 11–12, 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 of real output growth, the unemployment rate, inflation, and the target federal funds rate for each year from 2012 through 2015 and over the longer run. Each participant's assessment was based on information available at the time of the meeting plus his or her judgment of appropriate monetary policy and assumptions about the factors likely to affect economic outcomes. The longer-run projections represent each participant's judgment of the value 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 each participant deems most likely to foster outcomes for economic activity and inflation that best satisfy his or her individual interpretation of the Federal Reserve's objectives of maximum employment and stable prices.

Overall, the assessments submitted in December indicated that FOMC participants projected that, under appropriate monetary policy, the pace of economic recovery would gradually pick up over the 2012–15 period and inflation would remain subdued (table 1 and figure 1). Participants anticipated that the growth rate of real gross domestic product (GDP) would increase somewhat in 2013 and again in 2014, and that economic growth in 2014 and 2015 would exceed their estimates of the longer-run sustainable rate of growth, while the unemployment rate would decline gradually through 2015. Participants projected that each year's 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 next few years. In particular, 14 participants thought that it would be appropriate for the first increase in the target federal funds rate to occur during 2015 or later. Most participants judged that appropriate monetary policy would include purchasing agency mortgage-backed securities (MBS) and longer-term Treasury securities after the completion of the maturity extension program at the end of 2012.

As in September, participants judged the uncertainty associated with the outlook for real activity and the unemployment rate to be unusually high compared with historical norms, with the risks weighted mainly toward slower economic growth and a higher unemployment rate. While a number of participants viewed the uncertainty surrounding their projections for inflation to be unusually high, more saw the level of uncertainty to be broadly similar to historical

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

Variable	Central tendency[1]					Range[2]				
	2012	2013	2014	2015	Longer run	2012	2013	2014	2015	Longer run
Change in real GDP	1.7 to 1.8	2.3 to 3.0	3.0 to 3.5	3.0 to 3.7	2.3 to 2.5	1.6 to 2.0	2.0 to 3.2	2.8 to 4.0	2.5 to 4.2	2.2 to 3.0
September projection	1.7 to 2.0	2.5 to 3.0	3.0 to 3.8	3.0 to 3.8	2.3 to 2.5	1.6 to 2.0	2.3 to 3.5	2.7 to 4.1	2.5 to 4.2	2.2 to 3.0
Unemployment rate	7.8 to 7.9	7.4 to 7.7	6.8 to 7.3	6.0 to 6.6	5.2 to 6.0	7.7 to 8.0	6.9 to 7.8	6.1 to 7.4	5.7 to 6.8	5.0 to 6.0
September projection	8.0 to 8.2	7.6 to 7.9	6.7 to 7.3	6.0 to 6.8	5.2 to 6.0	8.0 to 8.3	7.0 to 8.0	6.3 to 7.5	5.7 to 6.9	5.0 to 6.3
PCE inflation	1.6 to 1.7	1.3 to 2.0	1.5 to 2.0	1.7 to 2.0	2.0	1.6 to 1.8	1.3 to 2.0	1.4 to 2.2	1.5 to 2.2	2.0
September projection	1.7 to 1.8	1.6 to 2.0	1.6 to 2.0	1.8 to 2.0	2.0	1.5 to 1.9	1.5 to 2.1	1.6 to 2.2	1.8 to 2.3	2.0
Core PCE inflation[3]	1.6 to 1.7	1.6 to 1.9	1.6 to 2.0	1.8 to 2.0		1.6 to 1.8	1.5 to 2.0	1.5 to 2.0	1.7 to 2.2	
September projection	1.7 to 1.9	1.7 to 2.0	1.8 to 2.0	1.9 to 2.0		1.6 to 2.0	1.6 to 2.0	1.6 to 2.2	1.8 to 2.3	

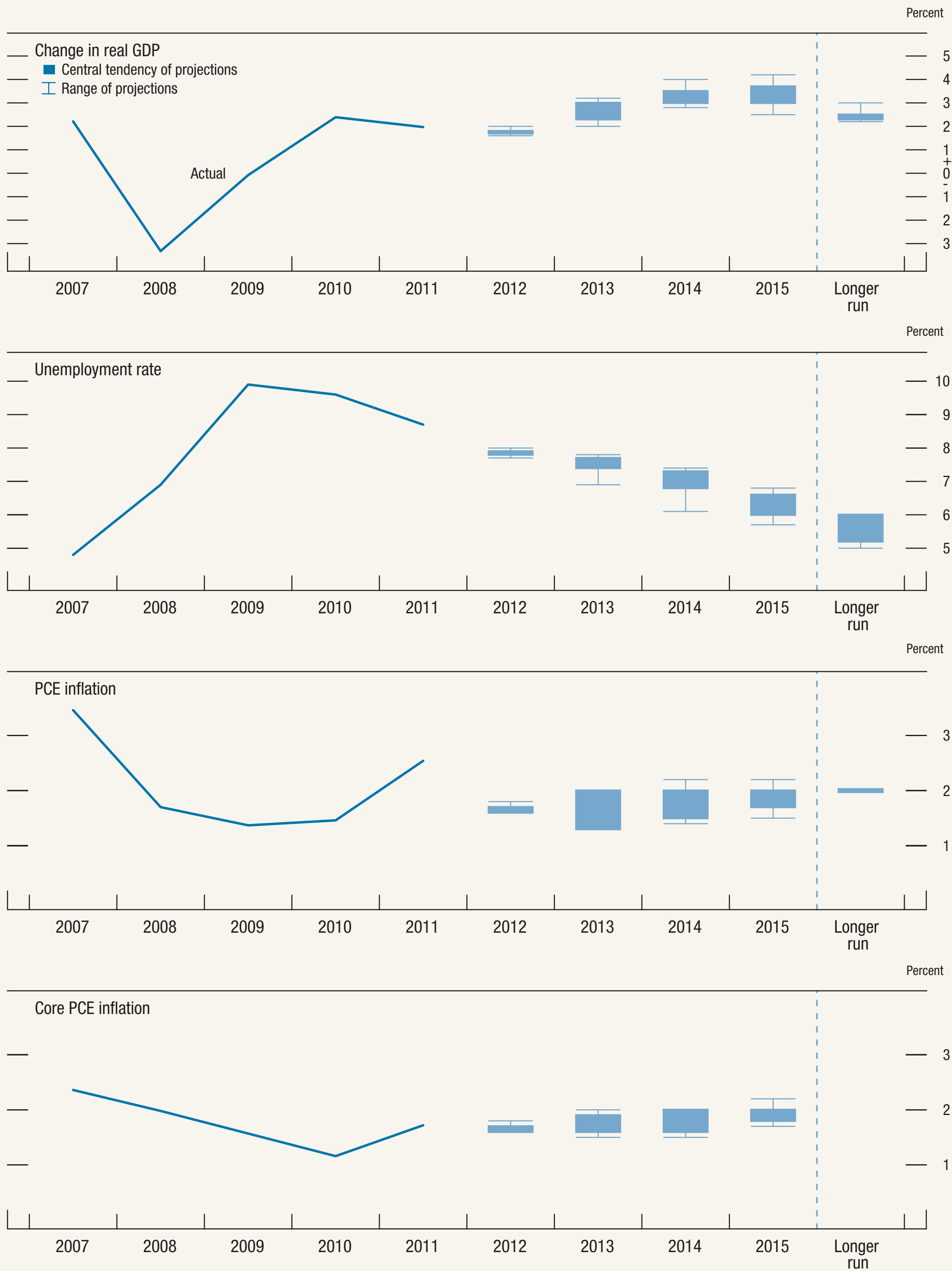
Note: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price 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 September projections were made in conjunction with the meeting of the Federal Open Market Committee on September 12–13, 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.

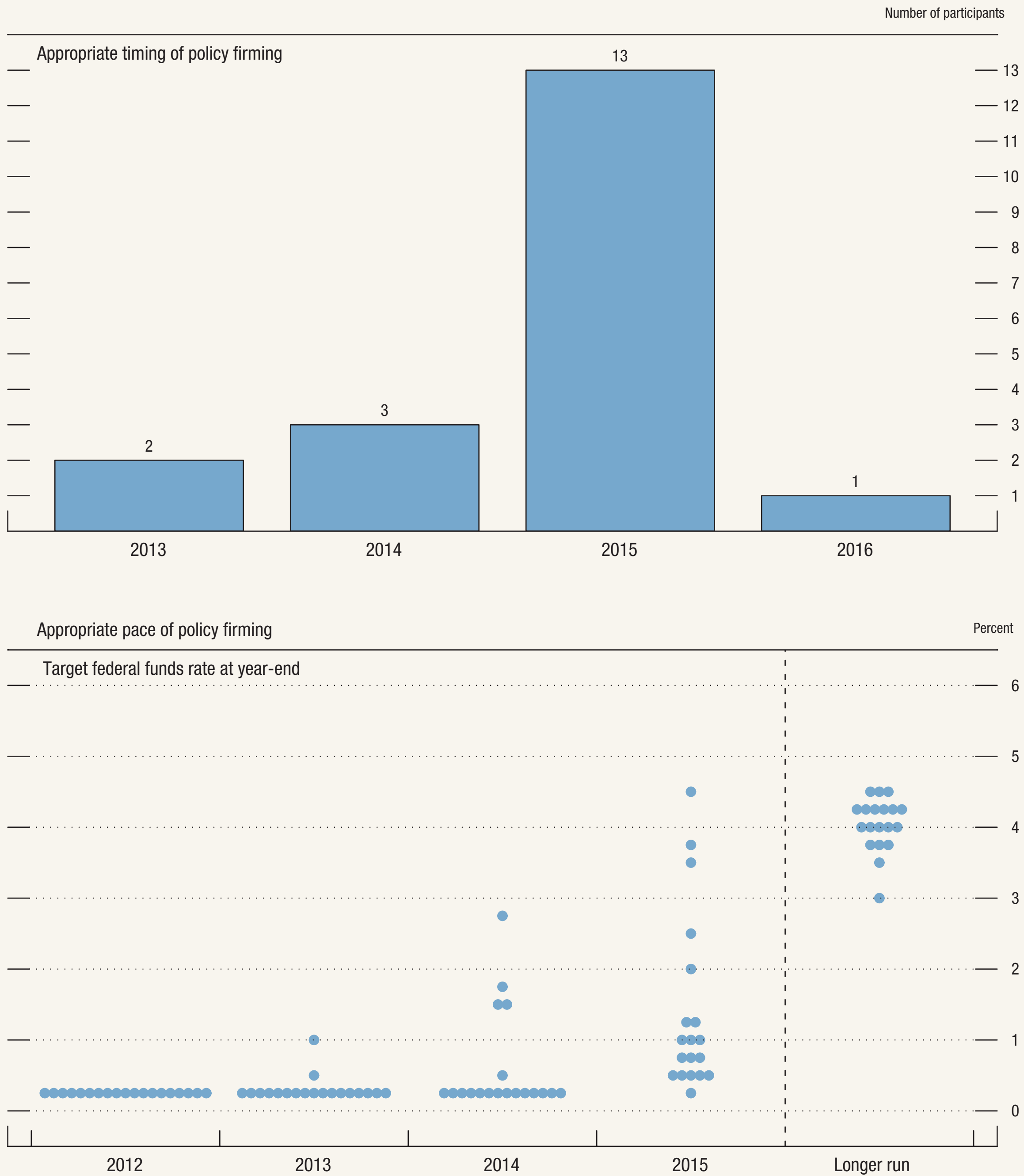
[3] Longer-run projections for core PCE inflation are not collected.

Figure 1. Central tendencies and ranges of economic projections, 2012–15 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, December 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 ¼ percent will occur in the specified calendar year. In September 2012, the numbers of FOMC participants who judged that the first increase in the target federal funds rate would occur in 2012, 2013, 2014, 2015, and 2016 were, respectively, 1, 3, 2, 12, and 1. In the lower panel, each shaded circle indicates the value (rounded to the nearest ¼ 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.

norms; most considered the risks to inflation to be roughly balanced.

The Outlook for Economic Activity

Participants judged that the economy grew at a moderate pace over the second half of 2012 and projected that, conditional on their individual assumptions about appropriate monetary policy, the economy would grow at a somewhat faster pace in 2013 before expanding in 2014 and 2015 at a rate above what participants saw as the longer-run rate of output growth. The central tendency of their projections for the change in real GDP in 2012 was 1.7 to 1.8 percent, slightly lower than in September. A number of participants mentioned that last summer's drought and the effects of Hurricane Sandy likely had held down economic activity in the second half of this year. Many participants also noted that, while conditions in the housing and labor markets appeared to have improved recently, uncertainty about fiscal policy appeared to be holding back business and household spending. Participants' projections for 2013 through 2015 were generally little changed relative to their September projections. The central tendency of participants' projections for real GDP growth in 2013 was 2.3 to 3.0 percent, followed by a central tendency of 3.0 to 3.5 percent for 2014 and one of 3.0 to 3.7 percent for 2015. The central tendency for the longer-run rate of increase of real GDP remained 2.3 to 2.5 percent, unchanged from September. Most participants noted that the high degree of monetary policy accommodation assumed in their projections would help promote the economic recovery over the forecast period; however, they also judged that several factors would likely hold back the pace of economic expansion, including slower growth abroad, a still-weak housing market, the difficult fiscal and financial situation in Europe, and fiscal restraint in the United States.

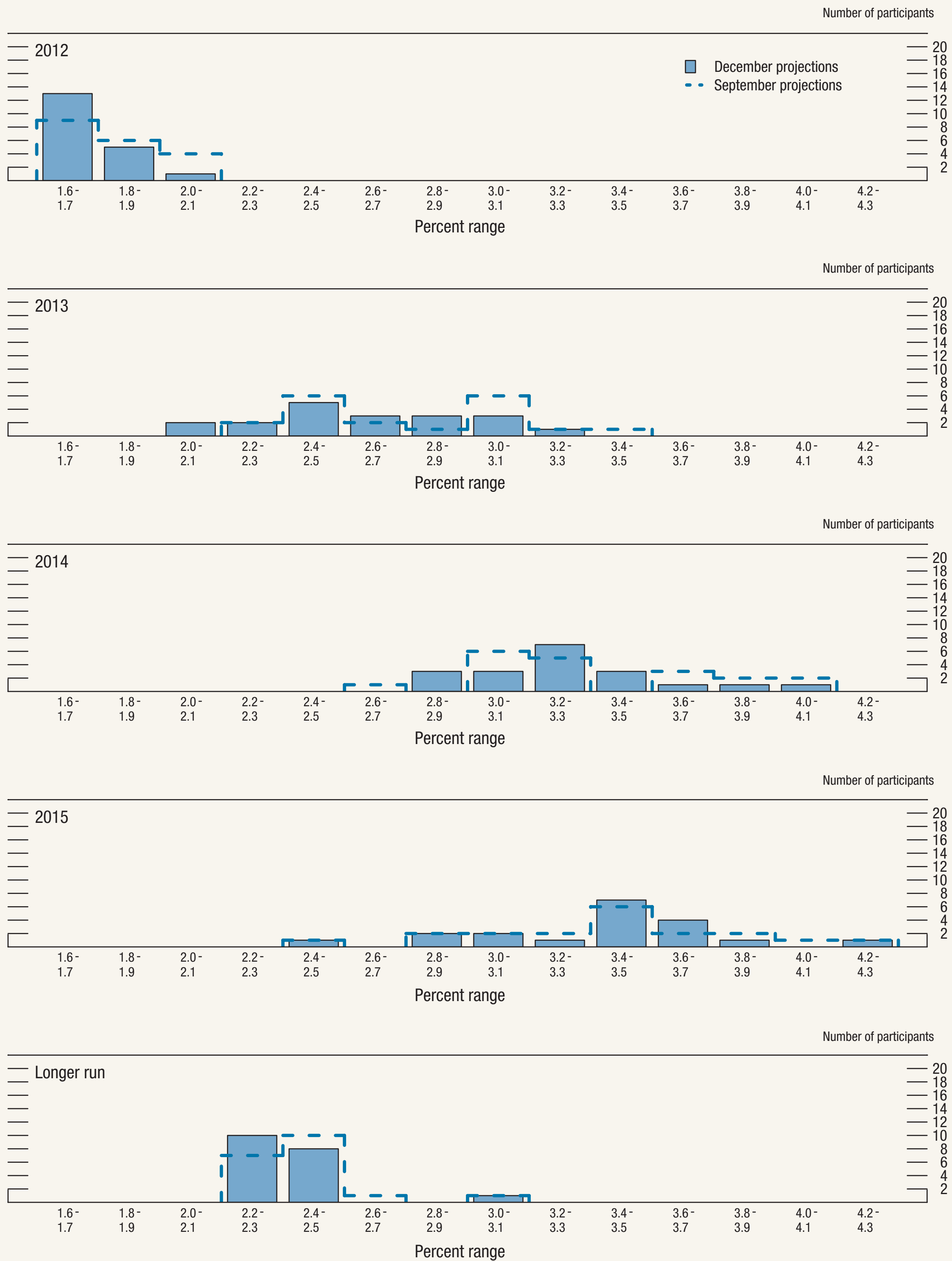
Participants projected the unemployment rate for the final quarter of 2012 to be close to its average level in October and November, implying a rate somewhat below that projected in September. Participants anticipated a gradual decline in the unemployment rate over the forecast period; even so, they generally thought that the unemployment rate at the end of 2015 would still be well above their individual estimates of its longer-run normal level. The central tendencies of participants' forecasts for the unemployment rate were 7.4 to 7.7 percent at the end of 2013, 6.8 to 7.3 percent at the end of 2014, and 6.0 to 6.6 percent at the end of 2015. The central tendency of participants' estimates of the longer-run normal rate of unemployment that would prevail under appropriate monetary policy and in the absence of further shocks to the economy was 5.2 to 6.0 percent, unchanged from September. Most participants projected that the unemployment rate would converge to their estimates of its longer-run normal rate in five or six years, while a few judged that less time would be needed.

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 rate of improvement in the housing sector, 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, the likely evolution of credit and financial market conditions, and longer-term trends in productivity and the labor force. With the data for much of 2012 now in hand, the dispersion of participants' projections of real GDP growth and the unemployment rate this year narrowed compared with their September submissions. Meanwhile, the distribution of participants' forecasts for the change in real GDP in 2013 shifted down a bit, and that for 2014 narrowed slightly. However, the range of projections for real GDP growth in 2015 was little changed from September. The distributions of the unemployment rate projections at the end of 2012, 2013, and 2014 all shifted lower, while the range of projections for the unemployment rate for 2015, at 5.7 to 6.8 percent, remained close to its September level. The dispersion of estimates for the longer-run rate of output growth stayed fairly narrow, with all but one between 2.2 and 2.5 percent. The range of participants' estimates of the longer-run rate of unemployment, at 5.0 to 6.0 percent, narrowed relative to September. This range reflected different judgments among participants about several factors, including the outlook for labor force participation and the structure of the labor market.

The Outlook for Inflation

Participants' views on the broad outlook for inflation under appropriate monetary policy were little changed from September. Most anticipated that inflation for 2012 as a whole would be close to 1.6 percent, somewhat lower than projected in September. A number of participants remarked that recent inflation readings had come in below their expectations. Almost all of the participants judged that both headline and core inflation would remain subdued over the 2013–15 period, running at rates equal to or below the FOMC's longer-run objective

Figure 3.A. Distribution of participants' projections for the change in real GDP, 2012–15 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, 2012–15 and over the longer run

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

of 2 percent. Specifically, the central tendency of participants' projections for inflation, as measured by the PCE price index, moved down to 1.3 to 2.0 percent for 2013 and was little changed for 2014 and 2015 at 1.5 to 2.0 percent and 1.7 to 2.0 percent, respectively. The central tendencies of the forecasts for core inflation were broadly similar to those for the headline measure for 2013 through 2015. In discussing factors likely to sustain low inflation, several participants cited stable inflation expectations and expectations for continued sizable resource slack.

Figures 3.C and 3.D provide information about the diversity of participants' views about the outlook for inflation. The range of participants' projections for headline inflation for 2012 narrowed from 1.5 to 1.9 percent in September to 1.6 to 1.8 percent in December; nearly all participants' projections in December were at 1.6 percent or 1.7 percent, broadly in line with recent inflation readings. The distributions of participants' projections for headline inflation in 2013 and 2014 shifted lower compared with the corresponding distributions for September, while the range of projections for core inflation narrowed slightly for both years. The distributions for core and overall inflation in 2015 were concentrated near the Committee's longer-run inflation objective of 2 percent, although somewhat less so than in September.

Appropriate Monetary Policy

As indicated in figure 2, most participants judged that exceptionally low levels of the federal funds rate would remain appropriate for several more years. In particular, 13 participants thought that the first increase in the target federal funds rate would not be warranted until 2015, and 1 judged that policy firming would likely not be appropriate until 2016 (upper panel). The 13 participants who expected that the target federal funds rate would not move above its effective lower bound until 2015 thought the federal funds rate would be 1¼ percent or lower at the end of that year, while the 1 participant who expected that policy firming would commence in 2016 saw the federal funds rate target at 50 basis points at the end of that year. Five participants judged that an earlier increase in the federal funds rate, in 2013 or 2014, would be most consistent with the Committee's statutory mandate. Those participants judged that the appropriate value for the federal funds rate would range from ½ to 2¾ percent at the end of 2014 and from 2 to 4½ percent at the end of 2015.

Among the participants who saw a later tightening of policy, a majority indicated that they believed it was appropriate to maintain the current level of the federal funds rate until the unemployment rate is less than or equal to 6½ percent. In contrast, a majority of those who favored an earlier tightening of policy pointed to concerns about inflation as a primary reason for expecting that it would be appropriate to tighten policy sooner. Participants were about evenly split between those who judged the appropriate path for the federal funds rate to be unchanged relative to September and those who saw the appropriate path as lower.

Nearly all participants saw the appropriate target for the federal funds rate at the end of 2015 as still well below its expected longer-run value. 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.

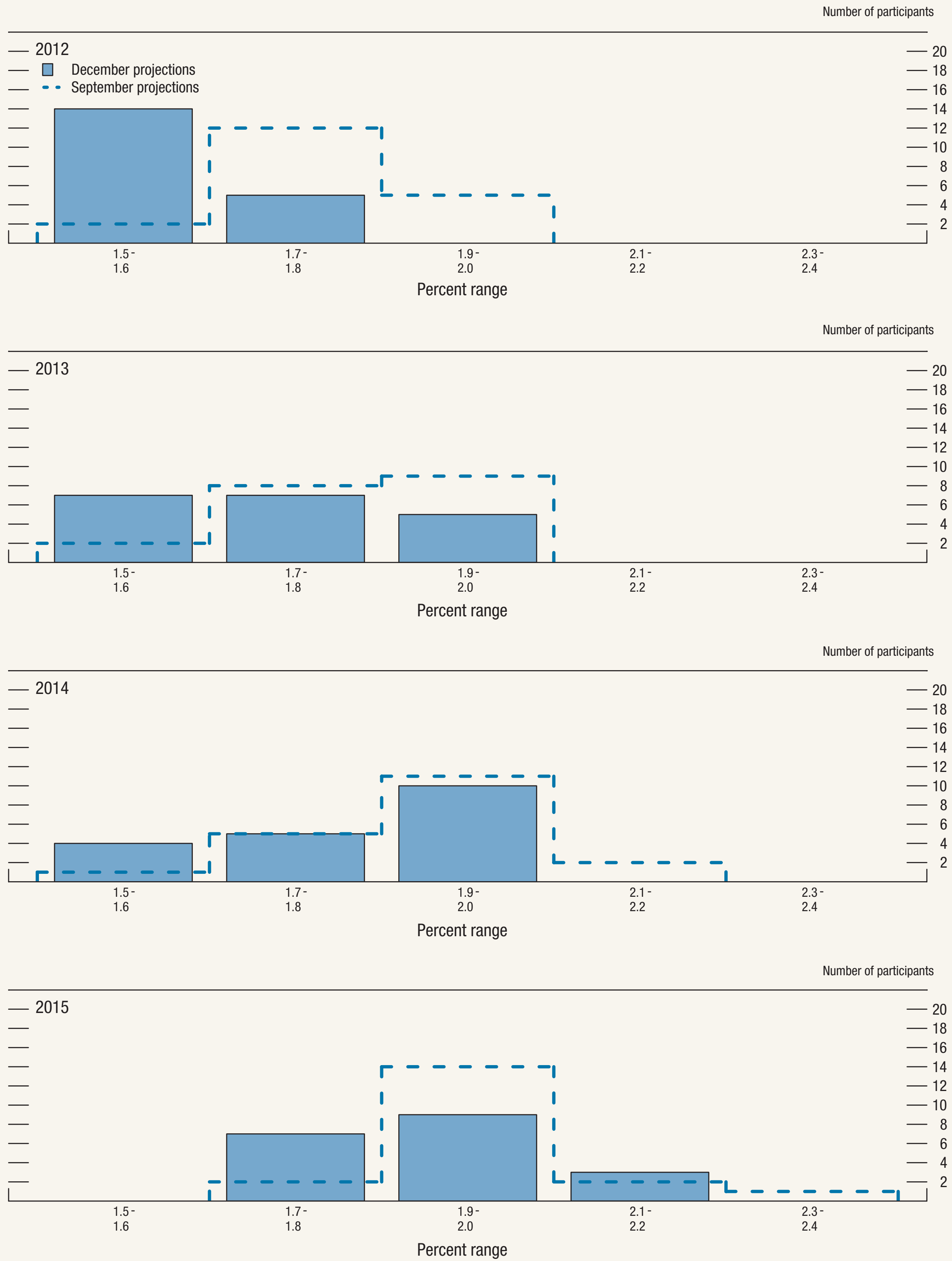
Participants also provided information on their views regarding the appropriate path of the Federal Reserve's balance sheet. Most participants thought it was appropriate for the Committee to continue purchasing MBS and longer-term Treasury securities after completing the maturity extension program at the end of this year. In their projections, taking into account the likely benefits and costs of purchases as well as the expected evolution of the outlook, these participants were approximately evenly divided between those who judged that it would likely be appropriate for the Committee to complete its asset purchases sometime around the middle of 2013 and those who judged that it would likely be appropriate for the asset purchases to continue beyond that date. In contrast, several participants believed the Committee would best foster its dual objectives by ending its purchases of Treasury securities or all of its asset purchases at the end of this year when the maturity extension program was completed.

Key factors informing participants' views of the economic outlook and the appropriate setting for monetary policy include their judgments regarding labor market conditions that would be consistent with maximum employment, the extent to which employment currently deviated from maximum employment, the extent to which projected inflation over the medium term deviated from the Committee's longer-term objective of 2 percent, and participants' projections of the likely time horizon necessary to return employment and inflation to mandate-consistent levels. Many participants mentioned economic thresholds based on the unemployment rate and the inflation outlook that were consistent with their judgments of when it would be appropriate to consider beginning to raise the federal funds rate. A couple of

Figure 3.C. Distribution of participants' projections for PCE inflation, 2012–15 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, 2012–15



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

participants noted that their assessments of the appropriate path for the federal funds rate took into account the likelihood that the neutral level of the federal funds rate was somewhat below its historical norm. There was some concern expressed that a protracted period of very accommodative monetary policy could lead to imbalances in the financial system. It was also noted that because the appropriate stance of monetary policy is conditional on the evolution of real activity and inflation over time, 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 2015 and over the longer run. As previously noted, most participants judged that economic conditions would warrant maintaining the current low level of the federal funds rate until 2015. Views on the appropriate level of the federal funds rate by the end of 2015 varied, with 12 participants seeing the appropriate level of the federal funds rate as 1 percent or lower and 4 of them seeing the appropriate level as 2½ percent or higher. Generally, the participants who judged that a longer period of very accommodative monetary policy would be appropriate were those who projected that a sizable gap between the unemployment rate and the longer-run normal level of the unemployment rate would persist until 2015 or later. In contrast, the majority of the 5 participants who judged that policy firming should begin in 2013 or 2014 indicated that the Committee would need to act relatively soon in order 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 of the participants judged their current levels of uncertainty about real GDP growth and unemployment to be higher than was the norm during the previous 20 years (figure 4).[2] Seven participants judged that the levels of uncertainty associated with their forecasts of total PCE inflation were higher as well, while another 10 participants viewed uncertainty about inflation as broadly similar to historical norms. The main factors cited as contributing to the elevated uncertainty about economic outcomes were the difficulties involved in predicting fiscal policy in the United States, the continuing potential for European developments to threaten financial stability, and the possibility of a general slowdown in global economic growth. As in September, participants noted the challenges associated with forecasting the path of the U.S. economic recovery following a financial crisis and recession that differed markedly from recent historical experience. A number of participants also commented that in the aftermath of the financial crisis, they were more uncertain about the level of potential output and its rate of growth. It was noted that some of the uncertainty about potential output arose from the risk that a continuation of elevated levels of long-term unemployment might impair the skills of the affected individuals or cause some of them to drop out of the labor force, thereby reducing potential output in the medium term.

Table 2. Average historical projection error ranges
Percentage points

Variable	2012	2013	2014	2015
Change in real GDP[1]	±0.6	±1.4	±1.7	±1.7
Unemployment rate[1]	±0.2	±0.9	±1.5	±1.9
Total consumer prices[2]	±0.5	±0.9	±1.1	±1.0

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 fall 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 may be found 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.

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 U.S. fiscal policy, which many participants thought had the potential to slow economic activity significantly over the near term, and the situation in Europe.

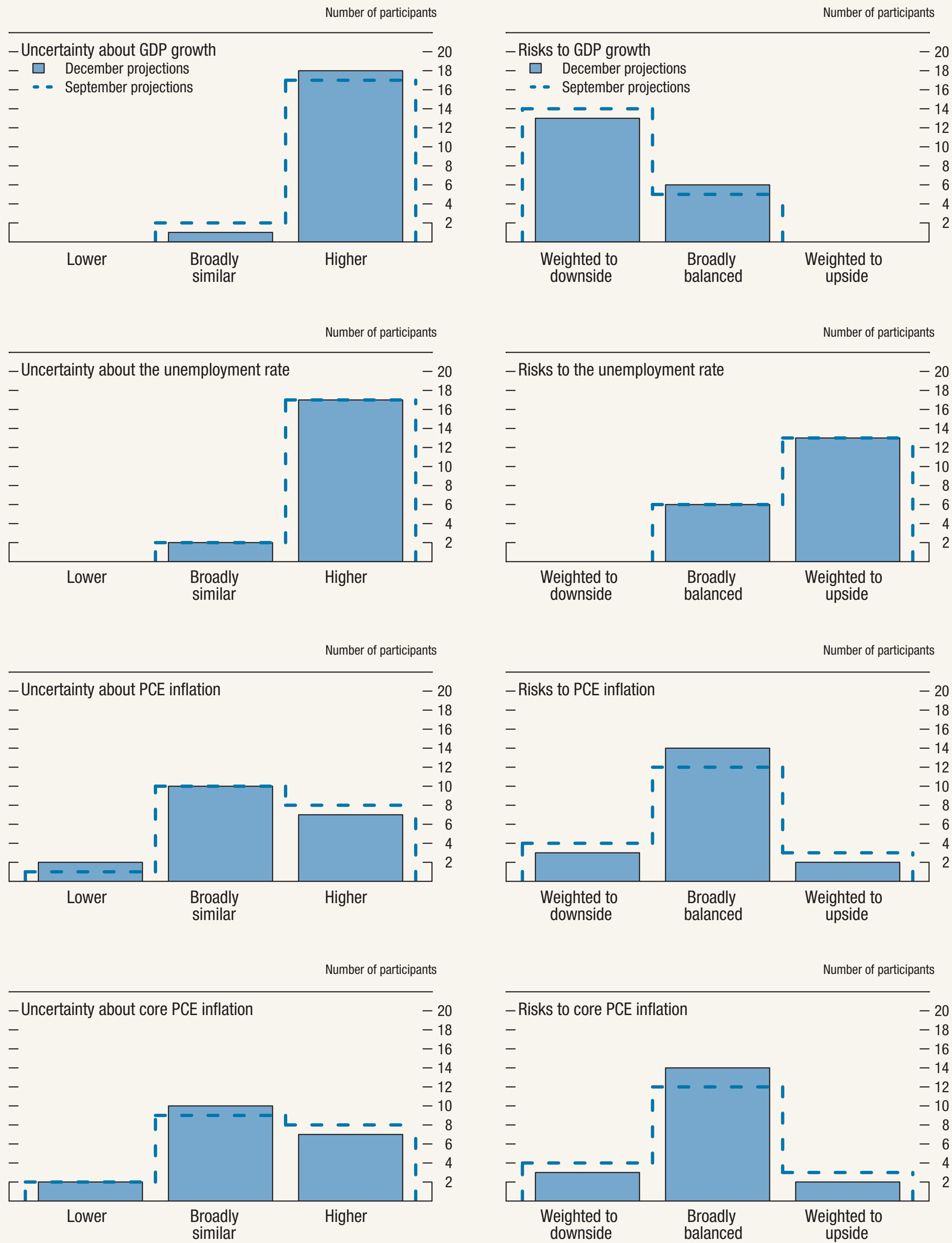
Most participants continued to judge the risks to their projections for inflation as broadly balanced, with several highlighting the recent stability of longer-term inflation expectations. However, three participants saw the risks to inflation as tilted to the

2 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 through 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 3.E. Distribution of participants' projections for the target federal funds rate, 2012–15 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.

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.

downside, reflecting, for example, risks of disinflation that could arise from adverse shocks to the economy that policy would have limited scope to offset. A couple of 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, and uncertainty about the Committee's ability to shift to a less accommodative policy stance when it becomes appropriate to do so.

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 2.4 to 3.6 percent in the current year, 1.6 to 4.4 percent in the second year, and 1.3 to 4.7 percent in the third and fourth years. The corresponding 70 percent confidence intervals for overall inflation would be 1.5 to 2.5 percent in the current year, 1.1 to 2.9 percent in the second year, 0.9 to 3.1 percent in the third year, and 1.0 to 3.0 percent in the fourth 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.

Litigation

During 2012, the Board of Governors was a party in 13 lawsuits or appeals filed that year and was a party in 13 other cases pending from previous years, for a total of 26 cases. In 2011, the Board had been a party in a total of 22 cases. As of December 31, 2012, 17 cases were pending.

Conover v. Board of Governors, No. 12-cv-6480 (N.D. California, filed December 20, 2012), is a Freedom of Information Act case.

Crisman v. Board of Governors et al., No. 12-cv-1871 (D. District of Columbia, filed November 19, 2012), is a Freedom of Information Act case.

Wise v. Federal Reserve Board, No. 12-cv-1636 (D. District of Columbia, filed October 2, 2012), is a claim under the Federal Tort Claims Act.

McKinley v. Board of Governors, No 12-cv-1175 (D. District of Columbia, filed July 18, 2012), was a Freedom of Information Act case. On March 7, 2013, the plaintiff voluntarily dismissed the action with prejudice.

Judicial Watch v. Board of Governors and Federal Open Market Committee, No. 12-cv-1114 (D. District of Columbia, filed July 6, 2012), was a Freedom of Information Act case. On February 12, 2013, the plaintiff voluntarily dismissed the action with prejudice.

Von Brincken v. Board of Governors, No. 78503 (Superior Court of California, Nevada County, filed June 26, 2012), was a suit involving a mortgage. On August 3, 2012, the plaintiff voluntarily dismissed the Board of Governors as a party.

Marcusse v. United States Department of Justice, et al., No. 12-cv-1025 (D. District of Columbia, filed June 22, 2012), is a Freedom of Information Act case.

Gelb v. Board of Governors, No. 12-cv-4880 (S.D. New York, filed June 21, 2012), is a Freedom of Information Act case.

State National Bank of Big Spring v. Bernanke, No. 12-cv-1032 (D. District of Columbia, filed June 21, 2012), is a challenge to the constitutionality of the Consumer Financial Protection Bureau and the Financial Stability Oversight Council.

Mashak v. Federal Reserve Bank System, et al., No. 12-cv-1333 (D. Minnesota, filed June 1, 2012), was a challenge regarding mortgage foreclosure. On February 14, 2013, the district court dismissed the action.

First Pryority Bank v. Board of Governors, No. 12-cv-415-D (W.D. Oklahoma, filed April 17, 2012), was a challenge to an agency decision regarding release of confidential supervisory information. On October 18, 2012, the case was dismissed by consent of the parties.

DeNaples v. Board of Governors et al., No. 12-1198 (D.C. Circuit, filed April 19, 2012), was a petition for review of cease-and-desist orders issued by the Board and the Office of the Comptroller of the Currency. On January 29, 2013, the Court of Appeals vacated the orders and remanded to the agencies for additional action.

Freedom Watch v. Board of Governors, No. 12-cv-314 (D. District of Columbia, filed February 27, 2012), was a Freedom of Information Act case. On February 27, 2013, the district court granted the government's motion to dismiss.

Estate of Deleon v. Board of Governors, No. 11-cv-1538 (N.D. New York, filed December 30, 2011), was a complaint involving failure to address a consumer complaint at a regulated bank. On February 14, 2013, the district court dismissed the case.

Haller v. U.S. Department of Housing and Urban Development et al., No 11-cv-881 MRB-KLL (S.D. Ohio, filed December 16, 2011), was an action arising out of a mortgage foreclosure. On March 4, 2013, the district court granted the Board's motion to dismiss.

Farrell v. Geithner et al., No. 12-cv-0026 (M.D. Florida, filed in state court December 15, 2011; notice of removal filed January 19, 2012), was an action relating to a tax lien. On February 29, 2012, the district court substituted the United States as defendant and terminated all claims against the Board.

NACS et al. v. Board of Governors, No. 11-cv-2075(RJL) (D. District of Columbia, filed November 22, 2011), is a challenge to regulations issued pursuant to section 1075 of the Dodd-Frank Wall Street Reform and Consumer Protection Act relating to debit card fees.

Handy v. Bernanke, No. 12-1207 (Fourth Circuit, filed February 3, 2012), was an appeal of an order of the district court for the Eastern District of Virginia dismissing an action relating to employment at the Federal Reserve Bank of Richmond. On June 8, 2012, the court of appeals affirmed the district court's dismissal of the action.

CitiMortgage, Inc. v. Kokolis, No. 11-cv-2933-RBH (D. South Carolina, filed in state court August 5, 2011; notice of removal filed October 27, 2011), is a third-party complaint against the Board and the United States Department of the Treasury by the defendant in a mortgage foreclosure action. The district court dismissed the action on May 30, 2012, and the plaintiff's appeal to the Fourth Circuit Court of Appeals (No. 12-1917) is pending.

First Citizens Bank and Trust Co. v. Spirakis, No. 11-cv-2895-RBH (D. South Carolina, filed in state court August 5, 2011; notice of removal filed October 24, 2011), is a third-party complaint against the Board and the United States Department of the Treasury by the defendant in a mortgage foreclosure action. The district court dismissed the action on May 30, 2012, and the Fourth Circuit affirmed the dismissal (No. 12-1914) on March 15, 2013.

Perry v. Bernanke, No. 11-cv-1246(RWR) (D. District of Columbia, filed July 7, 2011), was an employment discrimination action. On May 22, 2012, the plaintiff voluntarily dismissed the action.

Barragan v. Board of Governors, No. 11-cv-0696 CAS-(JCx) (C.D. California, filed May 3, 2011), was a Freedom of Information Act case. On April 30, 2012, the district court granted the Board's motion to dismiss the action.

Murray v. Board of Governors, No. 11-1063 (Sixth Circuit, filed January 14, 2011), was an appeal of a district court order (763 F. Supp. 2d 860) granting summary judgment to the Board on a challenge to the constitutionality of federal expenditures relating to American International Group (AIG). On June 1, 2012, the court of appeals affirmed the district court's judgment (681 F.3d 744), and on December 10, 2012, the Supreme Court denied further review.

McKinley v. Board of Governors, No. 10-5353 (District of Columbia Circuit, filed October 22, 2010), was an appeal from an order of the district court granting the Board's motion for summary judgment in a Freedom of Information Act case (744 F. Supp. 2d 128 (D. District of Columbia, September 29, 2010)). On June 3, 2011, the court of appeals affirmed the district court's order (647 F.3d 331). On January 12, 2012, the Supreme Court denied further review.

McKinley v. Board of Governors, No. 10-00751 (D. District of Columbia, filed May 11, 2010), was a Freedom of Information Act case. On March 29, 2012, the district court granted the Board's motion for summary judgment.

Artis v. Greenspan, No. 01-cv-0400 (D. District of Columbia, filed February 22, 2001), is an employment discrimination action.

Statistical Tables

Table 1. Federal Reserve open market transactions, 2012

Millions of dollars

Type of security and transaction	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
U.S. Treasury securities[1]													
Outright transactions[2]													
Treasury bills													
Gross purchases	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross sales	0	0	0	0	0	0	0	0	0	0	0	0	0
Exchanges	18,423	18,423	20,841	18,423	24,361	18,423	0	0	0	0	0	0	118,894
For new bills	18,423	18,423	20,841	18,423	24,361	18,423	0	0	0	0	0	0	118,894
Redemptions	0	0	0	0	0	0	18,423	0	0	0	0	0	18,423
Others within 1 year													
Gross purchases	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross sales	11,659	12,643	10,609	12,220	12,942	14,788	7,927	8,928	3,721	594	1	26	96,058
Maturity shifts	0	0	0	0	0	0	0	0	0	0	0	0	0
Exchanges	0	0	0	0	0	0	0	0	0	0	0	0	0
Redemptions	0	0	0	0	0	0	1,791	11,762	0	827	102	382	14,864
1 to 5 years													
Gross purchases	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross sales	33,391	31,723	33,828	32,176	31,587	28,869	31,720	30,062	35,275	39,064	37,899	38,002	403,596
Maturity shifts	0	0	0	0	0	0	0	0	0	0	0	0	0
Exchanges	0	0	0	0	0	0	0	0	0	0	0	0	0
5 to 10 years													
Gross purchases	28,734	29,723	27,101	28,311	29,405	24,478	29,022	32,403	28,193	23,997	33,678	28,871	343,916
Gross sales	0	0	0	0	0	0	0	0	0	0	0	0	0
Maturity shifts	0	0	0	0	0	0	0	0	0	0	0	0	0
Exchanges	0	0	0	0	0	0	0	0	0	0	0	0	0
More than 10 years													
Gross purchases	12,952	16,672	16,744	15,748	15,097	17,469	15,433	16,179	13,668	16,112	16,221	17,891	190,186
Gross sales	0	0	0	0	0	0	0	0	0	0	0	0	0
Maturity shifts	0	0	0	0	0	0	0	0	0	0	0	0	0
Discount notes	0	0	0	0	0	0	0	0	0	0	0	0	0
All maturities													
Gross purchases	41,686	46,395	43,845	44,059	44,502	41,947	44,455	48,582	41,861	40,109	49,899	46,762	534,102
Gross sales	45,050	44,366	44,437	44,396	44,529	43,657	39,647	38,990	38,996	39,658	37,900	38,028	499,654
Redemptions	0	0	0	0	0	0	20,214	11,762	0	827	102	382	33,287
Net change in U.S. Treasury securities	-3,364	2,029	-592	-337	-27	-1,710	-15,406	-2,170	2,865	-376	11,897	8,352	1,161
Federal agency obligations													
Outright transactions[2]													
Gross purchases	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross sales	0	0	0	0	0	0	0	0	0	0	0	0	0
Redemptions	2,496	681	4,339	1,907	1,319	1,768	455	3,819	3,805	1,503	2,619	2,500	27,211
Net change in federal agency obligations	-2,496	-681	-4,339	-1,907	-1,319	-1,768	-455	-3,819	-3,805	-1,503	-2,619	-2,500	-27,211
Mortgage-backed securities[3]													
Net settlements[2]													
Net change in mortgage-backed securities	-1,672	4,784	-4,004	11,013	3,945	3,255	-1,549	-9,761	-8,707	17,051	31,581	43,042	88,978

(continued on next page)

Table 1.—*continued*

Type of security and transaction	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Temporary transactions													
Repurchase agreements[4]													
Gross purchases	0	0	0	0	0	0	0	810	0	0	0	0	810
Gross sales	0	0	0	0	0	0	0	810	0	0	0	0	810
Reverse repurchase agreements[4]													
Gross purchases	1,791,992	1,769,570	1,933,414	1,899,934	2,040,796	1,817,642	1,853,469	2,126,434	1,730,865	2,064,996	1,904,159	2,018,199	22,951,470
Gross sales	1,777,081	1,772,134	1,951,112	1,898,867	2,043,323	1,804,989	1,859,107	2,129,510	1,734,986	2,072,000	1,899,633	2,034,666	22,977,408
Net change in temporary transactions	14,911	-2,564	-17,698	1,067	-2,527	12,653	-5,638	-3,076	-4,121	-7,005	4,526	-16,467	-25,939
Total net change in System Open Market Account	**9,051**	**-1,216**	**-22,629**	**-1,177**	**-3,873**	**9,175**	**-21,499**	**-9,065**	**-5,061**	**-8,884**	**13,805**	**-10,615**	**-51,988**

Note: Sales, redemptions, and negative figures reduce holdings of the System Open Market Account; all other figures increase such holdings. Components may not sum to totals because of rounding.

1 Transactions exclude changes in compensation for the effects of inflation on the principal of inflation-indexed securities. Transactions include the rollover of inflation compensation into new securities.

2 Excludes the effect of temporary transactions—repurchase agreements and reverse repurchase agreements.

3 Guaranteed by Fannie Mae, Freddie Mac, and Ginnie Mae. Monthly net change in face value of the securities held, which is the remaining principal balance of the underlying mortgages.

4 Cash value of agreements, which are collateralized by U.S. Treasury securities, federal agency debt securities, and mortgage-backed securities.

Table 2. Federal Reserve Bank holdings of U.S. Treasury and federal agency securities, December 31, 2010–2012
Millions of dollars

Description	December 31			Change	
	2012	2011	2010	2011 to 2012	2010 to 2011
U.S. Treasury securities					
Held outright[1]	**1,666,145**	**1,663,446**	**1,021,493**	**2,699**	**641,953**
By remaining maturity					
Bills					
1–90 days	0	18,423	18,423	-18,423	0
91 days to 1 year	0	0	0	0	0
Notes and bonds					
1 year or less	21	114,829	70,449	-114,808	44,380
More than 1 year through 5 years	378,476	649,698	439,594	-271,222	210,104
More than 5 years through 10 years	862,410	649,913	333,955	212,497	315,958
More than 10 years	425,238	230,583	159,072	194,655	71,511
By type					
Bills	0	18,423	18,423	-18,423	0
Notes	1,110,398	1,286,344	773,285	-175,946	513,059
Bonds	555,747	358,679	229,786	197,068	128,893
Federal agency securities					
Held outright[1]	**76,783**	**103,994**	**147,460**	**-27,211**	**-43,466**
By remaining maturity					
Discount notes					
1–90 days	0	0	0	0	0
91 days to 1 year	0	0	0	0	0
Coupons					
1 year or less	19,562	27,211	43,466	-7,649	-16,255
More than 1 year through 5 years	52,830	60,603	71,050	-7,773	-10,447
More than 5 years though 10 years	2,044	13,833	30,597	-11,789	-16,764
More than 10 years	2,347	2,347	2,347	0	0
By type					
Discount notes	0	0	0	0	0
Coupons	76,783	103,994	147,460	-27,211	-43,466
By issuer					
Federal Home Loan Mortgage Corporation	32,261	45,126	57,515	-12,865	-12,389
Federal National Mortgage Association	31,906	39,707	58,568	-7,801	-18,861
Federal Home Loan Banks	12,616	19,161	31,377	-6,545	-12,216
Mortgage-backed securities[2]					
Held outright[1]	**926,662**	**837,683**	**992,141**	**88,979**	**-154,458**
By remaining maturity					
1 year or less	2	0	0	2	0
More than 1 year through 5 years	1	13	24	-12	-11
More than 5 years though 10 years	2,365	34	20	2,331	14
More than 10 years	924,294	837,636	992,097	86,658	-154,461
By issuer					
Federal Home Loan Mortgage Corporation	292,155	289,537	346,959	2,618	-57,422
Federal National Mortgage Association	503,696	460,910	547,545	42,786	-86,635
Government National Mortgage Association	130,811	87,237	97,637	43,574	-10,400
Temporary transactions					
Repurchase agreements[3]	**0**	**0**	**0**	**0**	**0**
Reverse repurchase agreements[3]	**107,188**	**99,900**	**59,703**	**7,288**	**40,197**
Foreign official and international accounts	107,188	99,900	59,703	7,288	40,197
Dealers	0	0	0	0	0

Note: Components may not sum to totals because of rounding.

[1] Excludes the effect of temporary transactions—repurchase agreements and reverse repurchase agreements.

[2] Guaranteed by Fannie Mae, Freddie Mac, and Ginnie Mae.

[3] Cash value of agreements, which are collateralized by U.S. Treasury securities, federal agency debt securities, and mortgage-backed securities.

Table 3. Federal Reserve Bank interest rates on loans to depository institutions, December 31, 2012
Percent

Reserve Bank	Primary credit	Secondary credit	Seasonal credit
All banks	0.75	1.25	0.20

Note: For details on rate changes over the course of 2012, see the section on discount rates in the chapter "Record of Policy Actions of the Board of Governors" on page 117. *Primary credit* is available for very short terms as a backup source of liquidity to depository institutions that are in generally sound financial condition in the judgment of the lending Federal Reserve Bank. *Secondary credit* is available in appropriate circumstances to depository institutions that do not qualify for primary credit. *Seasonal credit* is available to help relatively small depository institutions meet regular seasonal needs for funds that arise from a clear pattern of intra-yearly movements in their deposits and loans. The discount rate on seasonal credit takes into account rates charged by market sources of funds and is reestablished on the first business day of each two-week reserve maintenance period.

Table 4. Reserve requirements of depository institutions, December 31, 2012

Type of deposit	Requirements	
	Percentage of deposits	Effective date
Net transaction accounts[1]		
$0 million–$12.4 million[2]	0	12/27/2012
More than $12.4 million–$79.5 million[3]	3	12/27/2012
More than $79.5 million	10	12/27/2012
Nonpersonal time deposits	0	12/27/1990
Eurocurrency liabilities	0	12/27/1990

Note: Required reserves must be held in the form of vault cash and, if vault cash is insufficient, also in the form of a deposit with a Federal Reserve Bank. An institution must hold that deposit directly with a Reserve Bank or with another institution in a pass-through relationship. Reserve requirements are imposed on commercial banks, savings banks, savings and loan associations, credit unions, U.S. branches and agencies of foreign banks, Edge corporations, and agreement corporations.

[1] Total transaction accounts consist of demand deposits, automatic transfer service (ATS) accounts, NOW accounts, share draft accounts, telephone or preauthorized transfer accounts, ineligible acceptances, and affiliate-issued obligations maturing in seven days or less. Net transaction accounts are total transaction accounts less amounts due from other depository institutions and less cash items in the process of collection.

For a more detailed description of these deposit types, see Form FR 2900.

[2] The amount of net transaction accounts subject to a reserve requirement ratio of 0 percent (the "exemption amount") is adjusted each year by statute. The exemption amount is adjusted upward by 80 percent of the previous year's (June 30 to June 30) rate of increase in total reservable liabilities at all depository institutions. No adjustment is made in the event of a decrease in such liabilities.

[3] The amount of net transaction accounts subject to a reserve requirement ratio of 3 percent is the "low reserve tranche." By statute, the upper limit of the low reserve tranche is adjusted each year by 80 percent of the previous year's (June 30 to June 30) rate of increase or decrease in net transaction accounts held by all depository institutions.

Table 5. Banking offices and banks affiliated with bank holding companies in the United States, December 31, 2011 and 2012

Type of office	Total	Commercial banks[1]						State-chartered savings banks
		Total	Member			Nonmember		
			Total	National	State			
All banking offices								
Banks								
Number, Dec. 31, 2011	**6,564**	**6,265**	**2,120**	**1,299**	**821**	**4,145**		**299**
Changes during 2012								
New banks	31	23	7	4	3	16		8
Banks converted into branches	-169	-166	-61	-43	-18	-105		-3
Ceased banking operations[2]	-68	-58	-15	-5	-10	-43		-10
Other[3]	0	-1	0	-33	33	-1		1
Net change	-206	-202	-69	-77	8	-133		-4
Number, Dec. 31, 2012	**6,358**	**6,063**	**2,051**	**1,222**	**829**	**4,012**		**295**
Branches and additional offices								
Number, Dec. 31, 2011	**84,252**	**81,666**	**58,255**	**43,706**	**14,549**	**23,411**		**2,586**
Changes during 2012								
New branches	2,344	2,261	1,714	1,472	242	547		83
Banks converted to branches	169	162	75	46	29	87		7
Discontinued[2]	-1,962	-1,903	-1,395	-1,045	-350	-508		-59
Other[3]	0	-9	65	104	-39	-74		9
Net change	551	511	459	577	-118	52		40
Number, Dec. 31, 2012	**84,803**	**82,177**	**58,714**	**44,283**	**14,431**	**23,463**		**2,626**
Banks affiliated with bank holding companies								
Banks								
Number, Dec. 31, 2011	**5,328**	**5,203**	**1,860**	**1,136**	**724**	**3,343**		**125**
Changes during 2012								
BHC-affiliated new banks	55	48	12	8	4	36		7
Banks converted into branches	-147	-144	-54	-38	-16	-90		-3
Ceased banking operations[2]	-56	-53	-15	-8	-7	-38		-3
Other[3]	0	-1	-3	-32	29	2		1
Net change	-148	-150	-60	-70	10	-90		2
Number, Dec. 31, 2012	**5,180**	**5,053**	**1,800**	**1,066**	**734**	**3,253**		**127**

Note: Includes banks, banking offices, and bank holding companies in U.S. territories and possessions (affiliated insular areas).

1 For purposes of this table, banks are entities that are defined as banks in the Bank Holding Company Act, as amended, which is implemented by Federal Reserve Regulation Y. Generally, a bank is any institution that accepts demand deposits and is engaged in the business of making commercial loans or any institution that is defined as an insured bank in section 3(h) of the FDIC Act.

2 Institutions that no longer meet the Regulation Y definition of a bank.

3 Interclass changes and sales of branches.

Table 6A. Reserves of depository institutions, Federal Reserve Bank credit, and related items, year-end 1984–2012 and month-end 2012

Millions of dollars

Period	Factors supplying reserve funds								
	Federal Reserve Bank credit outstanding						Gold stock	Special drawing rights certificate account	Treasury currency outstanding[4]
	Securities held outright[1]	Repurchase agreements[2]	Loans and other credit extensions[3]	Float	Other Federal Reserve assets	Total			
1984	167,612	2,015	3,577	833	12,347	186,384	11,096	4,618	16,418
1985	186,025	5,223	3,060	988	15,302	210,598	11,090	4,718	17,075
1986	205,454	16,005	1,565	1,261	17,475	241,760	11,084	5,018	17,567
1987	226,459	4,961	3,815	811	15,837	251,883	11,078	5,018	18,177
1988	240,628	6,861	2,170	1,286	18,803	269,748	11,060	5,018	18,799
1989	233,300	2,117	481	1,093	39,631	276,622	11,059	8,518	19,628
1990	241,431	18,354	190	2,222	39,897	302,091	11,058	10,018	20,402
1991	272,531	15,898	218	731	34,567	323,945	11,059	10,018	21,014
1992	300,423	8,094	675	3,253	30,020	342,464	11,056	8,018	21,447
1993	336,654	13,212	94	909	33,035	383,904	11,053	8,018	22,095
1994	368,156	10,590	223	-716	33,634	411,887	11,051	8,018	22,994
1995	380,831	13,862	135	107	33,303	428,239	11,050	10,168	24,003
1996	393,132	21,583	85	4,296	32,896	451,992	11,048	9,718	24,966
1997	431,420	23,840	2,035	719	31,452	489,466	11,047	9,200	25,543
1998	452,478	30,376	17	1,636	36,966	521,475	11,046	9,200	26,270
1999	478,144	140,640	233	-237	35,321	654,100	11,048	6,200	28,013
2000	511,833	43,375	110	901	36,467	592,686	11,046	2,200	31,643
2001	551,685	50,250	34	-23	37,658	639,604	11,045	2,200	33,017
2002	629,416	39,500	40	418	39,083	708,457	11,043	2,200	34,597
2003	666,665	43,750	62	-319	40,847	751,005	11,043	2,200	35,468
2004	717,819	33,000	43	925	42,219	794,007	11,045	2,200	36,434
2005	744,215	46,750	72	885	39,611	831,532	11,043	2,200	36,540
2006	778,915	40,750	67	-333	39,895	859,294	11,041	2,200	38,206
2007	740,611	46,500	72,636	-19	41,799	901,528	11,041	2,200	38,681
2008	495,629	80,000	1,605,848	-1,494	43,553	2,223,537	11,041	2,200	38,674
2009	1,844,838	0	281,095	-2,097	92,811	2,216,647	11,041	5,200	42,691
2010[r]	2,161,094	0	138,311	-1,421	110,255	2,408,240	11,041	5,200	43,542
2011[r]	2,605,124	0	144,098	-631	152,568	2,901,159	11,041	5,200	44,198
2012	2,669,589	0	11,867	-486	218,296	2,899,266	11,041	5,200	44,797
Jan	2,597,453	0	147,629	-1,333	159,611	2,903,361	11,041	5,200	44,233
Feb	2,603,213	0	147,520	-909	158,519	2,908,342	11,041	5,200	44,259
Mar	2,594,403	0	77,299	-720	168,319	2,839,301	11,041	5,200	44,389
Apr	2,603,402	0	59,988	-814	176,788	2,839,364	11,041	5,200	44,427
May	2,606,435	0	47,860	-647	175,980	2,829,628	11,041	5,200	44,480
Jun	2,606,397	0	48,787	-709	187,339	2,841,814	11,041	5,200	44,517
Jul	2,589,004	0	45,079	-901	195,290	2,828,471	11,041	5,200	44,563
Aug	2,573,335	0	30,260	-594	193,473	2,796,475	11,041	5,200	44,592
Sep	2,563,678	0	16,800	-607	202,531	2,782,401	11,041	5,200	44,635
Oct	2,579,274	0	16,674	-930	210,282	2,805,301	11,041	5,200	44,692
Nov	2,620,638	0	15,524	-559	209,214	2,844,817	11,041	5,200	44,741
Dec	2,669,589	0	11,867	-486	218,296	2,899,266	11,041	5,200	44,797

Note: Components may not sum to totals because of rounding.

[1] Includes U.S. Treasury securities, federal agency debt securities, and mortgage-backed securities. U.S. Treasury securities and federal agency debt securities include securities lent to dealers, which are fully collateralized by U.S. Treasury securities, federal agency securities, and other highly rated debt securities.

[2] Cash value of agreements, which are collateralized by U.S. Treasury securities, federal agency debt securities, and agency mortgage-backed securities.

[3] Refer to "Table 6B. Loans and other credit extensions, by type, year-end 1984–2012 and month-end 2012" on page 296 for detail.

[4] Includes currency and coin (other than gold) issued directly by the U.S. Treasury. The largest components are fractional and dollar coins. For details refer to "U.S. Currency and Coin Outstanding and in Circulation," *Treasury Bulletin*.

Table 6A.—*continued*

Period	Factors absorbing reserve funds										Reserve balances with Federal Reserve Banks
	Currency in circulation	Reverse repurchase agreements[5]	Treasury cash holdings[6]	Deposits with Federal Reserve Banks, other than reserve balances					Required clearing balances[7]	Other Federal Reserve liabilities and capital[8]	
				Term deposits	Treasury general account	Treasury supplementary financing account	Foreign	Other			
1984	183,796	0	513	…	5,316	…	253	867	1,126	5,952	20,693
1985	197,488	0	550	…	9,351	…	480	1,041	1,490	5,940	27,141
1986	211,995	0	447	…	7,588	…	287	917	1,812	6,088	46,295
1987	230,205	0	454	…	5,313	…	244	1,027	1,687	7,129	40,097
1988	247,649	0	395	…	8,656	…	347	548	1,605	7,683	37,742
1989	260,456	0	450	…	6,217	…	589	1,298	1,618	8,486	36,713
1990	286,963	0	561	…	8,960	…	369	528	1,960	8,147	36,081
1991	307,756	0	636	…	17,697	…	968	1,869	3,946	8,113	25,051
1992	334,701	0	508	…	7,492	…	206	653	5,897	7,984	25,544
1993	365,271	0	377	…	14,809	…	386	636	6,332	9,292	27,967
1994	403,843	0	335	…	7,161	…	250	1,143	4,196	11,959	25,061
1995	424,244	0	270	…	5,979	…	386	2,113	5,167	12,342	22,960
1996	450,648	0	249	…	7,742	…	167	1,178	6,601	13,829	17,310
1997	482,327	0	225	…	5,444	…	457	1,171	6,684	15,500	23,447
1998	517,484	0	85	…	6,086	…	167	1,869	6,780	16,354	19,164
1999	628,359	0	109	…	28,402	…	71	1,644	7,481	17,256	16,039
2000	593,694	0	450	…	5,149	…	216	2,478	6,332	17,962	11,295
2001	643,301	0	425	…	6,645	…	61	1,356	8,525	17,083	8,469
2002	687,518	21,091	367	…	4,420	…	136	1,266	10,534	18,977	11,988
2003	724,187	25,652	321	…	5,723	…	162	995	11,829	19,793	11,054
2004	754,877	30,783	270	…	5,912	…	80	1,285	9,963	26,378	14,137
2005	794,014	30,505	202	…	4,573	…	83	2,144	8,651	30,466	10,678
2006	820,176	29,615	252	…	4,708	…	98	972	6,842	36,231	11,847
2007	828,938	43,985	259	…	16,120	…	96	1,830	6,614	41,622	13,986
2008	889,898	88,352	259	…	106,123	259,325	1,365	21,221	4,387	48,921	855,599
2009	928,249	77,732	239	…	186,632	5,001	2,411	35,262	3,020	63,219	973,814
2010r	982,750	59,703	177	0	140,773	199,964	3,337	13,631	2,374	99,602	965,712
2011r	1,075,820	99,900	128	0	85,737	0	125	64,909	2,480	72,766	1,559,731
2012	1,169,205	107,188	150	0	92,720	0	6,427	27,476	…	66,093	1,491,044
Jan	1,069,057	84,989	143	3,079	158,596	0	122	41,113	1,976	74,537	1,530,222
Feb	1,091,596	87,553	161	0	62,542	0	127	44,702	1,955	75,070	1,605,136
Mar	1,098,581	96,671	150	3,057	43,480	0	127	37,160	1,937	74,037	1,544,730
Apr	1,100,681	95,604	140	0	166,619	0	129	18,198	1,927	78,203	1,438,531
May	1,109,807	98,131	147	3,053	112,369	0	138	25,025	1,902	74,672	1,465,106
Jun	1,111,924	85,478	117	0	91,419	0	1,579	30,236	1,892	74,852	1,505,075
Jul	1,113,842	91,117	121	3,040	90,485	0	4,288	18,780	…	70,062	1,497,541
Aug	1,127,975	94,192	118	0	30,121	0	5,169	18,516	…	66,435	1,514,783
Sep	1,128,414	92,743	122	3,040	85,446	0	5,625	22,907	…	67,660	1,437,320
Oct	1,141,971	99,748	146	0	99,966	0	5,991	17,660	…	66,353	1,434,399
Nov	1,150,225	95,222	147	3,043	48,947	0	6,633	17,442	…	67,272	1,516,868
Dec	1,169,205	107,188	150	0	92,720	0	6,427	27,476	…	66,093	1,491,044

[5] Cash value of agreements, which are collateralized by U.S. Treasury securities, federal agency debt securities, and agency mortgage-backed securities.

[6] Coin and paper currency held by the Treasury.

[7] Required clearing balances were discontinued in July 2012.

[8] In 2010, includes funds from American International Group, Inc. asset dispositions, held as agent.

… Not applicable.

r Revised.

Table 6B. Loans and other credit extensions, by type, year-end 1984–2012 and month-end 2012

Millions of dollars

Period	Total loans and other credit extensions	Term auction credit	Other loans					Net portfolio holdings of						Preferred interests in AIA/ALICO LLCs[10]	Central bank liquidity swaps[11]
			Primary, secondary, and seasonal credit[1]	Primary dealer and other broker-dealer credit[2]	AMLF[3]	TALF[4]	AIG[5]	CPFF LLC[6]	MMIFF LLC[7]	Maiden Lane LLC[8]	Maiden Lane II LLC[8]	Maiden Lane III LLC[8]	TALF LLC[9]		
1984	3,577	…	3,577	…	…	…	…	…	…	…	…	…	…	…	…
1985	3,060	…	3,060	…	…	…	…	…	…	…	…	…	…	…	…
1986	1,565	…	1,565	…	…	…	…	…	…	…	…	…	…	…	…
1987	3,815	…	3,815	…	…	…	…	…	…	…	…	…	…	…	…
1988	2,170	…	2,170	…	…	…	…	…	…	…	…	…	…	…	…
1989	481	…	481	…	…	…	…	…	…	…	…	…	…	…	…
1990	190	…	190	…	…	…	…	…	…	…	…	…	…	…	…
1991	218	…	218	…	…	…	…	…	…	…	…	…	…	…	…
1992	675	…	675	…	…	…	…	…	…	…	…	…	…	…	…
1993	94	…	94	…	…	…	…	…	…	…	…	…	…	…	…
1994	223	…	223	…	…	…	…	…	…	…	…	…	…	…	…
1995	135	…	135	…	…	…	…	…	…	…	…	…	…	…	…
1996	85	…	85	…	…	…	…	…	…	…	…	…	…	…	…
1997	2,035	…	2,035	…	…	…	…	…	…	…	…	…	…	…	…
1998	17	…	17	…	…	…	…	…	…	…	…	…	…	…	…
1999	233	…	233	…	…	…	…	…	…	…	…	…	…	…	…
2000	110	…	110	…	…	…	…	…	…	…	…	…	…	…	…
2001	34	…	34	…	…	…	…	…	…	…	…	…	…	…	…
2002	40	…	40	…	…	…	…	…	…	…	…	…	…	…	…
2003	62	…	62	…	…	…	…	…	…	…	…	…	…	…	…
2004	43	…	43	…	…	…	…	…	…	…	…	…	…	…	…
2005	72	…	72	…	…	…	…	…	…	…	…	…	…	…	…
2006	67	…	67	…	…	…	…	…	…	…	…	…	…	…	…
2007	72,636	40,000	8,636	…	…	…	…	…	…	…	…	…	…	…	24,000
2008	1,605,848	450,219	93,791	37,404	23,765	…	38,914	334,102	0	27,023	20,117	26,785	…	…	553,728
2009	281,095	75,918	20,700	0	0	47,532	22,184	14,064	…	26,701	15,659	22,661	298	25,106	10,272
2010	138,311	0	221	…	…	24,703	19,953	…	…	26,967	16,198	23,143	665	26,385	75
2011	144,098	0	196	…	…	9,013	…	…	…	7,232	9,280	17,744	811	…	99,823
2012	11,867	0	70	…	…	556	…	…	…	1,413	61	22	856	…	8,889

(continued on next page)

Table 6B.—*continued*

Period	Total loans and other credit extensions	Term auction credit	Other loans					Net portfolio holdings of						Preferred interests in AIA/ALICO LLCs[10]	Central bank liquidity swaps[11]
			Primary, secondary, and seasonal credit[1]	Primary dealer and other broker-dealer credit[2]	AMLF[3]	TALF[4]	AIG[5]	CPFF LLC[6]	MMIFF LLC[7]	Maiden Lane LLC[8]	Maiden Lane II LLC[8]	Maiden Lane III LLC[8]	TALF LLC[9]		
2012, month-end															
Jan	147,629	0	16	…	…	8,141	…	…	…	6,966	9,508	17,725	819	…	104,454
Feb	147,520	0	15	…	…	7,564	…	…	…	6,439	7,301	17,611	825	…	107,763
Mar	77,299	0	6	…	…	7,056	…	…	…	5,446	19	17,460	831	…	46,482
Apr	59,988	0	133	…	…	6,553	…	…	…	4,182	19	20,199	836	…	28,066
May	47,860	0	71	…	…	5,425	…	…	…	3,878	19	15,257	841	…	22,368
Jun	48,787	0	77	…	…	4,526	…	…	…	2,416	18	12,936	845	…	27,969
Jul	45,079	0	168	…	…	3,517	…	…	…	2,084	61	7,377	848	…	31,022
Aug	30,260	0	262	…	…	2,149	…	…	…	1,910	61	1,585	851	…	23,442
Sep	16,800	0	126	…	…	1,467	…	…	…	1,719	61	23	853	…	12,551
Oct	16,674	0	85	…	…	1,177	…	…	…	1,572	61	23	855	…	12,903
Nov	15,524	0	36	…	…	937	…	…	…	1,431	61	22	856	…	12,181
Dec	11,867	0	70	…	…	556	…	…	…	1,413	61	22	856	…	8,889

Note: Components may not sum to totals because of rounding.

[1] Prior to 2003, category was “Adjustment, extended, and seasonal credit.”

[2] Includes credit extended through the Primary Dealer Credit Facility (PDCF) and credit extended to certain other broker-dealers. The PDCF was dissolved in February 2010.

[3] Includes credit extended through the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF). The AMLF was dissolved in February 2010.

[4] Includes credit extended by the Federal Reserve Bank of New York (FRBNY) to eligible borrowers through the Term Asset-Backed Securities Loan Facility (TALF), net of unamortized deferred administrative fees. The TALF was discontinued in June 2010.

[5] Credit extended to American International Group, Inc. (AIG) includes outstanding principal and capitalized interest net of unamortized deferred commitment fees and allowance for loan restructuring. Excludes credit extended to consolidated LLCs. Upon the closing of the AIG recapitalization plan in January 2011, the credit extended to AIG by the FRBNY under the revolving credit facility was repaid in full.

[6] Net portfolio holdings of Commercial Paper Funding Facility (CPFF) LLC. The CPFF was discontinued in February 2010.

[7] Net portfolio holdings of Money Market Investor Funding Facility (MMIFF) LLC. The MMIFF was discontinued in October 2009.

[8] Net portfolio holdings at fair value.

[9] Net portfolio holdings of TALF LLC, a limited liability company formed to purchase and manage any asset-backed securities that might be surrendered by a TALF borrower or otherwise claimed by the FRBNY in connection with its enforcement rights to the TALF collateral.

[10] Preferred interests in AIA Aurora LLC and ALICO Holdings LLC at book value. After the closing of the AIG recapitalization plan, the Federal Reserve was paid in full for its preferred interests in the special purpose vehicles AIA Aurora LLC and ALICO Holdings LLC.

[11] Dollar value of foreign currency held under these agreements valued at the exchange rate to be used when the foreign currency is returned to the foreign central bank. This exchange rate equals the market exchange rate used when the foreign currency was acquired from the foreign central bank.

… Not applicable.

Table 6C. Reserves of depository institutions, Federal Reserve Bank credit, and related items, year-end 1918–1983
Millions of dollars

Period	Factors supplying reserve funds									
	Federal Reserve Bank credit outstanding							Gold stock[6]	Special drawing rights certificate account	Treasury currency outstanding[7]
	Securities held outright[1]	Repurchase agreements[2]	Loans	Float[3]	All other[4]	Other Federal Reserve assets[5]	Total			
1918	239	0	1,766	199	294	0	2,498	2,873	…	1,795
1919	300	0	2,215	201	575	0	3,292	2,707	…	1,707
1920	287	0	2,687	119	262	0	3,355	2,639	…	1,709
1921	234	0	1,144	40	146	0	1,563	3,373	…	1,842
1922	436	0	618	78	273	0	1,405	3,642	…	1,958
1923	80	54	723	27	355	0	1,238	3,957	…	2,009
1924	536	4	320	52	390	0	1,302	4,212	…	2,025
1925	367	8	643	63	378	0	1,459	4,112	…	1,977
1926	312	3	637	45	384	0	1,381	4,205	…	1,991
1927	560	57	582	63	393	0	1,655	4,092	…	2,006
1928	197	31	1,056	24	500	0	1,809	3,854	…	2,012
1929	488	23	632	34	405	0	1,583	3,997	…	2,022
1930	686	43	251	21	372	0	1,373	4,306	…	2,027
1931	775	42	638	20	378	0	1,853	4,173	…	2,035
1932	1,851	4	235	14	41	0	2,145	4,226	…	2,204
1933	2,435	2	98	15	137	0	2,688	4,036	…	2,303
1934	2,430	0	7	5	21	0	2,463	8,238	…	2,511
1935	2,430	1	5	12	38	0	2,486	10,125	…	2,476
1936	2,430	0	3	39	28	0	2,500	11,258	…	2,532
1937	2,564	0	10	19	19	0	2,612	12,760	…	2,637
1938	2,564	0	4	17	16	0	2,601	14,512	…	2,798
1939	2,484	0	7	91	11	0	2,593	17,644	…	2,963
1940	2,184	0	3	80	8	0	2,274	21,995	…	3,087
1941	2,254	0	3	94	10	0	2,361	22,737	…	3,247
1942	6,189	0	6	471	14	0	6,679	22,726	…	3,648
1943	11,543	0	5	681	10	0	12,239	21,938	…	4,094
1944	18,846	0	80	815	4	0	19,745	20,619	…	4,131
1945	24,262	0	249	578	2	0	25,091	20,065	…	4,339
1946	23,350	0	163	580	1	0	24,093	20,529	…	4,562
1947	22,559	0	85	535	1	0	23,181	22,754	…	4,562
1948	23,333	0	223	541	1	0	24,097	24,244	…	4,589
1949	18,885	0	78	534	2	0	19,499	24,427	…	4,598
1950	20,725	53	67	1,368	3	0	22,216	22,706	…	4,636
1951	23,605	196	19	1,184	5	0	25,009	22,695	…	4,709
1952	24,034	663	156	967	4	0	25,825	23,187	…	4,812
1953	25,318	598	28	935	2	0	26,880	22,030	…	4,894
1954	24,888	44	143	808	1	0	25,885	21,713	…	4,985
1955	24,391	394	108	1,585	29	0	26,507	21,690	…	5,008
1956	24,610	305	50	1,665	70	0	26,699	21,949	…	5,066
1957	23,719	519	55	1,424	66	0	25,784	22,781	…	5,146
1958	26,252	95	64	1,296	49	0	27,755	20,534	…	5,234
1959	26,607	41	458	1,590	75	0	28,771	19,456	…	5,311
1960	26,984	400	33	1,847	74	0	29,338	17,767	…	5,398
1961	28,722	159	130	2,300	51	0	31,362	16,889	…	5,585
1962	30,478	342	38	2,903	110	0	33,871	15,978	…	5,567
1963	33,582	11	63	2,600	162	0	36,418	15,513	…	5,578
1964	36,506	538	186	2,606	94	0	39,930	15,388	…	5,405
1965	40,478	290	137	2,248	187	0	43,340	13,733	…	5,575
1966	43,655	661	173	2,495	193	0	47,177	13,159	…	6,317
1967	48,980	170	141	2,576	164	0	52,031	11,982	…	6,784
1968	52,937	0	186	3,443	58	0	56,624	10,367	…	6,795
1969	57,154	0	183	3,440	64	2,743	63,584	10,367	…	6,852
1970	62,142	0	335	4,261	57	1,123	67,918	10,732	400	7,147

(continued on next page)

Table 6C.—*continued*

Period	Factors supplying reserve funds									
	Federal Reserve Bank credit outstanding							Gold stock[6]	Special drawing rights certificate account	Treasury currency outstanding[7]
	Securities held outright[1]	Repurchase agreements[2]	Loans	Float[3]	All other[4]	Other Federal Reserve assets[5]	Total			
1971	69,481	1,323	39	4,343	261	1,068	76,515	10,132	400	7,710
1972	71,119	111	1,981	3,974	106	1,260	78,551	10,410	400	8,313
1973	80,395	100	1,258	3,099	68	1,152	86,072	11,567	400	8,716
1974	84,760	954	299	2,001	999	3,195	92,208	11,652	400	9,253
1975	92,789	1,335	211	3,688	1,126	3,312	102,461	11,599	500	10,218
1976	100,062	4,031	25	2,601	991	3,182	110,892	11,598	1,200	10,810
1977	108,922	2,352	265	3,810	954	2,442	118,745	11,718	1,250	11,331
1978	117,374	1,217	1,174	6,432	587	4,543	131,327	11,671	1,300	11,831
1979	124,507	1,660	1,454	6,767	704	5,613	140,705	11,172	1,800	13,083
1980	128,038	2,554	1,809	4,467	776	8,739	146,383	11,160	2,518	13,427
1981	136,863	3,485	1,601	1,762	195	9,230	153,136	11,151	3,318	13,687
1982	144,544	4,293	717	2,735	1,480	9,890	163,659	11,148	4,618	13,786
1983	159,203	1,592	918	1,605	418	8,728	172,464	11,121	4,618	15,732

Note: For a description of figures and discussion of their significance, see *Banking and Monetary Statistics*, 1941–1970 (Board of Governors of the Federal Reserve System, 1976), pp. 507–23. Components may not sum to totals because of rounding.

[1] In 1969 and thereafter, includes securities loaned—fully guaranteed by U.S. government securities pledged with Federal Reserve Banks—and excludes securities sold and scheduled to be bought back under matched sale–purchase transactions. On September 29, 1971, and thereafter, includes federal agency issues bought outright.

[2] On December 1, 1966, and thereafter, includes federal agency obligations held under repurchase agreements.

[3] In 1960 and thereafter, figures reflect a minor change in concept; refer to *Federal Reserve Bulletin*, vol. 47 (February 1961), p. 164.

[4] Principally acceptances and, until August 21, 1959, industrial loans, the authority for which expired on that date.

[5] For the period before April 16, 1969, includes the total of Federal Reserve capital paid in, surplus, other capital accounts, and other liabilities and accrued dividends, less the sum of bank premises and other assets, and is reported as "Other Federal Reserve accounts;" thereafter, "Other Federal Reserve assets'' and "Other Federal Reserve liabilities and capital'' are shown separately.

[6] Before January 30, 1934, includes gold held in Federal Reserve Banks and in circulation.

[7] Includes currency and coin (other than gold) issued directly by the Treasury. The largest components are fractional and dollar coins. For details refer to "U.S. Currency and Coin Outstanding and in Circulation,'' *Treasury Bulletin*.

Table 6C. Reserves of depository institutions, Federal Reserve Bank credit, and related items, year-end 1918–1983—*continued*

Millions of dollars

Period	Factors absorbing reserve funds								Member bank reserves[9]			
	Currency in circulation	Treasury cash holdings[8]	Deposits with Federal Reserve Banks, other than reserve balances			Other Federal Reserve accounts[5]	Required clearing balances	Other Federal Reserve liabilities and capital[5]	With Federal Reserve Banks	Currency and coin[10]	Required[11]	Excess[11,12]
			Treasury	Foreign	Other							
1918	4,951	288	51	96	25	118	0	0	1,636	…	1,585	51
1919	5,091	385	31	73	28	208	0	0	1,890	…	1,822	68
1920	5,325	218	57	5	18	298	0	0	1,781	…	…	…
1921	4,403	214	96	12	15	285	0	0	1,753	…	1,654	99
1922	4,530	225	11	3	26	276	0	0	1,934	…	…	…
1923	4,757	213	38	4	19	275	0	0	1,898	…	1,884	14
1924	4,760	211	51	19	20	258	0	0	2,220	…	2,161	59
1925	4,817	203	16	8	21	272	0	0	2,212	…	2,256	-44
1926	4,808	201	17	46	19	293	0	0	2,194	…	2,250	-56
1927	4,716	208	18	5	21	301	0	0	2,487	…	2,424	63
1928	4,686	202	23	6	21	348	0	0	2,389	…	2,430	-41
1929	4,578	216	29	6	24	393	0	0	2,355	…	2,428	-73
1930	4,603	211	19	6	22	375	0	0	2,471	…	2,375	96
1931	5,360	222	54	79	31	354	0	0	1,961	…	1,994	-33
1932	5,388	272	8	19	24	355	0	0	2,509	…	1,933	576
1933	5,519	284	3	4	128	360	0	0	2,729	…	1,870	859
1934	5,536	3,029	121	20	169	241	0	0	4,096	…	2,282	1,814
1935	5,882	2,566	544	29	226	253	0	0	5,587	…	2,743	2,844
1936	6,543	2,376	244	99	160	261	0	0	6,606	…	4,622	1,984
1937	6,550	3,619	142	172	235	263	0	0	7,027	…	5,815	1,212
1938	6,856	2,706	923	199	242	260	0	0	8,724	…	5,519	3,205
1939	7,598	2,409	634	397	256	251	0	0	11,653	…	6,444	5,209
1940	8,732	2,213	368	1,133	599	284	0	0	14,026	…	7,411	6,615
1941	11,160	2,215	867	774	586	291	0	0	12,450	…	9,365	3,085
1942	15,410	2,193	799	793	485	256	0	0	13,117	…	11,129	1,988
1943	20,449	2,303	579	1,360	356	339	0	0	12,886	…	11,650	1,236
1944	25,307	2,375	440	1,204	394	402	0	0	14,373	…	12,748	1,625
1945	28,515	2,287	977	862	446	495	0	0	15,915	…	14,457	1,458
1946	28,952	2,272	393	508	314	607	0	0	16,139	…	15,577	562
1947	28,868	1,336	870	392	569	563	0	0	17,899	…	16,400	1,499
1948	28,224	1,325	1123	642	547	590	0	0	20,479	…	19,277	1,202
1949	27,600	1,312	821	767	750	706	0	0	16,568	…	15,550	1,018
1950	27,741	1,293	668	895	565	714	0	0	17,681	…	16,509	1,172
1951	29,206	1,270	247	526	363	746	0	0	20,056	…	19,667	389
1952	30,433	1,270	389	550	455	777	0	0	19,950	…	20,520	-570
1953	30,781	761	346	423	493	839	0	0	20,160	…	19,397	763
1954	30,509	796	563	490	441	907	0	0	18,876	…	18,618	258
1955	31,158	767	394	402	554	925	0	0	19,005	…	18,903	102
1956	31,790	775	441	322	426	901	0	0	19,059	…	19,089	-30
1957	31,834	761	481	356	246	998	0	0	19,034	…	19,091	-57
1958	32,193	683	358	272	391	1,122	0	0	18,504	…	18,574	-70
1959	32,591	391	504	345	694	841	0	0	18,174	310	18,619	-135
1960	32,869	377	485	217	533	941	0	0	17,081	2,544	18,988	637
1961	33,918	422	465	279	320	1,044	0	0	17,387	2,823	20,114	96
1962	35,338	380	597	247	393	1,007	0	0	17,454	3,262	20,071	645
1963	37,692	361	880	171	291	1,065	0	0	17,049	4,099	20,677	471
1964	39,619	612	820	229	321	1,036	0	0	18,086	4,151	21,663	574
1965	42,056	760	668	150	355	211	0	0	18,447	4,163	22,848	-238
1966	44,663	1,176	416	174	588	-147	0	0	19,779	4,310	24,321	-232
1967	47,226	1,344	1,123	135	653	-773	0	0	21,092	4,631	25,905	-182
1968	50,961	695	703	216	747	-1,353	0	0	21,818	4,921	27,439	-700
1969	53,950	596	1,312	134	807	0	0	1,919	22,085	5,187	28,173	-901

(continued on next page)

Table 6C.—*continued*

Period	Factors absorbing reserve funds								Member bank reserves[9]			
	Currency in circulation	Treasury cash holdings[8]	Deposits with Federal Reserve Banks, other than reserve balances			Other Federal Reserve accounts[5]	Required clearing balances	Other Federal Reserve liabilities and capital[5]	With Federal Reserve Banks	Currency and coin[10]	Required[11]	Excess[11,12]
			Treasury	Foreign	Other							
1970	57,093	431	1,156	148	1,233	0	0	1,986	24,150	5,423	30,033	-460
1971	61,068	460	2,020	294	999	0	0	2,131	27,788	5,743	32,496	1,035
1972	66,516	345	1,855	325	840	0	0	2,143	25,647	6,216	32,044	98
1973	72,497	317	2,542	251	1,149[13]	0	0	2,669	27,060	6,781	35,268	-1,360
1974	79,743	185	3,113	418	1,275[13]	0	0	2,935	25,843	7,370	37,011	-3,798
1975	86,547	483	7,285	353	1,090	0	0	2,968	26,052	8,036	35,197	-1,103[14]
1976	93,717	460	10,393	352	1,357	0	0	3,063	25,158	8,628	35,461	-1,535
1977	103,811	392	7,114	379	1,187	0	0	3,292	26,870	9,421	37,615	-1,265
1978	114,645	240	4,196	368	1,256	0	0	4,275	31,152	10,538	42,694	-893
1979	125,600	494	4,075	429	1,412	0	0	4,957	29,792	11,429	44,217	-2,835
1980	136,829	441	3,062	411	617	0	0	4,671	27,456	13,654	40,558	675
1981	144,774	443	4,301	505	781	0	117	5,261	25,111	15,576	42,145	-1,442
1982	154,908	429	5,033	328	1,033	0	436	4,990	26,053	16,666	41,391	1,328
1983	171,935	479	3,661	191	851	0	1013	5,392	20,413	17,821	39,179	-945

8 Coin and paper currency held by the Treasury, as well as any gold in excess of the gold certificates issued to the Reserve Bank.

9 In November 1979 and thereafter, includes reserves of member banks, Edge Act corporations, and U.S. agencies and branches of foreign banks. On November 13, 1980, and thereafter, includes reserves of all depository institutions.

10 Between December 1, 1959, and November 23, 1960, part was allowed as reserves; thereafter, all was allowed.

11 Estimated through 1958. Before 1929, data were available only on call dates (in 1920 and 1922 the call date was December 29). Since September 12, 1968, the amount has been based on close-of-business figures for the reserve period two weeks before the report date.

12 For the week ending November 15, 1972, and thereafter, includes $450 million of reserve deficiencies on which Federal Reserve Banks are allowed to waive penalties for a transition period in connection with bank adaptation to Regulation J as amended, effective November 9, 1972. Allowable deficiencies are as follows (beginning with first statement week of quarter, in millions): 1973—Q1, $279; Q2, $172; Q3, $112; Q4, $84; 1974—Q1, $67; Q2, $58. The transition period ended with the second quarter of 1974.

13 For the period before July 1973, includes certain deposits of domestic nonmember banks and foreign-owned banking institutions held with member banks and redeposited in full with Federal Reserve Banks in connection with voluntary participation by nonmember institutions in the Federal Reserve System program of credit restraint. As of December 12, 1974, the amount of voluntary nonmember bank and foreign-agency and branch deposits at Federal Reserve Banks that are associated with marginal reserves is no longer reported. However, two amounts are reported: (1) deposits voluntarily held as reserves by agencies and branches of foreign banks operating in the United States and (2) Eurodollar liabilities.

14 Adjusted to include waivers of penalties for reserve deficiencies, in accordance with change in Board policy, effective November 19, 1975.

... Not applicable.

Table 7. Principal assets and liabilities of insured commercial banks, by class of bank, June 30, 2012 and 2011
Millions of dollars, except as noted

Item	Total	Member banks			Nonmember banks
		Total	National	State	
2012					
Assets					
Loans and investments	8,942,607	7,239,403	5,926,681	1,312,722	1,703,204
Loans, gross	6,290,902	4,994,722	4,137,456	857,266	1,296,180
Net	6,289,482	4,994,032	4,137,004	857,028	1,295,450
Investments	2,651,705	2,244,681	1,789,225	455,456	407,024
U.S. Treasury and federal agency securities	379,994	299,720	234,048	65,672	80,274
Other	2,271,711	1,944,961	1,555,178	389,784	326,750
Cash assets, total	917,457	758,044	572,540	185,503	159,413
Liabilities					
Deposits, total	7,979,069	6,433,980	5,241,978	1,192,001	1,545,089
Interbank	165,317	142,602	122,121	20,481	22,715
Other transactions	1,189,781	950,797	687,646	263,151	238,983
Other nontransactions	6,623,971	5,340,581	4,432,211	908,369	1,283,391
Equity capital	1,445,279	1,207,868	994,963	212,905	237,411
Number of banks	6,187	2,097	1,284	813	4,090
2011					
Assets					
Loans and investments	8,434,335	6,808,930	5,576,020	1,232,910	1,625,405
Loans, gross	6,041,199	4,788,631	3,959,630	829,000	1,252,569
Net	6,039,137	4,787,552	3,958,813	828,739	1,251,585
Investments	2,393,136	2,020,300	1,616,390	403,910	372,837
U.S. Treasury and federal agency securities	379,737	288,730	220,572	68,158	91,007
Other	2,013,399	1,731,570	1,395,818	335,752	281,830
Cash assets, total	972,319	831,390	624,046	207,344	140,929
Liabilities					
Deposits, total	7,259,837	5,799,846	4,704,506	1,095,339	1,459,991
Interbank	126,687	103,515	83,779	19,737	23,172
Other transactions	1,021,851	805,409	598,682	206,727	216,442
Other nontransactions	6,111,298	4,890,921	4,022,045	868,876	1,220,377
Equity capital	1,381,748	1,156,633	947,815	208,818	225,114
Number of banks	6,384	2,155	1,347	808	4,229

Note: Includes U.S.-insured commercial banks located in the United States but not U.S.-insured commercial banks operating in U.S. territories or possessions. Data are domestic assets and liabilities (except for those components reported on a consolidated basis only). Components may not sum to totals because of rounding. Data for 2011 have been revised.

Table 8. Initial margin requirements under Regulations T, U, and X
Percent of market value

Effective date	Margin stocks	Convertible bonds	Short sales, T only[1]
1934, Oct. 1	25–45	...	...
1936, Feb. 1	25–55	...	...
1936, Apr. 1	55	...	...
1937, Nov. 1	40	...	50
1945, Feb. 5	50	...	50
1945, July 5	75	...	75
1946, Jan. 21	100	...	100
1947, Feb. 1	75	...	75
1949, Mar. 3	50	...	50
1951, Jan. 17	75	...	75
1953, Feb. 20	50	...	50
1955, Jan. 4	60	...	60
1955, Apr. 23	70	...	70
1958, Jan. 16	50	...	50
1958, Aug. 5	70	...	70
1958, Oct. 16	90	...	90
1960, July 28	70	...	70
1962, July 10	50	...	50
1963, Nov. 6	70	...	70
1968, Mar. 11	70	50	70
1968, June 8	80	60	80
1970, May 6	65	50	65
1971, Dec. 6	55	50	55
1972, Nov. 24	65	50	65
1974, Jan. 3	50	50	50

Note: These regulations, adopted by the Board of Governors pursuant to the Securities Exchange Act of 1934, limit the amount of credit that may be extended for the purpose of purchasing or carrying margin securities (as defined in the regulations) when the loan is collateralized by such securities. The margin requirement, expressed as a percentage, is the difference between the market value of the securities being purchased or carried (100 percent) and the maximum loan value of the collateral as prescribed by the Board. Regulation T was adopted effective October 1, 1934; Regulation U, effective May 1, 1936; and Regulation X, effective November 1, 1971. The former Regulation G, which was adopted effective March 11, 1968, was merged into Regulation U, effective April 1, 1998.

1 From October 1, 1934, to October 31, 1937, the requirement was the margin "customarily required" by the brokers and dealers.

... Not applicable.

Table 9A. Statement of Condition of the Federal Reserve Banks, by Bank, December 31, 2012 and 2011
Millions of dollars

Item	Total		Boston		New York		Philadelphia		Cleveland		Richmond	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Assets												
Gold certificate account	11,037	11,037	408	390	3,824	3,866	437	432	515	450	890	872
Special drawing rights certificate account	5,200	5,200	196	196	1,818	1,818	210	210	237	237	412	412
Coin	2,108	2,306	38	53	90	80	141	160	145	174	373	409
Loans and securities												
Primary, secondary, and seasonal loans	70	196	2	2	18	9	2	0	0	0	0	5
Term Asset-Backed Securities Loan Facility[1]	560	9,059[r]	…	…	560	9,059[r]	…	…	…	…	…	…
Treasury securities, bought outright[2]	1,666,145	1,663,446	40,467	40,898	934,131	773,574	55,079	56,983	42,361	44,933	118,582	192,111
Government-sponsored enterprise debt securities, bought outright[2]	76,783	103,994	1,865	2,557	43,048	48,362	2,538	3,562	1,952	2,809	5,465	12,010
Federal agency and government-sponsored enterprise mortgage-backed securities, bought outright[3]	926,662	837,683	22,507	20,596	519,536	389,559	30,633	28,696	23,560	22,628	65,952	96,744
Total loans and securities	2,670,220	2,614,378[r]	64,842	64,053	1,497,295	1,220,562[r]	88,252	89,241	67,873	70,370	189,999	300,870
Net portfolio holdings of consolidated variable interest entities[4]	2,750	35,693	…	…	2,750	35,693	…	…	…	…	…	…
Foreign currency denominated assets[5]	24,972	25,950	875	897	8,056	7,516	2,166	2,514	1,846	1,925	5,166	5,321
Central bank liquidity swaps[6]	8,889	99,823	312	3,450	2,867	28,912	771	9,669	657	7,405	1,839	20,469
Other assets												
Items in process of collection	216	363	0	11	0	0	0	53	8	59	0	4
Bank premises	2,318	2,185	119	122	431	261	71	67	115	125	230	233
All other assets[7]	190,990	124,403[r]	4,669	3,085	106,715	57,644[r]	6,322	4,276	4,875	3,372	13,742	14,437
Interdistrict settlement account	0	0	31,984	35,147	-110,116	274,474	-16,451	-28,084	3,671	-4,966	-28,388	-123,650
Total assets	**2,918,700**	**2,921,337**	**103,443**	**107,403**	**1,513,730**	**1,630,826**	**81,919**	**78,539**	**79,942**	**79,150**	**184,263**	**219,377**
Liabilities												
Federal Reserve notes outstanding	1,354,878	1,205,888	47,464	44,207	478,110	427,406	47,566	45,940	60,564	54,131	103,121	94,381
Less: Notes held by Federal Reserve Bank	228,217	171,836	6,244	4,275	93,101	50,541	4,304	6,177	8,060	9,085	11,462	10,670
Federal Reserve notes outstanding, net	1,126,661	1,034,052	41,220	39,932	385,008	376,865	43,262	39,763	52,504	45,046	91,659	83,711
Securities sold under agreements to repurchase[8]	107,188	99,900	2,603	2,456	60,096	46,458	3,543	3,422	2,725	2,699	7,629	11,537
Deposits												
Depository institutions	1,491,045	1,562,253	56,666	62,799	917,383	1,024,868	30,547	30,250	20,154	26,962	72,657	111,913
Treasury, general account	92,720	85,737	…	…	92,720	85,737	…	…	…	…	…	…
Foreign, official accounts	6,427	125	1	1	6,399	97	3	4	3	3	8	8
Other[9]	27,476	64,909	8	27	27,345	64,754	14	4	0	0	68	81
Total deposits	1,617,668	1,713,023	56,675	62,827	1,043,847	1,175,456	30,564	30,257	20,157	26,965	72,733	112,002

(continued on next page)

Table 9A.—*continued*

Item	Total		Boston		New York		Philadelphia		Cleveland		Richmond	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Other liabilities												
Interest on Federal Reserve notes due to U.S. Treasury[10]	1,407	900	31	51	831	-378	29	78	17	81	51	240
Deferred credit items	702	994	0	58	0	3	0	109	3	142	0	19
Consolidated variable interest entities[11]	1,218	10,535	…	…	1,218	10,535	…	…	…	…	…	…
All other liabilities[12]	9,134	8,134	224	193	5,239	4,533	289	243	268	240	699	739
Total liabilities	**2,863,980**	**2,867,539**	**100,752**	**105,517**	**1,496,240**	**1,613,472**	**77,686**	**73,872**	**75,674**	**75,173**	**172,771**	**208,249**
Capital accounts												
Capital paid in	27,360	26,899	1,345	943	8,745	8,677	2,116	2,333	2,134	1,989	5,746	5,564
Surplus (including accumulated other comprehensive loss)	27,360	26,899	1,345	943	8,745	8,677	2,116	2,333	2,134	1,989	5,746	5,564
Total liabilities and capital accounts	**2,918,700**	**2,921,337**	**103,443**	**107,403**	**1,513,730**	**1,630,826**	**81,919**	**78,539**	**79,942**	**79,150**	**184,263**	**219,377**

Note: Components may not sum to totals because of rounding.

1 Measured at fair value. Amounts include $4 million and $37 million in unrealized gains as of December 31, 2012 and 2011, respectively.

2 Par value. Includes securities loaned—fully collateralized by U.S. Treasury securities, other investment-grade securities, and collateral eligible for tri-party repurchase agreements pledged with Federal Reserve Banks.

3 The par amount shown is the remaining principal balance of the securities.

4 The FRBNY is the primary beneficiary of TALF LLC, Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC and, as a result, the accounts and results of operations of these entities are included in the combined financial statements of the Federal Reserve Banks. For additional details, see "Table 6. Key financial data for consolidated variable interest entities" on page 103.

5 Valued daily at market exchange rates.

6 Dollar value of foreign currency held under these agreements valued at the exchange rate to be used when the foreign currency is returned to the foreign central bank. This exchange rate equals the market exchange rate used when the foreign currency was acquired from the foreign central bank.

7 Includes premiums on securities, accrued interest, and depository institution overdrafts.

8 Contract amount of agreements.

9 Includes deposits of government-sponsored enterprises, the Consumer Financial Protection Bureau, and international organizations. These deposits are primarily held by the FRBNY.

10 Represents the estimated weekly remittances to U.S. Treasury as interest on Federal Reserve notes or, in those cases where the Reserve Bank's net earnings are not sufficient to equate surplus to capital paid-in, the deferred asset for interest on Federal Reserve notes. The amounts on this line are calculated in accordance with Board of Governors policy, which requires the Federal Reserve Banks to remit residual earnings to the U.S. Treasury as interest on Federal Reserve notes after providing for the costs of operations, payment of dividends, and the amount necessary to equate surplus with capital paid-in.

11 The other beneficial interest holder related to the TALF LLC is the U.S. Treasury; to Maiden Lane LLC, it is JPMorgan Chase; and to Maiden Lane II and Maiden Lane III LLCs, it is AIG.

12 Includes discounts on securities, accrued benefit costs, and cash collateral posted by counterparties under commitments to purchase and sell federal agency and GSE MBS.

r Revised.

… Not applicable.

Table 9A. Statement of Condition of the Federal Reserve Banks, by Bank, December 31, 2012 and 2011—*continued*
Millions of dollars

Item	Atlanta		Chicago		St. Louis		Minneapolis		Kansas City		Dallas		San Francisco	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Assets														
Gold certificate account	1,337	1,394	839	854	313	319	192	197	315	318	725	728	1,242	1,217
Special drawing rights certificate account	654	654	424	424	150	150	90	90	153	153	282	282	574	574
Coin	209	205	311	332	35	35	51	60	165	176	196	241	354	381
Loans and securities														
Primary, secondary, and seasonal loans	4	0	9	17	0	0	32	5	3	11	0	132	0	15
Term Asset-Backed Securities Loan Facility[1]	…	…	…	…	…	…	…	…	…	…	…	…	…	…
Treasury securities, bought outright[2]	100,457	123,665	92,430	98,785	26,048	31,484	15,147	25,565	33,473	44,249	64,738	65,789	143,229	165,411
Government-sponsored enterprise debt securities, bought outright[2]	4,629	7,731	4,260	6,176	1,201	1,968	698	1,598	1,543	2,766	2,983	4,113	6,601	10,341
Federal agency and government-sponsored enterprise mortgage-backed securities, bought outright[3]	55,871	62,276	51,407	49,746	14,487	15,855	8,424	12,874	18,617	22,283	36,006	33,130	79,660	83,298
Total loans and securities	160,961	193,672	148,106	154,723	41,736	49,307	24,301	40,041	53,637	69,309	103,727	103,165	229,490	259,065
Net portfolio holdings of consolidated variable interest entities[4]	…	…	…	…	…	…	…	…	…	…	…	…	…	…
Foreign currency denominated assets[5]	1,428	1,487	666	657	204	211	102	802	248	234	400	393	3,815	3,993
Central bank liquidity swaps[6]	508	5,720	237	2,529	73	814	36	3,083	89	899	142	1,512	1,358	15,361
Other assets														
Items in process of collection	208	31	0	19	1	5	0	15	0	6	0	17	0	143
Bank premises	215	214	203	206	131	134	103	105	252	259	239	245	209	213
All other assets[7]	11,557	9,275	10,593	7,376	3,025	2,385	1,786	1,945	3,852	3,318	7,441	4,939	16,414	12,350
Interdistrict settlement account	36,287	-44,538	-856	-5,416	958	-8,856	2,869	-19,268	-4,827	-17,589	5,662	1,679	79,207	-58,932
Total assets	**213,364**	**168,114**	**160,523**	**161,706**	**46,625**	**44,504**	**29,530**	**27,070**	**53,883**	**57,081**	**118,814**	**113,201**	**332,663**	**234,366**
Liabilities														
Federal Reserve notes outstanding	175,865	145,803	95,089	88,894	37,318	33,916	22,352	20,976	36,361	34,479	95,624	80,188	155,444	135,566
Less: Notes held by Federal Reserve Bank	26,016	29,109	12,410	11,962	3,780	4,018	3,123	5,087	6,603	3,418	28,068	11,931	25,047	25,563
Federal Reserve notes outstanding, net	149,849	116,694	82,679	76,932	33,538	29,899	19,229	15,889	29,758	31,061	67,556	68,258	130,397	110,003
Securities sold under agreements to repurchase[8]	6,463	7,427	5,946	5,933	1,676	1,891	974	1,535	2,153	2,657	4,165	3,951	9,214	9,934
Deposits														
Depository institutions	52,776	40,223	69,746	76,732	10,739	12,012	8,790	9,046	21,194	22,542	45,805	39,705	184,588	105,201
Treasury, general account	…	…	…	…	…	…	…	…	…	…	…	…	…	…
Foreign, official accounts	2	2	1	1	0	0	0	1	0	0	1	1	6	6
Other[9]	8	2	26	35	0	0	0	0	2	4	6	1	1	1
Total deposits	52,786	40,227	69,773	76,767	10,739	12,013	8,790	9,048	21,196	22,546	45,812	39,707	184,595	105,208

(continued on next page)

Table 9A.—*continued*

Item	Atlanta		Chicago		St. Louis		Minneapolis		Kansas City		Dallas		San Francisco	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Other liabilities														
Interest on Federal Reserve notes due to U.S. Treasury[10]	90	171	89	170	27	53	11	34	39	63	75	88	118	248
Deferred credit items	553	57	0	56	0	36	147	194	0	38	0	45	0	237
Consolidated variable interest entities[11]	…	…	…	…	…	…	…	…	…	…	…	…	…	…
All other liabilities[12]	505	462	477	413	189	173	149	149	183	182	337	290	576	516
Total liabilities	**210,246**	**165,037**	**158,963**	**160,271**	**46,169**	**44,064**	**29,300**	**26,851**	**53,329**	**56,546**	**117,946**	**112,339**	**324,901**	**226,147**
Capital accounts														
Capital paid in	1,559	1,538	780	718	228	220	115	110	277	268	434	431	3,881	4,109
Surplus (including accumulated other comprehensive loss)	1,559	1,538	780	718	228	220	115	110	277	268	434	431	3,881	4,109
Total liabilities and capital accounts	**213,364**	**168,114**	**160,523**	**161,706**	**46,625**	**44,504**	**29,530**	**27,070**	**53,883**	**57,081**	**118,814**	**113,201**	**332,663**	**234,366**

Note: Components may not sum to totals because of rounding.

1 Measured at fair value. Amounts include $4 million and $37 million in unrealized gains as of December 31, 2012 and 2011, respectively.

2 Par value. Includes securities loaned—fully collateralized by U.S. Treasury securities, other investment-grade securities, and collateral eligible for tri-party repurchase agreements pledged with Federal Reserve Banks.

3 The par amount shown is the remaining principal balance of the securities.

4 The FRBNY is the primary beneficiary of TALF LLC, Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC and, as a result, the accounts and results of operations of these entities are included in the combined financial statements of the Federal Reserve Banks. For additional details, see "Table 6. Key financial data for consolidated variable interest entities" on page 103.

5 Valued daily at market exchange rates.

6 Dollar value of foreign currency held under these agreements valued at the exchange rate to be used when the foreign currency is returned to the foreign central bank. This exchange rate equals the market exchange rate used when the foreign currency was acquired from the foreign central bank.

7 Includes premiums on securities, accrued interest, and depository institution overdrafts.

8 Contract amount of agreements.

9 Includes deposits of government-sponsored enterprises, the Consumer Financial Protection Bureau, and international organizations. These deposits are primarily held by the FRBNY.

10 Represents the estimated weekly remittances to U.S. Treasury as interest on Federal Reserve notes or, in those cases where the Reserve Bank's net earnings are not sufficient to equate surplus to capital paid-in, the deferred asset for interest on Federal Reserve notes. The amounts on this line are calculated in accordance with Board of Governors policy, which requires the Federal Reserve Banks to remit residual earnings to the U.S. Treasury as interest on Federal Reserve notes after providing for the costs of operations, payment of dividends, and the amount necessary to equate surplus with capital paid-in.

11 The other beneficial interest holder related to the TALF LLC is the U.S. Treasury; to Maiden Lane LLC, it is JPMorgan Chase; and to Maiden Lane II and Maiden Lane III LLCs, it is AIG.

12 Includes discounts on securities, accrued benefit costs, and cash collateral posted by counterparties under commitments to purchase and sell federal agency and GSE MBS.

r Revised.

… Not applicable.

Table 9B. Statement of Condition of the Federal Reserve Banks, December 31, 2012 and 2011
Supplemental information—collateral held against Federal Reserve notes: Federal Reserve agents' accounts
Millions of dollars

Item	2012	2011
Federal Reserve notes outstanding	1,354,877	1,205,888
Less: Notes held by Federal Reserve Banks not subject to collateralization	228,216	171,836
Collateralized Federal Reserve notes	**1,126,661**	**1,034,052**
Collateral for Federal Reserve notes		
Gold certificate account	11,037	11,037
Special drawing rights certificate account	5,200	5,200
U.S. Treasury securities[1]	1,110,424	1,017,815
Total collateral	**1,126,661**	**1,034,052**

1 Face value. Includes compensation to adjust for the effect of inflation on the original face value of inflation-indexed securities.

Table 10. Income and expenses of the Federal Reserve Banks, by Bank, 2012
Thousands of dollars

Item	Total	Boston	New York	Philadelphia	Cleveland	Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
Current income													
Interest income													
Primary, secondary, and seasonal loans	278	4	14	2	3	9	25	21	23	60	17	74	26
Term Asset-Backed Securities Loan Facility	80,338	…	80,338	…	…	…	…	…	…	…	…	…	…
Total loan interest income	80,616	4	80,352	2	3	9	25	21	23	60	17	74	26
Treasury securities	46,415,600	1,131,247	24,773,580	1,550,058	1,200,836	3,882,655	2,982,151	2,626,033	768,699	504,001	1,017,589	1,812,569	4,166,182
Government-sponsored enterprise debt securities	2,626,052	64,024	1,394,644	87,785	68,055	222,899	169,745	148,858	43,731	28,972	58,047	102,600	236,692
Federal agency and government-sponsored enterprise mortgage-backed securities	31,429,248	766,322	16,670,745	1,050,891	814,847	2,677,308	2,034,593	1,782,415	524,092	348,108	696,125	1,228,096	2,835,706
Foreign currency denominated assets	138,969	4,866	44,433	12,175	10,277	28,725	7,948	3,691	1,136	888	1,371	2,216	21,243
Central bank liquidity swaps[1]	241,171	8,433	76,395	21,349	17,840	49,811	13,795	6,377	1,971	2,124	2,359	3,826	36,891
Other investments	8,966	218	4,963	297	229	668	550	500	142	86	184	349	780
Total SOMA interest income	80,860,006	1,975,110	42,964,760	2,722,555	2,112,084	6,862,066	5,208,782	4,567,874	1,339,771	884,179	1,775,675	3,149,656	7,297,494
Total interest income	80,940,622	1,975,114	43,045,112	2,722,557	2,112,087	6,862,075	5,208,807	4,567,895	1,339,794	884,239	1,775,692	3,149,730	7,297,520
Priced services	449,319	…	81,662	…	…	…	290,282	77,375	…	…	…	…	…
Compensation received for services provided[2]	184,417	14,737	3,058	1,672	15,099	19,199	574	20,013	3,192	53,332	36,762	7,893	8,886
Securities lending fees	9,329	228	4,810	314	244	859	624	535	160	112	216	366	861
Other income	2,415	6	2,175	95	48	19	7	15	5	8	8	22	7
Total other income	645,480	14,971	91,705	2,081	15,391	20,077	291,487	97,938	3,357	53,452	36,986	8,281	9,754
Total current income	**81,586,102**	**1,990,085**	**43,136,817**	**2,724,638**	**2,127,478**	**6,882,152**	**5,500,294**	**4,665,833**	**1,343,151**	**937,691**	**1,812,678**	**3,158,011**	**7,307,274**
Current expenses													
Interest expense on securities sold under agreements to repurchase	141,943	3,456	76,873	4,726	3,654	11,358	8,956	7,985	2,312	1,468	3,036	5,535	12,584
Interest on reserves[3]	3,871,302	72,887	2,574,852	91,296	44,527	227,019	114,308	173,377	32,489	19,790	51,439	103,573	365,745
Interest on term deposits[4]	3,653	12	2,195	598	9	264	48	90	1	81	196	6	153
Personnel													
Salaries and other personnel expenses	1,888,219	102,753	468,094	83,378	82,928	281,119	142,255	144,110	94,546	97,089	122,568	99,622	169,757
Retirement and other benefits	617,285	31,086	148,026	28,627	30,293	89,971	55,205	48,517	29,674	31,619	30,462	37,796	56,009
Net periodic pension expense[5]	640,919	791	637,198	878	-75	321	1,884	104	131	404	-188	-63	-466
Administrative													
Fees	183,179	3,938	46,915	8,941	5,183	67,168	17,160	8,922	11,940	3,092	1,918	2,433	5,569
Travel	99,296	3,795	14,367	3,684	5,807	16,600	9,338	11,777	5,987	4,261	7,156	5,493	11,031
Postage and other shipping costs	14,721	362	825	302	1,513	742	2,651	435	773	450	1,036	2,517	3,115
Communications	47,561	906	6,040	726	740	28,481	1,828	1,929	1,183	1,558	1,265	1,449	1,456
Materials and supplies	69,413	3,436	25,676	7,202	2,465	6,149	5,009	4,728	2,385	1,602	2,582	3,936	4,243
Building													
Taxes on real estate	46,772	5,944	12,862	1,814	2,067	3,028	3,328	2,822	718	3,484	3,355	3,510	3,840
Property depreciation	133,873	11,652	28,849	5,622	7,036	14,153	8,465	15,329	8,214	4,199	7,984	11,380	10,990
Utilities	38,604	3,743	9,213	1,906	1,692	4,161	3,400	2,097	1,711	1,789	2,006	3,682	3,204
Rent	34,983	180	7,382	911	317	22,797	159	1,079	972	275	493	170	248
Other building	61,001	4,703	10,551	3,708	3,328	5,971	5,623	7,469	2,294	2,442	1,692	9,303	3,917

(continued on next page)

Table 10.—*continued*

Item	Total	Boston	New York	Philadelphia	Cleveland	Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
Equipment/software													
Purchases	40,665	3,088	6,677	2,009	1,914	7,854	2,764	4,162	2,096	2,166	3,014	2,779	2,142
Rentals	3,686	285	1,300	201	279	230	497	688	21	72	13	50	50
Depreciation	85,433	4,066	8,655	3,801	2,062	44,262	3,561	3,336	2,663	1,583	3,219	3,011	5,214
Repairs and maintenance	62,846	4,553	5,871	3,093	2,039	23,362	5,777	3,651	1,628	1,294	2,296	3,250	6,032
Software	171,773	5,061	35,699	10,455	4,922	66,972	12,343	3,889	3,224	5,694	5,167	10,648	7,699
Other expenses													
Compensation paid for service costs incurred[2]	184,428	…	32,287	…	…	…	140,430	11,711	…	…	…	…	…
Other expenses	77,954	14,266	84,159	16,744	4,856	-280,691	38,945	53,774	74,770	22,009	7,135	21,935	20,052
Recoveries	-151,914	-17,525	-22,077	-4,406	-4,658	-41,459	-11,908	-10,110	-7,101	-2,317	-8,969	-14,270	-7,114
Expenses capitalized[6]	-62,801	-5,715	-23,933	-738	-2,530	-5,159	-346	-2,181	-3,675	-9,298	-702	-902	-7,622
Total current expenses	**8,304,794**	**257,723**	**4,198,556**	**275,478**	**200,368**	**594,673**	**571,680**	**499,690**	**268,956**	**194,806**	**248,173**	**316,843**	**677,848**
Reimbursements	-506,441	-32,295	-124,159	-38,826	-25,260	-49,460	-19,207	-5,624	-110,800	-35,343	-25,656	-26,364	-13,447
Net expenses	7,798,353	225,428	4,074,397	236,652	175,108	545,213	552,473	494,066	158,156	159,463	222,517	290,479	664,401
Current net income	73,787,749	1,764,657	39,062,420	2,487,986	1,952,370	6,336,939	4,947,821	4,171,767	1,184,995	778,228	1,590,161	2,867,532	6,642,873
Additions to (+) and deductions from (-) current net income													
Profit on sales of Treasury securities	13,254,934	322,811	7,151,353	441,689	341,649	1,073,199	840,338	746,780	216,875	138,889	285,368	517,059	1,178,924
Profit on sales of Federal agency and government-sponsored enterprise mortgage-backed securities	241,382	5,899	123,752	8,125	6,329	22,547	16,255	13,864	4,173	2,955	5,638	9,463	22,382
Foreign currency translation gains (losses)	-1,116,381	-39,194	-363,902	-95,664	-82,507	-231,140	-63,820	-29,940	-9,134	-1,463	-11,213	-17,983	-170,421
Term Asset-Backed Securities Loan Facility unrealized losses[7]	-33,637	…	-33,637	…	…	…	…	…	…	…	…	…	…
Net income from consolidated variable interest entities[8]	6,037,978	…	6,037,978	…	…	…	…	…	…	…	…	…	…
Other additions	372	27	100	5	0	2	0	12	0	0	0	0	226
Other deductions	-3,807	-1	0	0	0	0	0	0	0	-76	0	0	-3,730
Net addition to (+) current net income	18,380,841	289,542	12,915,644	354,155	265,471	864,608	792,773	730,716	211,914	140,305	279,793	508,539	1,027,381
Cost of unreimbursed Treasury services	6	…	6	…	…	…	…	…	…	…	…	…	…
Assessments by Board													
Board expenditures[9]	490,001	20,302	157,276	40,754	37,062	99,838	27,910	13,685	4,004	2,016	4,877	7,901	74,376
Cost of currency	722,301	35,047	148,871	34,908	39,555	67,053	102,907	65,879	23,604	15,202	24,599	57,729	106,947
Consumer Financial Protection Bureau[10]	385,200	17,906	123,098	30,835	29,681	78,105	21,744	10,890	3,145	1,585	3,842	6,166	58,203
Office of Financial Research[10]	2,079	87	656	333	161	277	116	58	11	2	13	30	335
Net income before interest on Federal Reserve notes expense remitted to Treasury	90,569,006	1,980,857	51,548,162	2,735,306	2,111,383	6,956,277	5,587,918	4,811,971	1,366,146	899,730	1,836,620	3,304,244	7,430,392
Interest on Federal Reserve notes expense remitted to Treasury	88,417,936	1,497,670	51,022,917	2,812,450	1,830,583	6,413,920	5,452,810	4,690,388	1,336,831	881,740	1,807,401	3,266,764	7,404,462
Net income	2,151,071	483,187	525,245	-77,144	280,800	542,357	135,108	121,583	29,316	17,990	29,219	37,480	25,930
Other comprehensive income (loss)	-52,611	-3,349	65,845	-8,149	-9,135	-28,302	-22,192	-12,866	-7,832	-6,375	-3,568	-8,068	-8,620
Comprehensive income	2,098,460	479,838	591,091	-85,293	271,665	514,055	112,916	108,716	21,483	11,615	25,652	29,412	17,310

(continued on next page)

Table 10.—*continued*

Item	Total	Boston	New York	Philadelphia	Cleveland	Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
Distribution of comprehensive income													
Dividends on capital stock	1,637,934	78,087	522,719	131,613	126,080	332,329	92,388	46,147	13,383	6,766	16,365	26,220	245,837
Transferred to/from surplus and change in accumulated other comprehensive income	460,528	401,751	68,372	-216,906	145,586	181,726	20,528	62,570	8,101	4,849	9,287	3,192	-228,528
Interest on Federal Reserve notes expense remitted to Treasury	88,417,936	1,497,670	51,022,917	2,812,450	1,830,583	6,413,920	5,452,810	4,690,388	1,336,831	881,740	1,807,401	3,266,764	7,404,462
Total distribution of comprehensive income	**90,516,398**	**1,977,508**	**51,614,008**	**2,727,157**	**2,102,249**	**6,927,975**	**5,565,726**	**4,799,105**	**1,358,315**	**893,355**	**1,833,053**	**3,296,176**	**7,421,771**

Note: Components may not sum to totals because of rounding.

[1] Represents interest income recognized on swap agreements with foreign central banks.

[2] The Federal Reserve Bank of Atlanta (FRBA) has overall responsibility for managing the Reserve Banks' provision of check and automated clearinghouse (ACH) services and recognizes total System revenue for these services. The Federal Reserve Bank of New York (FRBNY) has overall responsibility for managing the Reserve Banks' provision of Fedwire funds transfer and securities transfer services, and recognizes the total System revenue for these services. The Federal Reserve Bank of Chicago (FRBC) has overall responsibility for managing the Reserve Banks' provision of electronic access services to depository institutions, and recognizes the total System revenue for these services. The FRBA, the FRBNY, and the FRBC compensate the other Reserve Banks for the costs incurred in providing these services.

[3] In October 2008, the Reserve Banks began to pay interest to depository institutions on qualifying balances held at the Federal Reserve Banks.

[4] In April 2010, the Reserve Banks began to pay interest on term deposits under the Term Deposit Facility.

[5] Reflects the effect of the Financial Accounting Standards Board's Codification Topic (ASC 715) Compensation - Retirement Benefits. Net pension expense for the System Retirement Plan of $638,091 thousand is recorded on behalf of the System in the books of the FRBNY. The Retirement Benefit Equalization Plan and the Supplemental Employee Retirement Plan are recorded by each Federal Reserve Bank.

[6] Includes expenses for labor and materials capitalized and depreciated or amortized as charges to activities in the periods benefited.

[7] Represents the valuation adjustment for Term Asset-Backed Securities Loan Facility (TALF) loans, which are recorded at fair value. In addition to the valuation adjustment, earnings on TALF loans include interest income of $265 million, and the FRBNY's allocated share of TALF LLC's net income.

[8] Represents the portion of the consolidated variable interest entities' net income recorded by the FRBNY. The amount includes interest income, interest expenses, realized and unrealized gains and losses, and professional fees.

[9] For additional details, see the "Board of Governors Financial Statements" on page 320 in the "Federal Reserve System Audits" section of this report.

[10] The Board of Governors assesses the Reserve Banks to fund the operations of the Consumer Financial Protection Bureau and Office of Financial Research. These assessments are allocated to each Reserve Bank based on each Reserve Bank's capital and surplus balances as of the most recent quarter.

… Not applicable.

Table 11. Income and expenses of the Federal Reserve Banks, 1914–2012

Thousands of dollars

Federal Reserve Bank and period	Current income	Net expenses	Net additions or deductions (-)[1]	Assessments by the Board of Governors			Other comprehensive income (loss)	Dividends paid	Distributions to the U.S. Treasury		Transferred to/from surplus[4]	Transferred to/from surplus and change in accumulated other comprehensive income[5]
				Board expenditures	Costs of currency	Consumer Financial Protection Bureau and Office of Financial Research[2]			Statutory transfers[3]	Interest on Federal Reserve notes		
All banks												
1914–15	2,173	2,018	6	302	…	…	…	217	…	…	…	…
1916	5,218	2,082	-193	192	…	…	…	1,743	…	…	…	…
1917	16,128	4,922	-1,387	238	…	…	…	6,804	1,134	…	…	1,134
1918	67,584	10,577	-3,909	383	…	…	…	5,541	…	…	…	48,334
1919	102,381	18,745	-4,673	595	…	…	…	5,012	2,704	…	…	70,652
1920	181,297	27,549	-3,744	710	…	…	…	5,654	60,725	…	…	82,916
1921	122,866	33,722	-6,315	741	…	…	…	6,120	59,974	…	…	15,993
1922	50,499	28,837	-4,442	723	…	…	…	6,307	10,851	…	…	-660
1923	50,709	29,062	-8,233	703	…	…	…	6,553	3,613	…	…	2,546
1924	38,340	27,768	-6,191	663	…	…	…	6,682	114	…	…	-3,078
1925	41,801	26,819	-4,823	709	…	…	…	6,916	59	…	…	2,474
1926	47,600	24,914	-3,638	722	1,714	…	…	7,329	818	…	…	8,464
1927	43,024	24,894	-2,457	779	1,845	…	…	7,755	250	…	…	5,044
1928	64,053	25,401	-5,026	698	806	…	…	8,458	2,585	…	…	21,079
1929	70,955	25,810	-4,862	782	3,099	…	…	9,584	4,283	…	…	22,536
1930	36,424	25,358	-93	810	2,176	…	…	10,269	17	…	…	-2,298
1931	29,701	24,843	311	719	1,479	…	…	10,030	…	…	…	-7,058
1932	50,019	24,457	-1,413	729	1,106	…	…	9,282	2,011	…	…	11,021
1933	49,487	25,918	-12,307	800	2,505	…	…	8,874	…	…	…	-917
1934	48,903	26,844	-4,430	1,372	1,026	…	…	8,782	…	…	-60	6,510
1935	42,752	28,695	-1,737	1,406	1,477	…	…	8,505	298	…	28	607
1936	37,901	26,016	486	1,680	2,178	…	…	7,830	227	…	103	353
1937	41,233	25,295	-1,631	1,748	1,757	…	…	7,941	177	…	67	2,616
1938	36,261	25,557	2,232	1,725	1,630	…	…	8,019	120	…	-419	1,862
1939	38,501	25,669	2,390	1,621	1,356	…	…	8,110	25	…	-426	4,534
1940	43,538	25,951	11,488	1,704	1,511	…	…	8,215	82	…	-54	17,617
1941	41,380	28,536	721	1,840	2,588	…	…	8,430	141	…	-4	571
1942	52,663	32,051	-1,568	1,746	4,826	…	…	8,669	198	…	50	3,554
1943	69,306	35,794	23,768	2,416	5,336	…	…	8,911	245	…	135	40,327
1944	104,392	39,659	3,222	2,296	7,220	…	…	9,500	327	…	201	48,410
1945	142,210	41,666	-830	2,341	4,710	…	…	10,183	248	…	262	81,970
1946	150,385	50,493	-626	2,260	4,482	…	…	10,962	67	…	28	81,467
1947	158,656	58,191	1,973	2,640	4,562	…	…	11,523	36	75,284	87	8,366
1948	304,161	64,280	-34,318	3,244	5,186	…	…	11,920	…	166,690	…	18,523
1949	316,537	67,931	-12,122	3,243	6,304	…	…	12,329	…	193,146	…	21,462
1950	275,839	69,822	36,294	3,434	7,316	…	…	13,083	…	196,629	…	21,849
1951	394,656	83,793	-2,128	4,095	7,581	…	…	13,865	…	254,874	…	28,321
1952	456,060	92,051	1,584	4,122	8,521	…	…	14,682	…	291,935	…	46,334
1953	513,037	98,493	-1,059	4,100	10,922	…	…	15,558	…	342,568	…	40,337
1954	438,486	99,068	-134	4,175	6,490	…	…	16,442	…	276,289	…	35,888
1955	412,488	101,159	-265	4,194	4,707	…	…	17,712	…	251,741	…	32,710
1956	595,649	110,240	-23	5,340	5,603	…	…	18,905	…	401,556	…	53,983
1957	763,348	117,932	-7,141	7,508	6,374	…	…	20,081	…	542,708	…	61,604
1958	742,068	125,831	124	5,917	5,973	…	…	21,197	…	524,059	…	59,215
1959	886,226	131,848	98,247	6,471	6,384	…	…	22,722	…	910,650	…	-93,601
1960	1,103,385	139,894	13,875	6,534	7,455	…	…	23,948	…	896,816	…	42,613
1961	941,648	148,254	3,482	6,265	6,756	…	…	25,570	…	687,393	…	70,892
1962	1,048,508	161,451	-56	6,655	8,030	…	…	27,412	…	799,366	…	45,538
1963	1,151,120	169,638	615	7,573	10,063	…	…	28,912	…	879,685	…	55,864

(continued on next page)

Table 11.—*continued*

Federal Reserve Bank and period	Current income	Net expenses	Net additions or deductions (-)[1]	Assessments by the Board of Governors			Other comprehensive income (loss)	Dividends paid	Distributions to the U.S. Treasury		Transferred to/from surplus[4]	Transferred to/from surplus and change in accumulated other comprehensive income[5]
				Board expenditures	Costs of currency	Consumer Financial Protection Bureau and Office of Financial Research[2]			Statutory transfers[3]	Interest on Federal Reserve notes		
1964	1,343,747	171,511	726	8,655	17,230	…	…	30,782	…	1,582,119	…	-465,823
1965	1,559,484	172,111	1,022	8,576	23,603	…	…	32,352	…	1,296,810	…	27,054
1966	1,908,500	178,212	996	9,022	20,167	…	…	33,696	…	1,649,455	…	18,944
1967	2,190,404	190,561	2,094	10,770	18,790	…	…	35,027	…	1,907,498	…	29,851
1968	2,764,446	207,678	8,520	14,198	20,474	…	…	36,959	…	2,463,629	…	30,027
1969	3,373,361	237,828	-558	15,020	22,126	…	…	39,237	…	3,019,161	…	39,432
1970	3,877,218	276,572	11,442	21,228	23,574	…	…	41,137	…	3,493,571	…	32,580
1971	3,723,370	319,608	94,266	32,634	24,943	…	…	43,488	…	3,356,560	…	40,403
1972	3,792,335	347,917	-49,616	35,234	31,455	…	…	46,184	…	3,231,268	…	50,661
1973	5,016,769	416,879	-80,653	44,412	33,826	…	…	49,140	…	4,340,680	…	51,178
1974	6,280,091	476,235	-78,487	41,117	30,190	…	…	52,580	…	5,549,999	…	51,483
1975	6,257,937	514,359	-202,370	33,577	37,130	…	…	54,610	…	5,382,064	…	33,828
1976	6,623,220	558,129	7,311	41,828	48,819	…	…	57,351	…	5,870,463	…	53,940
1977	6,891,317	568,851	-177,033	47,366	55,008	…	…	60,182	…	5,937,148	…	45,728
1978	8,455,309	592,558	-633,123	53,322	60,059	…	…	63,280	…	7,005,779	…	47,268
1979	10,310,148	625,168	-151,148	50,530	68,391	…	…	67,194	…	9,278,576	…	69,141
1980	12,802,319	718,033	-115,386	62,231	73,124	…	…	70,355	…	11,706,370	…	56,821
1981	15,508,350	814,190	-372,879	63,163	82,924	…	…	74,574	…	14,023,723	…	76,897
1982	16,517,385	926,034	-68,833	61,813	98,441	…	…	79,352	…	15,204,591	…	78,320
1983	16,068,362	1,023,678	-400,366	71,551	152,135	…	…	85,152	…	14,228,816	…	106,663
1984	18,068,821	1,102,444	-412,943	82,116	162,606	…	…	92,620	…	16,054,095	…	161,996
1985	18,131,983	1,127,744	1,301,624	77,378	173,739	…	…	103,029	…	17,796,464	…	155,253
1986	17,464,528	1,156,868	1,975,893	97,338	180,780	…	…	109,588	…	17,803,895	…	91,954
1987	17,633,012	1,146,911	1,796,594	81,870	170,675	…	…	117,499	…	17,738,880	…	173,771
1988	19,526,431	1,205,960	-516,910	84,411	164,245	…	…	125,616	…	17,364,319	…	64,971
1989	22,249,276	1,332,161	1,254,613	89,580	175,044	…	…	129,885	…	21,646,417	…	130,802
1990	23,476,604	1,349,726	2,099,328	103,752	193,007	…	…	140,758	…	23,608,398	…	180,292
1991	22,553,002	1,429,322	405,729	109,631	261,316	…	…	152,553	…	20,777,552	…	228,356
1992	20,235,028	1,474,531	-987,788	128,955	295,401	…	…	171,763	…	16,774,477	…	402,114
1993	18,914,251	1,657,800	-230,268	140,466	355,947	…	…	195,422	…	15,986,765	…	347,583
1994	20,910,742	1,795,328	2,363,862	146,866	368,187	…	…	212,090	…	20,470,011	…	282,122
1995	25,395,148	1,818,416	857,788	161,348	370,203	…	…	230,527	…	23,389,367	…	283,075
1996	25,164,303	1,947,861	-1,676,716	162,642	402,517	…	…	255,884	5,517,716	14,565,624	…	635,343
1997	26,917,213	1,976,453	-2,611,570	174,407	364,454	…	…	299,652	20,658,972	0	…	831,705
1998	28,149,477	1,833,436	1,906,037	178,009	408,544	…	…	343,014	17,785,942	8,774,994	…	731,575
1999	29,346,836	1,852,162	-533,557	213,790	484,959	…	…	373,579	…	25,409,736	…	479,053
2000	33,963,992	1,971,688	-1,500,027	188,067	435,838	…	…	409,614	…	25,343,892	…	4,114,865
2001	31,870,721	2,084,708	-1,117,435	295,056	338,537	…	…	428,183	…	27,089,222	…	517,580
2002	26,760,113	2,227,078	2,149,328	205,111	429,568	…	…	483,596	…	24,495,490	…	1,068,598
2003	23,792,725	2,462,658	2,481,127	297,020	508,144	…	…	517,705	…	22,021,528	…	466,796
2004	23,539,942	2,238,705	917,870	272,331	503,784	…	…	582,402	…	18,078,003	…	2,782,587
2005	30,729,357	2,889,544	-3,576,903	265,742	477,087	…	…	780,863	…	21,467,545	…	1,271,672
2006	38,410,427	3,263,844	-158,846	301,014	491,962	…	…	871,255	…	29,051,678	…	4,271,828
2007	42,576,025	3,510,206	198,417	296,125	576,306	…	324,481	992,353	…	34,598,401	…	3,125,533
2008	41,045,582	4,870,374	3,340,628	352,291	500,372	…	-3,158,808	1,189,626	…	31,688,688	…	2,626,053
2009	54,463,121	5,978,795	4,820,204	386,400	502,044	…	1,006,813	1,428,202	…	47,430,237	…	4,564,460
2010	79,300,937	6,270,420	9,745,562	422,200	622,846	42,286	45,881	1,582,785	…	79,268,124	…	883,724
2011	85,241,366	7,316,643	2,015,991	472,300	648,798	281,712	-1,161,848	1,577,284	…	75,423,597	…	375,175
2012	81,586,102	7,798,353	18,380,835	490,001	722,301	387,279	-52,611	1,637,934	…	88,417,936	…	460,528
Total, 1914–2012	**1,095,102,775**	**89,092,047**	**42,543,433**	**7,124,117**	**12,404,679**	**711,277**	**-2,996,092**	**17,146,961**	**44,113,958**	**930,754,943**	**-4**	**33,302,148[6]**

(continued on next page)

Table 11.—*continued*

Federal Reserve Bank and period	Current income	Net expenses	Net additions or deductions (-)[1]	Assessments by the Board of Governors			Other compre-hensive income (loss)	Dividends paid	Distributions to the U.S. Treasury		Transferred to/from surplus[4]	Transferred to/from surplus and change in accumulated other comprehensive income[5]
				Board expenditures	Costs of currency	Consumer Financial Protection Bureau and Office of Financial Research[2]			Statutory transfers[3]	Interest on Federal Reserve notes		
Aggregate for each Bank, 1914–2012												
Boston	48,938,059	4,584,895	537,775	300,477	700,994	29,475	-6,886	743,769	2,579,504	38,990,848	135	1,538,850
New York	420,255,691	23,438,102[7]	27,299,034	1,854,412	3,531,142	219,277	-2,909,652	4,592,507	17,307,161	382,526,780	-433	11,176,116
Philadelphia	38,211,271	3,933,041	1,138,667	441,897	567,714	61,361	-9,806	1,240,703	1,312,118	29,500,884	291	2,282,124
Cleveland	55,287,578	4,380,418	1,047,072	519,322	695,580	54,147	1,503	1,259,096	2,827,043	44,157,860	-10	2,442,701
Richmond	89,009,228	7,739,780	3,205,191	1,255,893	1,049,733	147,726	-4,553	3,392,548	3,083,928	68,713,740	-72	6,826,594
Atlanta	75,403,122	10,820,700	1,973,341	511,256	1,173,822	40,384	-21,303	1,160,546	2,713,230	59,055,953	5	1,879,263
Chicago	113,285,710	8,855,619	2,006,084	607,996	1,338,595	19,500	-18,697	1,206,463	4,593,811	97,452,200	12	1,198,898
St. Louis	33,713,236	3,421,141	469,730	137,321	440,936	5,920	1,813	283,947	1,833,837	27,709,862	-27	351,847
Minneapolis	18,129,904	3,446,070	446,750	187,945	237,792	8,290	-9,406	412,255	416,227	13,585,933	65	272,678
Kansas City	37,159,691	4,674,083	633,576	170,293	457,211	6,953	-14,110	328,732	1,249,703	30,492,932	-9	399,256
Dallas	47,678,067	4,846,862	1,159,867	254,781	675,146	11,009	-1,994	475,660	1,510,802	40,459,553	55	602,066
San Francisco	118,031,218	8,951,335	2,626,355	882,525	1,536,012	107,235	-3,003	2,050,736	4,686,594	98,108,397	-17	4,331,756
Total	**1,095,102,775**	**89,092,047**	**42,543,433**	**7,124,117**	**12,404,679**	**711,277**	**-2,996,092**	**17,146,961**	**44,113,958**	**930,754,943**	**-4**	**33,302,148**

Note: Components may not sum to totals because of rounding.

1 For 1987 and subsequent years, includes the cost of services provided to the Treasury by Federal Reserve Banks for which reimbursement was not received.

2 Starting in 2010, as required under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, the Board of Governors began assessing the Reserve Banks to fund the operations of the Consumer Financial Protection Bureau and Office of Financial Research. These assessments are allocated to the Reserve Banks based on each Reserve Bank's capital and surplus balances as of the most recent quarter.

3 Represents transfers made as a franchise tax from 1917 through 1932; transfers made under section 13b of the Federal Reserve Act from 1935 through 1947; and transfers made under section 7 of the Federal Reserve Act for 1996 and 1997.

4 Transfers are made under section 13b of the Federal Reserve Act.

5 Transfers are made under section 7 of the Federal Reserve Act. Beginning in 2006, accumulated other comprehensive income is reported as a component of surplus.

6 The $33,302,148 thousand transferred to surplus was reduced by direct charges of $500 thousand for charge-off on Bank premises (1927); $139,300 thousand for contributions to capital of the Federal Deposit Insurance Corporation (1934); $4 thousand net upon elimination of section 13b surplus (1958); and $106,000 thousand (1996), $107,000 thousand (1997), and $3,752,000 thousand (2000) transferred to the Treasury as statutorily required; and $1,848,716 thousand related to the implementation of SFAS No. 158 (2006) and was increased by a transfer of $11,131 thousand from reserves for contingencies (1955), leaving a balance of $27,359,757 thousand on December 31, 2012.

7 This amount is reduced by $5,231,168 thousand for expenses of the System Retirement Plan. See note 5, "Table 10. Income and expenses of the Federal Reserve Banks, by Bank, 2012," on page 309.

… Not applicable.

Table 12. Operations in principal departments of the Federal Reserve Banks, 2009–2012

Operation	2012	2011	2010	2009
Millions of pieces				
Currency processed	31,703	32,249	32,143	31,891
Currency destroyed	4,614	4,813	5,948	6,049
Coin received	58,669	59,550[r]	62,345	65,349
Checks handled				
U.S. government checks[1]	121	159	185	202
Postal money orders	108	113	121	131
Commercial	6,622	6,780	7,712	8,585
Securities transfers[2]	18	19	20	21
Funds transfers[3]	132	127	125	125
Automated clearinghouse transactions				
Commercial	10,665	10,349	10,233	9,966
Government	1,382	1,305	1,222	1,195
Millions of dollars				
Currency processed	581,382	576,442	569,249	561,013
Currency destroyed	105,464	81,943	120,049	92,708
Coin received	5,700	5,907[r]	6,014	6,288
Checks handled				
U.S. government checks[1]	199,251	241,817	292,261	311,667
Postal money orders	21,927	22,220	23,210	23,675
Commercial	8,125,424	7,943,524[r]	8,811,010[r]	10,365,669[r]
Securities transfers[2]	284,401,670	291,823,993	320,123,901	295,741,666
Funds transfers[3]	599,200,625	663,837,575	608,325,851	631,127,108
Automated clearinghouse transactions				
Commercial	19,293,857	17,801,549	16,941,077	15,418,718
Government	4,609,914	4,534,707	4,426,808	4,297,071

1 Includes government checks handled electronically (electronic checks).

2 Data on securities transfers do not include reversals.

3 Data on funds transfers do not include non-value transfers.

r Revised.

Table 13. Number and annual salaries of officers and employees of the Federal Reserve Banks, December 31, 2012

Federal Reserve Bank (including branches)	President[1]	Other officers[1]		Employees			Total	
	Annual salary (dollars)[2]	Number	Annual salaries (dollars)[2]	Number		Annual salaries (dollars)[2]	Number	Annual salaries (dollars)[2]
				Full-time	Part-time			
Boston	350,400	67	13,912,585	892	28	80,422,556	988	94,685,542
New York	410,780	490	111,587,993	2,593	40	278,533,606	3,124	390,532,379
Philadelphia	350,400	60	10,704,050	778	22	60,910,199	861	71,964,649
Cleveland	347,400	51	9,259,600	857	22	64,701,501	931	74,308,501
Richmond	347,400	85	14,875,400	1,357	24	106,867,456	1,467	122,090,256
Atlanta	314,400	81	15,775,680	1,465	16	113,383,004	1,563	129,473,084
Chicago	350,400	103	19,166,990	1,289	44	113,138,925	1,437	132,656,315
St. Louis	281,300	86	15,356,300	863	34	65,296,509	984	80,934,109
Minneapolis	313,500	55	9,816,225	976	50	71,098,934	1,082	81,228,659
Kansas City	323,200	77	13,721,900	1,248	17	84,836,210	1,343	98,881,310
Dallas	350,400	65	10,993,953	1,057	8	74,524,752	1,131	85,869,105
San Francisco	367,500	81	17,002,551	1,508	24	137,529,608	1,614	154,899,659
Federal Reserve Information Technology	…	61	10,976,636	1,085	4	110,128,691	1,150	121,105,327
Office of Employee Benefits	…	13	2,958,750	36	0	3,580,740	49	6,539,490
Total	**4,107,080**	**1,375**	**276,108,613**	**16,004**	**333**	**1,364,952,691**	**17,724**	**1,645,168,384**

Note: Components may not sum to totals because of rounding.

1 No incumbent president and no other officers, except for those who received a promotion with a significant increase in responsibility, received a salary increase in 2011 or 2012, due to the Board's application of the pay freeze to Reserve Bank officers.

2 Annualized salary liability (excluding outside agency costs) based on salaries in effect on December 31, 2012.

… Not applicable.

Table 14. Acquisition costs and net book value of the premises of the Federal Reserve Banks and Branches, December 31, 2012
Thousands of dollars

Federal Reserve Bank or Branch	Acquisition costs				Net book value	Other real estate[3]
	Land	Buildings (including vaults)[1]	Building machinery and equipment	Total[2]		
Boston	27,293	169,775	31,815	228,883	118,664	...
New York	67,627	506,825	87,531	661,983	431,260	...
Philadelphia	8,146	108,649	23,447	140,242	71,338	...
Cleveland	4,219	127,778	25,785	157,782	96,097	...
Cincinnati	3,075	28,159	17,408	48,642	19,046	...
Pittsburgh	0	0	0	0	0	5,426
Richmond	31,747	157,865	51,510	241,122	152,031	...
Baltimore	7,917	39,853	13,383	61,153	35,245	...
Charlotte	7,884	44,740	13,683	66,307	42,708	...
Atlanta	22,995	158,572	18,198	199,765	152,120	...
Birmingham	5,347	13,056	1,493	19,896	10,583	...
Jacksonville	1,779	23,383	4,659	29,821	16,217	...
Nashville	0	0	0	0	0	3,718
New Orleans	3,785	12,641	6,113	22,539	11,021	...
Miami	4,254	30,039	6,951	41,244	24,770	...
Chicago	4,619	209,782	27,558	241,959	120,979	...
Detroit	12,329	74,129	11,457	97,915	82,505	...
St. Louis	9,377	140,558	15,615	165,550	120,555	...
Memphis	2,472	15,027	5,160	22,659	10,275	...
Minneapolis	15,522	109,373	17,074	141,969	93,919	...
Helena	2,890	10,335	1,571	14,796	8,989	...
Kansas City	38,585	199,249	26,986	264,820	237,176	...
Denver	3,694	9,873	6,344	19,911	9,023	...
Omaha	3,559	7,692	1,925	13,176	6,157	...
Dallas	37,450	123,687	32,207	193,344	119,396	...
El Paso	262	3,683	1,989	5,934	851	...
Houston	25,119	104,059	9,209	138,387	114,624	7,204
San Antonio	826	8,035	2,969	11,830	3,661	...
San Francisco	20,988	118,031	29,496	168,515	90,578	...
Los Angeles	6,306	75,264	20,160	101,730	53,951	...
Salt Lake City	1,294	5,407	1,529	8,230	2,910	...
Seattle	13,101	49,970	6,744	69,815	61,464	
Total	**394,461**	**2,685,489**	**519,969**	**3,599,919**	**2,318,113**	**16,348**

1 Includes expenditures for construction at some offices, pending allocation to appropriate accounts.
2 Excludes charge-offs of $17,699 thousand before 1952.
3 Includes real estate held pending sale.
... Not applicable.

Federal Reserve System Audits

The Board of Governors, the Federal Reserve Banks, and the Federal Reserve System as a whole are all subject to several levels of audit and review.

The Board's financial statements are audited annually by an outside auditor retained by the Board's Office of Inspector General. The outside auditor also tests the Board's compliance with certain laws and regulations affecting those statements.

The Reserve Banks' financial statements are audited annually by an independent outside auditor retained by the Board of Governors. In addition, the Reserve Banks are subject to annual examination by the Board. As discussed in the chapter "Federal Reserve Banks," the Board's examination includes a wide range of ongoing oversight activities conducted on site and off site by staff of the Board's Division of Reserve Bank Operations and Payment Systems.

The OIG also conducts audits, reviews, and investigations relating to the Board's programs and operations as well as to Board functions delegated to the Reserve Banks, and Federal Reserve operations are also subject to review by the Government Accountability Office.

Board of Governors Financial Statements

The financial statements of the Board of Governors for 2012 and 2011 were audited by Deloitte & Touche LLP, independent auditors.

BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM
WASHINGTON, D.C. 20551

March 5, 2013

MANAGEMENT'S ASSERTION

To the Committee on Board Affairs:

The management of the Board of Governors of the Federal Reserve System ("the Board") is responsible for the preparation and fair presentation of the balance sheet as of December 31, 2012, and for the related statement of operations and statement of cash flows for the year then ended (the "Financial Statements"). The Financial Statements have been prepared in conformity with accounting principles generally accepted in the United States of America and, as such, include some amounts which are based on management judgments and estimates. To our knowledge, the Financial Statements are, in all material respects, fairly presented in conformity with generally accepted accounting principles and include all disclosures necessary for such presentation.

The Board's management is also responsible for establishing and maintaining effective internal control over financial reporting as it relates to the Financial Statements. Such internal control is designed to provide reasonable assurance to management and to the Committee on Board Affairs regarding the preparation of the Financial Statements in accordance with accounting principles generally accepted in the United States of America. The Board's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Board; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of Financial Statements in accordance with generally accepted accounting principles, and that the Board's receipts and expenditures are being made only in accordance with authorizations of its management; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Board's assets that could have a material effect on the Financial Statements.

Internal control, no matter how well designed and operated, can only provide reasonable assurance of achieving the Board's control objectives with respect to the preparation of reliable Financial Statements. The likelihood of achievement of such objectives is affected by limitations inherent to internal control, including the possibility of human error. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that specific controls may become inadequate because of changes in conditions or that the degree of compliance with policies or procedures may deteriorate.

The Board's management assessed its internal control over financial reporting with regards to the Financial Statements based upon the criteria established in the *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Based on this assessment, we believe that the Board has maintained effective internal control over financial reporting as it relates to its Financial Statements.

Donald V. Hammond
Chief Operating Officer

William L. Mitchell
Chief Financial Officer

INDEPENDENT AUDITORS' REPORT

To the Board of Governors of the Federal Reserve System:

We have audited the accompanying financial statements of the Board of Governors of the Federal Reserve System (the "Board"), which are comprised of the balance sheets as of December 31, 2012 and 2011, and the related statements of operations, and cash flows for the years then ended, and the related notes to the financial statements. We also have audited the Board's internal control over financial reporting as of December 31, 2012, based on criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Management's Responsibility

The Board's management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error. The Board's management is also responsible for its assertion of the effectiveness of internal control over financial reporting, included in the accompanying Management's Assertion.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements and an opinion on the Board's internal control over financial reporting based on our audits. We conducted our audits of the financial statements in accordance with auditing standards generally accepted in the United States of America, auditing standards of the Public Company Accounting Oversight Board (United States), and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States and we conducted our audit of internal control over financial reporting in accordance with attestation standards established by the American Institute of Certified Public Accountants and in accordance with the auditing standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement and whether effective internal control over financial reporting was maintained in all material respects.

An audit of the financial statements involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Board's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances. An audit of the financial statements also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. An audit of internal control over financial reporting involves obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Definition of Internal Control Over Financial Reporting

The Board's internal control over financial reporting is a process designed by, or under the supervision of, the Board's principal executive and principal financial officers, or persons performing similar functions, and effected by the Board's Committee on Board Affairs, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America. The Board's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Board; (2) provide

reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with accounting principles generally accepted in the United States of America, and that receipts and expenditures of the Board are being made only in accordance with authorizations of management and governors of the Board; and (3) provide reasonable assurance regarding prevention or timely detection and correction of unauthorized acquisition, use, or disposition of the Board's assets that could have a material effect on the financial statements.

Inherent Limitations of Internal Control Over Financial Reporting

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected and corrected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Board as of December 31, 2012 and 2011, and the results of its operations and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America. Also, in our opinion, the Board maintained, in all material respects, effective internal control over financial reporting as of December 31, 2012, based on the criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Report on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued a report dated March 5, 2013, on our tests of the Board's compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of compliance and the results of that testing, and not to provide an opinion on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be read in conjunction with this report in considering the results of our audits.

Deloitte & Touche LLP

March 5, 2013
Washington, DC

Board of Governors of the Federal Reserve System Balance Sheets

	As of December 31,	
	2012	2011
Assets		
Current assets:		
Cash	$ 53,965,151	$ 73,592,126
Accounts receivable – net	2,437,241	5,433,087
Prepaid expenses and other assets	4,518,080	3,338,770
Total current assets	60,920,472	82,363,983
Noncurrent assets:		
Property, equipment, and software – net	186,703,851	181,903,601
Other assets	1,081,446	476,795
Total noncurrent assets	187,785,297	182,380,396
Total	$248,705,769	$264,744,379
Liabilities and cumulative results of operations		
Current liabilities:		
Accounts payable and accrued liabilities	$ 16,181,003	$ 25,686,787
Accrued payroll and related taxes	20,907,437	18,616,534
Accrued annual leave	29,218,663	27,281,750
Capital lease payable	456,896	237,479
Unearned revenues and other liabilities	617,787	872,868
Total current liabilities	67,381,786	72,695,418
Long-term liabilities:		
Capital lease payable	1,069,116	–
Retirement benefit obligation	33,740,310	27,485,712
Postretirement benefit obligation	13,249,648	11,799,079
Postemployment benefit obligation	10,695,165	11,145,144
Other long-term liabilities	21,261,795	20,261,325
Total long-term liabilities	80,016,034	70,691,260
Total liabilities	147,397,820	143,386,678
Cumulative results of operations:		
Fund balance	119,140,439	138,451,243
Accumulated other comprehensive income (loss)	(17,832,490)	(17,093,542)
Total cumulative results of operations	101,307,949	121,357,701
Total	$248,705,769	$264,744,379

See notes to financial statements.

Board of Governors of the Federal Reserve System Statements of Operations

	For the years ended December 31,	
	2012	2011
Board operating revenues:		
Assessments levied on Federal Reserve Banks for Board operating expenses and capital expenditures	$490,000,000	$472,300,000
Other revenues	9,793,604	6,555,903
Total operating revenues	499,793,604	478,855,903
Board operating expenses:		
Salaries	299,889,043	274,866,723
Retirement, insurance, and benefits	70,232,938	61,516,094
Contractual services and professional fees	50,873,548	37,486,707
Depreciation, amortization, and net gains or losses on disposals	21,969,729	19,496,451
Travel	15,068,161	14,583,555
Postage, supplies, and non-capital furniture and equipment	11,256,753	10,760,230
Utilities	9,016,693	8,736,997
Software	10,967,296	9,399,273
Rentals of space	14,120,215	6,401,350
Repairs and maintenance	5,696,326	4,774,395
Printing and binding	2,126,056	2,345,881
Other expenses	7,887,650	8,510,962
Total operating expenses	519,104,408	458,878,618
Net income (loss)	(19,310,804)	19,977,285
Currency costs:		
Assessments levied or to be levied on Federal Reserve Banks for currency costs	721,074,064	650,010,597
Expenses for costs related to currency	721,074,064	650,010,597
Currency assessments over (under) expenses	–	–
Bureau of Consumer Financial Protection (Bureau):		
Assessments levied on the Federal Reserve Banks for the Bureau	385,200,000	241,711,564
Transfers to the Bureau	385,200,000	241,711,564
Bureau assessments over (under) transfers	–	–
Office of Financial Research (Office):		
Assessments levied on the Federal Reserve Banks for the Office	2,078,298	40,000,000
Transfers to the Office	2,078,298	40,000,000
Office assessments over (under) transfers	–	–
Total net income (loss)	(19,310,804)	19,977,285
Other comprehensive income:		
Amortization of prior service (credit) cost	584,890	507,786
Amortization of net actuarial (gain) loss	1,659,956	653,874
Net actuarial gain (loss) arising during the year	(2,983,794)	(3,627,680)
Total other comprehensive income (loss)	(738,948)	(2,466,020)
Comprehensive income (loss)	(20,049,752)	17,511,265
Cumulative results of operations – beginning of year	121,357,701	103,846,436
Cumulative results of operations – end of year	$101,307,949	$121,357,701

See notes to financial statements.

Board of Governors of the Federal Reserve System Statements of Cash Flows

	For the years ended December 31,	
	2012	2011
Cash flows from operating activities:		
Net income (loss)	$(19,310,804)	$ 19,977,285
Adjustments to reconcile results of operations to net cash provided by (used in) operating activities:		
Depreciation and amortization	21,901,984	19,015,100
Net loss (gain) on disposal of property and equipment	67,745	481,351
Other additional non-cash adjustments to results of operations	492,739	351,867
(Increase) decrease in assets:		
Accounts receivable, prepaid expenses and other assets	1,211,886	(2,780,003)
Increase (decrease) in liabilities:		
Accounts payable and accrued liabilities	(6,317,712)	5,340,020
Accrued payroll and related taxes	2,290,903	(3,277,502)
Accrued annual leave	1,936,913	944,560
Unearned revenues and other liabilities	(255,081)	316,022
Net retirement benefit obligation	6,363,414	4,128,953
Net postretirement benefit obligation	602,805	490,927
Net postemployment benefit obligation	(449,979)	(2,668,110)
Other long-term liabilities	437,509	298,191
Net cash provided by (used in) operating activities	8,972,322	42,618,661
Cash flows from investing activities:		
Capital expenditures	(28,057,137)	(23,585,868)
Net cash provided by (used in) investing activities	(28,057,137)	(23,585,868)
Cash flows from financing activities:		
Capital lease payments	(542,160)	(583,299)
Net cash provided by (used in) financing activities	(542,160)	(583,299)
Net increase (decrease) in cash	(19,626,975)	18,449,494
Cash balance – beginning of year	73,592,126	55,142,632
Cash balance – end of year	$ 53,965,151	$ 73,592,126

See notes to financial statements.

Board of Governors of the Federal Reserve System Notes to Financial Statements as of and for the Years ended December 31, 2012 and 2011

(1) Structure

The Federal Reserve System (the System) was established by Congress in 1913 and consists of the Board of Governors (the Board), the Federal Open Market Committee, the twelve regional Federal Reserve Banks (Reserve Banks), the Federal Advisory Council, and the private commercial banks that are members of the System. The Board, unlike the Reserve Banks, was established as a federal government agency and is located in Washington, D.C.

The Board is required by the Federal Reserve Act (the Act) to report its operations to the Speaker of the House of Representatives. The Act also requires the Board, each year, to order a financial audit of each Reserve Bank and to publish each week a statement of the financial condition of each Reserve Bank and a combined statement for all of the Reserve Banks. Accordingly, the Board believes that the best financial disclosure consistent with law is achieved by issuing separate financial statements for the Board and for the Reserve Banks. Therefore, the accompanying financial statements include only the results of operations and activities of the Board. Combined financial statements for the Reserve Banks are included in the Board's annual report to the Speaker of the House of Representatives and weekly statements are available on the Board's website.

The Dodd-Frank Wall Street Reform and Consumer Financial Protection Act of 2010 (Dodd-Frank Act) established the Bureau of Consumer Financial Protection (Bureau) as an independent bureau within the System and designated the Board's Office of Inspector General (OIG) as the OIG for the Bureau. As required by the Dodd-Frank Act, the Board transferred certain responsibilities to the Bureau in July 2011. The Dodd-Frank Act requires the Board to fund the Bureau from the combined earnings of the System. The Dodd-Frank Act also created the Financial Stability Oversight Council (FSOC) of which the Chairman of the Board is a member, as well as the Office of Financial Research (Office) within the U.S. Department of Treasury to provide support to the FSOC and the member agencies. The Dodd-Frank Act required that the Board provide funding for the FSOC and the Office until July 2012. Section 1017 of the Dodd-Frank Act provides that the financial statements of the Bureau are not to be consolidated with those of the Board or the System; the Board has also determined that neither the FSOC nor the Office should be consolidated in the Board's financial statements. Accordingly, the Board's financial statements do not include financial data of the Bureau, the FSOC, or the Office other than the funding that the Board is required by the Dodd-Frank Act to provide.

(2) Operations and Services

The Board's responsibilities require thorough analysis of domestic and international financial and economic developments. The Board carries out those responsibilities in conjunction with the Reserve Banks and the Federal Open Market Committee. The Board also supervises the operations of the Reserve Banks and exercises broad responsibility in the nation's payments system. Policy regarding open market operations is established by the Federal Open Market Committee. However, the Board has sole authority over changes in reserve requirements, and it must approve any change in the discount rate initiated by a Reserve Bank. The Board also plays a major role in the supervision and regulation of the U.S. bank-

ing system. It has supervisory responsibilities for state-chartered banks that are members of the System, bank holding companies, savings and loan holding companies, foreign activities of member banks, U.S. activities of foreign banks, and any systemically important nonbank financial company that are designated by the FSOC. Although the Dodd-Frank Act gave the Bureau general rule-writing responsibility for Federal consumer financial laws, the Board retains rule-writing responsibility under the Community Reinvestment Act and other specific statutory provisions. The Board also enforces the requirements of Federal consumer financial laws for state member banks with assets of $10 billion or less. In addition, the Board enforces certain other consumer laws at all state member banks, regardless of size.

Section 318(c) of the Dodd-Frank Act requires that the Board shall collect a total amount of assessments, fees, or other charges, from certain companies (large bank holding companies and savings and loan holding companies with total consolidated assets of $50 billion or more and systemically important nonbank financial companies designated by the FSOC) that is equal to the total expenses the Board estimates are necessary or appropriate to carry out the supervisory and regulatory responsibilities of the Board with respect to such companies. As of December 31, 2012, the Board has not issued rulemaking regarding this new responsibility, and currently does not anticipate finalizing any such rulemaking until later in 2013. As such, sufficient information is not available to determine a reasonable estimate of the fees that it may eventually collect and transfer to the U.S. Treasury.

(3) Significant Accounting Policies

Basis of Accounting — The Board prepares its financial statements in accordance with accounting principles generally accepted in the United States (GAAP).

Revenues — The Federal Reserve Act authorizes the Board to levy an assessment on the Reserve Banks to fund its operations. The Board allocates the assessment to each Reserve Bank based on the Reserve Bank's capital and surplus balances.

Assessments to Fund the Bureau and the Office — The Board assesses the Reserve Banks for the funds transferred to the Bureau and the Office based on each Reserve Bank's capital and surplus balances. These assessments and transfers are reported separately from the Board's operating activities in the Board's Statements of Operations.

Civil Money Penalties — The Board has enforcement authority over the financial institutions it supervises and their affiliated parties, including the authority to assess civil money penalties. As directed by statute, all civil money penalties that are assessed and collected by the Board are remitted to either the Department of Treasury (Treasury) or the Federal Emergency Management Agency (FEMA). As a collecting entity, the Board does not recognize civil money penalties as revenue nor does the Board use the civil money penalty to fund Board expenses. Civil money penalties whose collection is contingent upon fulfillment of certain conditions in the enforcement action are not recorded in the Board's financial records. Checks for civil money penalties made payable to the National Flood Insurance Program are forwarded to FEMA and are not recorded in the Board's financial records.

Currency Costs — The Board issues the nation's currency (in the form of Federal Reserve notes), and the Reserve Banks distribute currency and coin through depository institutions. The Board incurs expenses and assesses the Reserve Banks

for the expenses related to producing, issuing, and retiring Federal Reserve notes as well as providing educational services. The assessment is allocated based on each Reserve Bank's share of the number of notes comprising the System's net liability for Federal Reserve notes on December 31 of the prior year. These expenses and assessments are reported separately from the Board's operating activities in the Board's Statements of Operations.

Allowance for Doubtful Accounts — Accounts receivable are shown net of the allowance for doubtful accounts. Accounts receivable considered uncollectible are charged against the allowance account in the year they are deemed uncollectible. The allowance for doubtful accounts is adjusted monthly, based upon a review of outstanding receivables. The allowance for doubtful accounts is $30,000 and $112,000 for 2012 and 2011, respectively.

Property, Equipment, and Software — The Board's property, equipment, and software are stated at cost less accumulated depreciation and amortization. Depreciation and amortization are calculated on a straight-line basis over the estimated useful lives of the assets, which range from three to ten years for furniture and equipment, ten to fifty years for building equipment and structures, and two to ten years for software. Upon the sale or other disposition of a depreciable asset, the cost and related accumulated depreciation or amortization are removed and any gain or loss is recognized. Construction in process includes costs incurred for short-term and long-term projects that have not been placed into service. The majority of the balance represents long-term building enhancement projects.

Art Collections — The Board has collections of works of art, historical treasures, and similar assets. These collections are maintained and held for public exhibition in furtherance of public service. Proceeds from any sales of collections are used to acquire other items for collections. The cost of collections purchased by the Board is charged to expense in the year purchased and donated collection items are not recorded. The value of the Board's collections has not been determined.

Deferred Rent — Leases for certain space contain scheduled rent increases over the term of the lease. Rent abatements, lease incentives, and scheduled rent increases must be considered in determining the annual rent expense to be recognized. The deferred rent represents the difference between the actual lease payments and the rent expense recognized. Lease incentives impact deferred rent, and are non-cash transactions, and discussed in the leases footnote.

Estimates — The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Recently Issued Accounting Standards — In June 2011, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2011–05, *Comprehensive Income* (Topic 220): *Presentation of Comprehensive Income*, which requires a reporting entity to present the total of comprehensive income, the components of net income and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. This update eliminates the option to present the components of other comprehensive income as part of the statement of shareholders'

equity. The update is intended to improve the comparability, consistency, and transparency of financial reporting and to increase the prominence of items by presenting the components reported in other comprehensive income. The Board has adopted the update in this ASU effective for the year ended December 31, 2012, and the required presentation is reflected in the Board's financial statements.

In December 2011, the FASB issued ASU 2011–12, *Comprehensive Income* (Topic 220): *Deferral of the Effective Date for Amendments to the Presentation of Reclassifications of Items out of Accumulated Other Comprehensive Income in Accounting Standards Update No. 2011–05*. This update indefinitely defers the requirements of ASU 2011–05 related to presentation of reclassification adjustments from accumulated other comprehensive income. When effective, this update will affect the classification of these adjustments in the Statements of Operations.

In February 2013, the FASB issued ASU 2013–02, *Comprehensive Income* (Topic 220): *Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income*. This update requires an entity to report the effect of significant reclassifications out of accumulated other comprehensive income on the respective net income line items. This update is effective for the Board for the year ending December 31, 2013, and will be reflected in the Board's 2013 financial statements.

(4) Property, Equipment, and Software

The following is a summary of the components of the Board's property, equipment, and software, at cost, net of accumulated depreciation and amortization as of December 31, 2012 and 2011:

	As of December 31,	
	2012	2011
Land	$ 18,640,314	$ 18,640,314
Buildings and improvements	205,006,985	195,869,546
Construction in process	14,362,523	13,952,693
Furniture and equipment	74,519,266	66,604,104
Software in use	29,147,933	27,091,292
Software in process	2,422,381	1,384,526
Vehicles	960,745	521,419
Other intangible assets	496,675	496,675
Subtotal	345,556,822	324,560,569
Less accumulated depreciation and amortization	(158,852,971)	(142,656,968)
Property, equipment, and software – net	$ 186,703,851	$ 181,903,601

(5) Leases

Capital Leases — The Board entered into capital leases for copier equipment in 2008 and 2009 that terminated in March 2012. The Board subsequently entered into new capital leases in 2012. Under the new commitments, the capital lease term extends through 2016. Furniture and equipment includes capitalized leases of $1,853,000 and $2,086,000 in 2012 and 2011, respectively. Accumulated depreciation includes $337,000 and $1,852,000 related to assets under capital leases as of 2012 and 2011, respectively. The depreciation expense for the leased equipment is $471,000 and $533,000 for 2012 and 2011, respectively.

The future minimum lease payments required under the capital leases and the present value of the net minimum lease payments as of December 31, 2012, are as follows:

Years Ended December 31,	Amount
2013	$ 711,659
2014	711,659
2015	711,659
2016	192,799
Total minimum lease payments	2,327,776
Less amount representing maintenance	(754,555)
Net minimum lease payments	1,573,221
Less amount representing interest	(47,209)
Present value of net minimum lease payments	1,526,012
Less current maturities of capital lease payments	(456,896)
Long-term capital lease obligations	$1,069,116

Operating Leases — The Board has entered into several operating leases to secure office, training, and warehouse space. Minimum annual payments under the multi-year operating leases having an initial or remaining non-cancelable lease term in excess of one year at December 31, 2012, are as follows:

Years Ending December 31,	
2013	$ 14,555,834
2014	14,918,629
2015	15,360,855
2016	15,744,650
After 2016	71,438,299
	$132,018,267

Rental expenses under the multi-year operating leases were $13,553,000 and $6,093,000 for the years ended December 31, 2012 and 2011, respectively. The Board entered into two new operating leases in early 2013. The estimated future minimum lease payments associated with the new leases total $109,337,000 over a ten year period, which is not reflected in the schedule above.

The Board leases and subleases space, primarily to other governmental agencies. The revenues collected for these leases from governmental agencies were $480,000 in both 2012 and 2011.

Deferred Rent — Other long-term liabilities include deferred rent of $20,924,000 and $19,733,000 as of the years ended December 31, 2012 and 2011, respectively. The 2012 ending balance includes non-cash lease incentives of $563,000.

(6) Retirement Benefits

Substantially all of the Board's employees participate in the Retirement Plan for Employees of the Federal Reserve System (the System Plan). The System Plan provides retirement benefits to employees of the Board, the Reserve Banks, the Office of Employee Benefits of the Federal Reserve System (OEB), and certain employees of the Bureau. The Reserve Bank of New York (FRBNY), on behalf of the System, recognizes the net assets and costs associated with the System Plan in its financial statements. Costs associated with the System Plan were not redistributed to the Board during the year ended December 31, 2012 and 2011.

Employees of the Board who became employed prior to 1984 are covered by a contributory defined benefits program under the System Plan. Employees of the Board who became employed after 1983 are covered by a non-contributory defined benefits program under the System Plan. FRBNY, on behalf of the System, funded $780 million and $420 million during the years ended December 31, 2012 and 2011, respectively. The Board was not assessed a contribution for 2012 and 2011.

Board employees covered under the System Plan are also covered under a Benefits Equalization Plan (BEP). Benefits paid under the BEP are limited to those benefits that cannot be paid from the System Plan due to limitations imposed by the Internal Revenue Code. Activity for the BEP as of December 31, 2012 and 2011, is summarized in the following tables:

	2012	2011
Change in projected benefit obligation:		
Benefit obligation – beginning of year	$ 14,147,186	$ 11,933,435
Service cost	2,100,366	1,456,457
Interest cost	867,002	602,381
Plan participants' contributions	–	–
Actuarial (gain) loss	(1,928,409)	567,091
Gross benefits paid	(33,312)	(35,438)
Transfers to the Bureau	–	(376,740)
Benefit obligation – end of year	$ 15,152,833	$ 14,147,186
Accumulated benefit obligation – end of year	$ 3,149,276	$ 2,351,832
Weighted-average assumptions used to determine benefit obligation as of December 31:		
Discount rate	4.25 %	4.50 %
Rate of compensation increase	4.50 %	5.00 %
Change in plan assets:		
Fair value of plan assets – beginning of year	$ –	$ –
Employer contributions	33,312	35,438
Plan participants' contributions	–	–
Gross benefits paid	(33,312)	(35,438)
Fair value of plan assets – end of year	$ –	$ –
Funded status:		
Reconciliation of funded status – end of year:		
Fair value of plan assets	$ –	$ –
Benefit obligation	15,152,833	14,147,186
Funded status	(15,152,833)	(14,147,186)
Amount recognized – end of year	$(15,152,833)	$(14,147,186)
Amounts recognized in the statements of financial position consist of:		
Asset	$ –	$ –
Liability	(15,152,833)	(14,147,186)
Net amount recognized	$(15,152,833)	$(14,147,186)
Amounts recognized in accumulated other comprehensive income consist of:		
Net actuarial loss (gain)	$ 2,939,609	$ 5,535,793
Prior service cost (credit)	620,967	699,952
Net amount recognized	$ 3,560,576	$ 6,235,745

Expected cash flows:	
Expected employer contributions – 2013	$ 137,203
Expected benefit payments:*	
2013	$ 137,203
2014	164,275
2015	186,654
2016	212,730
2017	225,868
2018–2022	1,623,583

* Expected benefit payments to be made by the Board.

	2012	2011
Components of net periodic benefit cost:		
Service cost	$ 2,100,366	$1,456,457
Interest cost	867,002	602,381
Expected return on plan assets	–	–
Amortization:		
Actuarial (gain) loss	$ 667,775	$ 230,468
Prior service (credit) cost	78,985	1,881
Net periodic benefit cost (credit)	$ 3,714,128	$2,291,187
Weighted-average assumptions used to determine net periodic benefit cost:		
Discount rate	4.50 %	5.50 %
Rate of compensation increase	5.00 %	5.00 %
Other changes in plan assets and benefit obligations recognized in other comprehensive income:		
Current year actuarial (gain) loss	$(1,928,409)	$ 190,351
Amortization of prior service credit (cost)	(78,985)	(1,881)
Amortization of actuarial gain (loss)	(667,775)	(230,468)
Total recognized in other comprehensive (income) loss	$(2,675,169)	$ (41,998)
Total recognized in net periodic benefit cost and other comprehensive income	$ 1,038,959	$2,249,189

Estimated amounts that will be amortized from accumulated other comprehensive income into net periodic benefit cost (credit) in 2013 are shown below:

Net actuarial (gain) loss	$ 36,979
Prior service (credit) cost	99,779
Total	$136,758

The Board also provides another non-qualified plan for Officers of the Board. The retirement benefits covered under the Pension Enhancement Plan (PEP) increase the pension benefit calculation from 1.8% above the Social Security integration

level to 2.0%. Activity for the PEP as of December 31, 2012 and 2011, is summarized in the following tables:

	2012	2011
Change in projected benefit obligation:		
Benefit obligation – beginning of year	$ 13,250,209	$ 9,949,637
Service cost	684,473	489,236
Interest cost	750,474	589,888
Plan participants' contributions	–	–
Actuarial (gain) loss	3,856,673	2,401,971
Gross benefits paid	(101,099)	(57,124)
Transfers to the Bureau	–	(123,399)
Benefit obligation – end of year	$ 18,440,730	$ 13,250,209
Accumulated benefit obligation – end of year	$ 14,766,590	$ 10,000,174
Weighted-average assumptions used to determine benefit obligation as of December 31:		
Discount rate	4.00 %	4.50 %
Rate of compensation increase	4.50 %	5.00 %
Change in plan assets:		
Fair value of plan assets – beginning of year	$ –	$ –
Employer contributions	101,099	57,124
Plan participants' contributions	–	–
Gross benefits paid	(101,099)	(57,124)
Fair value of plan assets – end of year	$ –	$ –
Funded status:		
Reconciliation of funded status – end of year:		
Fair value of plan assets	$ –	$ –
Benefit obligation	18,440,730	13,250,209
Funded status	(18,440,730)	(13,250,209)
Amount recognized – end of year	$(18,440,730)	$(13,250,209)
Amounts recognized in the statements of financial position consist of:		
Asset	$ –	$ –
Liability	(18,440,730)	(13,250,209)
Net amount recognized	$(18,440,730)	$(13,250,209)
Amounts recognized in accumulated other comprehensive income consist of:		
Net actuarial loss (gain)	$ 8,514,540	$ 5,416,792
Prior service cost (credit)	2,180,488	2,711,883
Net amount recognized	$ 10,695,028	$ 8,128,675

Expected cash flows:	
Expected employer contributions – 2013	$ 162,055
Expected benefit payments:*	
2013	$ 162,055
2014	$ 234,218
2015	$ 311,695
2016	$ 392,185
2017	$ 478,316
2018–2022	$3,813,305

* Expected benefit payments to be made by the Board.

	2012	2011
Components of net periodic benefit cost:		
Service cost	$ 684,473	$ 489,236
Interest cost	750,474	589,888
Expected return on plan assets	–	–
Amortization:		
Actuarial (gain) loss	758,925	327,639
Prior service (credit) cost	531,395	531,395
Net periodic benefit cost (credit)	$2,725,267	$1,938,158
Weighted-average assumptions used to determine net periodic benefit cost:		
Discount rate	4.50 %	5.50 %
Rate of compensation increase	5.00 %	5.00 %
Other changes in plan assets and benefit obligations recognized in other comprehensive income:		
Current year actuarial (gain) loss	$3,856,673	$2,278,572
Amortization of prior service credit (cost)	(531,395)	(531,395)
Amortization of actuarial gain (loss)	(758,925)	(327,639)
Total recognized in other comprehensive (income) loss	$2,566,353	$1,419,538
Total recognized in net periodic benefit cost and other comprehensive income	$5,291,620	$3,357,696

Estimated amounts that will be amortized from accumulated other comprehensive income into net periodic benefit cost (credit) in 2013 are shown below:

Net actuarial (gain) loss	$ 757,959
Prior service (credit) cost	531,395
Total	$1,289,354

The total accumulated retirement benefit obligation includes a liability for a supplemental retirement agreement and a benefits equalization plan under the Federal Reserve System's Thrift Plan. The total obligation as of December 31, 2012 and 2011, is summarized in the following table:

	2012	2011
Retirement benefit obligation:		
Benefit obligation – BEP	$15,152,833	$14,147,186
Benefit obligation – PEP	18,440,730	13,250,209
Additional benefit obligations	146,747	88,317
Total accumulated retirement benefit obligation	$33,740,310	$27,485,712

A relatively small number of Board employees participate in the Civil Service Retirement System (CSRS) or the Federal Employees' Retirement System (FERS). These defined benefit plans are administered by the U.S. Office of Personnel Management, which determines the required employer contribution levels. The Board's contributions to these plans totaled $586,000 and $523,000 in 2012 and 2011, respectively. The Board has no liability for future payments to retirees under these programs and is not accountable for the assets of the plans.

Employees of the Board may also participate in the Federal Reserve System's Thrift Plan or Roth 401(k). Board contributions to members' accounts were $19,211,000 and $17,699,000 in 2012 and 2011, respectively.

(7) Postretirement Benefits

The Board provides certain life insurance programs for its active employees and retirees. Activity as of December 31, 2012 and 2011, is summarized in the following tables:

	2012	2011
Change in benefit obligation:		
Benefit obligation – beginning of year	$ 11,799,079	$ 10,219,672
Service cost	210,030	186,268
Interest cost	534,224	529,161
Plan participants' contributions	–	–
Actuarial (gain) loss	1,055,530	1,158,757
Gross benefits paid	(349,215)	(294,779)
Benefit obligation – end of year	$ 13,249,648	$ 11,799,079
Weighted-average assumptions used to determine benefit obligation as of December 31 – discount rate	4.00 %	4.50 %
Change in plan assets:		
Fair value of plan assets – beginning of year	$ –	$ –
Employer contributions	349,215	294,779
Gross benefits paid	(349,215)	(294,779)
Fair value of plan assets – end of year	$ –	$ –
Funded status:		
Reconciliation of funded status – end of year:		
Fair value of plan assets	$ –	$ –
Benefit obligation	13,249,648	11,799,079
Funded status	(13,249,648)	(11,799,079)
Amount recognized – end of year	$(13,249,648)	$(11,799,079)
Amounts recognized in the statements of financial position consist of:		
Asset	$ –	$ –
Liability	(13,249,648)	(11,799,079)
Net amount recognized	$(13,249,648)	$(11,799,079)
Amounts recognized in accumulated other comprehensive income consist of:		
Net actuarial loss (gain)	$ 3,802,439	$ 2,980,166
Prior service cost (credit)	(225,554)	(251,044)
Net amount recognized	$ 3,576,885	$ 2,729,122

Expected cash flows:	
Expected employer contributions – 2013	$ 372,355
Expected benefit payments:*	
2013	$ 372,355
2014	402,603
2015	430,068
2016	460,866
2017	491,282
2018–2022	2,837,643

* Expected benefit payments to be made by the Board.

	2012	2011
Components of net periodic benefit cost:		
Service cost	$ 210,030	$ 186,268
Interest cost	534,224	529,161
Expected return on plan assets	–	–
Amortization:		
Actuarial (gain) loss	233,256	95,767
Prior service (credit) cost	(25,490)	(25,490)
Net periodic benefit cost (credit)	$ 952,020	$ 785,706
Weighted-average assumptions used to determine net periodic benefit cost – discount rate	4.50 %	5.25 %
Other changes in plan assets and benefit obligations recognized in other comprehensive income:		
Current year actuarial (gain) loss	$1,055,530	$1,158,757
Amortization of prior service credit (cost)	25,490	25,490
Amortization of actuarial gain (loss)	(233,256)	(95,767)
Total recognized in other comprehensive (income) loss	$ 847,764	$1,088,480
Total recognized in net periodic benefit cost and other comprehensive income	$1,799,784	$1,874,186

Estimated amounts that will be amortized from accumulated other comprehensive income into net periodic benefit cost (credit) in 2013 are shown below:

Net actuarial (gain) loss	$313,301
Prior service (credit) cost	(25,490)
Total	$287,811

(8) Postemployment Benefits

The Board provides certain postemployment benefits to eligible former or inactive employees and their dependents during the period subsequent to employment but prior to retirement. Postemployment costs were actuarially determined using a December 31 measurement date and discount rates of 2.50% and 2.25% as of December 31, 2012 and 2011, respectively. The net periodic postemployment benefit cost (credit) recognized by the Board as of December 31, 2012 and 2011, were $518,000 and ($1,606,000), respectively.

(9) Accumulated Other Comprehensive Income (Loss)

A reconciliation of beginning and ending balances of accumulated other comprehensive income (loss) for the years ended December 31, 2012 and 2011, is as follows:

	Amount Related to Defined Benefit Retirement Plans	Amount Related to Postretirement Benefits Other Than Pensions	Total Accumulated Other Comprehensive Income (Loss)
Balance – January 1, 2011	$(12,986,880)	$(1,640,642)	$(14,627,522)
Change in funded status of benefit plans:			
Amortization of prior service (credit) costs	533,276	(25,490)	507,786
Amortization of net actuarial (gain) loss	558,107	95,767	653,874
Net actuarial gain (loss) arising during the year	(2,468,923)	(1,158,757)	(3,627,680)
Change in funded status of benefit plans – other comprehensive income (loss)	(1,377,540)	(1,088,480)	(2,466,020)
Balance – December 31, 2011	(14,364,420)	(2,729,122)	(17,093,542)
Change in funded status of benefit plans:			
Amortization of prior service (credit) costs	610,380	(25,490)	584,890
Amortization of net actuarial (gain) loss	1,426,700	233,256	1,659,956
Net actuarial gain (loss) arising during the year	(1,928,264)	(1,055,530)	(2,983,794)
Change in funded status of benefit plans – other comprehensive income (loss)	108,816	(847,764)	(738,948)
Balance – December 31, 2012	$(14,255,604)	$(3,576,886)	$(17,832,490)

Additional detail regarding the classification of accumulated other comprehensive income (loss) is included in Notes 6 and 7.

(10) Reserve Banks

The Board performs certain functions for the Reserve Banks in conjunction with its responsibilities for the System, and the Reserve Banks provide certain administrative functions for the Board. The Board assesses the Reserve Banks for its operating expenses, to include expenses related to its currency responsibilities, as well as for the funding the Board is required to provide to the Bureau and the Office.

Activity related to the Board and Reserve Banks is summarized in the following table:

	2012	2011
For the years ended December 31:		
Assessments levied or to be levied on Federal Reserve Banks for:		
Currency expenses	$ 721,074,064	$ 650,010,597
Board operations	490,000,000	472,300,000
Transfers of funds to the Bureau	385,200,000	241,711,564
Transfers of funds to the Office	2,078,298	40,000,000
Total assessments levied or to be levied on Federal Reserve Banks	$1,598,352,362	$1,404,022,161
Board expenses charged to the Federal Reserve Banks for data processing	$ 423,209	$ 406,421
Federal Reserve Bank expenses charged to the Board:		
Data processing and communication	$ 1,313,902	$ 788,910
Contingency site	1,191,220	1,211,362
Total Federal Reserve Bank expenses charged to the Board	$ 2,505,122	$ 2,000,272
Net transactions with Federal Reserve Banks	$1,596,270,449	$1,402,428,310
As of the years ended December 31:		
Accounts receivable due from the Federal Reserve Banks	$ 751,614	$ 2,501,565
Accounts payable due to the Federal Reserve Banks	$ 334,665	$ 16,358

The Board contracted for audit services on behalf of entities that are included in the combined financial statements of the Reserve Banks. The entities reimburse the Board for the cost of the audit services. The Board accrued liabilities of $185,000 and $293,000 in audit services and recorded net receivables of $170,000 and $500,000 from the entities as of December 31, 2012 and 2011, respectively. In 2013, the Board also entered into lease arrangements with the Reserve Banks related to space needs for the OIG and the Board's data center.

The OEB administers certain System benefit programs on behalf of the Board and the Reserve Banks, and costs associated with the OEB's activities are assessed to the Board and Reserve Banks. The Board was assessed $2,530,000 and $2,596,000 for the years ended December 31, 2012 and 2011, respectively.

(11) Federal Financial Institutions Examination Council

The Board is one of the five member agencies of the Federal Financial Institutions Examination Council (the Council), and currently performs certain management functions for the Council. The five agencies that are represented on the Council are the Board, Federal Deposit Insurance Corporation, National Credit Union Administration, Office of the Comptroller of the Currency, and the Bureau.

The Board's financial statements do not include financial data for the Council. Activity related to the Board and Council, is summarized in the following table:

	2012	2011
For the years ended December 31:		
Council expenses charged to the Board:		
Assessments for operating expenses	$ 137,466	$ 137,421
Assessments for examiner education	1,043,917	810,459
Central Data Repository	1,111,793	1,113,255
Home Mortgage Disclosure Act/Community Reinvestment Act	753,464	702,482
Uniform Bank Performance Report	132,294	117,215
Total Council expenses charged to the Board	$3,178,934	$2,880,832
Board expenses charged to the Council:		
Data processing related services	$4,392,625	$4,164,479
Administrative services	261,000	281,000
Total Board expenses charged to the Council	$4,653,625	$4,445,479
As of the years ended December 31:		
Accounts receivable due from the Council	$ 545,770	$ 494,234
Accounts payable due to the Council	$ 211,061	$ 132,539

(12) The Bureau of Consumer Financial Protection

Beginning July 2011, section 1017 of the Dodd-Frank Act requires the Board to fund the Bureau from the combined earnings of the System, in an amount determined by the Director of the Bureau to be reasonably necessary to carry out the authorities of the Bureau under Federal consumer financial law, taking into account such other sums made available to the Bureau from the preceding year (or quarter of such year). The Dodd-Frank Act limits the amount to be transferred each fiscal year to a fixed percentage of the System's total operating expenses. The Board received and processed funding requests for the Bureau totaling $385,200,000 and $241,711,564 during calendar years 2012 and 2011, respectively. During 2012, the Bureau transferred $3 million to the Board related to funding the operations of the OIG.

As part of the transfer of responsibilities from the Board to the Bureau, certain Board staff were transferred to the Bureau during 2011. The Board continued to administer certain non-retirement benefits for all transferred Board employees through July 20, 2012.

(13) The Office of Financial Research

Section 155(c) of the Dodd-Frank Act requires the Board to provide an amount sufficient to cover the expenses of the Office for the two-year period following the date of the enactment (July 21, 2010). The expenses of the FSOC are included in the expenses of the Office. The Board received and processed funding requests for the Office totaling $42,000,000 and $40,000,000 during 2012 and 2011, respectively. At the end of the two-year period in 2012, the Office returned $39,921,702 to the Board which was returned to the Reserve Banks.

(14) Currency

The Bureau of Engraving and Printing (BEP) is the sole supplier for currency printing and also provides currency retirement services. The Board provides or contracts for other services associated with currency, such as shipping, education, and quality assurance. The currency costs incurred by the Board for the years ended December 31, 2012 and 2011, are reflected in the following table:

	2012	2011
Expenses related to BEP services:		
Printing	$687,704,624	$623,214,300
Retirement	3,132,105	3,475,244
Subtotal related to BEP services	$690,836,729	$626,689,544
Other currency expenses:		
Shipping	$ 17,179,610	$ 15,728,046
Research and development	5,316,005	4,486,525
Quality assurance services	7,259,900	2,992,053
Education services	481,820	114,429
Subtotal other currency expenses	$ 30,237,335	$ 23,321,053
Total currency expenses	$721,074,064	$650,010,597

(15) Commitments and Contingencies

Commitments — The Board has entered into an agreement with the Federal Deposit Insurance Corporation and the Office of the Comptroller of the Currency, through the Council, to fund a portion of the enhancements and maintenance fees for a central data repository project that requires maintenance through 2013. The estimated Board expense to support this effort is $845,000 for the remaining option period.

Litigation and Contingent Liabilities — The Board is subject to contingent liabilities which arise from litigation cases and various business contracts. These contingent liabilities arise in the normal course of operations and their ultimate disposition is unknown. Based on information currently available to management, it is management's opinion that the expected outcome of these matters, in the aggregate, will not have a material adverse effect on the financial statements.

(16) Subsequent Events

There were no subsequent events that require adjustments to or disclosures in the financial statements as of December 31, 2012. Subsequent events were evaluated through March 5, 2013, which is the date the financial statements were available to be issued.

INDEPENDENT AUDITORS' REPORT ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

To the Board of Governors of the Federal Reserve System:

We have audited, in accordance with the auditing standards generally accepted in the United States of America, auditing standards of the Public Company Accounting Oversight Board (United States), and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Board of Governors of the Federal Reserve System (the "Board") as of and for the years ended December 31, 2012 and 2011, and the related notes to the financial statements. We have also audited, in accordance with attestation standards established by the American Institute of Certified Public Accountants and in accordance with the auditing standards of the Public Company Accounting Oversight Board (United States), the Board's internal control over financial reporting as of December 31, 2012, based on the criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. We have issued our report on the aforementioned audits dated March 5, 2013.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Board's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards.*

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of compliance and the results of that testing, and not to provide an opinion on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Board's compliance. Accordingly, this communication is not suitable for any other purpose.

Deloitte & Touche LLP

March 5, 2013
Washington, DC

Federal Reserve Banks Combined Financial Statements

The combined financial statements of the Federal Reserve Banks were audited by Deloitte & Touche LLP, independent auditors, for the years ended December 31, 2012 and 2011.

INDEPENDENT AUDITORS' REPORT

To the Board of Governors of the Federal Reserve System and the Boards of Directors of the Federal Reserve Banks:

We have audited the accompanying combined financial statements of the Federal Reserve Banks (the "Reserve Banks"), which are comprised of the combined statements of condition as of December 31, 2012 and 2011, and the related combined statements of income and comprehensive income, and changes in capital for the years then ended, and the related notes to the combined financial statements.

Management's Responsibility for the Combined Financial Statements

Management is responsible for the preparation and fair presentation of these combined financial statements in accordance with accounting principles established by the Board of Governors of the Federal Reserve System (the "Board") as described in Note 3 to the combined financial statements; this includes determining that the basis of accounting established by the Board is an acceptable basis for the preparation of the financial statements in the circumstances. Management is also responsible for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the combined financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these combined financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and in accordance with the auditing standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the combined financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the combined financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the combined financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the preparation and fair presentation of the combined financial statements of the Federal Reserve Banks' in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Federal Reserve Banks' internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the combined financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the combined financial statements referred to above present fairly, in all material respects, the financial position of the Reserve Banks as of December 31, 2012 and 2011, and the results of their operations for the years then ended in accordance with the basis of accounting described in Note 3 to the financial statements.

Basis of Accounting

We draw attention to Note 3 to the combined financial statements, which describes the basis of accounting. The Division of Reserve Bank Operations and Payment Systems has prepared these financial statements in conformity with accounting principles established by the Board, as set forth in the *Financial Accounting Manual for Federal Reserve Banks*, which is a basis of accounting other than accounting principles generally accepted in the United States of America. The effects on the combined financial statements of the differences between the accounting principles established by the Board and accounting principles generally accepted in the United States of America are also described in Note 3 to the combined financial statements. Our opinion is not modified with respect to this matter.

Deloitte & Touche LLP

March 14, 2013
Washington, DC

Federal Reserve Banks

Abbreviations

ABS	Asset-backed securities
ACH	Automated clearinghouse
AIA	American International Assurance Company Ltd.
AIG	American International Group, Inc.
ALICO	American Life Insurance Company
ASC	Accounting Standards Codification
ASU	Accounting Standards Update
BEP	Benefit Equalization Retirement Plan
Bureau	Bureau of Consumer Financial Protection
CDO	Collateralized debt obligation
CDS	Credit default swaps
CIP	Committee on Investment Performance (related to System Retirement Plan)
CMBS	Commercial mortgage-backed securities
FAM	*Financial Accounting Manual for Federal Reserve Banks*
FASB	Financial Accounting Standards Board
Fannie Mae	Federal National Mortgage Association
Freddie Mac	Federal Home Loan Mortgage Corporation
FOMC	Federal Open Market Committee
FRBA	Federal Reserve Bank of Atlanta
FRBC	Federal Reserve Bank of Cleveland
FRBNY	Federal Reserve Bank of New York
FRBSF	Federal Reserve Bank of San Francisco
GAAP	Accounting principles generally accepted in the United States of America
GSE	Government-sponsored enterprise
IMF	International Monetary Fund
JPMC	JPMorgan Chase & Co.
Libor	London interbank offered rate
LLC	Limited liability company
MBS	Mortgage-backed securities
ML	Maiden Lane LLC
ML II	Maiden Lane II LLC
ML III	Maiden Lane III LLC
MTM	Mark-to-market
OEB	Office of Employee Benefits of the Federal Reserve System
OFR	Office of Financial Research
RMBS	Residential mortgage-backed securities
SBA	Small Business Administration
SDR	Special drawing rights
SERP	Supplemental Retirement Plan for Select Officers of the Federal Reserve Banks

SOMA	System Open Market Account
STRIPS	Separate Trading of Registered Interest and Principal of Securities
TALF	Term Asset-Backed Securities Loan Facility
TARP	Troubled Asset Relief Program
TBA	To be announced
TDF	Term Deposit Facility
TRS	Total return swap agreement
VIE	Variable interest entity

Federal Reserve Banks Combined Statements of Condition as of December 31, 2012 and December 31, 2011
(in millions)

	2012	2011
Assets		
Gold certificates	$ 11,037	$ 11,037
Special drawing rights certificates	5,200	5,200
Coin	2,108	2,306
Loans:		
Depository institutions	70	196
Term Asset-Backed Securities Loan Facility (measured at fair value)	560	9,059
System Open Market Account:		
Treasury securities, net (of which $9,139 and $15,121 is lent as of December 31, 2012 and 2011, respectively)	1,809,188	1,750,277
Government-sponsored enterprise debt securities, net (of which $697 and $1,276 is lent as of December 31, 2012 and 2011, respectively)	79,479	107,828
Federal agency and government-sponsored enterprise mortgage-backed securities, net	950,321	848,258
Foreign currency denominated assets, net	24,972	25,950
Central bank liquidity swaps	8,889	99,823
Other investments	23	–
Investments held by consolidated variable interest entities (of which $2,266 and $35,593 is measured at fair value as of December 31, 2012 and 2011, respectively)	2,750	35,693
Accrued interest receivable	18,932	19,710
Bank premises and equipment, net	2,676	2,549
Items in process of collection	216	273
Other assets	713	711
Total assets	$2,917,134	$2,918,870
Liabilities and capital		
Federal Reserve notes outstanding, net	$1,126,661	$1,034,052
System Open Market Account:		
Securities sold under agreements to repurchase	107,188	99,900
Other liabilities	3,177	1,368
Consolidated variable interest entities:		
Beneficial interest in consolidated variable interest entities (measured at fair value)	803	9,845
Other liabilities (of which $71 and $106 is measured at fair value as of December 31, 2012 and 2011, respectively)	415	690
Deposits:		
Depository institutions	1,491,045	1,562,253
Treasury, general account	92,720	85,737
Other deposits	33,903	65,034
Interest payable to depository institutions	199	178
Accrued benefit costs	3,964	3,952
Deferred credit items	702	904
Accrued interest on Federal Reserve notes	1,407	900
Other liabilities	230	259
Total liabilities	2,862,414	2,865,072
Capital paid-in	27,360	26,899
Surplus (including accumulated other comprehensive loss of $4,845 and $4,792 at December 31, 2012 and 2011, respectively)	27,360	26,899
Total capital	54,720	53,798
Total liabilities and capital	$2,917,134	$2,918,870

The accompanying notes are an integral part of these combined financial statements.

Federal Reserve Banks Combined Statements of Income and Comprehensive Income for the years ended December 31, 2012 and December 31, 2011
(in millions)

	2012	2011
Interest income		
Loans:		
Term Asset-Backed Securities Loan Facility	$ 80	$ 265
American International Group, Inc., net	–	409
System Open Market Account:		
Treasury securities, net	46,416	42,257
Government-sponsored enterprise debt securities, net	2,626	3,053
Federal agency and government-sponsored enterprise mortgage-backed securities, net	31,429	38,281
Foreign currency denominated assets, net	139	249
Central bank liquidity swaps	241	34
Other investments	9	–
Investments held by consolidated variable interest entities	1,110	3,429
Total interest income	82,050	87,977
Interest expense		
System Open Market Account:		
Securities sold under agreements to repurchase	142	44
Beneficial interest in consolidated variable interest entities	153	285
Deposits:		
Depository institutions	3,871	3,765
Term Deposit Facility	4	6
Total interest expense	4,170	4,100
Net interest income	77,880	83,877
Non-interest income		
Term Asset-Backed Securities Loan Facility, unrealized losses	(34)	(84)
System Open Market Account:		
Treasury securities gains, net	13,255	2,258
Federal agency and government-sponsored enterprise mortgage-backed securities gains, net	241	10
Foreign currency translation (losses) gains, net	(1,116)	152
Consolidated variable interest entities:		
Investments held by consolidated variable interest entities gains (losses), net	7,451	(3,920)
Beneficial interest in consolidated variable interest entities (losses) gains, net	(2,345)	491
Dividends on preferred interests	–	47
Income from services	449	477
Reimbursable services to government agencies	506	485
Other	69	134
Total non-interest income	18,476	50
Operating expenses		
Salaries and benefits	3,084	2,811
Occupancy	314	312
Equipment	193	188
Assessments:		
Board of Governors operating expenses and currency costs	1,212	1,121
Bureau of Consumer Financial Protection	385	242
Office of Financial Research	2	40
Professional fees related to consolidated variable interest entities	25	71
Other	572	604
Total operating expenses	5,787	5,389
Net income before interest on Federal Reserve notes expense remitted to Treasury	90,569	78,538
Interest on Federal Reserve notes expense remitted to Treasury	88,418	75,424
Net income	2,151	3,114
Change in prior service costs related to benefit plans	171	46
Change in actuarial losses related to benefit plans	(224)	(1,208)
Total other comprehensive loss	(53)	(1,162)
Comprehensive income	$ 2,098	$ 1,952

The accompanying notes are an integral part of these combined financial statements.

Federal Reserve Banks Combined Statements of Changes in Capital for the years ended December 31, 2012 and December 31, 2011
(in millions, except share data)

	Capital paid-in	Surplus			Total capital
		Net income retained	Accumulated other comprehensive loss	Total surplus	
Balance at December 31, 2010 (530,481,136 shares)	$26,524	$30,154	$(3,630)	$26,524	$53,048
Net change in capital stock issued (7,503,485 shares)	375	–	–	–	375
Comprehensive income:					
Net income	–	3,114	–	3,114	3,114
Other comprehensive loss	–	–	(1,162)	(1,162)	(1,162)
Dividends on capital stock	–	(1,577)	–	(1,577)	(1,577)
Net change in capital	375	1,537	(1,162)	375	750
Balance at December 31, 2011 (537,984,621 shares)	$26,899	$31,691	$(4,792)	$26,899	$53,798
Net change in capital stock issued (9,210,524 shares)	461	–	–	–	461
Comprehensive income:					
Net income	–	2,151	–	2,151	2,151
Other comprehensive loss	–	–	(53)	(53)	(53)
Dividends on capital stock	–	(1,637)	–	(1,637)	(1,637)
Net change in capital	461	514	(53)	461	922
Balance at December 31, 2012 (547,195,145 shares)	$27,360	$32,205	$(4,845)	$27,360	$54,720

The accompanying notes are an integral part of these combined financial statements.

(1) Structure

The Federal Reserve Banks (Reserve Banks) are part of the Federal Reserve System (System) created by Congress under the Federal Reserve Act of 1913 (Federal Reserve Act), which established the central bank of the United States. The Reserve Banks are chartered by the federal government and possess a unique set of governmental, corporate, and central bank characteristics.

In accordance with the Federal Reserve Act, supervision and control of each Reserve Bank is exercised by a board of directors. The Federal Reserve Act specifies the composition of the board of directors for each of the Reserve Banks. Each board is composed of nine members serving three-year terms: three directors, including those designated as chairman and deputy chairman, are appointed by the Board of Governors of the Federal Reserve System (Board of Governors) to represent the public, and six directors are elected by member banks. Banks that are members of the System include all national banks and any state-chartered banks that apply and are approved for membership. Member banks are divided into three classes according to size. Member banks in each class elect one director representing member banks and one representing the public. In any election of directors, each member bank receives one vote, regardless of the number of shares of Reserve Bank stock it holds.

In addition to the 12 Reserve Banks, the System also consists, in part, of the Board of Governors and the Federal Open Market Committee (FOMC). The Board of Governors, an independent federal agency, is charged by the Federal Reserve Act with a number of specific duties, including general supervision over the Reserve Banks. The FOMC is composed of members of the Board of Governors, the president of the Federal Reserve Bank of New York (FRBNY), and, on a rotating basis, four other Reserve Bank presidents.

(2) Operations and Services

The Reserve Banks perform a variety of services and operations. These functions include participating in formulating and conducting monetary policy; participating in the payment system, including large-dollar transfers of funds, automated clearinghouse (ACH) operations, and check collection; distributing coin and currency; performing fiscal agency functions for the U.S. Department of the Treasury (Treasury), certain federal agencies, and other entities; serving as the federal government's bank; providing short-term loans to depository institutions; providing loans to participants in programs or facilities with broad-based eligibility in unusual and exigent circumstances; serving consumers and communities by providing educational materials and information regarding financial consumer protection rights and laws and information on community development programs and activities; and supervising bank holding companies, state member banks, savings and loan holding companies, U.S. offices of foreign banking organizations, and designated financial market utilities pursuant to authority delegated by the Board of Governors. Certain services are provided to foreign and international monetary authorities, primarily by the FRBNY.

The FOMC, in conducting monetary policy, establishes policy regarding domestic open market operations, oversees these operations, and issues authorizations and directives to the FRBNY to execute transactions. The FOMC authorizes and directs the FRBNY to conduct operations in domestic markets, including the direct purchase and sale of Treasury securities, government-sponsored enterprise (GSE) debt securities, federal agency and GSE mortgage-backed securities (MBS),

the purchase of these securities under agreements to resell, and the sale of these securities under agreements to repurchase. The FRBNY holds the resulting securities and agreements in a portfolio known as the System Open Market Account (SOMA). The FRBNY is authorized and directed to lend the Treasury securities and federal agency and GSE debt securities that are held in the SOMA.

To counter disorderly conditions in foreign exchange markets or to meet other needs specified by the FOMC to carry out the System's central bank responsibilities, the FOMC has authorized and directed the FRBNY to execute spot and forward foreign exchange transactions in 14 foreign currencies, to hold balances in those currencies, and to invest such foreign currency holdings, while maintaining adequate liquidity. The FOMC has also authorized the FRBNY to maintain reciprocal currency arrangements with the Bank of Canada and the Bank of Mexico in the maximum amounts of $2 billion and $3 billion, respectively, and to warehouse foreign currencies for the Treasury and the Exchange Stabilization Fund.

Because of the global character of funding markets, the System has at times coordinated with other central banks to provide temporary liquidity. In May 2010, the FOMC authorized and directed the FRBNY to establish temporary U.S. dollar liquidity swap arrangements with the Bank of Canada, the Bank of England, the European Central Bank, the Bank of Japan, and the Swiss National Bank through January 2011. Subsequently, the FOMC authorized and directed the FRBNY to extend these arrangements through February 1, 2013. In December 2012, the FOMC authorized and directed the FRBNY to extend these arrangements through February 1, 2014. In addition, in November 2011, as a contingency measure, the FOMC authorized the FRBNY to establish temporary bilateral foreign currency liquidity swap arrangements, with the Bank of Canada, the Bank of England, the European Central Bank, the Bank of Japan, and the Swiss National Bank so that liquidity can be provided to U.S. institutions in any of their currencies if necessary. In December 2012, the FOMC authorized the FRBNY to extend these temporary bilateral foreign currency liquidity swap arrangements through February 1, 2014.

Although the Reserve Banks are separate legal entities, they collaborate on the delivery of certain services to achieve greater efficiency and effectiveness. This collaboration takes the form of centralized operations and product or function offices that have responsibility for the delivery of certain services on behalf of the Reserve Banks. Various operational and management models are used and are supported by service agreements between the Reserve Banks. In some cases, costs incurred by a Reserve Bank for services provided to other Reserve Banks are not shared; in other cases, the Reserve Banks are reimbursed for costs incurred in providing services to other Reserve Banks.

(3) Significant Accounting Policies

Accounting principles for entities with the unique powers and responsibilities of the nation's central bank have not been formulated by accounting standard-setting bodies. The Board of Governors has developed specialized accounting principles and practices that it considers to be appropriate for the nature and function of a central bank. These accounting principles and practices are documented in the *Financial Accounting Manual for Federal Reserve Banks* (FAM), which is issued by the Board of Governors. The Reserve Banks are required to adopt and apply accounting policies and practices that are consistent with the FAM and the combined financial statements have been prepared in accordance with the FAM.

Limited differences exist between the accounting principles and practices in the FAM and accounting principles generally accepted in the United States of America (GAAP), due to the unique nature of the Reserve Banks' powers and responsibilities as part of the nation's central bank and given the System's unique responsibility to conduct monetary policy. The primary differences are the presentation of all SOMA securities holdings at amortized cost and the recording of all SOMA securities on a settlement-date basis. Amortized cost, rather than the fair value presentation, more appropriately reflects the Reserve Banks' securities holdings given the System's unique responsibility to conduct monetary policy. Although the application of fair value measurements to the securities holdings may result in values substantially greater or less than their carrying values, these unrealized changes in value have no direct effect on the quantity of reserves available to the banking system or on the ability of the Reserve Banks, as the central bank, to meet their financial obligations and responsibilities. Both the domestic and foreign components of the SOMA portfolio may involve transactions that result in gains or losses when holdings are sold before maturity. Decisions regarding securities and foreign currency transactions, including their purchase and sale, are motivated by monetary policy objectives rather than profit. Accordingly, fair values, earnings, and gains or losses resulting from the sale of such securities and currencies are incidental to open market operations and do not motivate decisions related to policy or open market activities. Accounting for these securities on a settlement-date basis, rather than the trade-date basis required by GAAP, better reflects the timing of the transaction's effect on the quantity of reserves in the banking system. The cost bases of Treasury securities, GSE debt securities, and foreign government debt instruments are adjusted for amortization of premiums or accretion of discounts on a straight-line basis, rather than using the interest method required by GAAP. SOMA securities holdings are evaluated for credit impairment periodically.

In addition, the Reserve Banks do not present a Combined Statement of Cash Flows as required by GAAP because the liquidity and cash position of the Reserve Banks are not a primary concern given the Reserve Banks' unique powers and responsibilities as a central bank. Other information regarding the Reserve Banks' activities is provided in, or may be derived from, the Combined Statements of Condition, Income and Comprehensive Income, and Changes in Capital, and the accompanying notes to the combined financial statements. Other than those described above, there are no significant differences between the policies outlined in the FAM and GAAP.

Preparing the combined financial statements in conformity with the FAM requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the combined financial statements, and the reported amounts of income and expenses during the reporting period. Actual results could differ from those estimates.

The presentation of "Dividends on capital stock" and "Interest on Federal Reserve notes expense remitted to Treasury" in the Combined Statements of Income and Comprehensive Income for the year ended December 31, 2011 has been revised to conform to the current year presentation format. In addition, the presentation of "Comprehensive income" and "Dividends on capital stock" in the Combined Statements of Changes in Capital for the year ended December 31, 2011 have been revised to conform to the current year presentation format. The revised presentation of "Dividends on capital stock" and "Interest on Federal Reserve notes

expense remitted to Treasury" better reflects the nature of these items and results in a more consistent treatment of the amounts presented in the Combined Statements of Income and Comprehensive Income and the related balances presented in the Combined Statements of Condition. As a result of the change to report "Interest on Federal Reserve notes expense remitted to Treasury" as an expense, the amount reported as "Comprehensive income" for the year ended December 31, 2011 has been revised. Significant accounts and accounting policies are explained below.

a. Consolidation

The combined financial statements include the accounts and results of operations of the Reserve Banks as well as several variable interest entities (VIEs), which include Maiden Lane LLC (ML), Maiden Lane II LLC (ML II), Maiden Lane III LLC (ML III), and TALF LLC. The consolidation of the VIEs was assessed in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 810 (ASC 810) *Consolidation*, which requires a VIE to be consolidated by its controlling financial interest holder. Intercompany balances and transactions have been eliminated in consolidation. See Note 6 for additional information on the VIEs. The combined financial statements of the Reserve Banks also include accounts and results of operations of Maiden and Nassau LLC, a Delaware limited liability company (LLC) wholly-owned by the FRBNY, which was formed to own and operate the 33 Maiden Lane building, which was purchased on February 28, 2012. The FRBNY had been the primary occupant of the building since 1998, accounting for approximately 74 percent of the leased space.

A Reserve Bank consolidates a VIE if it has a controlling financial interest, which is defined as the power to direct the significant economic activities of the entity and the obligation to absorb losses or the right to receive benefits of the entity that could potentially be significant to the VIE. To determine whether it is the controlling financial interest holder of a VIE, the Reserve Bank evaluates the VIE's design, capital structure, and relationships with the variable interest holders. The Reserve Bank reconsiders whether it has a controlling financial interest in a VIE, as required by ASC 810, at each reporting date or if there is an event that requires consideration.

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank Act) established the Bureau of Consumer Financial Protection (Bureau) as an independent bureau within the System that has supervisory authority over some institutions previously supervised by the Reserve Banks in connection with those institutions' compliance with consumer protection statutes. Section 1017 of the Dodd-Frank Act provides that the financial statements of the Bureau are not to be consolidated with those of the Board of Governors or the System. Section 152 of the Dodd-Frank Act established the Office of Financial Research (OFR) within the Treasury. The Board of Governors funds the Bureau and OFR through assessments on the Reserve Banks as required by the Dodd-Frank Act. The Reserve Banks reviewed the law and evaluated the design of and their relationships to the Bureau and the OFR and determined that neither should be consolidated in the Reserve Banks' combined financial statements.

b. Gold and Special Drawing Rights Certificates

The Secretary of the Treasury is authorized to issue gold and special drawing rights (SDR) certificates to the Reserve Banks. Upon authorization, the Reserve Banks acquire gold certificates by crediting equivalent amounts in dollars to the

account established for the Treasury. The gold certificates held by the Reserve Banks are required to be backed by the gold owned by the Treasury. The Treasury may reacquire the gold certificates at any time and the Reserve Banks must deliver them to the Treasury. At such time, the Treasury's account is charged, and the Reserve Banks' gold certificate accounts are reduced. The value of gold for purposes of backing the gold certificates is set by law at $42 2/9 per fine troy ounce. Gold certificates are recorded by the Banks at original cost. The Board of Governors allocates the gold certificates among the Reserve Banks once a year based on each Reserve Bank's average Federal Reserve notes outstanding during the preceding calendar year.

SDRs are issued by the International Monetary Fund (IMF) to its members in proportion to each member's quota in the IMF at the time of issuance. SDRs serve as a supplement to international monetary reserves and may be transferred from one national monetary authority to another. Under the law providing for U.S. participation in the SDR system, the Secretary of the Treasury is authorized to issue SDR certificates to the Reserve Banks. When SDR certificates are issued to the Reserve Banks, equivalent amounts in U.S. dollars are credited to the account established for the Treasury and the Reserve Banks' SDR certificate accounts are increased. The Reserve Banks are required to purchase SDR certificates, at the direction of the Treasury, for the purpose of financing SDR acquisitions or for financing exchange stabilization operations. At the time SDR certificate transactions occur, the Board of Governors allocates the SDR certificates among the Reserve Banks based upon each Reserve Bank's Federal Reserve notes outstanding at the end of the preceding calendar year. SDR certificates are recorded by the Banks at original cost. There were no SDR certificate transactions during the years ended December 31, 2012 and 2011.

c. Coin

The amount reported as coin in the Combined Statements of Condition represents the face value of all United States coin held by the Reserve Banks. The Reserve Banks buy coin at face value from the U.S. Mint in order to fill depository institution orders.

d. Loans

Loans to depository institutions are reported at their outstanding principal balances, and interest income is recognized on an accrual basis.

The FRBNY records the Term Asset-Backed Securities Loan Facility (TALF) loans at fair value in accordance with the fair value option provisions of FASB ASC Topic 825 (ASC 825) *Financial Instruments*. Unrealized gains (losses) on TALF loans that are recorded at fair value are reported as "Non-interest income: Term Asset-Backed Securities Loan Facility, unrealized losses" in the Combined Statements of Income and Comprehensive Income. The interest income on TALF loans is recognized based on the contracted rate and is reported as a component of "Interest income: Term Asset-Backed Securities Loan Facility" in the Combined Statements of Income and Comprehensive Income.

Interest income on the FRBNY's loan to American International Group, Inc. (AIG) was recognized on an accrual basis. See Note 4 for additional information on AIG loan. Loan administrative and commitment fees were deferred and amortized on a straight-line basis, rather than using the interest method required by GAAP, over the term of the loan or commitment period. This method resulted in

an interest amount that approximated the amount determined using the interest method.

Loans, other than those recorded at fair value, are impaired when current information and events indicate that it is probable that the Reserve Banks will not receive the principal and interest that is due in accordance with the contractual terms of the loan agreement. Impaired loans are evaluated to determine whether an allowance for loan loss is required. The Reserve Banks have developed procedures for assessing the adequacy of any allowance for loan losses using all available information to identify incurred losses. This assessment includes monitoring information obtained from banking supervisors, borrowers, and other sources to assess the credit condition of the borrowers and, as appropriate, evaluating collateral values. Generally, the Reserve Banks would discontinue recognizing interest income on impaired loans until the borrower's repayment performance demonstrates principal and interest would be received in accordance with the terms of the loan agreement. If the Reserve Banks discontinue recording interest on an impaired loan, cash payments are first applied to principal until the loan balance is reduced to zero; subsequent payments are applied as recoveries of amounts previously deemed uncollectible, if any, and then as interest income.

Impaired loans include loans that have been modified in debt restructurings involving borrowers experiencing financial difficulties. The allowance for loan restructuring is determined by discounting the restructured cash flows using the original effective interest rate for the loan. Unless the borrower can demonstrate that it can meet the restructured terms, the Reserve Banks discontinue recognizing interest income. Performance prior to the restructuring, or significant events that coincide with the restructuring, are considered in assessing whether the borrower can meet the new terms.

e. Securities Purchased Under Agreements to Resell, Securities Sold Under Agreements to Repurchase, and Securities Lending

The FRBNY may engage in purchases of securities with primary dealers under agreements to resell (repurchase transactions). These repurchase transactions are settled through a triparty arrangement. In a triparty arrangement, two commercial custodial banks manage the collateral clearing, settlement, pricing, and pledging, and provide cash and securities custodial services for and on behalf of the FRBNY and counterparty. The collateral pledged must exceed the principal amount of the transaction by a margin determined by the FRBNY for each class and maturity of acceptable collateral. Collateral designated by the FRBNY as acceptable under repurchase transactions primarily includes Treasury securities (including Treasury Inflation-Protected Securities and Separate Trading of Registered Interest and Principal of Securities (STRIPS) Treasury securities); direct obligations of several federal and GSE-related agencies, including Federal National Mortgage Association (Fannie Mae) and Federal Home Loan Mortgage Corporation (Freddie Mac); and pass-through MBS of Fannie Mae, Freddie Mac, and Government National Mortgage Association. The repurchase transactions are accounted for as financing transactions with the associated interest income recognized over the life of the transaction.

The FRBNY may engage in sales of securities under agreements to repurchase (reverse repurchase transactions) with primary dealers and selected money market funds. The list of eligible counterparties was expanded to include GSEs, effective in July 2011, and bank and savings institutions, effective in December 2011. These reverse repurchase transactions may be executed through a triparty arrangement

as an open market operation, similar to repurchase transactions. Reverse repurchase transactions may also be executed with foreign official and international account holders as part of a service offering. Reverse repurchase agreements are collateralized by a pledge of an amount of Treasury securities, GSE debt securities, and federal agency and GSE MBS that are held in the SOMA. Reverse repurchase transactions are accounted for as financing transactions, and the associated interest expense is recognized over the life of the transaction. These transactions are reported at their contractual amounts as "System Open Market Account: Securities sold under agreements to repurchase" and the related accrued interest payable is reported as a component of "Other liabilities" in the Combined Statements of Condition.

Treasury securities and GSE debt securities held in the SOMA may be lent to primary dealers to facilitate the effective functioning of the domestic securities markets. The amortized cost basis of securities lent continues to be reported as "Treasury securities, net" and "Government-sponsored enterprise debt securities, net," as appropriate, in the Combined Statements of Condition. Overnight securities lending transactions are fully collateralized by Treasury securities that have fair values in excess of the securities lent. The FRBNY charges the primary dealer a fee for borrowing securities, and these fees are reported as a component of "Non-interest income: Other" in the Combined Statements of Income and Comprehensive Income.

Activity related to securities purchased under agreements to resell, securities sold under agreements to repurchase, and securities lending is allocated to each of the Reserve Banks on a percentage basis derived from an annual settlement of the interdistrict settlement account that occurs in the second quarter of each year.

f. Treasury Securities; Government-Sponsored Enterprise Debt Securities; Federal Agency and Government-Sponsored Enterprise Mortgage-Backed Securities; Foreign Currency Denominated Assets; and Warehousing Agreements

Interest income on Treasury securities, GSE debt securities, and foreign currency denominated assets comprising the SOMA is accrued on a straight-line basis. Interest income on federal agency and GSE MBS is accrued using the interest method and includes amortization of premiums, accretion of discounts, and gains or losses associated with principal paydowns. Premiums and discounts related to federal agency and GSE MBS are amortized or accreted over the term of the security to stated maturity, and the amortization of premiums and accretion of discounts are accelerated when principal payments are received. Gains and losses resulting from sales of securities are determined by specific issue based on average cost. Treasury securities, GSE debt securities, and federal agency and GSE MBS are reported net of premiums and discounts in the Combined Statements of Condition, and interest income on those securities is reported net of the amortization of premiums and accretion of discounts in the Combined Statements of Income and Comprehensive Income.

In addition to outright purchases of federal agency and GSE MBS that are held in the SOMA, the FRBNY enters into dollar roll transactions (dollar rolls), which primarily involve an initial transaction to purchase or sell "to be announced" (TBA) MBS for delivery in the current month combined with a simultaneous agreement to sell or purchase TBA MBS on a specified future date. During the years ended December 31, 2012 and 2011, the FRBNY executed dollar rolls primarily to facilitate settlement of outstanding purchases of federal agency and GSE

MBS. The FRBNY accounts for dollar roll transactions as purchases or sales on a settlement-date basis. In addition, TBA MBS transactions may be paired off or assigned prior to settlement. Net gains resulting from dollar roll transactions are reported as "Non-interest income: System Open Market Account: Federal agency and government-sponsored enterprise mortgage-backed securities gains, net" in the Combined Statements of Income and Comprehensive Income.

Foreign currency denominated assets, which can include foreign currency deposits, securities purchased under agreements to resell, and government debt instruments, are revalued daily at current foreign currency market exchange rates in order to report these assets in U.S. dollars. Foreign currency translation gains and losses that result from the daily revaluation of foreign currency denominated assets are reported as "Non-interest income: System Open Market Account: Foreign currency translation (losses) gains, net" in the Combined Statements of Income and Comprehensive Income.

Activity related to Treasury securities, GSE debt securities, and federal agency and GSE MBS, including the premiums, discounts, and realized gains and losses, is allocated to each Reserve Bank on a percentage basis derived from an annual settlement of the interdistrict settlement account that occurs in the second quarter of each year. Activity related to foreign currency denominated assets, including the premiums, discounts, and realized and unrealized gains and losses, is allocated to each Reserve Bank based on the ratio of each Reserve Bank's capital and surplus to the Reserve Banks' aggregate capital and surplus at the preceding December 31.

Warehousing is an arrangement under which the FOMC has approved the exchange, at the request of the Treasury, of U.S. dollars for foreign currencies held by the Treasury over a limited period. The purpose of the warehousing facility is to supplement the U.S. dollar resources of the Treasury for financing purchases of foreign currencies and related international operations. Warehousing agreements are designated as held-for-trading purposes and are valued daily at current market exchange rates. Activity related to these agreements is allocated to each Reserve Bank based on the ratio of each Reserve Bank's capital and surplus to the Reserve Banks' aggregate capital and surplus at the preceding December 31.

The FRBNY is authorized to hold foreign currency working balances and execute foreign exchange contracts to facilitate international payments and currency transactions it makes on behalf of foreign central bank and U.S. official institution customers. These foreign currency working balances and contracts are not related to the FRBNY's monetary policy operations. Foreign currency working balances are reported as a component of "Other assets" in the Combined Statements of Condition and the related foreign currency translation gains and losses that result from the daily revaluation of the foreign currency working balances and contracts are reported as a component of "Non-interest income: Other" in the Combined Statements of Income and Comprehensive Income.

g. Central Bank Liquidity Swaps

Central bank liquidity swaps, which are transacted between the FRBNY and a foreign central bank, can be structured as either U.S. dollar liquidity or foreign currency liquidity swap arrangements.

Central bank liquidity swaps activity, including the related income and expense, is allocated to each Reserve Bank based on the ratio of each Reserve Bank's capital and surplus to aggregate capital and surplus at the preceding December 31. The

foreign currency amounts associated with these central bank liquidity swap arrangements are revalued daily at current foreign currency market exchange rates.

U.S. dollar liquidity swaps

At the initiation of each U.S. dollar liquidity swap transaction, the foreign central bank transfers a specified amount of its currency to a restricted account for the FRBNY in exchange for U.S. dollars at the prevailing market exchange rate. Concurrent with this transaction, the FRBNY and the foreign central bank agree to a second transaction that obligates the foreign central bank to return the U.S. dollars and the FRBNY to return the foreign currency on a specified future date at the same exchange rate as the initial transaction. The foreign currency amounts that the FRBNY acquires are reported as "System Open Market Account: Central bank liquidity swaps" in the Combined Statements of Condition. Because the swap transaction will be unwound at the same U.S. dollar amount and exchange rate that were used in the initial transaction, the recorded value of the foreign currency amounts is not affected by changes in the market exchange rate.

The foreign central bank compensates the FRBNY based on the foreign currency amounts it holds for the FRBNY. The FRBNY recognizes compensation during the term of the swap transaction, which is reported as "Interest income: System Open Market Account: Central bank liquidity swaps" in the Combined Statements of Income and Comprehensive Income.

Foreign currency liquidity swaps

The structure of foreign currency liquidity swap transactions involves the transfer by the FRBNY, at the prevailing market exchange rate, of a specified amount of U.S. dollars to an account for the foreign central bank in exchange for its currency. The foreign currency amount received would be reported as a liability by the Reserve Banks.

h. Investments Held by Consolidated Variable Interest Entities

The investments held by consolidated VIEs may include investments in federal agency and GSE MBS, non-agency residential mortgage-backed securities (RMBS), commercial and residential real estate mortgage loans, collateralized debt obligation (CDOs), short-term investments with maturities of greater than three months and less than one year, other investment securities, and swap contracts. Investments are reported as "Investments held by consolidated variable interest entities" in the Combined Statements of Condition. These investments are accounted for and classified as follows:

- ML's investments in debt securities are accounted for in accordance with FASB ASC Topic 320 (ASC 320) *Investments – Debt and Equity Securities* and ML elected the fair value option for all eligible assets and liabilities in accordance with ASC 825. Other financial instruments, including swap contracts in ML, are recorded at fair value in accordance with FASB ASC Topic 815 (ASC 815) *Derivatives and Hedging*.
- ML II and ML III qualify as nonregistered investment companies under the provisions of FASB ASC Topic 946 (ASC 946) *Financial Services – Investment Companies* and, therefore, all investments are recorded at fair value in accordance with ASC 946.
- TALF LLC follows the guidance in ASC 320 when accounting for any acquired ABS investments, and has elected the fair value option for all eligible assets in accordance with ASC 825.

i. Preferred Interests

The FRBNY's preferred interests in American International Assurance Company Ltd. LLC (AIA) and American Life Insurance Company LLC (ALICO) were paid in full on January 14, 2011. The five percent cumulative dividends accrued by the FRBNY on the preferred interests are reported as "Non-interest income: Dividends on preferred interests" in the Combined Statements of Income and Comprehensive Income.

j. Bank Premises, Equipment, and Software

Bank premises and equipment are stated at cost less accumulated depreciation. Depreciation is calculated on a straight-line basis over the estimated useful lives of the assets, which range from 2 to 50 years. Major alterations, renovations, and improvements are capitalized at cost as additions to the asset accounts and are depreciated over the remaining useful life of the asset or, if appropriate, over the unique useful life of the alteration, renovation, or improvement. Maintenance, repairs, and minor replacements are charged to operating expense in the year incurred.

Costs incurred for software during the application development stage, whether developed internally or acquired for internal use, are capitalized based on the purchase cost and the cost of direct services and materials associated with designing, coding, installing, and testing the software. Capitalized software costs are amortized on a straight-line basis over the estimated useful lives of the software applications, which generally range from two to five years. Maintenance costs related to software are charged to operating expense in the year incurred.

Capitalized assets, including software, buildings, leasehold improvements, furniture, and equipment, are impaired and an adjustment is recorded when events or changes in circumstances indicate that the carrying amount of assets or asset groups is not recoverable and significantly exceeds the assets' fair value.

k. Federal Reserve Notes

Federal Reserve notes are the circulating currency of the United States. These notes, which are identified as issued to a specific Reserve Bank, must be fully collateralized. All of the Reserve Banks' assets are eligible to be pledged as collateral. The collateral value is equal to the book value of the collateral tendered with the exception of securities, for which the collateral value is equal to the par value of the securities tendered. The par value of securities sold under agreements to repurchase is deducted from the eligible collateral value.

The Board of Governors may, at any time, call upon a Reserve Bank for additional security to adequately collateralize outstanding Federal Reserve notes. To satisfy the obligation to provide sufficient collateral for outstanding Federal Reserve notes, the Reserve Banks have entered into an agreement that provides for certain assets of the Reserve Banks to be jointly pledged as collateral for the Federal Reserve notes issued to all Reserve Banks. In the event that this collateral is insufficient, the Federal Reserve Act provides that Federal Reserve notes become a first and paramount lien on all the assets of the Reserve Banks. Finally, Federal Reserve notes are obligations of the United States government.

"Federal Reserve notes outstanding, net" in the Combined Statements of Condition represents the Reserve Banks' Federal Reserve notes outstanding, reduced by

the Reserve Banks' currency holdings of $228 billion and $172 billion at December 31, 2012 and 2011, respectively.

At December 31, 2012 and 2011, all Federal Reserve notes issued to the Reserve Banks were fully collateralized. At December 31, 2012, all gold certificates, all special drawing rights certificates, and $1,110 billion of domestic securities held in the SOMA were pledged as collateral. At December 31, 2012, no investments denominated in foreign currencies were pledged as collateral.

l. Beneficial Interest in Consolidated Variable Interest Entities

ML, ML II, and ML III have outstanding senior and subordinated financial interests, and TALF LLC has an outstanding financial interest. The subordinated financial interests of ML II and ML III include the interest-holder's allocated share of any residual net proceeds. Upon issuance of the financial interests, ML, ML II, ML III, and TALF LLC each elected to measure these obligations at fair value in accordance with ASC 825. Principal, interest, and changes in fair value on the senior financial interest, which were extended by the FRBNY, are eliminated in consolidation. The financial interests are recorded at fair value as "Beneficial interest in consolidated variable interest entities" in the Combined Statements of Condition. Interest expense and changes in fair value of the financial interest are recorded in "Interest expense: Beneficial interest in consolidated variable interest entities" and "Non-interest income: Beneficial interest in consolidated variable interest entities (losses) gains, net," respectively, in the Combined Statements of Income and Comprehensive Income.

m. Deposits

Depository Institutions

Depository institutions' deposits represent the reserve and service-related balances, such as required clearing balances, in the accounts that depository institutions hold at the Reserve Banks. The interest rates paid on required reserve balances and excess balances are determined by the Board of Governors, based on an FOMC-established target range for the federal funds rate. Interest payable is reported as a component of "Interest payable to depository institutions" in the Combined Statements of Condition.

The Term Deposit Facility (TDF) consists of deposits with specific maturities held by eligible institutions at the Reserve Banks. The Reserve Banks pay interest on these deposits at interest rates determined by auction. Interest payable is reported as a component of "Interest payable to depository institutions" in the Combined Statements of Condition. There were no deposits held by the Reserve Banks under the TDF at December 31, 2012 and 2011.

Treasury

The Treasury general account is the primary operational account of the Treasury and is held at the FRBNY.

Other

Other deposits include foreign central bank and foreign government deposits held at the FRBNY. Other deposits also include GSE deposits held by the Reserve Banks.

n. Items in Process of Collection and Deferred Credit Items

"Items in process of collection" primarily represents amounts attributable to checks that have been deposited for collection and that, as of the balance sheet date, have not yet been presented to the paying bank. "Deferred credit items" is the counterpart liability to items in process of collection. The amounts in this account arise from deferring credit for deposited items until the amounts are collected. The balances in both accounts can vary significantly.

o. Capital Paid-in

The Federal Reserve Act requires that each member bank subscribe to the capital stock of the Reserve Bank in an amount equal to six percent of the capital and surplus of the member bank. These shares are nonvoting, with a par value of $100, and may not be transferred or hypothecated. As a member bank's capital and surplus changes, its holdings of Reserve Bank stock must be adjusted. Currently, only one-half of the subscription is paid in and the remainder is subject to call. A member bank is liable for Reserve Bank liabilities up to twice the par value of stock subscribed by it.

By law, each Reserve Bank is required to pay each member bank an annual dividend of six percent on the paid-in capital stock. This cumulative dividend is paid semiannually.

p. Surplus

The Board of Governors requires the Reserve Banks to maintain a surplus equal to the amount of capital paid-in. On a daily basis, surplus is adjusted to equate the balance to capital paid-in. Accumulated other comprehensive income is reported as a component of "Surplus" in the Combined Statements of Condition and the Combined Statements of Changes in Capital. Additional information regarding the classifications of accumulated other comprehensive income is provided in Notes 9, 10, and 11.

q. Interest on Federal Reserve Notes

The Board of Governors requires the Reserve Banks to transfer excess earnings to the Treasury as interest on Federal Reserve notes after providing for the costs of operations, payment of dividends, and reservation of an amount necessary to equate surplus with capital paid-in. This amount is reported as "Interest on Federal Reserve notes expense remitted to Treasury" in the Combined Statements of Income and Comprehensive Income. The amount due to the Treasury is reported as "Accrued interest on Federal Reserve notes" in the Combined Statements of Condition. See Note 13 for additional information on interest on Federal Reserve notes.

If earnings during the year are not sufficient to provide for the costs of operations, payment of dividends, and equating surplus and capital paid-in, remittances to the Treasury are suspended. A deferred asset is recorded that represents the amount of net earnings a Reserve Bank will need to realize before remittances to the Treasury resume. This deferred asset is periodically reviewed for impairment.

r. Income and Costs Related to Treasury Services

When directed by the Secretary of the Treasury, the Reserve Banks are required by the Federal Reserve Act to serve as fiscal agent and depositary of the United States Government. By statute, the Treasury has appropriations to pay for these services. During the years ended December 31, 2012 and 2011, the Reserve Banks were reimbursed for all services provided to the Treasury as its fiscal agent.

s. Assessments

The Board of Governors assesses the Reserve Banks to fund its operations, the operations of the Bureau and, for a two-year period following the July 21, 2010 effective date of the Dodd-Frank Act, the OFR. These assessments are allocated to each Reserve Bank based on each Reserve Bank's capital and surplus balances. The Board of Governors also assesses each Reserve Bank for expenses related to producing, issuing, and retiring Federal Reserve notes based on each Reserve Bank's share of the number of notes comprising the System's net liability for Federal Reserve notes on December 31 of the prior year.

During the period before the Bureau transfer date of July 21, 2011, there was no limit on the funding provided to the Bureau and assessed to the Reserve Banks; the Board of Governors was required to provide the amount estimated by the Secretary of the Treasury needed to carry out the authorities granted to the Bureau under the Dodd-Frank Act and other federal law. The Dodd-Frank Act requires that, after the transfer date, the Board of Governors fund the Bureau in an amount not to exceed a fixed percentage of the total operating expenses of the System as reported in the Board of Governors' 2009 annual report, which totaled $4.98 billion. The fixed percentage of total 2009 operating expenses of the System is 10 percent ($498.0 million) for 2011, 11 percent ($547.8 million) for 2012, and 12 percent ($597.6 million) for 2013. After 2013, the amount will be adjusted in accordance with the provisions of the Dodd-Frank Act. The Reserve Banks' assessment for Bureau funding is reported as "Assessments: Bureau of Consumer Financial Protection" in the Combined Statements of Income and Comprehensive Income.

The Board of Governors assessed the Reserve Banks to fund the operations of the OFR for the two-year period ended July 21, 2012, following enactment of the Dodd-Frank Act; thereafter, the OFR is funded by fees assessed on bank holding companies and nonbank financial companies that meet the criteria specified in the Dodd-Frank Act.

t. Fair Value

Certain assets and liabilities reported on the Reserve Banks' Combined Statements of Condition are measured at fair value in accordance with ASC 820, including TALF loans, investments and beneficial interests of the consolidated VIE's, and assets of the Retirement Plan for Employees of the System. ASC 820 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. ASC 820 establishes a three-level fair value hierarchy that distinguishes between assumptions developed using market data obtained from independent sources (observable inputs) and the Reserve Bank's assumptions developed using the best information available in the circumstances (unobservable inputs). The three levels established by ASC 820 are described as follows:

- Level 1 – Valuation is based on quoted prices for identical instruments traded in active markets.
- Level 2 – Valuation is based on quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-based valuation techniques for which all significant assumptions are observable in the market.
- Level 3 – Valuation is based on model-based techniques that use significant inputs and assumptions not observable in the market. These unobservable inputs

and assumptions reflect the Reserve Banks' estimates of inputs and assumptions that market participants would use in pricing the assets and liabilities. Valuation techniques include the use of option pricing models, discounted cash flow models, and similar techniques.

The inputs or methodology used for valuing assets and liabilities are not necessarily an indication of the risk associated with those assets and liabilities.

u. Taxes

The Reserve Banks are exempt from federal, state, and local taxes, except for taxes on real property. The Reserve Banks' real property taxes were $47 million and $42 million for the years ended December 31, 2012 and 2011, respectively, and are reported as a component of "Operating expenses: Occupancy" in the Combined Statements of Income and Comprehensive Income.

v. Restructuring Charges

The Reserve Banks recognize restructuring charges for exit or disposal costs incurred as part of the closure of business activities in a particular location, the relocation of business activities from one location to another, or a fundamental reorganization that affects the nature of operations. Restructuring charges may include costs associated with employee separations, contract terminations, and asset impairments. Expenses are recognized in the period in which the Reserve Banks commit to a formalized restructuring plan or execute the specific actions contemplated in the plan and all criteria for financial statement recognition have been met.

Note 12 describes the Reserve Banks' restructuring initiatives and provides information about the costs and liabilities associated with employee separations and contract terminations. The costs associated with the impairment of certain Reserve Banks' assets are discussed in Note 7. Costs and liabilities associated with enhanced pension benefits in connection with the restructuring activities for all of the Reserve Banks are recorded on the books of the FRBNY and discussed in Note 9. Costs and liabilities associated with enhanced postretirement benefits are discussed in Note 10.

w. Recently Issued Accounting Standards

In April 2011, the FASB issued Accounting Standards Update (ASU) 2011–02, *Receivables* (Topic 310): *A Creditor's Determination of Whether a Restructuring Is a Troubled Debt Restructuring*, which clarifies accounting for troubled debt restructurings, specifically clarifying creditor concessions and financial difficulties experienced by borrowers. This update is effective for the Reserve Banks for the year ended December 31, 2012, and did not have a material effect on the Reserve Banks' combined financial statements.

In April 2011, the FASB issued ASU 2011–03, *Transfers and Servicing* (Topic 860): *Reconsideration of Effective Control for Repurchase Agreements*, which reconsidered the effective control for repurchase agreements. This update prescribes when the Reserve Banks may or may not recognize a sale upon the transfer of financial assets subject to repurchase agreements. This determination is based, in part, on whether the Reserve Banks have maintained effective control over the transferred financial assets. This update is effective for the Reserve Banks for the year ended December 31, 2012, and did not have a material effect on the Reserve Banks' combined financial statements.

In May 2011, the FASB issued ASU 2011–04, *Fair Value Measurement* (Topic 820): *Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRS*. This update requires additional disclosures for fair value measurements categorized as Level 3, including quantitative information about the unobservable inputs and assumptions used in the fair value measurement, a description of the valuation policies and procedures, and a narrative description of the sensitivity of the fair value measurement to changes in unobservable inputs and the interrelationships between those unobservable inputs. In addition, disclosure of the amounts and reasons for all transfers in and out of Level 1 and Level 2 is required. This update is effective for the Reserve Banks for the year ended December 31, 2012, and the required disclosures are included in Note 6.

In December 2011, the FASB issued ASU 2011–11, *Balance Sheet* (Topic 210): *Disclosures about Offsetting Assets and Liabilities*. This update will require a reporting entity to present enhanced disclosures for financial instruments and derivative instruments that are offset or subject to master netting agreements or similar such agreements. This update is effective for the Reserve Banks for the year ending December 31, 2013, and is not expected to have a material effect on the Reserve Banks' combined financial statements.

In December 2011, the FASB issued ASU 2011–12, *Comprehensive Income* (Topic 220): *Deferral of the Effective Date for Amendments to the Presentation of Reclassifications of Items Out of Accumulated Other Comprehensive Income in Accounting Standards Update No. 2011–05.* This update indefinitely deferred the requirements of ASU 2011–05, which required an entity to report the effect of significant reclassifications out of accumulated other comprehensive income on the respective net income line items. Subsequently, in February 2013, the FASB issued ASU 2013–02, *Comprehensive Income* (Topic 220): *Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income,* which established an effective date for the requirements of ASU 2011–05 related to reporting of significant reclassification adjustments from accumulated other comprehensive income. These presentation requirements of ASU 2011–05 are effective for the Bank for the year ending December 31, 2013, and will be reflected in the Reserve Banks' 2013 combined financial statements.

In January 2013, the FASB issued ASU 2013–01, *Balance Sheet* (Topic 210): *Clarifying the Scope of Disclosures about Offsetting Assets and Liabilities*. This update clarifies that the scope of Update 2011–11 applies to derivatives accounted for in accordance with Topic 815. This update is effective for the Reserve Banks for the year ending December 31, 2013, and is not expected to have a material effect on the Reserve Banks' combined financial statements.

(4) Loans

Loans to Depository Institutions

The Reserve Banks offer primary, secondary, and seasonal loans to eligible borrowers, and each program has its own interest rate. Interest is accrued using the applicable interest rate established at least every 14 days by the Reserve Banks' board of directors, subject to review and determination by the Board of Governors. Primary and secondary loans are extended on a short-term basis, typically overnight, whereas seasonal loans may be extended for a period of up to nine months.

Primary, secondary, and seasonal loans are collateralized to the satisfaction of each Reserve Bank to reduce credit risk. Assets eligible to collateralize these loans include consumer, business, and real estate loans; Treasury securities; GSE debt securities; foreign sovereign debt; municipal, corporate, and state and local government obligations; asset-backed securities (ABS); corporate bonds; commercial paper; and bank-issued assets, such as certificates of deposit, bank notes, and deposit notes. Collateral is assigned a lending value that is deemed appropriate by each Reserve Bank, which is typically fair value reduced by a margin. Loans to depository institutions are monitored daily to ensure that borrowers continue to meet eligibility requirements for these programs. The financial condition of borrowers is monitored by each Reserve Bank and, if a borrower no longer qualifies for these programs, the Reserve Bank will generally request full repayment of the outstanding loan or, for primary or seasonal loans, may convert the loan to a secondary credit loan. Collateral levels are reviewed daily against outstanding obligations and borrowers that no longer have sufficient collateral to support outstanding loans are required to provide additional collateral or to make partial or full repayment.

The remaining maturity distribution of loans to depository institutions outstanding as of December 31, 2012 and 2011, was as follows (in millions):

	Within 15 days	16 days to 90 days	Total
December 31, 2012	$ 67	$3	$ 70
December 31, 2011	$189	$7	$196

At December 31, 2012 and 2011, the Reserve Banks did not have any loans that were impaired, past due, or on non-accrual status, and no allowance for loan losses was required. There were no impaired loans during the years ended December 31, 2012 and 2011.

TALF

The TALF assisted financial markets in accommodating the credit needs of consumers and businesses of all sizes by facilitating the issuance of ABS collateralized by a variety of consumer and business loans. Each TALF loan had an original maturity of three-years, except loans secured by Small Business Administration (SBA) Pool Certificates, loans secured by SBA Development Company Participation Certificates, or ABS backed by student loans or commercial mortgage loans, which had an original maturity of five-years if the borrower so elected. The loans are secured by eligible collateral, with the FRBNY having lent an amount equal to the value of the collateral, as determined by the FRBNY, less a margin. Loan proceeds were disbursed to the borrower contingent on receipt by the FRBNY's custodian of the eligible collateral, an administrative fee, and, if applicable, a margin.

The TALF loans were extended on a nonrecourse basis. If the borrower does not repay the loan, the FRBNY will enforce its rights in the collateral and may sell the collateral to TALF LLC, a Delaware limited liability company, established on February 4, 2009, for the purpose of purchasing such assets. As of December 31, 2012, the FRBNY has not enforced its rights to the collateral because there have been no defaults.

Pursuant to a put agreement with the FRBNY, TALF LLC has committed to purchase assets that secure a TALF loan at a price equal to the principal amount outstanding plus accrued but unpaid interest, regardless of the fair value of the collat-

eral. Funding for the TALF LLC's purchases of these securities is derived first through the fees received by TALF LLC from the FRBNY for this commitment and any interest earned on its investments. In the event that such funding proves insufficient for the asset purchases that TALF LLC has committed to make under the put agreement, the Treasury originally committed to lend up to $20 billion, and on March 25, 2009, the Treasury funded $100 million. In addition to the Treasury's commitment, the FRBNY originally committed, as a senior lender, to lend up to $180 billion to TALF LLC if it needed the funding to purchase assets pursuant to the put agreement. Subsequently, the Treasury and FRBNY commitments to lend to TALF LLC were reduced to $1.4 billion and $2.6 billion, respectively. The termination date of the funding commitments was originally July 31, 2015. Information regarding further reduction in commitments is presented in Note 14.

Any Treasury loan to TALF LLC bears interest at a rate of the one-month London interbank offered rate (Libor) plus 300 basis points. Any loan that the FRBNY makes to TALF LLC would be senior to any Treasury loan and would bear interest at a rate of the one-month Libor plus 100 basis points. To the extent that Treasury and the FRBNY have extended credit to TALF LLC, their loans are secured by all of the assets of TALF LLC. The FRBNY is the managing member and the controlling party of TALF LLC and will remain the controlling party as long as it retains an economic interest in TALF LLC. After TALF LLC has paid all operating expenses and principal due to the FRBNY, the remaining proceeds of the portfolio holdings will be distributed in the following order: principal due to the Treasury, interest due to the FRBNY, and interest due to the Treasury. Any residual cash flows will be shared between the FRBNY, which will receive 10 percent, and the Treasury, which will receive 90 percent.

The FRBNY has elected the fair value option for all TALF loans in accordance with ASC 825. Recording all TALF loans at fair value, rather than at the remaining principal amount outstanding, improves accounting consistency and provides the most appropriate presentation on the financial statements by matching the change in fair value of TALF loans, the related put agreement with TALF LLC, and the valuation of the beneficial interests in TALF LLC. Information regarding the TALF LLC's assets and liabilities is presented in Note 6.

TALF loans are classified within Level 3 of the valuation hierarchy. Because external price information was not available, market-based models were used to determine the fair value of the TALF loans. The fair value of the TALF loans was determined by valuing the future cash flows from loan interest income and the estimated fair value of the collateral that may be put to the FRBNY. The valuation model takes into account a range of outcomes on TALF loan repayments, market prices of the collateral, risk premiums estimated using market prices, and the volatilities of market-risk factors. Other methodologies employed or assumptions made in determining fair value could result in an amount that differs significantly from the amount reported.

The following table presents the TALF loans at fair value as of December 31 by ASC 820 hierarchy (in millions):

	2012	2011
Level 3 fair value	$560	$9,059

The following table presents a reconciliation of TALF loans measured at fair value using significant unobservable inputs (Level 3) during the years ended December 31, 2012 and 2011 (in millions):

	TALF loans
Fair value at December 31, 2010	$ 24,853
Loan repayments and prepayments	(15,710)
Total realized and unrealized losses	(84)
Fair value at December 31, 2011	$ 9,059
Loan repayments and prepayments	(8,465)
Total realized and unrealized losses	(34)
Fair value at December 31, 2012	$ 560

The fair value of TALF loans reported in the Combined Statements of Condition as of December 31, 2012 and 2011, includes $3 million and $37 million in unrealized gains, respectively. The FRBNY attributes substantially all changes in fair value of loans to changes in instrument-specific credit spreads.

Eligible collateral includes U.S. dollar-denominated ABS that are backed by auto loans, student loans, credit card loans, equipment loans, floorplan loans, insurance premium financial loans, loans guaranteed by the SBA, residential mortgage servicing advances, or commercial mortgage loans. The following table presents the collateral concentration and remaining maturity distribution measured at fair value as of December 31, 2012 and 2011 (in millions):

Collateral type[1]	Time to maturity			
	Within 90 days	91 days to 1 year	Over 1 year to 5 years	Total
December 31, 2012:				
Student loan	$ –	$ –	$ 382	$ 382
Credit card	–	–	–	–
CMBS	3	–	129	132
Floorplan	–	–	–	–
Auto	–	–	–	–
SBAs	–	–	–	–
Other[2]	46	–	–	46
Total	$49	$ –	$ 511	$ 560
December 31, 2011:				
Student loan	$ –	$ 23	$1,937	$1,960
Credit card	–	2,326	80	2,406
CMBS	–	578	1,454	2,032
Floorplan	–	533	430	963
Auto	1	374	36	411
SBAs	–	113	221	334
Other[2]	–	426	527	953
Total	$ 1	$4,373	$4,685	$9,059

[1] All credit ratings are AAA unless otherwise indicated.

[2] Includes equipment loans, insurance premium financial loans, and residential mortgage servicing advances.

The aggregate remaining principal amount outstanding on TALF loans as of December 31, 2012 and 2011, was $556 million and $9,013 million, respectively.

At December 31, 2012 and 2011, no TALF loans were over 90 days past due or on nonaccrual status.

Earnings reported by the FRBNY related to the TALF include interest income and unrealized gains and losses on TALF loans as well as the FRBNY's allocated share of the TALF LLC's net income. Additional information regarding the income of the TALF LLC is presented in Note 6. The following table presents the components of TALF earnings recorded by the FRBNY for the years ended December 31 (in millions):

	2012	2011
Interest income	$ 80	$265
Unrealized losses	(34)	(84)
Subtotal – TALF loans	$ 46	$181
Allocated share of TALF LLC	(7)	(48)
Total TALF	$ 39	$133

AIG Loan, Net

In September 2008, the Board of Governors authorized the FRBNY to lend to AIG. Under the provisions of the original agreement, the FRBNY was authorized to lend up to $85 billion to AIG for two years at the three-month Libor, with a floor of 350 basis points, plus 850 basis points. In addition, the FRBNY assessed AIG a one-time commitment fee of 200 basis points on the full amount of the commitment and a fee of 850 basis points per annum on the undrawn credit line.

The Board and the Treasury announced a restructuring of the government's financial support to AIG in November 2008. As part of the restructuring, the Treasury purchased $40 billion of newly-issued AIG preferred shares under the Troubled Asset Relief Program (TARP). The majority of the TARP funds were used to pay down AIG's debt to the FRBNY. In addition, the terms of the original credit agreement were modified to reduce the revolving line of credit to $60 billion; reduce the interest rate to the three-month Libor with a floor of 350 basis points, plus 300 basis points; reduce the fee on undrawn funds to 75 basis points; and extend the term of the agreement to five years. Concurrent with the November 2008 restructuring of its financial support to AIG, the FRBNY established two LLCs, ML II and ML III, which are discussed further in Note 6.

On April 17, 2009, the FRBNY, as part of the U.S. government's commitment to the orderly restructuring of AIG over time, in the face of continuing market dislocations, further restructured the AIG loan by eliminating the 350 basis-point floor on the Libor used to calculate the interest rate on the loan. After this restructuring, the interest rate on the modified loan was equal to the three-month Libor plus 300 basis points.

On December 1, 2009, the FRBNY's commitment to lend to AIG was reduced to $35 billion from $60 billion when the outstanding balance of the FRBNY's loan to AIG was reduced by $25 billion in exchange for a liquidation preference of nonvoting perpetual preferred interests in ALICO LLC and AIA LLC. AIG created these two LLCs to hold, directly or indirectly, all of the outstanding common stock of ALICO and AIA, two life insurance holding company subsidiaries of AIG. The FRBNY was to be paid a five percent cumulative dividend on its nonvoting preferred interests through September 22, 2013, and a nine percent cumulative dividend thereafter. Although the FRBNY had certain governance rights to protect its interests, AIG retained control of the LLCs and the underlying operating companies.

On September 30, 2010, AIG announced an agreement with the Treasury, the FRBNY, and the trustees of the AIG Credit Facility Trust on a comprehensive recapitalization plan designed to repay all its obligations to American taxpayers. On January 14, 2011, upon closing of the recapitalization plan, the cash proceeds from certain asset dispositions, specifically the initial public offering of AIA and the sale of ALICO, were used first to repay in full the revolving line of credit extended to AIG by the FRBNY, including accrued interest and fees, and then to redeem a portion of the FRBNY's preferred interests in ALICO LLC taken earlier by the FRBNY in satisfaction of a portion of the revolving line of credit. The FRBNY's remaining preferred interests in ALICO LLC and AIA LLC, valued at approximately $20 billion, were purchased by AIG through a draw on the Treasury's Series F preferred stock commitment and then transferred by AIG to the Treasury as partial consideration for the transfer to AIG of all outstanding Series F shares. In addition, the FRBNY's commitment to lend any funds under the revolving line of credit was terminated.

(5) System Open Market Account

a. Domestic Securities Holdings

The FRBNY conducts domestic open market operations and, on behalf of the Reserve Banks, holds the resulting securities in the SOMA.

During the years ended December 31, 2012 and 2011, the FRBNY continued the purchase of Treasury securities and federal agency and GSE MBS under the large-scale asset purchase programs authorized by the FOMC. In August 2010, the FOMC announced that the Federal Reserve would maintain the level of domestic securities holdings in the SOMA portfolio by reinvesting principal payments from GSE debt securities and federal agency and GSE MBS in longer-term Treasury securities. In November 2010, the FOMC announced its intention to expand the SOMA portfolio holdings of longer-term Treasury securities by an additional $600 billion and completed these purchases in June 2011. In September 2011, the FOMC announced that the Federal Reserve would reinvest principal payments from the SOMA portfolio holdings of GSE debt securities and federal agency and GSE MBS in federal agency and GSE MBS. In June 2012, the FOMC announced that it would continue the existing policy of reinvesting principal payments from the SOMA portfolio holdings of GSE debt securities and federal agency and GSE MBS in federal agency and GSE MBS, and suspended the policy of rolling over maturing Treasury securities into new issues at auction. In September 2012, the FOMC announced that the Federal Reserve would purchase additional federal agency and GSE MBS at a pace of $40 billion per month and maintain its existing policy of reinvesting principal payments from its holdings of GSE debt securities and federal agency and GSE MBS in federal agency and GSE MBS. In December 2012, the FOMC announced that the Federal Reserve would purchase longer-term Treasury securities at a pace of $45 billion per month after its program to extend the average maturity of its holdings of Treasury securities is completed at the end of 2012.

During the years ended December 31, 2012 and 2011, the FRBNY also continued the purchase and sale of SOMA portfolio holdings under the maturity extension programs authorized by the FOMC. In September 2011, the FOMC announced that the Federal Reserve would extend the average maturity of the SOMA portfolio holdings of securities by purchasing $400 billion par value of Treasury securities with maturities of six to thirty years and selling or redeeming an equal par amount of Treasury securities with remaining maturities of three years or less by

the end of June 2012. In June 2012, the FOMC announced that the Federal Reserve would continue through the end of 2012 its program to extend the average maturity of securities by purchasing $267 billion par value of Treasury securities with maturities of six to thirty years and selling or redeeming an equal par amount of Treasury securities with maturities of three and a quarter years or less by the end of 2012. In September 2012, the FOMC announced it would continue its program to extend the average maturity of its holdings of securities as announced in June 2012.

The total of Treasury securities, GSE debt securities, and federal agency and GSE MBS, net, excluding accrued interest, held in the SOMA at December 31 was as follows (in millions):

	2012			
	Par	Unamortized premiums	Unaccreted discounts	Total amortized cost
Bills	$ –	$ –	$ –	$ –
Notes	1,110,398	32,532	(711)	1,142,219
Bonds	555,747	111,360	(138)	666,969
Total Treasury securities	$1,666,145	$143,892	$(849)	$1,809,188
GSE debt securities	$ 76,783	$ 2,703	$ (7)	$ 79,479
Federal agency and GSE MBS	$ 926,662	$ 24,367	$(708)	$ 950,321

	2011			
	Par	Unamortized premiums	Unaccreted discounts	Total amortized cost
Bills	$ 18,423	$ –	$ –	$ 18,423
Notes	1,286,344	26,806	(1,233)	1,311,917
Bonds	358,679	61,347	(89)	419,937
Total Treasury securities	$1,663,446	$88,153	$(1,322)	$1,750,277
GSE debt securities	$ 103,994	$ 3,847	$ (13)	$ 107,828
Federal agency and GSE MBS	$ 837,683	$11,617	$(1,042)	$ 848,258

The FRBNY executes transactions for the purchase of securities under agreements to resell primarily to temporarily add reserve balances to the banking system. Conversely, transactions to sell securities under agreements to repurchase are executed to temporarily drain reserve balances from the banking system and as part of a service offering to foreign official and international account holders.

There were no material transactions related to securities purchased under agreements to resell during the years ended December 31, 2012 and 2011. Financial information related to securities sold under agreements to repurchase for the years ended December 31 was as follows (in millions):

	2012	2011
Contract amount outstanding, end of year	$107,188	$ 99,900
Average daily amount outstanding, during the year	91,898	72,227
Maximum balance outstanding, during the year	122,541	124,512
Securities pledged (par value), end of year	93,547	86,089
Securities pledged (market value), end of year	107,188	99,900

The remaining maturity distribution of Treasury securities, GSE debt securities, federal agency and GSE MBS bought outright, and securities sold under agreements to repurchase at December 31, 2012 and 2011, was as follows (in millions):

	Within 15 days	16 days to 90 days	91 days to 1 year	Over 1 year to 5 years	Over 5 years to 10 years	Over 10 years	Total
December 31, 2012:							
Treasury securities (par value)	$ –	$ 5	$ 16	$378,476	$862,410	$425,238	$1,666,145
GSE debt securities (par value)	1,565	2,795	15,202	52,830	2,044	2,347	76,783
Federal agency and GSE MBS (par value)[1]	–	–	2	1	2,365	924,294	926,662
Securities sold under agreements to repurchase (contract amount)	107,188	–	–	–	–	–	107,188
December 31, 2011:							
Treasury securities (par value)	$ 16,246	$27,107	$89,899	$649,698	$649,913	$230,583	$1,663,446
GSE debt securities (par value)	2,496	5,020	19,695	60,603	13,833	2,347	103,994
Federal agency and GSE MBS (par value)[1]	–	–	–	13	34	837,636	837,683
Securities sold under agreements to repurchase (contract amount)	99,900	–	–	–	–	–	99,900

[1] The par amount shown for federal agency and GSE MBS is the remaining principal balance of the securities.

Federal agency and GSE MBS are reported at stated maturity in the table above. The estimated weighted average life of these securities, which differs from the stated maturity primarily because it factors in scheduled payments and prepayment assumptions, was approximately 3.3 and 2.4 years as of December 31, 2012 and 2011, respectively.

The amortized cost and par value of Treasury securities and GSE debt securities that were loaned from the SOMA at December 31 was as follows (in millions):

	2012	2011
Treasury securities (amortized costs)	$9,139	$15,121
Treasury securities (par value)	8,460	13,978
GSE debt securities (amortized cost)	697	1,276
GSE debt securities (par value)	676	1,216

The FRBNY enters into commitments to buy and sell Treasury securities and records the related securities on a settlement-date basis. As of December 31, 2012, there were no outstanding commitments.

The FRBNY enters into commitments to buy and sell federal agency and GSE MBS and records the related securities on a settlement-date basis. As of December 31, 2012, the total purchase price of the federal agency and GSE MBS under outstanding purchase commitments was $118,215 million, of which $10,164 million was related to dollar roll transactions. As of December 31, 2012, there were no outstanding sales commitments for federal agency and GSE MBS. These commitments, which had contractual settlement dates extending through February 2013, are for the purchase of TBA MBS for which the number and identity of the pools that will be delivered to fulfill the commitment are unknown at the time of the

trade. These commitments are subject to varying degrees of off-balance-sheet market risk and counterparty credit risk that result from their future settlement. The FRBNY requires the posting of cash collateral for commitments as part of the risk management practices used to mitigate the counterparty credit risk.

Other investments consist of cash and short-term investments related to the federal agency and GSE MBS portfolio. Other liabilities, which are related to federal agency and GSE MBS purchases and sales, includes the FRBNY's obligation to return cash margin posted by counterparties as collateral under commitments to purchase and sell federal agency and GSE MBS. In addition, other liabilities includes obligations that arise from the failure of a seller to deliver securities to the FRBNY on the settlement date. Although the FRBNY has ownership of and records its investments in the MBS as of the contractual settlement date, it is not obligated to make payment until the securities are delivered, and the amount included in other liabilities represents the FRBNY's obligation to pay for the securities when delivered. The amount of other investments and other liabilities held in the SOMA at December 31 was as follows (in millions):

	2012	2011
Other investments	$ 23	$ –
Other liabilities:		
Cash margin	$3,092	$1,271
Obligations from MBS transaction fails	85	97
Total other liabilities	$3,177	$1,368

Information about transactions related to Treasury securities, GSE debt securities, and federal agency and GSE MBS during the years ended December 31, 2012 and 2011, is summarized as follows (in millions):

	Bills	Notes	Bonds	Total Treasury securities	GSE debt securities	Federal agency and GSE MBS
Balance December 31, 2010	$ 18,422	$ 786,575	$261,955	$1,066,952	$152,972	$1,004,695
Purchases[1]	239,487	731,252	161,876	1,132,615	–	42,145
Sales[1]	–	(137,733)	–	(137,733)	–	–
Realized gains, net[2]	–	2,258	–	2,258	–	–
Principal payments and maturities	(239,494)	(67,273)	–	(306,767)	(43,466)	(195,413)
Amortization of premiums and accretion of discounts, net	8	(4,445)	(4,985)	(9,422)	(1,678)	(3,169)
Inflation adjustment on inflation-indexed securities	–	1,283	1,091	2,374	–	–
Balance December 31, 2011	$ 18,423	$1,311,917	$419,937	$1,750,277	$107,828	$ 848,258
Purchases[1]	118,886	397,999	263,991	780,876	–	431,487
Sales[1]	–	(507,420)	(11,727)	(519,147)	–	–
Realized gains, net[2]	–	12,003	1,252	13,255	–	–
Principal payments and maturities	(137,314)	(67,462)	–	(204,776)	(27,211)	(324,181)
Amortization of premiums and accretion of discounts, net	5	(5,461)	(7,531)	(12,987)	(1,138)	(5,243)
Inflation adjustment on inflation-indexed securities	–	643	1,047	1,690	–	–
Balance December 31, 2012	$ –	$1,142,219	$666,969	$1,809,188	$ 79,479	$ 950,321
Year ended December 31, 2011						
Supplemental information – par value of transactions:						
Purchases[3]	$ 239,494	$ 713,878	$127,802	$1,081,174	$ –	$ 40,955
Sales[3]	–	(134,829)	–	(134,829)	–	–
Year ended December 31, 2012						
Supplemental information – par value of transactions:						
Purchases[3]	$ 118,892	$ 383,106	$205,115	$ 707,113	$ –	$ 413,160
Sales[3]	–	(492,234)	(9,094)	(501,328)	–	–

[1] Purchases and sales are reported on a settlement-date basis and may include payments and receipts related to principal, premiums, discounts, and inflation compensation adjustments to the basis of inflation-indexed securities. The amount reported as sales includes the realized gains and losses on such transactions. Purchases and sales exclude MBS TBA transactions that are settled on a net basis.

[2] Realized gains, net offset the amount of realized gains and losses included in the reported sales amount.

[3] Includes inflation compensation.

b. Foreign Currency Denominated Assets

The FRBNY conducts foreign currency operations and, on behalf of the Reserve Banks, holds the resulting foreign currency denominated assets in the SOMA.

The FRBNY holds foreign currency deposits with foreign central banks and the Bank for International Settlements and invests in foreign government debt instruments of Germany, France, and Japan. These foreign government debt instruments are guaranteed as to principal and interest by the issuing foreign governments. In addition, the FRBNY enters into transactions to purchase Euro-denominated government debt securities under agreements to resell for which the accepted collateral is the debt instruments issued by the governments of Belgium, France, Germany, Italy, the Netherlands, and Spain.

Information about foreign currency denominated assets, including accrued interest, valued at amortized cost and foreign currency market exchange rates at December 31 was as follows (in millions):

	2012	2011
Euro:		
Foreign currency deposits	$ 8,925	$ 9,367
Securities purchased under agreements to resell	659	–
German government debt instruments	2,178	1,885
French government debt instruments	2,470	2,635
Japanese yen:		
Foreign currency deposits	3,553	3,985
Japanese government debt instruments	7,187	8,078
Total allocated to the Bank	$24,972	$25,950

The remaining maturity distribution of foreign currency denominated assets at December 31, 2012 and 2011, was as follows (in millions):

	Within 15 days	16 days to 90 days	91 days to 1 year	Over 1 year to 5 years	Total
December 31, 2012:					
Euro	$ 6,602	$1,726	$2,165	$3,739	$14,232
Japanese yen	3,801	491	2,139	4,309	10,740
Total	$10,403	$2,217	$4,304	$8,048	$24,972
December 31, 2011:					
Euro	$ 5,352	$2,933	$2,115	$3,487	$13,887
Japanese yen	4,180	662	3,143	4,078	12,063
Total	$ 9,532	$3,595	$5,258	$7,565	$25,950

There were no foreign exchange contracts related to open market operations outstanding as of December 31, 2012.

The FRBNY enters into commitments to buy foreign government debt instruments and records the related securities on a settlement-date basis. As of December 31, 2012, there were no outstanding commitments to purchase foreign government debt instruments. During 2012, there were purchases, sales, and maturities of foreign government debt instruments of $4,959 million, $0, and $4,840 million, respectively.

In connection with its foreign currency activities, the FRBNY may enter into transactions that are subject to varying degrees of off-balance-sheet market risk and counterparty credit risk that result from their future settlement. The FRBNY controls these risks by obtaining credit approvals, establishing transaction limits, receiving collateral in some cases, and performing daily monitoring procedures.

At December 31, 2012 and 2011, the authorized warehousing facility was $5 billion, with no balance outstanding.

There were no transactions related to the authorized reciprocal currency arrangements with the Bank of Canada and the Bank of Mexico during the years ended December 31, 2012 and 2011.

Foreign currency working balances held and foreign exchange contracts executed by the FRBNY to facilitate its international payments and currency transactions it

made on behalf of foreign central banks and U.S. official institution customers were not material as of December 31, 2012 and 2011.

c. Central Bank Liquidity Swaps

U.S. Dollar Liquidity Swaps

The total foreign currency held under U.S. dollar liquidity swaps in the SOMA at December 31, 2012 and 2011, was $8,889 million and $99,823 million, respectively.

The remaining maturity distribution of U.S. dollar liquidity swaps at December 31 was as follows (in millions):

	2012			2011		
	Within 15 days	16 days to 90 days	Total	Within 15 days	16 days to 90 days	Total
Euro	$1,741	$7,147	$8,888	$34,357	$51,080	$85,437
Japanese yen	1	–	1	9,035	4,956	13,991
Swiss franc	–	–	–	320	75	395
Total	$1,742	$7,147	$8,889	$43,712	$56,111	$99,823

Foreign Currency Liquidity Swaps

There were no transactions related to the foreign currency liquidity swaps during the years ended December 31, 2012 and 2011.

d. Fair Value of SOMA Assets

The fair value amounts presented below are solely for informational purposes. Although the fair value of SOMA security holdings can be substantially greater than or less than the recorded value at any point in time, these unrealized gains or losses have no effect on the ability of the Reserve Banks, as the central bank, to meet their financial obligations and responsibilities.

The fair value of the fixed-rate Treasury securities, GSE debt securities, federal agency and GSE MBS, and foreign government debt instruments in the SOMA's holdings is subject to market risk, arising from movements in market variables such as interest rates and credit risk. The fair value of federal agency and GSE MBS is also affected by the expected rate of prepayments of mortgage loans underlying the securities. The fair value of foreign government debt instruments is affected by currency risk. Based on evaluations performed as of December 31, 2012, there are no credit impairments of SOMA securities holdings as of that date.

The following table presents the amortized cost and fair value of the Treasury securities, GSE debt securities, federal agency and GSE MBS, and foreign currency denominated assets, net, held in the SOMA at December 31 (in millions):

	2012			2011		
	Amortized cost	Fair value	Fair value greater (less) than amortized cost	Amortized cost	Fair value	Fair value greater (less) than amortized cost
Treasury securities:						
Bills	$ –	$ –	$ –	$ 18,423	$ 18,423	$ –
Notes	1,142,219	1,213,177	70,958	1,311,917	1,389,429	77,512
Bonds	666,969	761,138	94,169	419,937	508,694	88,757
GSE debt securities	79,479	85,004	5,525	107,828	114,238	6,410
Federal agency and GSE MBS	950,321	993,990	43,669	848,258	895,495	47,237
Foreign currency denominated assets	24,972	25,141	169	25,950	26,116	166
Total SOMA portfolio securities holdings	$2,863,960	$3,078,450	$214,490	$2,732,313	$2,952,395	$220,082
Memorandum – Commitments for:						
Purchases of Treasury securities	$ –	$ –	$ –	$ 3,200	$ 3,208	$ 8
Purchases of Federal agency and GSE MBS	118,215	118,397	182	41,503	41,873	370
Sales of Federal agency and GSE MBS	–	–	–	4,430	4,473	43
Purchases of foreign government debt instruments	–	–	–	216	216	–

The fair value of Treasury securities, GSE debt securities, and foreign government debt instruments was determined using pricing services that provide market consensus prices based on indicative quotes from various market participants. The fair value of federal agency and GSE MBS was determined using a pricing service that utilizes a model-based approach that considers observable inputs for similar securities. The cost basis of foreign currency deposits adjusted for accrued interest approximates fair value. The contract amount for euro-denominated securities sold under agreements to repurchase approximates fair value.

The cost basis of securities purchased under agreements to resell, securities sold under agreements to repurchase, and other investments held in the SOMA approximate fair value.

Because the FRBNY enters into commitments to buy Treasury securities, federal agency and GSE MBS, and foreign government debt instruments and records the related securities on a settlement-date basis in accordance with the FAM, the related outstanding commitments are not reflected in the Combined Statements of Condition.

The following table provides additional information on the amortized cost and fair values of the federal agency and GSE MBS portfolio at December 31 (in millions):

Distribution of MBS holdings by coupon rate	2012		2011	
	Amortized cost	Fair value	Amortized cost	Fair value
2.0%	$ 845	$ 846	$ –	$ –
2.5%	37,562	37,766	–	–
3.0%	160,613	161,757	1,313	1,336
3.5%	179,587	184,752	19,415	19,660
4.0%	137,758	145,955	161,481	169,763
4.5%	262,485	282,182	406,465	431,171
5.0%	125,107	132,213	182,497	192,664
5.5%	39,970	41,819	66,795	70,064
6.0%	5,642	5,888	9,152	9,616
6.5%	752	812	1,140	1,221
Total	$950,321	$993,990	$848,258	$895,495

The following table presents the realized gains and the change in the unrealized gain position of the domestic securities holdings during the year ended December 31, 2012 (in millions):

	Total SOMA	
	Total portfolio holdings realized gains (losses)[1]	Fair value changes in unrealized gains (losses)[2]
Treasury securities	$13,255	$(1,142)
GSE debt securities	–	(885)
Federal agency and GSE MBS	241	(3,568)
Total	$13,496	$(5,595)

1 Total portfolio holdings realized gains (losses) are reported in "Non-interest income: System Open Market Account" in the Consolidated Statements of Income and Comprehensive Income.

2 Because SOMA securities are recorded at amortized cost, unrealized gains (losses) are not reported in the Consolidated Statements of Income and Comprehensive Income.

The amount of change in unrealized gain position related to foreign currency denominated assets was an increase of $3 million for the year ended December 31, 2012.

The following tables present the classification of SOMA financial assets at fair value as of December 31 by ASC 820 hierarchy (in millions):

	2012	2011
	Level 2	Level 2
Assets:		
Treasury securities	$1,974,315	$1,916,546
GSE debt securities	85,004	114,238
Federal agency and GSE MBS	993,990	895,495
Foreign government debt instruments	12,003	12,762
Total assets	$3,065,312	$2,939,041

The SOMA financial assets are classified as Level 2 in the table above because the fair values are based on indicative quotes and other observable inputs obtained from independent pricing services that, in accordance with ASC 820, are consistent with the criteria for Level 2 inputs. Although information consistent with the

criteria for Level 1 classification may exist for some portion of the SOMA assets, all securities in each asset class were valued using the inputs that are most applicable to of the securities in the asset class. The inputs used for valuing the SOMA financial assets are not necessarily an indication of the risk associated with those assets.

(6) Investments Held By Consolidated Variable Interest Entities

a. Summary Information for Consolidated Variable Interest Entities

The total assets of consolidated VIEs, including cash, cash equivalents, accrued interest, and other receivables at December 31 were as follows (in millions):

	2012	2011
ML	$1,811	$ 7,805
ML II	61	9,257
ML III	22	17,820
TALF LLC	856	811
Total	$2,750	$35,693

The FRBNY's approximate maximum exposure to loss at December 31, 2012 and 2011, was $829 million and $24,606 million, respectively. These estimates incorporate potential losses associated with assets recorded on the FRBNY's balance sheet, net of the fair value of subordinated interests (beneficial interest in consolidated VIEs).

The classification of significant assets and liabilities of the consolidated VIEs at December 31 was as follows (in millions):

	2012	2011
Assets:		
CDOs	$ –	$17,854
Non-agency RMBS	2	10,903
Federal agency and GSE MBS	1	440
Commercial mortgage loans	466	2,861
Swap contracts	408	657
Residential mortgage loans	–	378
Short-term investments	690	1,076
Other investments	65	282
Subtotal	$1,632	$34,451
Cash, cash equivalents, accrued interest receivable, and other receivables	1,118	1,242
Total investments held by consolidated VIEs	$2,750	$35,693
Liabilities:		
Beneficial interest in consolidated VIEs	$ 803	$ 9,845
Other liabilities[1]	$ 415	$ 690

[1] The amount reported as "Consolidated variable interest entities: Other liabilities" in the Combined Statements of Condition includes $341 million and $554 million related to cash collateral received on swap contracts at December 31, 2012 and 2011, respectively. The amount also includes accrued interest and accrued other expenses.

Total realized and unrealized gains (losses) for the year ended December 31, 2012, were as follows (in millions):

	Total portfolio holdings realized gains (losses)	Fair value changes unrealized gains (losses)	Total portfolio holdings realized/ unrealized gains (losses)
CDOs	$1,110	$4,439	$5,549
Non-agency RMBS	(334)	2,038	1,704
Federal agency and GSE MBS	12	(13)	(1)
Commercial mortgage loans[1]	(101)	394	293
Swap contracts	75	(165)	(90)
Residential mortgage loans[1]	(326)	322	(4)
Short-term investments	–	2	2
Other investments	(1)	(1)	(2)
Total	$ 435	$7,016	$7,451

[1] Substantially all unrealized gains (losses) on the commercial and residential mortgage loans are attributable to changes in instrument-specific credit risk.

Total realized and unrealized gains (losses) for the year ended December 31, 2011, were as follows (in millions):

	Total portfolio holdings realized gains (losses)	Fair value changes unrealized gains (losses)	Total portfolio holdings realized/ unrealized gains (losses)
CDOs	$ (60)	$(3,278)	$(3,338)
Non-agency RMBS	227	(1,084)	(857)
Federal agency and GSE MBS	1,221	(895)	326
Commercial mortgage loans[1]	(368)	407	39
Swap contracts	(258)	225	(33)
Residential mortgage loans[1]	(312)	263	(49)
Other investments	29	3	32
Other assets	(51)	11	(40)
Total	$ 428	$(4,348)	$(3,920)

[1] Substantially all unrealized gains (losses) on the commercial and residential mortgage loans are attributable to changes in instrument-specific credit risk.

The net income (loss) attributable to ML, ML II, ML III, and TALF LLC for the year ended December 31, 2012, was as follows (in millions):

	ML	ML II	ML III	TALF LLC	Total
Interest income:					
Portfolio interest income	$ 34	$ 52	$ 1,023	$ 1	$ 1,110
Less: Interest expense	45	7	97	4	153
Net interest income (loss)	(11)	45	926	(3)	957
Non-interest income:					
Portfolio holdings gains, net	553	1,392	5,506	–	7,451
Realized losses on beneficial interest in consolidated VIEs	–	(453)	(2,905)	–	(3,358)
Unrealized gains (losses) on beneficial interest in consolidated VIEs	–	216	801	(4)[1]	1,013
Net non-interest income (loss)	553	1,155	3,402	(4)	5,106
Total net interest income and non-interest income (loss)	542	1,200	4,328	(7)	6,063
Less: Professional fees	13	1	11	–	25
Net income (loss) attributable to consolidated VIEs	$529	$1,199	$ 4,317	$ (7)[2]	$ 6,038

[1] The TALF LLC's unrealized loss on beneficial interest represents Treasury's financial interest in the net income of TALF LLC for the year ended December 31, 2012.

[2] Additional information regarding TALF-related income recorded by the FRBNY is presented in Note 4.

The net income (loss) attributable to ML, ML II, ML III, and TALF for the year ended December 31, 2011, was as follows (in millions):

	ML	ML II	ML III	TALF LLC	Total
Interest income:					
Portfolio interest income	$ 808	$ 609	$ 2,012	$ –	$ 3,429
Less: Interest expense	70	36	175	4	285
Net interest income (loss)	738	573	1,837	(4)	3,144
Non-interest income:					
Portfolio holdings gains (losses), net	434	(991)	(3,363)	–	(3,920)
Unrealized gains (losses) on beneficial interest in consolidated VIEs	(114)	91	558	(44)[1]	491
Net non-interest income (loss)	320	(900)	(2,805)	(44)	(3,429)
Total net interest income and non-interest income (loss)	1,058	(327)	(968)	(48)	(285)
Less: Professional fees	43	8	20	–	71
Net income (loss) attributable to consolidated VIEs	$1,015	$(335)	$ (988)	$ (48)[2]	$ (356)

[1] The TALF LLC's unrealized loss on beneficial interest represents Treasury's financial interest in the net income of TALF LLC for the year ended December 31, 2011.

[2] Additional information regarding TALF-related income recorded by the FRBNY is presented in Note 4.

Following is a summary of the consolidated VIEs' subordinated financial interest for the years ended December 31, 2012 and 2011 (in millions):

	ML subordinated loan	ML II deferred purchase price	ML III equity contribution	TALF financial interest	Total
Fair value, December 31, 2010	$ 1,201	$ 1,387	$ 6,733	$730	$ 10,051
Interest accrued and capitalized	70	36	175	4	285
Unrealized (gain)/loss	114	(91)	(558)	44	(491)
Fair value, December 31, 2011	$ 1,385	$ 1,332	$ 6,350	$778	$ 9,845
Interest accrued and capitalized	$ 45	$ 7	$ 97	$ 4	$ 153
Realized (gain)/loss	–	453	2,905	–	3,358
Unrealized (gain)/loss	–	(216)	(801)	4	(1,013)
Repayments[1]	(1,430)	(1,566)	(8,544)	–	(11,540)
Fair value, at December 31, 2012	$ –	$ 10	$ 7	$786	$ 803

[1] For ML includes payments of $1,150 million of principal and $280 million of interest. For ML II includes payments of $1,000 million of principal, $113 million of interest, and $453 million of variable deferred purchase price. For ML III includes payments of $5,000 million of principal, $639 million of interest, and $2,905 million of excess amounts.

b. Maiden Lane LLC

To facilitate the merger of The Bear Stearns Companies, Inc. (Bear Stearns) and JPMorgan Chase & Co. (JPMC), the FRBNY extended credit to ML in June 2008. ML is a Delaware limited liability company formed by the FRBNY to acquire certain assets of Bear Stearns and to manage those assets over time, in order to maximize the potential for the repayment of the credit extended to ML and to minimize disruption to the financial markets. The assets acquired by ML were valued at $29.9 billion as of March 14, 2008, the date that the FRBNY committed to the transaction, and largely consisted of federal agency and GSE MBS, non-agency RMBS, commercial and residential mortgage loans, and derivatives and associated hedges.

The FRBNY extended a senior loan of approximately $28.8 billion and JPMC extended a subordinated loan of $1.15 billion to finance the acquisition of the assets. The two-year accumulation period that followed the closing date for ML ended on June 26, 2010. Consistent with the terms of the ML transaction, the distributions of the proceeds realized on the asset portfolio held by ML, after payment of certain fees and expenses, now occur on a monthly basis unless otherwise directed by the Federal Reserve. On June 14, 2012, the remaining outstanding balance of the senior loan from the FRBNY to ML was repaid in full, with interest. On November 15, 2012, the remaining outstanding balance of the subordinated loan from JPMC was repaid in full, with interest. The interest rate on the JPMC subordinated loan was the primary credit rate plus 450 basis points. The FRBNY will continue to sell the remaining assets from the ML portfolio as market conditions warrant and if the sales represent good value for the public. In accordance with the ML agreements, proceeds from future asset sales will be distributed to the FRBNY as contingent interest after all derivative instruments in ML have been terminated and paid or sold from the portfolio.

As of December 31, 2012, ML's investments consisted primarily of commercial mortgage loans, credit default swaps (CDS), and short-term investments with maturities of greater than three months and less than one year when acquired (primarily consisting of U.S. Treasury bills). Following is a description of the significant holdings at December 31, 2012, and the associated risk for each holding:

i. Debt Securities

ML has investments in short-term instruments with maturities of greater than three months and less than one year when acquired. As of December 31, 2012 ML had approximately $251 million in U.S. Treasury bills. Other investments are primarily comprised of commercial mortgage-backed securities (CMBS) and various other structured debt instruments.

At December 31, 2012, the ratings breakdown of the $320 million of debt securities, which are recorded at fair value in the ML portfolio as a percentage of aggregate fair value of all securities in the portfolio was as follows:

Security type:[2]	Ratings[1, 3]							
	AAA	AA+ to AA-	A+ to A-	BBB+ to BBB-	BB+ and lower	Government/ agency	Not rated[4]	Total
Short-term investments	0.0%	0.0%	0.0%	0.0%	0.0%	78.4%	0.0%	78.4%
Non-agency RMBS	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.5%
Federal agency and GSE MBS	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.2%
Other	0.0%	0.0%	0.0%	2.6%	6.9%	0.0%	11.4%	21.0%
Total	0.0%	0.0%	0.0%	2.6%	7.4%	78.5%	11.4%	100.0%

1 Lowest of all ratings is used for the purposes of this table if rated by two or more nationally recognized statistical rating organizations.

2 This table does not include ML commercial mortgage loans and swap contracts.

3 Rows and columns may not total due to rounding.

4 Not rated by a nationally recognized statistical rating organization as of December 31, 2012.

ii. Commercial Mortgage Loans

Commercial mortgage loans are subject to a high degree of credit risk because of exposure to financial loss resulting from failure by a counterparty to meet its contractual obligations. Default rates are subject to a wide variety of factors, including, but not limited to, property performance, property management, supply and demand, construction trends, consumer behavior, regional economic conditions, interest rates, and other factors.

The performance profile for the commercial mortgage loans at December 31, 2012, was as follows (in millions):

	Unpaid principal balance	Fair value	Fair value as a percentage of unpaid principal balance
Commercial mortgage loans:			
Performing loans	$176	$144	81.8%
Non-performing/non-accrual loans[1]	519	322	62.0%
Total	$695	$466	67.1%

1 Non-performing/non-accrual loans include loans with payments past due greater than 90 days.

The following table summarizes the property types of the commercial mortgage loans held in the ML portfolio at December 31, 2012 (in millions):

Property Type	Unpaid principal balances	Concentration of unpaid principal balances
Office[1]	$601	86.4%
Hospitality	86	12.4%
Other[2]	8	1.2%
Total	$695	100.0%

[1] One sponsor represented in the office property type amount accounts for approximately 86% of total unpaid principal balance of the commercial mortgage loan portfolio.

[2] No other individual property type comprises more than 5 percent of the total.

Commercial mortgage loans held by ML are composed of different levels of subordination with respect to the underlying properties, and relative to each other. Senior mortgage loans are secured property loans evidenced by a first mortgage that is senior to any subordinate or mezzanine financing. Subordinate mortgage interests, sometimes known as B Notes, are loans evidenced by a junior note or a junior participation in a mortgage loan. Mezzanine loans are loans made to the direct or indirect owner of the property-owning entity. Mezzanine loans are not secured by a mortgage on the property but rather by a pledge of the mezzanine borrower's direct or indirect ownership interest in the property-owning entity.

The following table summarizes commercial mortgage loans held by ML at December 31, 2012 (in millions):

Loan type	Unpaid principal balances	Concentration of unpaid principal balances
Senior mortgage loan	$ 91	13.1%
Subordinate mortgage interests	38	5.5%
Mezzanine loans	566	81.4%
Total	$695	100.0%

iii. Derivative Instruments

Derivative contracts are instruments, such as swap contracts, that derive their value from underlying assets, indexes, reference rates, or a combination of these factors. The ML portfolio is composed of derivative financial instruments included in a total return swap (TRS) agreement with JPMC. ML and JPMC entered into the TRS with reference obligations representing single-name CDS primarily on RMBS and CMBS, with various market participants, including JPMC. ML, through its investment manager, currently manages the CDS contracts within the TRS as a runoff portfolio and may unwind, amend, or novate reference obligations on an ongoing basis.

On an ongoing basis, ML pledges collateral for credit or liquidity related shortfalls based on 20 percent of the notional amount of sold CDS protection and 10 percent of the present value of future premiums on purchased CDS protection. Failure to post this collateral constitutes a TRS event of default. Separately, ML and JPMC engage in bilateral posting of collateral to cover the net mark-to-market (MTM) variations in the swap portfolio. ML only nets the collateral received from JPMC from the bilateral MTM posting for the reference obligations for which JPMC is the counterparty.

The values of ML's cash equivalents, purchased by the re-hypothecation of cash collateral associated with the TRS, were $0.5 billion and $0.8 billion, for the years ended December 31 2012 and 2011, respectively. In addition, ML has pledged $0.2 billion and $0.6 billion of federal agency and GSE MBS to JPMC as of December 31, 2012 and 2011, respectively.

The following risks are associated with the derivative instruments held by ML as part of the TRS agreement with JPMC:

Market Risk

CDS are agreements that provide protection for the buyer against the loss of principal and, in some cases, interest on a bond or loan in case of a default by the issuer. The nature of a credit event is established by the protection buyer and protection seller at the inception of a transaction, and such events include bankruptcy, insolvency, or failure to meet payment obligations when due. The buyer of the CDS pays a premium in return for payment protection upon the occurrence, if any, of a credit event. Upon the occurrence of a triggering credit event, the maximum potential amount of future payments the seller could be required to make under a CDS is equal to the notional amount of the contract. Such future payments could be reduced or offset by amounts recovered under recourse or by collateral provisions outlined in the contract, including seizure and liquidation of collateral pledged by the buyer. ML's derivatives portfolio consists of purchased and sold credit protection with differing underlying referenced names that do not necessarily offset.

Credit Risk

Credit risk is the risk of financial loss resulting from failure by a counterparty to meet its contractual obligations to ML. This can be caused by factors directly related to the counterparty, such as business or management. Taking collateral is the most common way to mitigate credit risk. ML takes financial collateral in the form of cash and marketable securities to cover JPMC counterparty risk as part of the TRS agreement with JPMC. ML remains exposed to credit risk for counterparties other than JPMC related to the swaps that underlie the TRS.

The following table summarizes the notional amounts of derivative contracts outstanding as of December 31 (in millions, except contract data):

	Notional amounts[1]	
	2012	2011
Credit derivatives:		
CDS[2]	$1,755	$3,940
Total	$1,755	$3,940

[1] These amounts represent the sum of gross long and gross short notional derivative contracts. The change in notional amounts is representative of the volume of activity for the year ended December 31, 2012.

[2] There were 470 and 979 CDS contracts outstanding as of December 2012 and 2011, respectively.

The following table summarizes the fair value of derivative instruments by contract type on a gross basis as of December 31, 2012 and 2011, which is reported as a component of "Investments held by consolidated variable interest entities" in the Combined Statements of Condition (in millions):

	2012		2011	
	Gross derivative assets	Gross derivative liabilities	Gross derivative assets	Gross derivative liabilities
Credit derivatives:				
CDS[1]	$ 816	$(343)	$1,630	$(791)
Counterparty netting	(272)	272	(685)	685
Cash collateral	(136)	–	(288)	–
Total	$ 408	$ (71)	$ 657	$(106)

[1] CDS fair values as of December 31, 2012 for assets and liabilities include interest receivables of $15 million and payables of $9 million. CDS fair values as of December 31, 2011 for assets and liabilities includes interest receivables of $22 million and payables of $13 million.

The table below summarizes certain information regarding protection sold through CDS as of December 31 (in millions):

Credit ratings of the reference obligation	Maximum potential payout/notional							
	2012						2011	
	Years to maturity					Fair value	Total	Fair value
	1 year or less	After 1 year through 3 years	After 3 years through 5 years	After 5 years	Total	Asset/ (liability)		Asset/ (liability)
Investment grade (AAA to BBB-)	$ –	$ –	$ –	$ 52	$ 52	$ (5)	$ 92	$ (14)
Non-investment grade (BB+ or lower)	–	–	–	438	438	(329)	1,154	(763)
Total credit protection sold	$ –	$ –	$ –	$490	$490	$(334)	$1,246	$(777)

The table below summarizes certain information regarding protection bought through CDS as of December 31 (in millions):

Credit ratings of the reference obligation	Maximum potential recovery/notional							
	2012						2011	
	Years to maturity					Fair value	Total	Fair value
	1 year or less	After 1 year through 3 years	After 3 years through 5 years	After 5 years	Total	Asset/ (liability)		Asset/ (liability)
Investment grade (AAA to BBB-)	$ –	$ –	$25	$ 125	$ 150	$ 27	$ 170	$ 46
Non-investment grade (BB+ or lower)	–	–	9	1,106	1,115	774	2,525	1,562
Total credit protection bought	$ –	$ –	$34	$1,231	$1,265	$801	$2,695	$1,608

Currency Risk

Currency risk is the risk of financial loss resulting from exposure to changes in exchange rates between two currencies. Under the terms of the TRS, JPMC may post cash collateral in the form of either U.S. dollar or Euro denominated curren-

cies to cover the net MTM variation in the swap portfolio. Starting in December 2012, JPMC began posting a portion of its collateral in Euro currency. This risk is mitigated by daily variation margin updates that capture the movement in the value of the swap portfolio in addition to any movement in exchange rates on the swap collateral.

Swap collateral received that is denominated in a foreign currency is translated into U.S. dollar amounts using the prevailing exchange rate as of the date of the combined financial statements. There is no gain or loss associated with this foreign denominated collateral as the asset and liability positions associated with it are offsetting.

c. Maiden Lane II LLC

Concurrent with the November 2008 restructuring of its financial support to AIG, the FRBNY extended credit to ML II, a Delaware limited liability company formed to purchase non-agency RMBS from the reinvestment pool of the securities lending portfolios of several regulated U.S. insurance subsidiaries of AIG. ML II borrowed $19.5 billion from the FRBNY and used the proceeds to purchase non-agency RMBS that had an approximate fair value of $20.8 billion as of October 31, 2008, from AIG's domestic insurance subsidiaries. The FRBNY is the sole and managing member and the controlling party of ML II and will remain as the controlling party as long as the FRBNY retains an economic interest in ML II. As part of the agreement, the AIG subsidiaries also received from ML II a fixed deferred purchase price of up to $1.0 billion, plus interest on any such fixed deferred purchase price outstanding. After repayment in full of the FRBNY's loan and the fixed deferred purchase price (each including accrued interest), any net proceeds will be distributed as contingent interest to the FRBNY, which is entitled to receive five-sixths, and as variable deferred purchase price to the AIG subsidiaries, which are entitled to receive one-sixth, in accordance with the agreement.

On March 30, 2011, the Federal Reserve announced that the FRBNY, through its investment manager, BlackRock Financial Management, Inc., would dispose of the securities in the ML II portfolio individually and in segments through a competitive sales process over time as market conditions warrant. During the year ended December 31, 2011, a total of nine bid list auctions were conducted and assets with a total current face amount of $9.96 billion were sold. On February 28, 2012, the FRBNY announced the sale of the remaining securities in the ML II portfolio. On March 1, 2012, the loan from the FRBNY to ML II was repaid in full with interest, in accordance with the terms of the facility. On March 15, 2012, the remaining portion of the fixed deferred purchase price plus interest owed to the AIG subsidiaries was repaid in full. Concurrently, distributions were made to the FRBNY and the AIG subsidiaries in the form of contingent interest and variable deferred purchase price for the amounts of $2.3 billion and $0.5 billion, respectively.

On March 19, 2012, ML II was dissolved and the FRBNY began the wind up process in accordance with and as required by Delaware law and the agreements governing ML II. Winding up requires ML II to pay or make reasonable provision to pay all claims and obligations of ML II before distributing its remaining assets. While its affairs are being wound up, the ML II is retaining certain assets to meet trailing expenses and other obligations as required by law. Dissolution costs are not expected to be material.

d. Maiden Lane III LLC

The FRBNY extended credit to ML III, a Delaware limited liability company formed to purchase ABS CDOs from certain third-party counterparties of AIG Financial Products Corp. ML III borrowed approximately $24.3 billion from the FRBNY, and AIG provided an equity contribution of $5 billion to ML III. The proceeds were used to purchase ABS CDOs with a fair value of $29.6 billion. On April 3, 2012, the FRBNY revised ML III's investment objective to allow for asset sales, and began conducting such sales shortly thereafter. On June 14, 2012, the FRBNY announced that its loan to ML III had been repaid in full, with interest. On July 16, 2012, the FRBNY announced that net proceeds from additional sales of securities in ML III enabled the full repayment of AIG's equity contribution plus accrued interest and provided residual profits to the FRBNY and AIG. Concurrently, distributions were made to the FRBNY and AIG in the form of contingent interest and excess amounts in the amounts of $5.9 billion and $2.9 billion, respectively. On August 23, 2012, the FRBNY announced that all remaining securities in ML III were sold. Any remaining proceeds will be divided between the FRBNY, which is entitled to receive two-thirds, and AIG (or its assignee), which is entitled to receive one-third, in accordance with the agreement.

On September 10, 2012, ML III was dissolved and the FRBNY began the wind up process in accordance with and as required by Delaware law and the agreements governing ML III. ML III expects the wind up process to be concluded during 2013. Winding up requires ML III to pay or make reasonable provision to pay all claims and obligations of ML III before distributing its remaining assets. While its affairs are being wound up, the ML III is retaining certain assets to meet trailing expenses and other obligations as required by law. Dissolution costs are not expected to be material.

e. TALF LLC

Cash receipts resulting from the put option fees paid to TALF LLC and proceeds from the Treasury's loan are invested in the following types of U.S. dollar-denominated short-term investments and cash equivalents eligible for purchase by the LLC: (1) U.S. Treasury securities, (2) federal agency securities that are senior, negotiable debt obligations of Fannie Mae, Freddie Mac, Federal Home Loan Banks, and Federal Farm Credit Banks, which have a fixed rate of interest, (3) repurchase agreements that are collateralized by Treasury and federal agency securities and fixed-rate agency mortgage-backed securities, and (4) money market mutual funds registered with the Securities and Exchange Commission and regulated under Rule 2a-7 of the Investment Company Act that invest exclusively in U.S. Treasury and federal agency securities. Cash may also be invested in a demand interest-bearing account held at the Bank of New York Mellon.

f. Fair Value Measurement

The consolidated VIEs have adopted ASC 820 and ASC 825 and have elected the fair value option for all securities and commercial and residential mortgages held by ML and TALF LLC. ML II and ML III qualify as nonregistered investment companies under the provisions of ASC 946 and, therefore, all investments are recorded at fair value in accordance with ASC 820. In addition, the FRBNY has elected to record the beneficial interests in ML, ML II, ML III, and TALF LLC at fair value.

The accounting and classification of these investments appropriately reflect the VIEs' and the FRBNY's intent with respect to the purpose of the investments and

most closely reflect the amount of the assets available to liquidate the entities' obligations.

i. Determination of Fair Value

The consolidated VIEs value their investments on the basis of the last available bid prices or current market quotations provided by dealers or pricing services selected by the designated investment managers. To determine the value of a particular investment, pricing services may use information on transactions in such investments; quotations from dealers; pricing metrics; market transactions in comparable investments; relationships observed in the market between investments; and calculated yield measures based on valuation methodologies commonly employed in the market for such investments.

Market quotations may not represent fair value in circumstances in which the investment manager believes that facts and circumstances applicable to an issuer, a seller, a purchaser, or the market for a particular security result in the current market quotations reflecting an inaccurate measure of fair value. In such cases or when market quotations are unavailable, the investment manager determines fair value by applying proprietary valuation models that use collateral performance scenarios and pricing metrics derived from the reported performance of the universe of investments with similar characteristics as well as the observable market.

Because of the uncertainty inherent in determining the fair value of investments that do not have a readily available fair value, the fair value of these investments may differ significantly from the values that would have been reported if a readily available fair value had existed for these investments and may differ materially from the values that may ultimately be realized.

The fair value of the liability for the beneficial interests of consolidated VIEs is estimated based upon the fair value of the underlying assets held by the VIEs. The holders of these beneficial interests do not have recourse to the general credit of the FRBNY.

ii. Valuation Methodologies for Level 3 Assets and Liabilities

In certain cases in which there is limited activity around inputs to the valuation, investments are classified within Level 3 of the valuation hierarchy. For example, in valuing CDOs, certain collateralized mortgage obligations, and commercial and residential mortgage loans, the determination of fair value is based on collateral performance scenarios. These valuations also incorporate pricing metrics derived from the reported performance of the universe of similar investments and from observations and estimates of market data. Because external price information is not available, market-based models are used to value these securities. Key inputs to the model may include market spreads or yield estimates for comparable instruments, performance data (i.e., prepayment rates, default rates, and loss severity), valuation estimates for underlying property collateral, projected cash flows, and other relevant contractual features. Because there is lack of observable pricing, securities and investment loans that are carried at fair value are classified within Level 3.

For the swap agreements, all of which are categorized as Level 3 assets and liabilities, there are various valuation methodologies. In each case, the fair value of the instrument underlying the swap is a significant input used to derive the fair value of the swap. When there are broker or dealer prices available for the underlying instruments, the fair value of the swap is derived based on those prices. When the

instrument underlying the swap is a market index (i.e., CMBS index), the closing market index price, which can also be expressed as a credit spread, is used to determine the fair value of the swap. In the remaining cases, the fair value of the underlying instrument is principally based on inputs and assumptions not observable in the market (i.e., discount rates, prepayment rates, default rates, and recovery rates).

For ML II, the fair value of the senior loan and the deferred purchase price is determined based on the fair value of the underlying assets held by ML II and the allocation of ML II's net investment income or loss and realized gains or losses on investments. For ML III, the fair value of the senior loan and the equity contribution is determined based on the fair value of the underlying assets held by ML III and the allocation of ML III's net investment income or loss and realized gains or losses on investments. For TALF LLC, the fair values of the subordinated loan (including the Treasury contingent interest) and the FRBNY's contingent interest are determined based on the fair value of the underlying assets held by TALF LLC and the allocation of TALF LLC's gains and losses.

ML Inputs for Level 3 Assets and Liabilities

The following table presents the valuation techniques and ranges of significant unobservable inputs generally used to determine the fair values of ML's Level 3 assets and liabilities as of December 31, 2012 (in millions, except for input values):

Investment	Fair value	Principal valuation technique	Unobservable inputs	Range of input values
Commercial mortgage loans	$466	Discounted cash flows	Discount rate	6%–20%
			Property capitalization rate	6%–10%
			Net operating income growth rate	3%–7%
CDS[1]	$473	Discounted cash flows	Credit spreads[2]	100 bps–6,451 bps
			Discount rate	0%–47%
			Constant prepayment rate	0%–20%
			Constant default rate	0%–34%
			Loss severity	40%–80%

1 Swap assets and liabilities are presented net for the purposes of this table.

2 Implied spread on closing market prices for index positions.

Sensitivity of ML Level 3 Fair Value Measurements to Changes in Unobservable Inputs

The following provides a general description of the impact of a change in an unobservable input on the fair value measurement and the interrelationship of unobservable inputs.

I. Loans

In general, an increase in isolation in either the discount rate or the property capitalization rate, which is the ratio between the net operating income produced by an asset and its current fair value, would result in a decrease in the fair value measurement; while an increase in net operating income growth rate, in isolation would result in an increase in the fair value measurement. For each of the relationships described above, the inverse would also generally apply.

II. Derivatives

For CDS with reference obligations on CMBS, an increase in credit spreads would generally result in a higher fair value measurement for protection buyers and a lower fair value measurement for protection sellers. The inverse would also generally apply to this relationship given a decrease in credit spreads.

For CDS with reference obligations on RMBS or other ABS assets, changes in the discount rate, constant prepayment rate, constant default rate, and loss severity would have an uncertain effect on the overall fair value measurement. This is because, in general, changes in these inputs could potentially affect other inputs used in determining the fair value measurement. For example, a change in the assumptions used for the constant default rate will generally be accompanied by a corresponding change in the assumption used for the loss severity and an inverse change in the assumption used for constant prepayment rates. Additionally, changes in the fair value measurement based on variations in the inputs used generally cannot be extrapolated because the relationship between each input is not perfectly correlated.

The following tables present the financial instruments recorded in VIEs at fair value as of December 31 by ASC 820 hierarchy (in millions):

	2012				
	Level 1[2]	Level 2[2]	Level 3	Netting[1]	Total fair value
Assets:					
CDOs	$ –	$ –	$ –	$ –	$ –
Non-agency RMBS	–	2	–	–	2
Federal agency and GSE MBS	–	1	–	–	1
Commercial mortgage loans	–	–	466	–	466
Cash equivalents	634	–	–	–	634
Swap contracts	–	–	816	(408)	408
Residential mortgage loans	–	–	–	–	–
Short-term investments	454	236	–	–	690
Other investments	–	10	55	–	65
Total assets	$1,088	$249	$1,337	$(408)	$2,266
Liabilities:					
Beneficial interest in consolidated VIEs	$ –	$803	$ –	$ –	$ 803
Swap contracts	–	–	343	(272)	71
Total liabilities	$ –	$803	$ 343	$(272)	$ 874

[1] Derivative receivables and payables and the related cash collateral received and paid are shown net when a master netting agreement exists.

[2] There were no transfers between Level 1 and Level 2 during the year ended December 31, 2012.

	2011				
	Level 1[3]	Level 2[3]	Level 3	Netting[1]	Total fair value
Assets:					
CDOs	$ –	$ 167	$17,687	$ –	$17,854
Non-agency RMBS	–	5,493	5,410	–	10,903
Federal agency and GSE MBS	–	440	–	–	440
Commercial mortgage loans	–	1,464	1,397	–	2,861
Cash equivalents	1,171	–	–	–	1,171
Swap contracts	–	–	1,630	(973)	657
Residential mortgage loans	–	–	378	–	378
Short-term investments[2]	1,076	–	–	–	1,076
Other investments[2]	19	126	108	–	253
Total assets	$2,266	$7,690	$26,610	$(973)	$35,593
Liabilities:					
Beneficial interest in consolidated VIEs	$ –	$ –	$ 9,845	$ –	$ 9,845
Swap contracts	–	–	791	(685)	106
Total liabilities	$ –	$ –	$10,636	$(685)	$ 9,951

[1] Derivative receivables and payables and the related cash collateral received and paid are shown netted when a master netting agreement exists.

[2] Investments with a fair value of $1,076 as of December 31, 2011 were recategorized from "Other investments" to a new line item labeled "Short-term investments" to conform to the current year presentation.

[3] There were no significant transfers between Level 1 and Level 2 during the year ended December 31, 2011.

The table below presents a reconciliation of all assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) as of December 31, 2012 (in millions). Unrealized gains and losses related to those assets still held at December 31, 2012 are reported as a component of "Investments held by consolidated variable interest entities, net" in the Combined Statements of Condition.

	2012						Change in unrealized gains (losses) related to financial instruments held at December 31, 2012
	Fair value December 31, 2011	Purchases, sales, issuances, and settlements, net	Net realized/ unrealized gains (losses)	Gross transfers in[1, 2]	Gross transfers out[1,2]	Fair value December 31, 2012	
Assets:							
CDOs	$17,687	$(23,196)	$5,509	$ –	$ –	$ –	$ (2)
Non-agency RMBS	5,410	(6,347)	937	–	–	–	–
Commercial mortgage loans	1,397	(1,187)	256	–	–	466	135
Residential mortgage loans	378	(374)	(4)	–	–	–	(1)
Other investments	108	(65)	2	10	–	55	–
Total assets	$24,980	$(31,169)	$6,700	$10	$ –	$521	$132
Net swap contracts[3]	$ 839	$ (276)	$ (90)	$ –	$ –	$473	$ (93)
Liabilities:							
Beneficial interest in consolidated VIEs	$ 9,845	$ (1,385)	$ –	$ –	$(8,460)	$ –	$ –

[1] The amount of transfers is based on the fair values of the transferred assets at the beginning of the reporting period.

[2] Beneficial interest in consolidated VIEs, with a December 31, 2011, fair value of $8,460 million, were transferred from Level 2 to Level 3 because they are valued at December 31, 2012, based on model-based techniques for which all significant inputs are observable (Level 2). These investments were valued in the prior year on non-observable model based inputs (Level 3). There were also certain other investments for which valuation inputs became less observable during the year ended December 31, 2012, which resulted in $10 million in transfers from Level 2 to Level 3. There were no other transfers between Level 2 and Level 3 during the current year.

[3] Level 3 derivative assets and liabilities are presented net for purposes of this table.

The following table presents the gross components of purchases, sales, issuances, and settlements, net, shown for the year ended December 31, 2012 (in millions):

	2012				
	Purchases	Sales	Issuances	Settlements[3]	Purchases, sales, issuances, and settlements, net
Assets:					
CDOs	$ –	$(22,206)	$ –	$ (990)	$(23,196)
Non-agency RMBS	–	(6,221)	–	(126)	(6,347)
Commercial mortgage loans	–	(1,119)	–	(68)	(1,187)
Residential mortgage loans	–	(370)	–	(4)	(374)
Other investments	–	(66)	–	1	(65)
Total assets	$ –	$(29,982)	$ –	$(1,187)	$(31,169)
Net swap contracts[1]	$ –	$ (147)	$ –	$ (129)	$ (276)
Liabilities:					
Beneficial interest in consolidated VIEs	$45[2]	$ –	$ –	$(1,430)	$ (1,385)

[1] Level 3 swap assets and liabilities are presented net for the purpose of this table.

[2] Represents accrued and capitalized interest.

[3] Includes paydowns.

The table below presents a reconciliation of all assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) as of December 31, 2011 (in millions). Unrealized gains and losses related to those assets still held at December 31, 2011 are reported as a component of “Investments held by consolidated variable interest entities, net” in the Combined Statements of Condition.

	2011						Change in unrealized gains (losses) related to financial instruments held at December 31, 2011
	Fair value December 31, 2010	Purchases, sales, and settlements, net	Net realized/ unrealized gains (losses)	Gross transfers in[1, 2]	Gross transfers out[1,2]	Fair value December 31, 2011	
Assets:							
CDOs	$22,811	$(1,889)	$(3,351)	$ 116	$ –	$17,687	$(3,297)
Non-agency RMBS	6,809	(2,891)	(483)	4,066	(2,091)	5,410	(725)
Commercial mortgage loans	1,931	(626)	92	–	–	1,397	65
Residential mortgage loans	603	(175)	(50)	–	–	378	263
Federal agency and GSE MBS	30	(28)	(2)	–	–	–	–
Other investments	79	(29)	(2)	94	(34)	108	(9)
Total assets	$32,263	$(5,638)	$(3,796)	$4,276	$(2,125)	$24,980	$(3,703)
Net swap contracts[3]	$ 970	$ (235)	$ 104	$ –	$ –	$ 839	$ 83
Liabilities:							
Beneficial interest in consolidated VIEs	$10,051	$ 285	$ (491)	$ –	$ –	$ 9,845	$ 491

[1] The amount of transfers is based on the fair values of the transferred assets at the beginning of the reporting period.

[2] Non-agency RMBS, with a December 31, 2010, fair value of $2,091 million, were transferred from Level 3 to Level 2 because they are valued at December 31, 2011, based on quoted prices in non-active markets (Level 2). These investments were valued in the prior year on non-observable model based inputs (Level 3). There were also certain non-agency RMBS, CDOs, and other investments for which valuation inputs became less observable during the year ended December 31, 2011, which resulted in $4,066 million, $116 million, and $94 million, respectively, in transfers from Level 2 to Level 3. There were no other significant transfers between Level 2 and Level 3 during the current year.

[3] Level 3 derivative assets and liabilities are presented net for purposes of this table.

The following table presents the gross components of purchases, sales, issuances, and settlements, net, shown for the year ended December 31, 2011 (in millions):

	2011				
	Purchases	Sales	Issuances	Settlements[3]	Purchases, sales, issuances, and settlements, net
Assets:					
CDOs	$ –	$ (6)	$ –	$(1,883)	$(1,889)
Non-agency RMBS	–	(1,978)	–	(913)	(2,891)
Commercial mortgage loans	–	(557)	–	(69)	(626)
Residential mortgage loans	–	(97)	–	(78)	(175)
Federal agency and GSE MBS	–	(17)	–	(11)	(28)
Other investments	2	(21)	–	(10)	(29)
Total assets	$ 2	$(2,676)	$ –	$(2,964)	$(5,638)
Net swap contracts[1]	$ –	$ (48)	$ –	$ (187)	$ (235)
Liabilities:					
Beneficial interest in consolidated VIEs	$285[2]	$ –	$ –	$ –	$ 285

[1] Level 3 swap assets and liabilities are presented net for the purpose of this table.
[2] Represents accrued and capitalized interest.
[3] Includes paydowns.

g. Professional Fees

The consolidated VIEs have recorded costs for professional services provided, among others, by several nationally recognized institutions that serve as investment managers, administrators, and custodians for the VIEs' assets. The fees charged by the investment managers, custodians, administrators, auditors, attorneys, and other service providers, are recorded in "Professional fees related to consolidated variable interest entities" in the Combined Statements of Income and Comprehensive Income.

(7) Bank Premises, Equipment, and Software

Bank premises and equipment at December 31 were as follows (in millions):

	2012	2011
Bank premises and equipment:		
Land and land improvements	$ 394	$ 350
Buildings[1]	2,659	2,494
Building machinery and equipment	520	514
Construction in progress	27	27
Furniture and equipment	1,024	1,042
Subtotal	4,624	4,427
Accumulated depreciation	(1,948)	(1,878)
Bank premises and equipment, net	$ 2,676	$ 2,549
Depreciation expense, for the years ended December 31	$ 218	$ 213

[1] FRBNY acquired the 33 Maiden Lane building on February 28, 2012. FRBNY had been the primary occupant of the building since 1998, accounting for approximately 74 percent of the leased space.

Bank premises and equipment at December 31 included the following amounts for capitalized leases (in millions):

	2012	2011
Leased premises and equipment under capital leases	$ 33	$ 24
Accumulated depreciation	(20)	(13)
Leased premises and equipment under capital leases, net	$ 13	$ 11
Depreciation expense related to leased premises and equipment under capital leases	$ 7	$ 5

The Reserve Banks lease space to outside tenants with remaining lease terms ranging from 1 to 12 years. Rental income from such leases was $37 million and $32 million for the years ended December 31, 2012 and 2011, respectively, and is reported as a component of "Non-interest income: Other" in the Combined Statements of Income and Comprehensive Income. Future minimum lease payments that the Reserve Banks will receive under noncancelable lease agreements in existence at December 31, 2012, are as follows (in millions):

2013	$ 29
2014	27
2015	23
2016	19
2017	13
Thereafter	30
Total	$141

The Reserve Banks had capitalized software assets, net of amortization, of $213 million and $165 million at December 31, 2012 and 2011, respectively. Amortization expense was $64 million and $54 million for the years ended December 31, 2012 and 2011, respectively. Capitalized software assets are reported as a component of "Other assets" in the Combined Statements of Condition and the related amortization is reported as a component of "Operating expenses: Other" in the Combined Statements of Income and Comprehensive Income.

The Federal Reserve Bank of Cleveland's (FRBC) recorded asset impairment losses of $12 million for the year ended December 31, 2011, to adjust the recorded amount of related building and land, building machinery and equipment, and land improvements to fair value. Fair values were based on appraisals and other valuation techniques. As a result of this restructure, the FRBC vacated the Pittsburgh branch facility in 2012, reclassifying $5.4 million from "Bank premises and equipment, net" to "Other assets" in the Combined Statements of Condition. A portion of the 2011 impairment loss in the amount of $10 million is reported as a component of "Operating expenses: Other" and the remaining amount of $2 million is reported as a component of "Operating expenses: Occupancy" in the Combined Statements of Income and Comprehensive Income. The FRBC had no impairment losses in 2012.

The Federal Reserve Bank of Atlanta (FRBA) recorded asset impairment losses of $1 million for the year ended December 31, 2011. Losses were determined using fair values based on quoted fair values or other valuation techniques and are reported as a component of "Operating expenses: Equipment" in the Combined Statements of Income and Comprehensive Income.

In 2008, after relocating operations to a new facility, the Federal Reserve Bank of San Francisco (FRBSF) classified its former Seattle branch office building as held

for sale, and the building was reported at fair value as a component of "Other assets" in the Statements of Condition. In April 2012, the FRBSF completed the donation of the building to the United States General Services Administration (GSA). Under the donation agreement, the FRBSF must continue to maintain the building for up to 15 months from the time GSA takes ownership. The FRBSF recorded an additional impairment of $3.4 million to reflect the final disposition of the building, which is recorded as a component of "Operating expenses: Other" in the Combined Statements of Income and Comprehensive Income.

(8) Commitments and Contingencies

In conducting its operations, the Reserve Banks enter into contractual commitments, normally with fixed expiration dates or termination provisions, at specific rates and for specific purposes.

At December 31, 2012, the Reserve Banks were obligated under noncancelable leases for premises and equipment with remaining terms ranging from 1 to approximately 10 years. These leases provide for increased rental payments based upon increases in real estate taxes, operating costs, or selected price indexes.

Rental expense under operating leases for certain operating facilities, warehouses, and data processing and office equipment (including taxes, insurance, and maintenance when included in rent), net of sublease rentals, was $16 million and $29 million for the years ended December 31, 2012 and 2011, respectively.

Future minimum rental payments under noncancelable operating leases, net of sublease rentals, with remaining terms of one year or more, at December 31, 2012, are as follows (in millions):

2013	$ 5
2014	5
2015	4
2016	4
2017	4
Thereafter	12
Future minimum rental payments	$34

At December 31, 2012, the Reserve Banks had unrecorded unconditional purchase commitments and long-term obligations extending through the year 2022 with a remaining fixed commitment of $267 million. Purchases of $28 million and $25 million were made against these commitments during 2012 and 2011, respectively. These commitments are for maintenance of currency processing machines and have variable and/or fixed components. The variable portion of the commitments is for additional services above the fixed contractual service limits. The fixed payments for the next five years under these commitments are as follows (in millions):

2013	$25
2014	35
2015	25
2016	25
2017	26

The Reserve Banks are involved in certain legal actions and claims arising in the ordinary course of business. Although it is difficult to predict the ultimate outcome of these actions, in management's opinion, based on discussions with coun-

sel, the legal actions and claims will be resolved without material adverse effect on the financial position or results of operations of the Reserve Banks.

Other Commitments

In support of financial market stability activities, the FRBNY entered into commitments to provide financial assistance to financial institutions. The contractual amounts shown below are the FRBNY's maximum exposures to loss in the event that the commitments are fully funded and there is a default by the borrower or total loss in value of pledged collateral. Total commitments at December 31, 2012 and 2011, were as follows (in millions):

	2012		2011	
	Contractual amount	Unfunded amount	Contractual amount	Unfunded amount
Commercial loan commitments (ML)	$55	$55	$61	$61
Additional loan commitments (ML)[1]	–	–	18	18
Total	$55	$55	$79	$79

[1] Represents additional restricted cash that may be required to be advanced by ML for property level expenses or improvements.

The undrawn portion of the FRBNY's commercial loan commitments relates to commercial mortgage loan commitments acquired by ML.

(9) Retirement and Thrift Plans

Retirement Plans

The Reserve Banks currently offer three defined benefit retirement plans to employees, based on length of service and level of compensation. Substantially all of the employees of the Reserve Banks, Board of Governors, and Office of Employee Benefits of the Federal Reserve System (OEB) participate in the Retirement Plan for Employees of the Federal Reserve System (System Plan). Under the Dodd-Frank Act, newly hired Bureau employees are eligible to participate in the System Plan and transferees from other governmental organizations can elect to participate in the System Plan. In addition, employees at certain compensation levels participate in the Benefit Equalization Retirement Plan (BEP) and certain Reserve Bank officers participate in the Supplemental Retirement Plan for Select Officers of the Federal Reserve Banks (SERP).

The System Plan provides retirement benefits to employees of the Reserve Banks, Board of Governors, OEB, and certain employees of the Bureau. The FRBNY, on behalf of the System, recognizes the net asset or net liability and costs associated with the System Plan in its combined financial statements. During the year ended December 31, 2012 and 2011, certain costs associated with the System Plan were reimbursed by the Bureau.

Following is a reconciliation of the beginning and ending balances of the System Plan benefit obligation (in millions):

	2012	2011
Estimated actuarial present value of projected benefit obligation at January 1	$10,198	$ 8,258
Service cost-benefits earned during the period	349	258
Interest cost on projected benefit obligation	473	461
Actuarial loss	833	1,427
Contributions by plan participants	4	6
Special termination benefits	9	10
Benefits paid	(334)	(315)
Plan amendments	(64)	93
Estimated actuarial present value of projected benefit obligation at December 31	$11,468	$10,198

Following is a reconciliation showing the beginning and ending balance of the System Plan assets, the funded status, and the accrued pension benefit costs (in millions):

	2012	2011
Estimated plan assets at January 1 (of which $7,977 and $6,998 is measured at fair value as of January 1, 2012 and 2011, respectively)	$ 8,048	$ 7,273
Actual return on plan assets	1,066	649
Contributions by the employer	782	435
Contributions by plan participants	4	6
Benefits paid	(334)	(315)
Estimated plan assets at December 31 (of which $9,440 and $7,977 is measured at fair value as of December 31, 2012 and 2011, respectively)	$ 9,566	$ 8,048
Funded status and accrued pension benefit costs	$(1,902)	$(2,150)
Amounts included in accumulated other comprehensive loss are shown below:		
Prior service cost	$ (559)	$ (739)
Net actuarial loss	(3,784)	(3,710)
Total accumulated other comprehensive loss	$(4,343)	$(4,449)

The FRBNY, on behalf of the System, funded $780.0 million and $420.1 million during the years ended December 31, 2012 and 2011, respectively. The Bureau is required by the Dodd-Frank Act to fund the System plan for each Bureau employee based on an established formula. During the years ended December 2012 and 2011, the Bureau funded contributions of $1.6 million and $14.4 million, respectively.

Accrued pension benefit costs are reported as a component of "Accrued benefit costs," in the Combined Statements of Condition.

The accumulated benefit obligation for the System Plan, which differs from the estimated actuarial present value of projected benefit obligation because it is based on current rather than future compensation levels, was $10,035 million and $8,803 million at December 31, 2012 and 2011, respectively.

The weighted-average assumptions used in developing the accumulated pension benefit obligation for the System Plan as of December 31 were as follows:

	2012	2011
Discount rate	4.00%	4.50%
Rate of compensation increase	4.50%	5.00%

Net periodic benefit expenses for the years ended December 31, 2012 and 2011, were actuarially determined using a January 1 measurement date. The weighted-average assumptions used in developing net periodic benefit expenses for the System Plan for the years were as follows:

	2012	2011
Discount rate	4.50%	5.50%
Expected asset return	7.25%	7.25%
Rate of compensation increase	5.00%	5.00%

Discount rates reflect yields available on high-quality corporate bonds that would generate the cash flows necessary to pay the System Plan's benefits when due. The expected long-term rate of return on assets is an estimate that is based on a combination of factors, including the System Plan's asset allocation strategy and historical returns; surveys of expected rates of return for other entities' plans; a projected return for equities and fixed income investments based on real interest rates, inflation expectations, and equity risk premiums; and surveys of expected returns in equity and fixed income markets.

The components of net periodic pension benefit expense for the System Plan for the years ended December 31 are shown below (in millions):

	2012	2011
Service cost-benefits earned during the period	$ 349	$ 258
Interest cost on projected benefit obligation	473	461
Amortization of prior service cost	116	110
Amortization of net loss	292	187
Expected return on plan assets	(599)	(531)
Net periodic pension benefit expense	631	485
Special termination benefits	9	10
Bureau of Consumer Financial Protection contributions	(2)	–
Total periodic pension benefit expense	$ 638	$ 495

Estimated amounts that will be amortized from accumulated other comprehensive loss into net periodic pension benefit expense in 2013 are shown below:

Prior service cost	$103
Net actuarial loss	275
Total	$378

The recognition of special termination losses is primarily the result of enhanced retirement benefits provided to employees during the restructuring described in Note 12.

Following is a summary of expected benefit payments, excluding enhanced retirement benefits (in millions):

2013	$ 379
2014	401
2015	425
2016	450
2017	476
2018–2022	2,777
Total	$4,908

The System's Committee on Investment Performance (CIP) is responsible for establishing investment policies, selecting investment managers, and monitoring the investment managers' compliance with its policies. The CIP is supported by staff in the OEB in carrying out these responsibilities. At December 31, 2012, the System Plan's assets were held in six investment vehicles: two actively managed long-duration fixed income portfolios, an indexed U.S. equity fund, an indexed non-U.S. developed-markets equity fund, an indexed long-duration fixed income portfolio, and a money market fund.

The diversification of the Plan's investments is designed to limit concentration of risk and the risk of loss related to an individual asset class. The two long-duration fixed income portfolios are separate accounts benchmarked to a custom benchmark of 55 percent Barclays Long Credit Index and 45 percent Citigroup 15+ years U.S. Treasury STRIPS Index, which was selected as a proxy for the liabilities of the Plan. These portfolios are actively managed and the guidelines are designed to limit portfolio deviations from the benchmark. The indexed long-duration fixed income portfolio is invested in two commingled funds and is benchmarked to 55 percent Barclays Long Credit Index and 45 percent Barclays 20+ STRIPS Index. The indexed U.S. equity fund is intended to track the overall U.S. equity market across market capitalizations and is benchmarked to the Dow Jones U.S. Total Stock Market Index. The indexed non-U.S. developed markets equity fund is intended to track the Morgan Stanley Capital International (MSCI), Europe, Australia, Far East plus Canada Index, which includes stocks from 23 markets deemed by MSCI to be "developed markets." Finally, the money market fund, which invests in high-quality money market securities, is the repository for cash balances and adheres to a constant dollar methodology.

Permitted and prohibited investments, including the use of derivatives, are defined in either the trust agreement (for commingled index vehicles) or the investment guidelines (for the three separate accounts). The CIP reviews the trust agreement and approves all investment guidelines as part of the selection of each investment to ensure that the trust agreement is consistent with the CIP's investment objectives for the System Plan's assets.

The System Plan's policy weight and actual asset allocations at December 31, by asset category, are as follows:

	Policy weight	Actual asset allocations	
		2012	2011
U.S. equities	35.0%	34.9%	39.0%
International equities	15.0%	13.6%	13.8%
Fixed income	50.0%	50.4%	46.6%
Cash	0.0%	1.1%	0.6%
Total	100.0%	100.0%	100.0%

Employer contributions to the System Plan may be determined using different assumptions than those required for financial reporting. The System Plan's anticipatory funding level for 2013 is $900 million. In 2013, the System plans to make monthly contributions of $75 million and will reevaluate the monthly contributions upon completion of the 2013 actuarial valuation. The Reserve Banks' projected benefit obligation, funded status, and net pension expenses for the BEP and the SERP at December 31, 2012 and 2011, and for the years then ended, were not material.

The System Plan's investments are reported at fair value as required by ASC 820. ASC 820 establishes a three-level fair value hierarchy that distinguishes between market participant assumptions developed using market data obtained from independent sources (observable inputs) and the Reserve Banks' assumptions about market participant assumptions developed using the best information available in the circumstances (unobservable inputs).

Determination of Fair Value

The System Plan's investments are valued on the basis of the last available bid prices or current market quotations provided by dealers, or pricing services. To determine the value of a particular investment, pricing services may use information on transactions in such investments; quotations from dealers; pricing metrics; market transactions in comparable investments; relationships observed in the market between investments; and calculated yield measures based on valuation methodologies commonly employed in the market for such investments.

Because of the uncertainty inherent in determining the fair value of investments that do not have a readily available fair value, the fair value of these investments may differ significantly from the values that would have been reported if a readily available fair value had existed for these investments and may differ materially from the values that may ultimately be realized.

The following tables present the financial instruments recorded at fair value as of December 31 by ASC 820 hierarchy (in millions):

Description	2012			
	Level 1[1]	Level 2[1]	Level 3	Total
Short-term investments	$ 23	$ 25	$ –	$ 48
Treasury and Federal agency securities	141	1,746	–	1,887
Corporate bonds	–	1,947	–	1,947
Other fixed income securities	–	352	–	352
Commingled funds	–	5,206	–	5,206
Total	$164	$9,276	$ –	$9,440

[1] U.S. Treasury STRIPs with a fair value of $1,737 million were transferred from Level 1 to Level 2 because they were valued based on quoted prices in non-active markets (Level 2). There were no other transfers between Level 1 and Level 2 during the year.

Description	2011			
	Level 1[1]	Level 2[1]	Level 3	Total
Short-term investments	$ 31	$ 29	$ –	$ 60
Treasury and Federal agency securities	1,685	14	–	1,699
Corporate bonds[2]	–	1,656	–	1,656
Other fixed income securities[2]	–	306	–	306
Commingled funds	–	4,256	–	4,256
Total	$1,716	$6,261	$ –	$7,977

[1] There were no transfers between Level 1 and Level 2 during the year.

[2] Investments with a fair value of $1,656 as of December 31, 2011 were recategorized from "Other fixed income securities" to a new line item labeled "Corporate bonds" to conform to the current year presentation.

The System Plan enters into futures contracts, traded on regulated exchanges, to manage certain risks and to maintain appropriate market exposure in meeting the investment objectives of the System Plan. The System Plan bears the market risk that arises from any unfavorable changes in the value of the securities or indexes underlying these futures contracts. The use of futures contracts involves, to varying degrees, elements of market risk in excess of the amount recorded in the Combined Statements of Condition. The guidelines established by the CIP further reduce risk by limiting the net futures positions, for most fund managers, to 15 percent of the market value of the advisor's portfolio.

At December 31, 2012 and 2011, a portion of short-term investments was available for futures trading. There were $7 million and $6 million of Treasury securities pledged as collateral for the years ended December 31, 2012 and 2011, respectively.

Thrift Plan

Employees of the Reserve Banks participate in the defined contribution Thrift Plan for Employees of the Federal Reserve System (Thrift Plan). The Reserve Banks matches 100 percent of the first six percent of employee contributions from the date of hire and provides an automatic employer contribution of one percent of eligible pay. The Reserve Banks' Thrift Plan contributions totaled $102 million and $96 million for the years ended December 31, 2012 and 2011, respectively, and are reported as a component of "Operating expenses: Salaries and benefits" in the Combined Statements of Income and Comprehensive Income.

(10) Postretirement Benefits Other Than Retirement Plans and Postemployment Benefits

Postretirement Benefits Other Than Retirement Plans

In addition to the Reserve Banks' retirement plans, employees who have met certain age and length-of-service requirements are eligible for both medical and life insurance benefits during retirement.

The Reserve Banks fund benefits payable under the medical and life insurance plans as due and, accordingly, has no plan assets.

Following is a reconciliation of the beginning and ending balances of the benefit obligation (in millions):

	2012	2011
Accumulated postretirement benefit obligation at January 1	$1,506	$1,358
Service cost benefits earned during the period	59	49
Interest cost on accumulated benefit obligation	69	72
Net actuarial loss (gain)	181	114
Curtailment loss (gain)	–	(7)
Special termination benefits loss	1	1
Contributions by plan participants	22	21
Benefits paid	(87)	(86)
Medicare Part D subsidies	5	5
Plan amendments	(1)	(21)
Accumulated postretirement benefit obligation at December 31	$1,755	$1,506

At December 31, 2012 and 2011, the weighted-average discount rate assumptions used in developing the postretirement benefit obligation were 3.75 percent and 4.50 percent, respectively.

Discount rates reflect yields available on high-quality corporate bonds that would generate the cash flows necessary to pay the plan's benefits when due.

Following is a reconciliation of the beginning and ending balance of the plan assets, the unfunded postretirement benefit obligation, and the accrued postretirement benefit costs (in millions):

	2012	2011
Fair value of plan assets at January 1	$ –	$ –
Contributions by the employer	60	60
Contributions by plan participants	22	21
Benefits paid	(87)	(86)
Medicare Part D subsidies	5	5
Fair value of plan assets at December 31	$ –	$ –
Unfunded obligation and accrued postretirement benefit cost	$1,755	$1,506
Amounts included in accumulated other comprehensive loss are shown below:		
Prior service cost	$ 36	$ 45
Net actuarial (loss)	(538)	(388)
Total accumulated other comprehensive loss	$ (502)	$ (343)

Accrued postretirement benefit costs are reported as a component of "Accrued benefit costs" in the Combined Statements of Condition.

For measurement purposes, the assumed health-care cost trend rates at December 31 are as follows:

	2012	2011
Health-care cost trend rate assumed for next year	7.00%	7.50%
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	5.00%	5.00%
Year that the rate reaches the ultimate trend rate	2018	2017

Assumed health-care cost trend rates have a significant effect on the amounts reported for health-care plans. A one percentage point change in assumed health-care cost trend rates would have the following effects for the year ended December 31, 2012 (in millions):

	One percentage point increase	One percentage point decrease
Effect on aggregate of service and interest cost components of net periodic postretirement benefit costs	$ 21	$ (17)
Effect on accumulated postretirement benefit obligation	245	(207)

The following is a summary of the components of net periodic postretirement benefit expense for the years ended December 31 (in millions):

	2012	2011
Service cost-benefits earned during the period	$ 59	$ 49
Interest cost on accumulated benefit obligation	69	72
Amortization of prior service cost	(10)	(7)
Amortization of net actuarial loss	31	21
Total periodic expense	149	135
Special termination benefits loss	1	1
Net periodic postretirement benefit expense	$150	$136

Estimated amounts that will be amortized from accumulated other comprehensive loss into net periodic postretirement benefit expense in 2013 are shown below:

Prior service cost	$(10)
Net actuarial loss	47
Total	$ 37

Net postretirement benefit costs are actuarially determined using a January 1 measurement date. At January 1, 2012 and 2011, the weighted-average discount rate assumptions used to determine net periodic postretirement benefit costs were 4.50 percent and 5.25 percent, respectively.

Net periodic postretirement benefit expense is reported as a component of "Operating expenses: Salaries and benefits" in the Combined Statements of Income and Comprehensive Income.

The recognition of special termination benefit losses is primarily the result of enhanced retirement benefits provided to employees during the restructuring described in Note 12.

The Medicare Prescription Drug, Improvement and Modernization Act of 2003 established a prescription drug benefit under Medicare (Medicare Part D) and a federal subsidy to sponsors of retiree health-care benefit plans that provide benefits that are at least actuarially equivalent to Medicare Part D. The benefits pro-

vided under the Reserve Banks' plan to certain participants are at least actuarially equivalent to the Medicare Part D prescription drug benefit. The estimated effects of the subsidy are reflected in actuarial loss in the accumulated postretirement benefit obligation and net periodic postretirement benefit expense.

Federal Medicare Part D subsidy receipts were $4.3 million and $4.2 million in the years ended December 31, 2012 and 2011, respectively. Expected receipts in 2013, related to benefits paid in the years ended December 31, 2012 and 2011, are $3.1 million.

Following is a summary of expected postretirement benefit payments (in millions):

	Without subsidy	With subsidy
2013	$ 78	$ 73
2014	82	76
2015	85	79
2016	89	82
2017	94	86
2018–2022	536	488
Total	$964	$884

Postemployment Benefits

The Reserve Banks offer benefits to former or inactive employees. Postemployment benefit costs are actuarially determined using a December 31 measurement date and include the cost of providing disability, medical, dental, and vision insurance, and survivor income benefits. The accrued postemployment benefit costs recognized by the Reserve Banks at December 31, 2012 and 2011, were $164 million and $157 million, respectively. This cost is included as a component of "Accrued benefit costs" in the Combined Statements of Condition. Net periodic postemployment benefit expense included in 2012 and 2011 operating expenses were $25 million and $27 million, respectively, and are recorded as a component of "Operating expenses: Salaries and benefits" in the Combined Statements of Income and Comprehensive Income.

(11) Accumulated Other Comprehensive Income and Other Comprehensive Income

Following is a reconciliation of beginning and ending balances of accumulated other comprehensive income (loss) as of December 31 (in millions):

	2012			2011		
	Amount related to defined benefit retirement plan	Amount related to postretirement benefits other than retirement plans	Total accumulated other comprehensive income (loss)	Amount related to defined benefit retirement plan	Amount related to postretirement benefits other than retirement plans	Total accumulated other comprehensive income (loss)
Balance at January 1	$(4,449)	$(343)	$(4,792)	$(3,360)	$(270)	$(3,630)
Change in funded status of benefit plans:						
Prior service costs arising during the year	64	1	65	(78)	22	(56)
Amortization of prior service cost	116	(10)	106	110	(8)	102
Change in prior service costs related to benefit plans	180	(9)	171	32	14	46
Net actuarial loss arising during the year	(366)	(181)	(547)	(1,308)	(108)	(1,416)
Amortization of net actuarial loss	292	31	323	187	21	208
Change in actuarial losses related to benefit plans	(74)	(150)	(224)	(1,121)	(87)	(1,208)
Change in funded status of benefit plans – other comprehensive income (loss)	106	(159)	(53)	(1,089)	(73)	(1,162)
Balance at December 31	$(4,343)	$(502)	$(4,845)	$(4,449)	$(343)	$(4,792)

Additional detail regarding the classification of accumulated other comprehensive loss is included in Notes 9 and 10.

(12) Business Restructuring Charges

The Reserve Banks had no material business restructuring charges in 2012.

In 2011, the U.S. Treasury announced a restructuring initiative to consolidate the Treasury Retail Securities operations. As a result of this initiative, Treasury Retail Securities operations performed by the FRBC were consolidated into the Federal Reserve Bank of Minneapolis. Additional announcements in 2011 included the consolidation of paper check processing, performed by the FRBC, into the FRBA.

In years prior to 2011, the Reserve Banks announced the acceleration of their check restructuring initiatives to align the check processing infrastructure and operations with declining check processing volumes. The new infrastructure consolidated paper and electronic check processing at the FRBA.

Following is a summary of financial information related to the restructuring plans (in millions):

	2011 restructuring plans	2010 and prior restructuring plans	Total
Information related to restructuring plans as of December 31, 2012:			
Total expected costs related to restructuring activity	$ 9	$ 34	$ 43
Estimated future costs related to restructuring activity	–	–	–
Expected completion date	2012	2011	
Reconciliation of liability balances:			
Balance at December 31, 2010	$ –	$ 10	$ 10
Employee separation costs	11	1	12
Adjustments	(1)	(2)	(3)
Payments	(4)	(4)	(8)
Balance at December 31, 2011	$ 6	$ 5	$ 11
Employee separation costs	–	–	–
Adjustments	(1)	(2)	(3)
Payments	(4)	(2)	(6)
Balance at December 31, 2012	$ 1	$ 1	$ 2

Employee separation costs are primarily severance costs for identified staff reductions associated with the announced restructuring plans. Separation costs that are provided under terms of ongoing benefit arrangements are recorded based on the accumulated benefit earned by the employee. Separation costs that are provided under the terms of one-time benefit arrangements are generally measured based on the expected benefit as of the termination date and recorded ratably over the period to termination. Restructuring costs related to employee separations are reported as a component of "Operating expenses: Salaries and benefits" in the Combined Statements of Income and Comprehensive Income.

Adjustments to the accrued liability are primarily due to changes in the estimated restructuring costs and are shown as a component of the appropriate expense category in the Combined Statements of Income and Comprehensive Income.

Restructuring costs associated with the impairment of certain Bank assets, including software, buildings, leasehold improvements, furniture, and equipment, are discussed in Note 7.

(13) Distribution of Comprehensive Income

In accordance with Board policy, Reserve Banks remit excess earnings, after providing for dividends and the amount necessary to equate surplus with capital paid-in, to the U.S. Treasury as interest on Federal Reserve notes. The following table presents the distribution of the Reserve Banks' comprehensive income in accordance with the Board's policy for the years ended December 31 (in millions):

	2012	2011
Dividends on capital stock	$ 1,637	$ 1,577
Transfer to surplus – amount required to equate surplus with capital paid-in	461	375
Interest on Federal Reserve notes expense remitted to Treasury	88,418	75,424
Total distribution	$90,516	$77,376

(14) Subsequent Events

On January 15, 2013, the Treasury, FRBNY, and the TALF LLC agreed to eliminate in their entirety the Treasury's subordinate funding commitment to the TALF LLC and the FRBNY's senior funding commitment to the TALF LLC. These commitments were no longer deemed necessary because the accumulated fees collected through the TALF program, and currently held in liquid assets in the TALF LLC, exceed the amount of TALF loans outstanding. In addition, the agreement related to distribution of proceeds was amended to limit funding of the cash collateral account to an amount equal to the outstanding principal plus accrued interest of all TALF loans as of the payment determination date; all accumulated funding in excess of that amount would then be distributed according to the distribution priorities described in the agreements governing TALF LLC. Pursuant to this agreement, the TALF LLC repaid in full the outstanding principal and accrued interest on the subordinated loan to the Treasury, and additional distributions were made to the Treasury and FRBNY as contingent interest in the amounts of $310 million and $35 million, respectively.

There were no other subsequent events that require adjustments to or disclosures in the combined financial statements as of December 31, 2012. Subsequent events were evaluated through March 14, 2013, which is the date that the combined financial statements were issued.

Office of Inspector General Activities

The Office of Inspector General (OIG) for the Federal Reserve Board, which is also the OIG for the Consumer Financial Protection Bureau, operates in accordance with the Inspector General Act of 1978, as amended. The OIG conducts activities and makes recommendations to promote economy and efficiency; enhance policies and procedures; and prevent and detect waste, fraud, and abuse in Board programs and operations, including functions that the Board has delegated to the Federal Reserve Banks. Accordingly, the OIG plans and conducts audits, inspections, evaluations, investigations, and other reviews relating to Board and Board-delegated programs and operations. It also retains an independent public accounting firm to annually audit the Board's and the Federal Financial Institutions Examination Council's financial statements. In addition, the OIG keeps the Congress and the Board of Governors fully informed about serious abuses and deficiencies.

During 2012, the OIG completed 24 audits, inspections, and evaluations (table 1) and conducted a number of follow-up reviews to evaluate action taken on prior recommendations. Due to the sensitive nature of some of the material, certain reports were only issued internally to the Board, as indicated. OIG investigative work resulted in 6 arrests, 8 indictments, 10 convictions, and 1 suspension/termination, as well as $37,673,456 in criminal fines and restitution. Nineteen investigations were opened and five investigations were closed during the year. The OIG also issued 2 semiannual reports to Congress and performed approximately 35 reviews of legislation and regulations related to the operations of the Board and/or the OIG.

For more information, visit the OIG website at www.federalreserve.gov/oig/. In particular, specific details about the OIG's body of work may be found in the OIG's work plan and semiannual reports to Congress.

Table 1. OIG audit, inspection, and evaluation reports issued in 2012

Report title	Month issued
Review of RBOPS' Oversight of the Next Generation $100 Note	January
Material Loss Review of First Chicago Bank and Trust	February
Federal Financial Institutions Examination Council Financial Statements and Independent Auditors' Report, December 31, 2011 and 2010	March
Board Financial Statements and Independent Auditors' Report, December 31, 2011 and 2010	March
Status of the Transfer of Office of Thrift Supervision Functions	March
Inquiry into Allegations of Undue Political Interference with Federal Reserve Officials Related to the 1972 Watergate Burglary and Iraq Weapons Purchases during the 1980s	March
Security Control Review of the National Remote Access Services System (internal report)	March
Material Loss Review of the Bank of the Commonwealth	April
Security Control Review of the Board's Public Website (internal report)	April
Material Loss Review of Community Banks of Colorado	May
Audit of the Board's Progress in Developing Enhanced Prudential Standards	May
Review of the Unauthorized Disclosure of a Confidential Staff Draft of the Volcker Rule Notice of Proposed Rulemaking	July
Security Control Review of the Federal Reserve Bank of Richmond's Lotus Notes Systems Supporting the Board's Division of Banking Supervision and Regulation (internal report)	August
Inspection of the Board's Protective Services Unit (internal report)	August
Audit of the Small Community Bank Examination Process	August
Audit of the Board's Government Travel Card Program	September
Status of the Transfer of Office of Thrift Supervision Functions	September
Audit of the Board's Actions to Analyze Mortgage Foreclosure Processing Risks	September
Office of Personnel Management OIG Peer Review (posted on the Office of Personnel Management OIG's website)	September
Security Control Review of the Aon Hewitt Employee Benefits System (internal report)	September
Evaluation of the Consumer Financial Protection Bureau's Consumer Response Unit	September
2012 Audit of the Board's Information Security Program	November
2012 Audit of the Consumer Financial Protection Bureau's Information Security Program	November
Security Control Review of Contingency Planning Controls for the Information Technology General Support System (internal report)	December

Government Accountability Office Reviews

The Federal Banking Agency Audit Act (Pub. L. No. 95–320) authorizes the Government Accountability Office (GAO) to audit certain aspects of Federal Reserve System operations. The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank Act) directs GAO to conduct additional audits with respect to these operations. Many of these Dodd-Frank-mandated audits have now been completed, but not all. In addition, the GAO has initiated its own review of financial regulators' progress on implementing Dodd-Frank Act regulations.

In 2012, the GAO completed 21 projects that involved the Federal Reserve (table 1). Ten projects remained open as of December 31, 2012 (table 2). Some of the major projects that GAO has undertaken include a study of the Independent Foreclosure Review process; a review of Board and Reserve Bank offices of Minority and Women Inclusion and the diversity of the Federal Reserve System workforce; a review of enforcement of the Servicemembers Civil Relief Act; and several studies on the costs and benefits associated with the implementation of the Dodd-Frank Act.

Table 1. Reports completed during 2012

Report title	Report number	Month issued (2012)
Agencies' Efforts to Analyze and Coordinate Their Rules	13-101	December
New Council and Research Office Should Strengthen the Accountability and Transparency of Their Decisions	12-886	September
Impact of the Dodd-Frank Act Depends Largely on Future Rule Makings	12-881	September
Challenges in Quantifying Its Effect on Low-Income Housing Tax Credit Investment	12-869R	August
Opportunities Exist to Increase Collaboration and Consider Consolidation	12-554	August
Overlap of Programs Suggests There May Be Opportunities for Consolidation	12-588	July
Regulatory Oversight of Compliance with Servicemembers Civil Relief Act Has Been Limited	12-700	July
Agencies Continue Rulemakings for Clarifying Specific Provisions of Orderly Liquidation Authority	12-735	July
Opportunities Exist to Further Enhance Borrower Outreach Efforts	12-776	June
Agencies Could Improve Effectiveness of Federal Efforts with Additional Data Collection and Analysis	12-296	June
Government's Exposure to AIG Lessens as Equity Investments Are Sold	12-574	May
Areas for Improvement in Information Systems Controls	12-615R	April
Revenues Have Exceeded Investments, but Concerns about Outstanding Investments Remain	12-301	March
Buybacks Can Enhance Treasury's Capacity to Manage under Changing Market Conditions [Reissued on March 21, 2012]	12-314	March
Approaches in Other Countries Offer Beneficial Strategies in Several Areas	12-328	March
Alternative Scenarios Suggest Different Benefits and Losses from Replacing the $1 Note with a $1 Coin	12-307	February
Characteristics and Regulation of Exempt Institutions and the Implications of Removing the Exemptions	12-160	January
Appraisal Subcommittee Needs to Improve Monitoring Procedures	12-147	January
Hybrid Capital Instruments and Small Institution Access to Capital	12-237	January
Potential Effects of New Changes on Foreign Holding Companies and U.S. Banks Abroad	12-235	January
Overview of Market Structure, Pricing, and Regulation	12-265	January

Table 2. Projects active at year-end 2012

Subject of project	Month initiated	GAO engagement #	Status
Automated teller machine (ATM) industry	November 2011	250640	Open
Financial crisis losses and potential impacts of the Dodd-Frank Act	November 2011	250638	Closed 02/14/13
Annual audit of financial statements	February 2012	198702	Open
Causes and consequences of recent bank failures	February 2012	250660	Closed 01/03/13
Trends in management-level diversity and diversity initiatives	February 2012	250656	Open
Effect of U.S. and international sanctions on the Iranian economy	June 2012	320896	Closed 02/25/13
Foreclosure review	July 2012	250676	Open
Dodd-Frank Act financial regulatory efforts	August 2012	250681	Closed 01/23/13
Financial company bankruptcies	November 2012	250692	Open
College credit, debit, and prepaid card agreements	November 2012	250691	Open

Federal Reserve System Organization

Congress designed the Federal Reserve System to give it a broad perspective on the economy and on economic activity in all parts of the nation. As such, the System is composed of a central, governmental agency—the Board of Governors—in Washington, D.C., and 12 regional Federal Reserve Banks. This section lists key officials across the System, including the Board of Governors, its officers, Federal Open Market Committee members, several System councils, and Federal Reserve Bank and Branch directors and officers.

Board of Governors

Members

The Board of Governors of the Federal Reserve System is composed of seven members, who are nominated by the President and confirmed by the Senate. The Chairman and the Vice Chairman of the Board are also named by the President from among the members and are confirmed by the Senate. For a full listing of Board members from 1913 through the present, visit www.federalreserve.gov/bios/boardmembership.htm.

Ben S. Bernanke
Chairman

Janet L. Yellen
Vice Chair

Elizabeth A. Duke

Daniel K. Tarullo

Sarah Bloom Raskin

Jeremy C. Stein

Jerome H. Powell

Divisions and Officers

Fifteen divisions support and carry out the mission of the Board of Governors, which is based in Washington, D.C.

Office of Board Members

Michelle A. Smith
Director

Linda L. Robertson
Assistant to the Board

Rosanna Pianalto-Cameron
Assistant to the Board

David W. Skidmore
Assistant to the Board

Brian J. Gross
Special Assistant to the Board for Congressional Liaison

Lucretia M. Boyer
Special Assistant to the Board for Public Information

Winthrop P. Hambley
Senior Adviser

Andrew T. Levin
Special Adviser to the Board

Jon W. Faust
Special Advisor to the Board

Adrienne D. Hurt
Adviser

Legal Division

Scott G. Alvarez
General Counsel

Richard M. Ashton
Deputy General Counsel

Kathleen M. O'Day
Deputy General Counsel

Stephanie Martin
Associate General Counsel

Ann Misback
Associate General Counsel

Laurie S. Schaffer
Associate General Counsel

Katherine H. Wheatley
Associate General Counsel

Jean C. Anderson
Assistant General Counsel

Alison M. Thro
Assistant General Counsel

Cary K. Williams
Assistant General Counsel

Office of the Secretary

Robert deV. Frierson
Secretary

Margaret M. Shanks
Deputy Secretary

Michael J. Lewandowski
Assistant Secretary

Division of International Finance

Steven B. Kamin
Director

Thomas A. Connors
Deputy Director

Michael P. Leahy
Deputy Director

Trevor A. Reeve
Senior Associate Director

Ralph W. Tryon
Associate Director

Christopher J. Erceg
Associate Director

David H. Bowman
Deputy Associate Director

Charles P. Thomas
Deputy Associate Director

Beth Anne Wilson
Deputy Associate Director

Shaghil Ahmed
Assistant Director

Joseph W. Gruber
Assistant Director

Mark S. Carey
Senior Adviser

Jane Haltmaier
Senior Adviser

John H. Rogers
Senior Adviser

Sally M. Davies
Senior Adviser

Brian M. Doyle
Adviser

Office of Financial Stability Policy and Research

J. Nellie Liang
Director

Andreas W. Lehnert
Deputy Director

Michael T. Kiley
Associate Director

Seth F. Wheeler
Chief of Staff

Rochelle M. Edge
Assistant Director

Division of Monetary Affairs

William B. English
Director

James A. Clouse
Deputy Director

Deborah J. Danker
Deputy Director

Stephen A. Meyer
Deputy Director

William Nelson
Deputy Director

Seth B. Carpenter
Senior Associate Director

Fabio M. Natalucci
Associate Director

Gretchen C. Weinbach
Associate Director

Egon Zakrajsek
Associate Director

William F. Bassett
Deputy Associate Director

Margaret G. DeBoer
Deputy Associate Director

Jane E. Ihrig
Deputy Associate Director

J. David Lopez-Salido
Deputy Associate Director

Thomas B. King
Assistant Director

Matthew M. Luecke
Assistant Director

Edward M. Nelson
Assistant Director

Min Wei
Assistant Director

Ellen E. Meade
Senior Adviser

Joyce K. Zickler
Senior Adviser

Mary T. Hoffman
Adviser

Division of Research and Statistics

David W. Wilcox
Director

Matthew J. Eichner
Deputy Director

David L. Reifschneider
Deputy Director

Janice Shack-Marquez
Deputy Director

William L. Wascher III
Deputy Director

Daniel M. Covitz
Associate Director

Michael S. Cringoli
Associate Director

Eric M. Engen
Associate Director

Heinrich T. Laubach
Associate Director

David E. Lebow
Associate Director

Michael G. Palumbo
Associate Director

S. Wayne Passmore
Associate Director

Sean D. Campbell
Deputy Associate Director

Jeffrey C. Campione
Deputy Associate Director

Sandra A. Cannon
Deputy Associate Director

Joshua H. Gallin
Deputy Associate Director

Diana Hancock
Deputy Associate Director

Arthur B. Kennickell
Assistant Director

Elizabeth K. Kiser
Assistant Director

Karen M. Pence
Assistant Director

John M. Roberts
Assistant Director

Steven A. Sharpe
Assistant Director

John J. Stevens
Assistant Director

Stacey M. Tevlin
Assistant Director

Glenn B. Canner
Senior Adviser

Robin A. Prager
Senior Adviser

Jeremy Rudd
Adviser

Division of Banking Supervision and Regulation

Michael S. Gibson
Director

Maryann F. Hunter
Deputy Director

Barbara J. Bouchard
Senior Associate Director

Timothy P. Clark
Senior Associate Director

Jack P. Jennings II
Senior Associate Director

Arthur W. Lindo
Senior Associate Director

Peter J. Purcell
Senior Associate Director

William G. Spaniel
Senior Associate Director

Mark E. Van Der Weide
Senior Associate Director

Todd A. Vermilyea
Senior Associate Director

Kevin M. Bertsch
Associate Director

Nida Davis
Associate Director

Gerald A. Edwards Jr.
Associate Director

David S. Jones
Associate Director

Michael D. Solomon
Associate Director

Richard A. Naylor II
Deputy Associate Director

Robert T. Ashman
Assistant Director

Kevin J. Clarke
Assistant Director

Adrienne T. Haden
Assistant Director

Anna L. Hewko
Assistant Director

Michael J. Hsu
Assistant Director

Michael J. Kraemer
Assistant Director

Robert T. Maahs
Assistant Director

Steven P. Merriett
Assistant Director

Thomas K. Odegard
Assistant Director

Nancy J. Perkins
Assistant Director

Tameika L. Pope
Assistant Director

Laurie F. Priest
Assistant Director

Lisa H. Ryu
Assistant Director

Michael J. Sexton
Assistant Director

Richard C. Watkins
Assistant Director

Sarkis Yoghourtdjian
Assistant Director

Norah M. Barger
Senior Adviser

William F. Treacy
Adviser

Division of Consumer and Community Affairs

Sandra F. Braunstein
Director

Tonda E. Price
Deputy Director

Anna Alvarez Boyd
Senior Associate Director

Suzanne G. Killian
Senior Associate Director

Allen J. Fishbein
Associate Director

James A. Michaels
Associate Director

Joseph A. Firschein
Deputy Associate Director

David E. Buchholz
Assistant Director

Carol A. Evans
Assistant Director

Phyllis L. Harwell
Assistant Director

Marisa A. Reid
Assistant Director

Division of Reserve Bank Operations and Payment Systems

Louise L. Roseman
Director

Jeffrey C. Marquardt
Deputy Director

Susan V. Foley
Senior Associate Director

Jeff J. Stehm
Senior Associate Director

Kenneth D. Buckley
Associate Director

Dorothy B. LaChapelle
Associate Director

Gregory L. Evans
Deputy Associate Director

Lisa K. Hoskins
Deputy Associate Director

Michael J. Lambert
Deputy Associate Director

Jennifer A. Lucier
Deputy Associate Director

Stuart E. Sperry
Deputy Associate Director

Timothy W. Maas
Assistant Director

Jeffrey D. Walker
Assistant Director

Paul W. Bettge
Senior Adviser

Michael J. Stan
Advisor

Office of the Chief Operating Officer

Donald V. Hammond
Chief Operating Officer

Sheila Clark
Diversity and Inclusion Programs Director

Financial Management

William L. Mitchell
Director and Chief Financial Officer

Christine M. Fields
Associate Director

James R. Riesz
Associate Director

Jeffrey R. Peirce
Assistant Director

Karen L. Vassallo
Assistant Director

Management Division

Michell C. Clark
Director

David J. Capp
Deputy Director

David J. Harmon
Associate Director

Marie S. Savoy
Associate Director

Tara Tinsley-Pelitere
Associate Director

Keith F. Bates
Assistant Director

Curtis B. Eldridge
Assistant Director and Chief

Reginald V. Roach
Assistant Director

Theresa A. Trimble
Assistant Director

Todd A. Glissman
Senior Adviser

Carol A. Sanders
Special Adviser

Christopher J. Suma
Special Adviser

Division of Information Technology

Sharon L. Mowry
Director

Geary L. Cunningham
Deputy Director

Wayne A. Edmondson
Deputy Director

Raymond Romero
Associate Director

Kofi A. Sapong
Associate Director

Lisa M. Bell
Deputy Associate Director

William Dennison
Deputy Associate Director

Glenn S. Eskow
Deputy Associate Director

Marietta Murphy
Deputy Associate Director

Kassandra Arana Quimby
Deputy Associate Director

Sheryl Lynn Warren
Deputy Associate Director

Rajasekhar R. Yelisetty
Deputy Associate Director

Theresa C. Palva
Assistant Director

Virginia M. Wall
Assistant Director

Edgar Wang
Assistant Director

Charles B. Young II
Assistant Director

Tillena G. Clark
Adviser

Can Xuan Nguyen
Adviser

Office of Inspector General

Mark Bialek
Inspector General

James A. Ogden
Deputy Inspector General

Jacqueline M. Becker
Associate Inspector General

Elise M. Ennis
Associate Inspector General

Andrew Patchan Jr.
Associate Inspector General

Harvey Witherspoon
Associate Inspector General

Federal Open Market Committee

The Federal Open Market Committee is made up of the seven members of the Board of Governors; the president of the Federal Reserve Bank of New York; and four of the remaining 11 Reserve Bank presidents, who serve one-year terms on a rotating basis. During 2012, the Federal Open Market Committee held eight regularly scheduled meetings (see "Minutes of Federal Open Market Committee Meetings").

Members

Ben S. Bernanke
Chairman, Board of Governors

William C. Dudley
Vice Chairman, President, Federal Reserve Bank of New York

Elizabeth Duke
Member, Board of Governors

Jeffrey M. Lacker
President, Federal Reserve Bank of Richmond

Dennis P. Lockhart
President, Federal Reserve Bank of Atlanta

Sandra Pianalto
President, Federal Reserve Bank of Cleveland

Jerome H. Powell
Member, Board of Governors

Sarah Bloom Raskin
Member, Board of Governors

Jeremy C. Stein
Member, Board of Governors

Daniel K. Tarullo
Member, Board of Governors

John C. Williams
President, Federal Reserve Bank of San Francisco

Janet L. Yellen
Member, Board of Governors

Alternate Members

James Bullard
President, Federal Reserve Bank of St. Louis

Christine M. Cumming
First Vice President, Federal Reserve Bank of New York

Charles L. Evans
President, Federal Reserve Bank of Chicago

Esther L. George
President, Federal Reserve Bank of Kansas City

Eric Rosengren
President, Federal Reserve Bank of Boston

Officers

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

Thomas C. Baxter
Deputy General Counsel

Richard M. Ashton
Assistant General Counsel

Steven B. Kamin
Economist

David W. Wilcox
Economist

David Altig
Associate Economist

Thomas A. Connors
Associate Economist

Michael P. Leahy
Associate Economist

James J. McAndrews
Associate Economist

William Nelson
Associate Economist

David Reifschneider
Associate Economist

Glenn D. Rudebusch
Associate Economist

Mark S. Sniderman
Associate Economist

William Wascher
Associate Economist

John A. Weinberg
Associate Economist

Simon Potter
Manager, System Open Market Account

Board of Governors Advisory Councils

The Federal Reserve System uses advisory committees in carrying out its varied responsibilities. Three of these committees advise the Board of Governors directly: the Federal Advisory Council, the Consumer Advisory Council, and the Community Depository Institutions Advisory Council. These councils, whose members are drawn from each of the 12 Federal Reserve Districts, meet two to four times a year. The individual Reserve Banks have advisory committees as well, including thrift institutions advisory committees, small business committees, and agricultural advisory committees. Moreover, officials from all Reserve Banks meet periodically in various committees. To learn more, visit www.federalreserve.gov/aboutthefed/advisorydefault.htm.

Federal Advisory Council

The Federal Advisory Council—a statutory body established under the Federal Reserve Act—consults with and advises the Board of Governors on all matters within the Board's jurisdiction. It is composed of one representative from each Federal Reserve District, chosen by the Reserve Bank in that District. The Federal Reserve Act requires the council to meet in Washington, D.C., at least four times a year. Three members of the council serve as its president, vice president, and secretary. In 2012, it met on February 2–3, May 10–11, September 13–14, and December 13–14. The council met with the Board on February 3, May 11, September 14, and December 14, 2012.

Members

District 1
Joseph L. Hooley
Chairman, President, and Chief Executive Officer, State Street Corporation, Boston, MA

District 2
Vikram Pandit
Chief Executive Officer, Citigroup, Inc., New York, NY (resigned October 16, 2012)
James P. Gorman
Chairman and Chief Executive Officer, Morgan Stanley, New York, NY

District 3
Bharat B. Masrani
President and Chief Executive Officer, TD Bank, Cherry Hill, NJ

District 4
James E. Rohr
Chairman and Chief Executive Officer, The PNC Financial Services Group, Inc., Pittsburgh, PA

District 5
Richard D. Fairbank
Chairman and Chief Executive Officer, Capital One Financial Corporation, McLean, VA

District 6
Daryl G. Byrd
President and Chief Executive Officer, IBERIABANK Corporation, Lafayette, LA

District 7
David W. Nelms
Chairman and Chief Executive Officer, Discover Financial Services, Riverwoods, IL

District 8
D. Bryan Jordan
Chairman, President, and Chief Executive Officer, First Horizon National Corporation, Memphis, TN

District 9
Richard K. Davis
Chairman, President, and Chief Executive Officer, U.S. Bancorp, Minneapolis, MN

District 10
Stanley A. Lybarger
President and Chief Executive Officer, Bank of Oklahoma, National Association, Tulsa, OK

District 11
Richard W. Evans Jr.
Chairman and Chief Executive Officer, Cullen/Frost Bankers Inc., San Antonio, TX

District 12
J. Michael Shepherd
Chairman and Chief Executive Officer, Bank of the West and BancWest Corporation, San Francisco, CA

Officers

Richard K. Davis
President

D. Bryan Jordan
Vice President

James E. Annable
Secretary

Community Depository Institutions Advisory Council

The Community Depository Advisory Council advises the Board of Governors on the economy, leading conditions, and other issues. Members are selected from representatives of banks, thrift institutions, and credit unions serving on local advisory councils at the 12 Federal Reserve Banks. One member of each of the Reserve Bank councils serves on the Community Depository Institutions Advisory Council, which meets twice a year with the Federal Reserve Board in Washington.

Members

Howard T. Boyle
President and Chief Executive Officer, Hometown Bank, Kent, OH

Peter G. Humphrey
President and Chief Executive Officer, Five Star Bank and Financial Institutions, Inc., Warsaw, NY (resigned August 2012)

Peter J. Johnson
President and Chief Executive Officer, American Federal Savings Bank, Helena, MT

Michael Kloiber
President and Chief Executive Officer, Tinker Federal Credit Union, Tinker Air Force Base, OK

Charles H. Majors
Chairman and Chief Executive Officer, American National Bank, Danville, VA

Drake Mills
President and Chief Executive Officer, Community Trust Bank, Ruston, LA

William T. Stapleton
President and Chief Executive Officer, Northampton Cooperative Bank, Northampton, MA

Dennis M. Terry
President and Chief Executive Officer, First Clover Leaf Bank, Edwardsville, IL

Claire W. Tucker
President and Chief Executive Officer, CapStar Bank, Nashville, TN

Michael J. Castellana
President and Chief Executive Officer, SEFCU, Albany, NY

Dennis D. Cirucci
President and Chief Executive Officer, Alliance Bank, Broomall, PA

John V. Evans,Jr.
Chief Executive Officer, D.L. Evans Bank, Burley, ID

Timothy G. Marshall
President and Chief Executive Officer, Bank of Ann Arbor, Ann Arbor, MI

Officer

Howard T. Boyle
President

Model Validation Council

The Model Validation Council was established in 2012 by the Board of Governors to provide expert and independent advice on its process to rigorously assess the models used in stress tests of banking institutions. The Dodd-Frank Wall Street Reform and Consumer Protection Act required the Federal Reserve to conduct annual stress tests of large bank holding companies and systemically important, nonbank financial institutions supervised by the Board. The Model Validation Council provides input on the Board's efforts to assess the effectiveness of the models used in the stress tests. The council is intended to improve the quality of the Federal Reserve's model assessment program and to strengthen the confidence in the integrity and independence of the program.

Members

Francis X. Diebold, *Chair*
Professor, University of Pennsylvania

Peter Christoffersen
Professor, University of Toronto

Mark Flannery
Professor, University of Florida

Philippe Jorion
Professor, University of California at Irvine

Chester Spatt
Professor, Carnegie Mellon University

Allan Timmermann
Professor, University of California at San Diego

Federal Reserve Bank Branches

To carry out the day-to-day operations of the Federal Reserve System, the nation has been divided into 12 Federal Reserve Districts, each with a Reserve Bank. As required by the Federal Reserve Act of 1913, each of the Reserve Banks is supervised by a board of directors who are familiar with economic and credit conditions in the District. Similarly, each of the 24 Reserve Bank Branches has a board of directors who are familiar with conditions in the area encompassed by the Branch.

Reserve Bank and Branch Directors

Each Federal Reserve Bank has a nine-member board with three different classes of directors: three Class A directors, who are nominated and elected by the member banks in that District to represent the stockholding banks; three Class B directors, who are nominated and elected by the member banks to represent the public; and three Class C directors, who are appointed by the Board of Governors to represent the public. Class B and Class C directors are selected with due, but not exclusive, consideration to the interests of agriculture, commerce, industry, services, labor, and consumers. For the election of Class A and Class B directors, the member banks of each Federal Reserve District are classified into three groups. Each group, which is comprised of banks with similar capitalization, elects one Class A director and one Class B director. Directors are elected or appointed to three-year terms on a rotating basis so, barring any unexpected resignations, one position becomes available for each class of director each year. Annually, the Board of Governors designates one Class C director to serve as chair, and another Class C director to serve as deputy chair, of each Reserve Bank board.

Pursuant to the Federal Reserve Act, Class B and Class C directors may not be officers, directors, or employees of any bank, and Class C directors may not hold stock in any bank. In order to give full and meaningful effect to these restrictions, as well as the requirement that Class B and Class C directors be selected with consideration for sectors of the economy beyond banking, it is the Board's policy that Class B and Class C directors may not be affiliated with, and Class C directors may not hold stock in, certain other institutions that are also subject to the System's supervision.

Each Federal Reserve Bank Branch also has a board with either five or seven directors. A majority of the Branch directors are appointed by the Federal Reserve Bank, with the remaining directors appointed by the Board of Governors. Branch directors appointed by the Reserve Bank are subject to the same eligibility requirements as Class A or Class B directors. Board-appointed Branch directors must meet the same requirements as Class B directors.

For more information on Reserve Bank and Branch directors, see www.federalreserve.gov/aboutthefed/directors/about.htm.

The directors of the Banks and Branches are listed below. For each director, the class of directorship, the director's principal business, and the expiration date of the director's term are shown.

District 1–Boston

Class A

Peter L. Judkins, 2012
President and Chief Executive Officer, Franklin Savings Bank, Farmington, ME

Richard E. Holbrook, 2013
Chairman and Chief Executive Officer, Eastern Bank, Boston, MA

Kathryn G. Underwood, 2014
President and Chief Executive Officer, Ledyard National Bank, Hanover, NH

Class B

Roger S. Berkowitz, 2012
President and Chief Executive Officer, Legal Sea Foods, LLC, Boston, MA

John F. Fish, 2013
Chief Executive Officer, Suffolk Construction Company, Inc., Boston, MA

Gary L. Gottlieb, 2014
President and Chief Executive Officer, Partners HealthCare System, Inc., Boston, MA

Class C

Catherine D'Amato, 2012
President and Chief Executive Officer, The Greater Boston Food Bank, Boston, MA

Kirk A. Sykes, 2013
President, New Boston's Urban Strategy America Fund, Boston, MA

William D. Nordhaus, 2014
Sterling Professor of Economics, Yale University, New Haven, CT

District 2–New York

Class A

James Dimon, 2012
Chairman and Chief Executive Officer, JPMorgan Chase & Co., New York, NY

Richard L. Carrión, 2013
Chairman, President, and Chief Executive Officer, Popular, Inc., San Juan, PR

Paul P. Mello, 2014
President and Chief Executive Officer, Solvay Bank, Solvay, NY

Class B

Glenn H. Hutchins, 2012
Co-Founder and Managing Director, Silver Lake, New York, NY

Alphonso O'Neil-White, 2013
President and Chief Executive Officer, HealthNow New York Inc., Buffalo, NY

Terry J. Lundgren, 2014
Chairman, President, and Chief Executive Officer, Macy's, Inc., New York, NY

Class C

Lee C. Bollinger, 2012
President, Columbia University, New York, NY

Kathryn S. Wylde, 2013
President and Chief Executive Officer, Partnership for New York City, New York, NY

Emily K. Rafferty, 2014
President, The Metropolitan Museum of Art, New York, NY

District 3–Philadelphia

Class A

Aaron L. Groff, Jr., 2012
Chairman, President, and Chief Executive Officer, Ephrata National Bank, Ephrata, PA

R. Scott Smith, 2013
Chairman and Chief Executive Officer, Fulton Financial Corporation, Lancaster, PA

Frederick C. Peters, 2014
Chairman and Chief Executive Officer, Bryn Mawr Trust Company, Bryn Mawr, PA

Class B

Deborah M. Fretz, 2012
Retired President and Chief Executive Officer, Sunoco Logistics Partners, Philadelphia, PA

Keith S. Campbell, 2013
Chairman, Mannington Mills, Inc., Salem, NJ

Patrick Harker, 2014
President, University of Delaware, Newark, DE

Class C

James E. Nevels, 2012
Chairman, The Swarthmore Group, Philadelphia, PA

Jeremy Nowak, 2013
Former President/Former Chief Executive Officer, William Penn Foundation/The Reinvestment Fund, Philadelphia, PA

Michael Angelakis, 2014
Vice Chair and Chief Financial Officer, Comcast Corporation, Philadelphia, PA

District 4–Cleveland

Class A

C. Daniel DeLawder, 2012
Chairman and Chief Executive Officer, Park National Bank, Newark, OH

Paul G. Greig, 2013
Chairman, President, and Chief Executive Officer, FirstMerit Corporation, Akron, OH

Todd A. Mason, 2014
President and Chief Executive Officer, First National Bank of Pandora, Pandora, OH

Class B

Susan Tomasky, 2012
Retired President, AEP Transmission, Columbus, OH

Harold Keller, 2013
President, Ohio Capital Corporation for Housing, Columbus, OH

Tilmon F. Brown, 2014
President and Chief Executive Officer, New Horizons Baking Company, Norwalk, OH

Class C

Richard K. Smucker, 2012
Chief Executive Officer, The J.M. Smucker Company, Orrville, OH

Christopher M. Connor, 2013
Chairman and Chief Executive Officer, The Sherwin-Williams Company, Cleveland, OH

Alfred M. Rankin, Jr., 2014
Chairman, President, and Chief Executive Officer, NACCO Industries, Inc., Cleveland, OH

Cincinnati Branch

Appointed by the Federal Reserve Bank

Donald E. Bloomer, 2012
President and Chief Executive Officer, Citizens National Bank, Somerset, KY

Austin W. Keyser, 2013
Midwest Senior Field Representative, AFL-CIO, McDermott, OH

Gregory B. Kenny, 2014
President and Chief Executive Officer, General Cable Corporation, Highland Heights, KY

Amos L. Otis, 2014
Founder, President, and Chief Executive Officer, SoBran, Inc., Dayton, OH

Appointed by the Board of Governors

Daniel B. Cunningham, 2012
President and Chief Executive Officer, The Long-Stanton Group, Cincinnati, OH

Peter S. Strange, 2013
Chairman, Messer, Inc., Cincinnati, OH

Susan Croushore, 2014
President and Chief Executive Officer, The Christ Hospital, Cincinnati, OH

Pittsburgh Branch

Appointed by the Federal Reserve Bank

Grant Oliphant, 2012
President and Chief Executive Officer, The Pittsburgh Foundation, Pittsburgh, PA

Todd D. Brice, 2013
President and Chief Executive Officer, S&T Bancorp, Inc., Indiana, PA

Dawne S. Hickton, 2014
Vice Chair, President, and Chief Executive Officer, RTI International Metals, Inc., Pittsburgh, PA

Petra Mitchell, 2014
President, Catalyst Connection, Pittsburgh, PA

Appointed by the Board of Governors

Robert A. Paul, 2012
Chairman and Chief Executive Officer, Ampco-Pittsburgh Corporation, Pittsburgh, PA

Glenn R. Mahone, 2013
Partner and Attorney at Law, Reed Smith LLP, Pittsburgh, PA

Charles L. Hammel III, 2014
President, PITT OHIO, Pittsburgh, PA

District 5–Richmond

Class A

Richard J. Morgan, 2012
Regional President, Sandy Spring Bank, Annapolis, MD

Alan L. Brill, 2013
President and Chief Executive Officer, Capon Valley Bank, Wardensville, WV

Edward L. Willingham IV, 2014
President, First Citizens BancShares, Inc., and First Citizens Bank, Raleigh, NC

Class B

Wilbur E. Johnson, 2012
Managing Partner, Young Clement Rivers, LLP, Charleston, SC

Patrick C. Graney III, 2013
Maxum East Regional President, Maxum Petroleum, Belle, WV

Marshall O. Larsen, 2014
Retired Chairman, President, and Chief Executive Officer, Goodrich Corporation, Charlotte, NC

Class C

Russell C. Lindner, 2012
Chairman and Chief Executive Officer, The Forge Company, Washington, DC

Margaret E. McDermid, 2013
Senior Vice President and Chief Information Officer, Dominion Resources, Inc., Richmond, VA

Linda D. Rabbitt, 2014
Chairman and Chief Executive Officer, Rand Construction Corporation, Washington, DC

Baltimore Branch

Appointed by the Federal Reserve Bank

James T. Brady, 2012
Managing Director–Mid-Atlantic, Ballantrae International, Ltd., Ijamsville, MD

Anita G. Newcomb, 2012
President and Managing Director, A. G. Newcomb & Co., Columbia, MD

William B. Grant, 2013
Chairman, President, and Chief Executive Officer, First United Corporation, Oakland, MD

Jana Wheatley, 2014
President, Warwick Enterprises, Inc., East New Market, MD

Appointed by the Board of Governors

Stephen R. Sleigh, 2012
Fund Director, IAM National Pension Fund, Washington, DC

Samuel L. Ross, 2013
Chief Executive Officer, Bon Secours Baltimore Health System, Baltimore, MD

Jenny G. Morgan, 2014
President and Chief Executive Officer, basys, inc., Linthicum, MD

Charlotte Branch

Appointed by the Federal Reserve Bank

Lucia Z. Griffith, 2012
Chief Executive Officer and Principal, METRO Landmarks, Charlotte, NC

John S. Kreighbaum, 2012
President and Chief Executive Officer, Carolina Premier Bank and Premara Financial, Inc., Charlotte, NC

Robert R. Hill, Jr., 2013
President and Chief Executive Officer, SCBT Financial Corporation, Columbia, SC

Christopher J. Estes, 2014
President and Chief Executive Officer, National Housing Conference, Washington, DC

Appointed by the Board of Governors

David J. Zimmerman, 2012
President, Southern Shows, Inc., Charlotte, NC

Vacancy, 2013

Claude Z. Demby, 2014
Chief Executive Officer, Noël Group, LLC, Zebulon, NC

District 6–Atlanta

Class A

Rudy E. Schupp, 2012
President and Chief Executive Officer, 1st United Bank, West Palm Beach, FL

T. Anthony Humphries, 2013
President and Chief Executive Officer, NobleBank & Trust, N.A., Anniston, AL

William H. Rogers, Jr., 2014
Chairman and Chief Executive Officer, SunTrust Banks, Inc., Atlanta, GA

Class B

Clarence Otis, Jr., 2012
Chairman and Chief Executive Officer, Darden Restaurants, Inc., Orlando, FL

José S. Suquet, 2013
Chairman, President, and Chief Executive Officer, Pan-American Life Insurance Group, New Orleans, LA

Renée Lewis Glover, 2014
President and Chief Executive Officer, Atlanta Housing Authority, Atlanta, GA

Class C

Thomas A. Fanning, 2012
Chairman, President, and Chief Executive Officer, Southern Company, Atlanta, GA

Carol B. Tomé, 2013
Chief Financial Officer and Executive Vice President, The Home Depot, Atlanta, GA

Thomas I. Barkin, 2014
Director, McKinsey & Company, Atlanta, GA

Birmingham Branch

Appointed by the Federal Reserve Bank

John A. Langloh, 2012
President and Chief Executive Officer, United Way of Central Alabama, Birmingham, AL

James K. Lyons, 2012
Director and Chief Executive Officer, Alabama State Port Authority, Mobile, AL

C. Richard Moore, Jr., 2013
Chairman, President, and Chief Executive Officer, Peoples Southern Bank, Clanton, AL

Macke B. Mauldin, 2014
President, Bank Independent, Sheffield, AL

Appointed by the Board of Governors

F. Michael Reilly, 2012
Chairman and Chief Executive Officer, Randall-Reilly Publishing Company, Tuscaloosa, AL

Howard Leroy Nicholson, 2013
Former Director, Alabama AFL-CIO LIFT, Montgomery, AL

Thomas R. Stanton, 2014
Chairman and Chief Executive Officer, ADTRAN, Inc., Huntsville, AL

Jacksonville Branch

Appointed by the Federal Reserve Bank

Oscar J. Horton, 2012
President and Chief Executive Officer, Sun State International Trucks, LLC, Tampa, FL

D. Kevin Jones, 2012
President and Chief Executive Officer, MIDFLORIDA Credit Union, Lakeland, FL

Carolyn M. Fennell, 2013
Director of Public Affairs, Greater Orlando Aviation Authority, Orlando International Airport, Orlando, FL

Hugh F. Dailey, 2014
President and Chief Executive Officer, Community Bank & Trust of Florida, Ocala, FL

Appointed by the Board of Governors

Leerie T. Jenkins, Jr., 2012
Chairman, Reynolds, Smith and Hills, Inc., Jacksonville, FL

Michael J. Grebe, 2013
Chairman and Chief Executive Officer, Interline Brands, Inc., Jacksonville, FL

Lynda L. Weatherman, 2014
President and Chief Executive Officer, Economic Development Commission of Florida's Space Coast, Rockledge, FL

Miami Branch

Appointed by the Federal Reserve Bank

Leonard L. Abess, 2012
Chairman and Chief Executive Officer, ThinkLAB Ventures, LLC, Miami, FL

Gary L. Tice, 2013
Chairman and Chief Executive Officer, First National Bank of the Gulf Coast, Naples, FL

Carol C. Lang, 2014
President, HealthLink Enterprises, Inc., Miami Beach, FL

Facundo L. Bacardi, 2014
Chairman, Barcardi, Limited, Coral Gables, FL

Appointed by the Board of Governors

Eduardo J. Padrón, 2012
President, Miami Dade College, Miami, FL

Michael J. Jackson, 2013
Chairman and Chief Executive Officer, AutoNation, Inc., Fort Lauderdale, FL

Thomas W. Hurley, 2014
Chairman and Chief Executive Officer, Becker Holding Corporation, Vero Beach, FL

Nashville Branch

Appointed by the Federal Reserve Bank

Cordia W. Harrington, 2012
Chief Executive Officer, Tennessee Bun Company, Nashville, TN

Jennifer S. Banner, 2012
Chief Executive Officer, Schaad Companies, LLC, Knoxville, TN

William Y. Carroll, Jr., 2013
President and Chief Executive Officer, SmartBank, Pigeon Forge, TN

Dan W. Hogan, 2014
Chief Operating Officer, CapStar Bank, Nashville, TN

Appointed by the Board of Governors

William J. Krueger, 2012
Vice Chairman, Nissan Americas, Nissan North America, Inc., Franklin, TN

Kathleen Calligan, 2013
Chief Executive Officer, Better Business Bureau Middle Tennessee, Nashville, TN

Scott McWilliams, 2014
Executive Chairman, OHL, Brentwood, TN

New Orleans Branch

Appointed by the Federal Reserve Bank

Matthew G. Stuller, Sr., 2012
Chairman and Chief Executive Officer, Stuller, Inc., Lafayette, LA

E. Renae Conley, 2012
Executive Vice President, Human Resources and Administration, Entergy Corporation, New Orleans, LA

Gerard R. Host, 2013
President and Chief Executive Officer, Trustmark Corporation, Jackson, MS

Carl J. Chaney, 2014
President and Chief Executive Officer, Hancock Bank and Hancock Holding Company, Gulfport, MS

Appointed by the Board of Governors

Robert S. Boh, 2012
President and Chief Executive Officer, Boh Bros. Construction Co., LLC, New Orleans, LA

Terrie P. Sterling, 2013
Executive Vice President and Chief Operating Officer, Our Lady of the Lake Regional Medical Center, Baton Rouge, LA

T. Lee Robinson, Jr., 2014
President, OHC, Inc., Mobile, AL

District 7–Chicago

Class A

Stephen J. Goodenow, 2012
Chairman and Chief Executive Officer, Bank Midwest, Spirit Lake, IA

Mark C. Hewitt, 2013
President and Chief Executive Officer, Clear Lake Bank & Trust Company, Clear Lake, IA

Frederick H. Waddell, 2014
Chairman and Chief Executive Officer, Northern Trust Corporation and The Northern Trust Company, Chicago, IL

Class B

Terry Mazany, 2012
President and Chief Executive Officer, The Chicago Community Trust, Chicago, IL

Ann D. Murtlow, 2013
Former President and Chief Executive Officer, Indianapolis Power & Light Company, Indianapolis, IN

Nelda J. Connors, 2014
Chairwoman and Chief Executive Officer, Pine Grove Holdings, LLC, Chicago, IL

Class C

William C. Foote, 2012
Retired Chairman, USG Corporation, Chicago, IL

Vacancy, 2013

Jeffrey A. Joerres, 2014
Chairman and Chief Executive Officer, ManpowerGroup, Milwaukee, WI

Detroit Branch

Appointed by the Federal Reserve Bank

Sheilah P. Clay, 2012
President and Chief Executive Officer, Neighborhood Service Organization, Detroit, MI

Nancy M. Schlichting, 2013
Chief Executive Officer, Henry Ford Health System, Detroit, MI

Brian C. Walker, 2014
President and Chief Executive Officer, Herman Miller, Inc., Zeeland, MI

Fernando Ruiz, 2014
Corporate Vice President and Treasurer, The Dow Chemical Company, Midland, MI

Appointed by the Board of Governors

Lou Anna K. Simon, 2012
President, Michigan State University, East Lansing, MI

Carl T. Camden, 2013
President and Chief Executive Officer, Kelly Services, Inc., Troy, MI

Michael E. Bannister, 2014
Chairman and Chief Executive Officer, Ford Motor Credit Company, Dearborn, MI

District 8–St. Louis

Class A

William E. Chappel, 2012
President and Chief Executive Officer, The First National Bank, Vandalia, IL

Robert G. Jones, 2013
President and Chief Executive Officer, Old National Bancorp, Evansville, IN

Susan S. Stephenson, 2014
Co-Chairman and President, Independent Bank, Memphis, TN

Class B

Sonja Yates Hubbard, 2012
Chief Executive Officer, E-Z Mart Stores, Inc., Texarkana, TX

Cal McCastlain, 2013
Partner, Dover Dixon Horne PLLC, Little Rock, AR

Gregory M. Duckett, 2014
Senior Vice President and Corporate Counsel, Baptist Memorial Health Care Corporation, Memphis, TN

Class C

George Paz, 2012
Chairman, President, and Chief Executive Officer, Express Scripts, St. Louis, MO

Sharon D. Fiehler, 2013
Executive Vice President and Chief Administrative Officer, Peabody Energy, St. Louis, MO

Ward M. Klein, 2014
Chief Executive Officer, Energizer Holdings, Inc., St. Louis, MO

Little Rock Branch

Appointed by the Federal Reserve Bank

William C. Scholl, 2012
President, First Security Bancorp, Searcy, AR

Michael A. Cook, 2013
Vice President and Assistant Treasurer, Wal-Mart Stores, Inc., Bentonville, AR

Mark D. Ross, 2014
Vice Chairman and Chief Operating Officer, Bank of the Ozarks, Little Rock, AR

Mary Ann Greenwood, 2014
President and Investment Advisor, Greenwood Gearhart Inc., Fayetteville, AR

Appointed by the Board of Governors

C. Sam Walls, 2012
Chief Executive Officer, Arkansas Capital Corporation, Little Rock, AR

Kaleybra Mitchell Morehead, 2013, *Vice President for College Affairs/Advancement*, Southeast Arkansas College, Pine Bluff, AR

Ray C. Dillon, 2014
President and Chief Executive Officer, Deltic Timber Corporation, El Dorado, AR

Louisville Branch

Appointed by the Federal Reserve Bank

Jon A. Lawson, 2012
President, Chief Executive Officer and Chairman, Bank of Ohio County, Beaver Dam, KY

David P. Heintzman, 2013
Chairman and Chief Executive Officer, Stock Yards Bank & Trust Company, Louisville, KY

Kevin Shurn, 2014
President and Owner, Superior Maintenance Co., Elizabethtown, KY

Malcolm Bryant, 2014
President, The Malcolm Bryant Corporation, Owensboro, KY

Appointed by the Board of Governors

Barbara Ann Popp, 2012
President, Schuler Bauer Real Estate Services, New Albany, IN

Gary A. Ransdell, 2013
President, Western Kentucky University, Bowling Green, KY

Gerald R. Martin, 2014
Managing Member, River Hill Capital, LLC, Louisville, KY

Memphis Branch

Appointed by the Federal Reserve Bank

Allegra C. Brigham, 2012
MUW Foundation President and Vice President for University Relations and Advancement, Mississippi University for Women, Columbus, MS

Mark P. Fowler, 2013
Vice Chairman, Liberty Bank of Arkansas, Jonesboro, AR

Clyde Warren Nunn, 2014
Chairman and President, Security Bancorp of Tennessee, Inc., Halls, TN

R. Molitor Ford, Jr., 2014
Vice Chairman and Chief Executive Officer, Commercial Bank and Trust Company, Memphis, TN

Appointed by the Board of Governors

Charlie E. Thomas III, 2012
Regional Director of External & Legislative Affairs, AT&T Tennessee, Memphis, TN

Charles S. Blatteis, 2013
Managing Member, Blatteis Law Firm, PLLC, Memphis, TN

Lawrence C. Long, 2014
Partner, St. Rest Planting Co., Indianola, MS

District 9–Minneapolis

Class A

Richard L. Westra, 2012
President and Chief Executive Officer, Dacotah Bank and Dacotah Banks, Inc., Aberdeen, SD

Julie Causey, 2013
Chairman, Western Bank, St. Paul, MN

Kenneth A. Palmer, 2014
Chairman, President, and Chief Executive Officer, Range Financial Corporation & Range Bank, NA, Negaunee, MI

Class B

William J. Shorma, 2012
President and Chief Executive Officer, Rush-Co/Strategic Rail Systems SRS, Springfield, SD

Lawrence R. Simkins, 2013
President and Chief Executive Officer, The Washington Corporations, Missoula, MT

Howard A. Dahl, 2014
President and Chief Executive Officer, Amity Technology LLC, Fargo, ND

Class C

Randall J. Hogan, 2012
Chairman and Chief Executive Officer, Pentair, Inc., Minneapolis, MN

Mary K. Brainerd, 2013
President and Chief Executive Officer, HealthPartners, Minneapolis, MN

MayKao Y. Hang, 2014
President and Chief Executive Officer, Amherst H. Wilder Foundation, St. Paul, MN

Helena Branch

Appointed by the Federal Reserve Bank

Timothy J. Bartz, 2012
Chairman, Anderson ZurMuehlen & Company, P.C., Helena, MT

Thomas R. Swenson, 2013
President and Chief Executive Officer, Bank of Montana and Bancorp of Montana Holding Company, Missoula, MT

Duana Kurokawa, 2014
President, Western Bank of Wolf Point, Wolf Point, MT

Appointed by the Board of Governors

Joseph F. McDonald, 2012
President Emeritus, Salish Kootenai College, Pablo, MT

David B. Solberg, 2014
Owner, Seven Blackfoot Ranch Company, Billings, MT

District 10–Kansas City

Class A

David W. Brownback, 2012
President and Chief Executive Officer, Citizens State Bank & Trust Company, Ellsworth, KS

Max T. Wake, 2013
President, Jones National Bank & Trust Co., Seward, NE

John A. Ikard, 2014
President and Chief Executive Officer, FirstBank Holding Company, Lakewood, CO

Class B

John T. Stout, Jr., 2012
Chief Executive Officer, Plaza Belmont Management Group LLC, Shawnee Mission, KS

Vacancy, 2013

Richard K. Ratcliffe, 2014
Chairman, Ratcliffe's Inc., Weatherford, OK

Class C

Paul DeBruce, 2012
Chief Executive Officer and Founder/Executive Vice President, DeBruce Grain, Inc./Gavilon, LLC, Kansas City, MO

Terry L. Moore, 2013
President, Omaha Federation of Labor, AFL-CIO, Omaha, NE

Barbara Mowry, 2014
Chief Executive Officer, GoreCreek Advisors, Greenwood Village, CO

Denver Branch

Appointed by the Federal Reserve Bank

Charles H. Brown III, 2012
President, C.H. Brown Co., Wheatland, WY

Anne Haines Yatskowitz, 2012
President and Chief Executive Officer, ACCION New Mexico–Arizona–Colorado, Albuquerque, NM

Mark A. Zaback, 2013
President and Chief Executive Officer, Jonah Bank of Wyoming, Casper, WY

Brian R. Wilkinson, 2014
President, Steele Street Bank & Trust, Denver, CO

Appointed by the Board of Governors

Richard L. Lewis, 2012
President and Chief Executive Officer, RTL Networks Inc., Denver, CO

Margaret M. Kelly, 2013
Chief Executive Officer, RE/MAX, LLC, Denver, CO

Larissa L. Herda, 2014
Chair, Chief Executive Officer, and President, tw telecom inc., Littleton, CO

Oklahoma City Branch

Appointed by the Federal Reserve Bank

Rose M. Washington, 2012
Executive Director, Tulsa Economic Development Corporation, Tulsa, OK

Vacancy, 2013

Douglas E. Tippens, 2013
President and Chief Executive Officer, Bank of Commerce, Yukon, OK

Linda Capps, 2014
Vice Chairman, Citizen Potawatomi Nation, Shawnee, OK

Appointed by the Board of Governors

Peter B. Delaney, 2012
Chairman, Chief Executive Officer, and President, OGE Energy Corporation, Oklahoma City, OK

K. Vasudevan, 2013
Chairman and Founder, Service & Technology Corporation, Bartlesville, OK

James D. Dunn, 2014
Chair, Mill Creek Lumber & Supply Co., Tulsa, OK

Omaha Branch

Appointed by the Federal Reserve Bank

Todd S. Adams, 2012
Chief Executive Officer, Adams Bank & Trust, Ogallala, NE

James L. Thom, 2012
Vice President, T-L Irrigation Co., Hastings, NE

JoAnn M. Martin, 2013
Chair, President, and Chief Executive Officer, Ameritas Life Insurance Corp., Lincoln, NE

Jeff W. Krejci, 2014
President, First State Bank, Hickman, NE

Appointed by the Board of Governors

G. Richard Russell, 2012
President and Chief Executive Officer, Millard Lumber Inc., Omaha, NE

Vacancy, 2013

James C. Farrell, 2014
President and Chief Executive Officer, Farmers National Company, Omaha, NE

District 11–Dallas

Class A

Pete Cook, 2012
Retired Chief Executive Officer, First National Bank in Alamogordo, Alamogordo, NM

Joe Kim King, 2013
Chief Executive Officer and Chairman of the Board, Texas Country Bancshares, Inc., Brady, TX

George F. Jones, Jr., 2014
Chief Executive Officer, Texas Capital Bank, Dallas, TX

Class B

Margaret H. Jordan, 2012
President and Chief Executive Officer, Dallas Medical Resource, Dallas, TX

Elton M. Hyder, 2013
President, The EMH Corporation, Fort Worth, TX

Jorge A. Bermudez, 2014
President and Chief Executive Officer, Byebrook Group, College Station, TX

Class C

Myron E. Ullman III, 2012
Retired Chairman and Chief Executive Officer, J.C. Penney Company, Inc., Plano, TX

Herbert D. Kelleher, 2013
Founder and Chairman Emeritus, Southwest Airlines, Dallas, TX

Renu Khator, 2014
Chancellor/President, University of Houston, Houston, TX

El Paso Branch

Appointed by the Federal Reserve Bank

Robert Nachtmann, 2012
Dean and Professor of Finance, The University of Texas at El Paso, El Paso, TX

Larry L. Patton, 2013
President and Chief Executive Officer, WestStar Bank, El Paso, TX

Laura M. Conniff, 2014
Qualifying Broker, Mathers Realty, Inc., Las Cruces, NM

Vacancy, 2014

Appointed by the Board of Governors

Renard U. Johnson, 2012
President/Chief Executive Officer, Management & Engineering Technologies International Inc. (METI), El Paso, TX

Cindy J. Ramos-Davidson, 2013
President and Chief Executive Officer, El Paso Hispanic Chamber of Commerce, El Paso, TX

Robert E. McKnight, Jr., 2014
Partner, McKnight Ranch Company, Fort Davis, TX

Houston Branch

Appointed by the Federal Reserve Bank

Paul B. Murphy, Jr., 2012
President and Chief Executive Officer, Cadence Bank, Houston, TX

Gerald B. Smith, 2013
Chairman and Chief Executive Officer, Smith, Graham & Company Investment Advisors, L.P., Houston, TX

Kirk S. Hachigian, 2014
Chairman and Chief Executive Officer, Cooper Industries, Ltd., Houston, TX

Ann B. Stern, 2014
President and Chief Executive Officer, Houston Endowment, Inc., Houston, TX

Appointed by the Board of Governors

Ellen Ochoa, 2012
Deputy Director, NASA Johnson Space Center, Houston, TX

Greg L. Armstrong, 2013
Chairman and Chief Executive Officer, Plains All American Pipeline, L.P., Houston, TX

Paul W. Hobby, 2014
Chairman and Managing Partner, Genesis Park, LP, Houston, TX

San Antonio Branch

Appointed by the Federal Reserve Bank

Manoj Saxena, 2012
General Manager, IBM Software Group, IBM, Austin, TX

Josue Robles, Jr., 2013
President and Chief Executive Officer, USAA, San Antonio, TX

Ygnacio D. Garza, 2014
Partner, Long Chilton LLP, Brownsville, TX

Janie Barrera, 2014
President and Chief Executive Officer, Accion Texas, Inc., San Antonio, TX

Appointed by the Board of Governors

Catherine M. Burzik, 2012
Former President and Chief Executive Officer, Kinetic Concepts, Inc., San Antonio, TX

Curtis V. Anastasio, 2013
President and Chief Executive Officer, NuStar Energy L.P., San Antonio, TX

Thomas E. Dobson, 2014
Chairman and Chief Executive Officer, Whataburger Restaurants, L.P., San Antonio, TX

District 12–San Francisco

Class A

Kenneth P. Wilcox, 2012
Chairman, Silicon Valley Bank, Santa Clara, CA

Betsy Lawer, 2013
Vice Chair, First National Bank Alaska, Anchorage, AK

Megan F. Clubb, 2014
President and Chief Executive Officer, Baker Boyer National Bank, Walla Walla, WA

Class B

Blake W. Nordstrom, 2012
President, Nordstrom, Inc., Seattle, WA

Nicole C. Taylor, 2013
President and Chief Executive Officer, East Bay Community Foundation, Oakland, CA

Richard Galanti, 2014
Executive Vice President and Chief Financial Officer, Costco Wholesale Corporation, Issaquah, WA

Class C

William D. Jones, 2012
President and Chief Executive Officer, City Scene Management Company, San Diego, CA

Patricia E. Yarrington, 2013
Vice President and Chief Financial Officer, Chevron Corporation, San Ramon, CA

Douglas W. Shorenstein, 2014
Chairman and Chief Executive Officer, Shorenstein Properties LLC, San Francisco, CA

Los Angeles Branch

Appointed by the Federal Reserve Bank

John C. Molina, 2012
Chief Financial Officer, Molina Healthcare, Inc., Long Beach, CA

Joseph C. Berenato, 2012
Director, Ducommun Incorporated, Carson, CA

David I. Rainer, 2013
Chairman, President, and Chief Executive Officer, California United Bank, Encino, CA

Peggy Tsiang Cherng, 2014
Co-Chair and Co-Chief Executive Officer, Panda Restaurant Group, Inc., Rosemead, CA

Appointed by the Board of Governors

Andrew J. Sale, 2012
Partner, Americas Automotive Leader, Ernst & Young LLP, Los Angeles, CA

Grace Evans Cherashore, 2013
President and Chief Executive Officer, Evans Hotels, San Diego, CA

Keith E. Smith, 2014
President and Chief Executive Officer, Boyd Gaming Corporation, Las Vegas, NV

Portland Branch

Appointed by the Federal Reserve Bank

S. Randolph Compton, 2012
President and Chief Executive Officer, Pioneer Trust Bank, N.A., Salem, OR

Roger W. Hinshaw, 2013
President, Oregon and SW Washington and Commercial Market Executive for Oregon and Inland Northwest, Bank of America Oregon, N.A., Portland, OR

Robert C. Hale, 2014
Chief Executive Officer, Hale Companies, Hermiston, OR

Tamara L. Lundgren, 2014
President and Chief Executive Officer, Schnitzer Steel Industries, Inc., Portland, OR

Appointed by the Board of Governors

David Y. Chen, 2012
Chief Executive Officer, Equilibrium Capital Group LLC, Portland, OR

Joseph E. Robertson, Jr., M.D., 2013, *President*, Oregon Health & Science University, Portland, OR

Roderick C. Wendt, 2014
Chief Executive Officer, JELD-WEN, inc., Klamath Falls, OR

Salt Lake City Branch

Appointed by the Federal Reserve Bank

Carol Carter, 2012
President and Chief Executive Officer, Industrial Compressor Products, Inc., Park City, UT

Albert T. Wada, 2013
Chairman and Chief Executive Officer, Wada Farms, Inc., Pingree, ID

Damon G. Miller, 2014
Utah Market President, U.S. Bank, Salt Lake City, UT

Josh England, 2014
President, England Logistics, Inc., Salt Lake City, UT

Appointed by the Board of Governors

Bradley J. Wiskirchen, 2012
Chief Executive Officer, Keynetics, Inc., Boise, ID

Scott L. Hymas, 2013
Chief Executive Officer, RC Willey, Salt Lake City, UT

Patrick F. Keenan, 2014
Chief Financial Officer, Rio Tinto Kennecott Utah Cooper, South Jordan, UT

Seattle Branch

Appointed by the Federal Reserve Bank

Henry L. (Skip) Kotkins, Jr., 2012
Chairman and Chief Executive Officer, SWL Holdings Inc., Seattle, WA

Nicole W. Piasecki, 2013
Vice President, Business Development & Strategic Integration, Boeing Commercial Airplanes, Renton, WA

Scott L. Morris, 2014
Chairman, President, and Chief Executive Officer, Avista Corporation, Spokane, WA

Patrick G. Yalung, 2014
Regional President, Washington, Wells Fargo Bank, N.A., Seattle, WA

Appointed by the Board of Governors

Mary O. McWilliams, 2012
Executive Director, Puget Sound Health Alliance, Seattle, WA

Martha Choe, 2013
Chief Administrative Officer, The Bill & Melinda Gates Foundation, Seattle, WA

Ada M. Healey, 2014
Vice President, Real Estate, Vulcan Inc., Seattle, WA

Reserve Bank and Branch Officers

As mentioned, each Federal Reserve Bank and its branches has a board of directors. The officers of each Bank and Branch are drawn from this pool of directors. Specifically, two directors of each Reserve Bank are designated by the Board of Governors as chair[1] and deputy chair, respectively, of their nine-member board. Each Reserve Bank also has a president and first vice president, who are appointed by the board of directors of the Bank, subject to approval by the Board of Governors. Additionally, each District Branch also has a chair, who is selected from among those Branch directors appointed by the Board of Governors.

Boston

Kirk A. Sykes, *Chair*

William D. Nordhaus, *Deputy Chair*

Eric S. Rosengren, *President*

Kenneth C. Montgomery, *First Vice President*

New York

Lee C. Bollinger, *Chair*

Kathryn S. Wylde, *Deputy Chair*

William C. Dudley, *President*

Christine M. Cumming, *First Vice President*

Additional office at East Rutherford, NJ

Philadelphia

Jeremy Nowak, *Chair*

James E. Nevels, *Deputy Chair*

Charles I. Plosser, *President*

D. Blake Prichard, *First Vice President*

Cleveland

Alfred M. Rankin, Jr., *Chair*

Richard K. Smucker, *Deputy Chair*

Sandra Pianalto, *President*

Gregory Stefani, *First Vice President*

Cincinnati

Peter S. Strange, *Chair*

LaVaughn M. Henry, *Senior Regional Officer*

Pittsburgh

Glenn R. Mahone, *Chair*

Robert B. Schaub, *Senior Regional Officer*

Richmond

Margaret E. McDermid, *Chair*

Linda D. Rabbitt, *Deputy Chair*

Jeffrey M. Lacker, *President*

Sarah G. Green, *First Vice President*

Baltimore

Jenny G. Morgan, *Chair*

David E. Beck, *Officer in Charge*

Charlotte

David J. Zimmerman, *Chair*

Matthew A. Martin, *Officer in Charge*

Atlanta

Carol B. Tomé, *Chair*

Thomas I. Barkin, *Deputy Chair*

Dennis P. Lockhart, *President*

Marie C. Gooding, *First Vice President*

Birmingham

F. Michael Reilly, *Chair*

Lesley McClure, *Vice President and Regional Executive*

Jacksonville

Leerie T. Jenkins, Jr., *Chair*

Christopher L. Oakley, *Vice President and Regional Executive*

Miami

Eduardo J. Padrón, *Chair*

Juan del Busto, *Vice President and Regional Executive*

Nashville

William J. Krueger, *Chair*

Lee C. Jones, *Vice President and Regional Executive*

New Orleans

Robert S. Boh, *Chair*

Robert J. Musso, *Senior Vice President and Regional Executive*

Chicago

William C. Foote, *Chair*

Jeffrey A. Joerres, *Deputy Chair*

Charles L. Evans, *President*

Gordon Werkema, *First Vice President*

Additional office at Des Moines, IA.

Detroit

Carl T. Camden, *Chair*

Robert Wiley, *Officer in Charge*

[1] The chair of a Federal Reserve Bank serves, by statute, as Federal Reserve agent.

St. Louis

Ward M. Klein, *Chair*

Sharon D. Fiehler, *Deputy Chair*

James Bullard, *President*

David A. Sapenaro, *First Vice President*

Little Rock

Ray C. Dillon, *Chair*

Robert A. Hopkins, *Regional Executive*

Louisville

Barbara Ann Popp, *Chair*

Maria Gerwing Hampton, *Regional Executive*

Memphis

Charles S. Blatteis, *Chair*

Martha Perine Beard, *Regional Executive*

Minneapolis

Mary K. Brainerd, *Chair*

Randall J. Hogan, *Deputy Chair*

Narayana R. Kocherlakota, *President*

James M. Lyon, *First Vice President*

Helena

David B. Solberg, *Chair*

R. Paul Drake, *Officer in Charge*

Kansas City

Paul DeBruce, *Chair*

Barbara Mowry, *Deputy Chair*

Esther L. George, *President*

Kelly J. Dubbert, *First Vice President*

Denver

Larissa L. Herda, *Chair*

Alison Felix, *Officer in Charge*

Oklahoma City

James D. Dunn, *Chair*

Chad R. Wilkerson, *Officer in Charge*

Omaha

James C. Farrell, *Chair*

Jason R. Henderson, *Officer in Charge*

Dallas

Herbert D. Kelleher, *Chair*

Myron E. Ullman III, *Deputy Chair*

Richard W. Fisher, *President*

Helen E. Holcomb, *First Vice President*

El Paso

Cindy J. Ramos-Davidson, *Chair*

Roberto A. Coronado, *Officer in Charge*

Houston

Paul W. Hobby, *Chair*

Daron D. Peschel, *Officer in Charge*

San Antonio

Catherine M. Burzik, *Chair*

Blake Hastings, *Officer in Charge*

San Francisco

Douglas W. Shorenstein, *Chair*

Patricia E. Yarrington, *Deputy Chair*

John C. Williams, *President*

John F. Moore, *First Vice President*

Additional office at Phoenix, AZ.

Los Angeles

Keith E. Smith, *Chair*

Mark L. Mullinix, *Officer in Charge*

Portland

David Y. Chen, *Chair*

Steven H. Walker, *Officer in Charge*

Salt Lake City

Scott L. Hymas, *Chair*

Robin A. Rockwood, *Officer in Charge*

Seattle

Mary O. McWilliams, *Chair*

Mark A. Gould, *Officer in Charge*

Officer Conferences

A number of the officers of each Bank also serve on councils that examine issues of importance to their districts.

Conference of Chairs

The chairs of the Federal Reserve Banks are organized into the Conference of Chairs, which meets to consider matters of common interest and to consult with and advise the Board of Governors. Such meetings, also attended by the deputy chairs, were held in Washington, D.C., on May 22 and 23 and November 6 and 7, 2012. The conference's executive committee members for 2012 and 2013 are listed below.

Conference of Chairs Executive Committee–2012

Alfred M. Rankin, Jr., *Chair*, Federal Reserve Bank of Cleveland

Herbert D. Kelleher, *Vice Chair*, Federal Reserve Bank of Dallas

Mary K. Brainerd, *Member*, Federal Reserve Bank of Minneapolis

Conference of Chairs Executive Committee–2013

Herbert D. Kelleher, *Chair*, Federal Reserve Bank of Dallas

Mary K. Brainerd, *Vice Chair*, Federal Reserve Bank of Minneapolis

Ward M. Klein, *Member*, Federal Reserve Bank of St. Louis

Conference of Presidents

The presidents of the Federal Reserve Banks are organized into the Conference of Presidents, which meets periodically to identify, define, and deliberate issues of strategic significance to the Federal Reserve System; to consider matters of common interest; and to consult with and advise the Board of Governors. Conference officers for 2012 are listed below.[2]

Conference of Presidents–2012

Richard W. Fisher, *Chair*, Federal Reserve Bank of Dallas

Charles I. Plosser, *Vice Chair*, Federal Reserve Bank of Philadelphia

Harvey R. Mitchell, *Secretary*, Federal Reserve Bank of Dallas

Frank J. Doto, *Assistant Secretary*, Federal Reserve Bank of Philadelphia

---

[2] On December 14, 2012, the Conference elected Charles I. Plosser as chair for 2013-14 and Dennis P. Lockhart, president of the Federal Reserve Bank of Atlanta, as vice chair. The Conference also elected Frank J. Doto as secretary for 2013-14 and Maria Smith, Federal Reserve Bank of Atlanta, as assistant secretary.

Conference of First Vice Presidents

The Conference of First Vice Presidents of the Federal Reserve Banks was organized in 1969 to meet periodically for the consideration of operations and other matters. Conference officers for 2012 are listed below.

Conference of First Vice Presidents–2012

Blake Prichard, *Chair*, Federal Reserve Bank of Philadelphia

Kenneth Montgomery, *Vice Chair*, Federal Reserve Bank of Boston

Thomas Lombardo, *Secretary*, Federal Reserve Bank of Philadelphia

Jeanne MacNevin, *Assistant Secretary*, Federal Reserve Bank of Boston

Index

A

Abbreviations, 344–345
ABCP. *See* Asset-backed commercial paper
ABSs. *See* Asset-backed securities
Accounting policies, 64–65, 327–329, 350–363
Accounting Standards Codification (ASC), 108
Accounting Standards Update, 328
Accounting Task Force, 64
Accumulated other comprehensive income, 337
ACH. *See* Automated clearinghouse services
Acquisitions, 79–80
Advanced foreign economies (AFEs), 21, 43
Advisory Councils
  Community Depository Institutions Advisory Council, 418
  Federal Advisory Council, 417–418
AFEs. *See* Advanced foreign economies
Agreement corporations, 51
AIG. *See* American International Group, Inc.
Allowance for Loan Loss Estimation Practices for Junior Lien Loans and Lines of Credit, 65
American Express Company, 78–79
American Express Travel Related Services Company (TRS), 78
American International Group, Inc. (AIG), 19, 42, 101–102, 353, 367–368, 385
American Recovery and Reinvestment Act (ARRA), 14, 34
AML. *See* Anti-money laundering
Anti-money laundering (AML)
  Compliance with regulatory requirements, 58–59, 66–67
  Examinations, 59
AOCI. *See* Accumulated other comprehensive income
ARRA. *See* American Recovery and Reinvestment Act
ASBA. *See* Association of Supervisors of Banks of the Americas
ASC. *See* Accounting Standards Codification
Asia Pacific Economic Cooperation, 61
Asian Development Bank, 61
Asset-backed commercial paper (ABCP), 18, 39
Asset-backed securities (ABSs), 31, 169
Asset Purchase Program, 22, 228
Assets and liabilities
  Commercial banks, 302
  Federal Reserve Banks, 41–42, 294–295, 298–299
Association of Supervisors of Banks of the Americas (ASBA), 61
Audits
  Board of Governors, 320–341
  Federal Reserve Banks, 342–407
  Federal Reserve System, 55
  by Government Accountability Office, 409
  by Office of the Inspector General, 408
Auto loans, 31
Automated clearinghouse (ACH) services, 93, 349

B

Balance sheets
  Board of Governors, 323
  Federal Reserve Banks, 19–20, 41–42, 132, 150, 157, 167, 193, 217–218, 228, 253, 262
Banco de México, 167
Bank Control Act, 72
Bank Holding Companies and Change in Bank Control (Regulation Y), 118
Bank holding companies (BHCs)
  Banks affiliated with, 293
  Capital planning, 54–55
  Complaints against, 83–84
  Consolidated Supervision Program, 76–77
  Developments in 2012, 49
  Equity prices, 18, 39
  Number of, 56
  Profitability of, 40
  Prudential standards, 111–112
  Regulation of, 71–74
  Regulatory reports, 67–68
  RFI/C(D) system, 56
  Stress testing, 54–55, 112
  Supervision of, 56, 112
  Surveillance and off-site monitoring, 60–61
Bank Holding Company Act, 67, 71–72, 111
Bank Holding Company Performance Reports (BHCPRs), 60
Bank Merger Act, 72
Bank of Canada, 167
Bank of China, 44
Bank of England
  Asset purchases, 21–22
  Extended Collateral Term Repo, 43
Bank of Japan
  Asset purchases, 43
  Loan programs, 22
  Swap arrangement with, 36

Bank of Tokyo, 79–80
Bank Secrecy Act/Anti-Money Laundering Examination Manual, 59, 66
Bank Secrecy Act (BSA), 59, 66, 113
Bank Service Company Act, 57
Bankia, 43
Banking Organization National Desktop, 69
Banking organizations, U.S. *See also* Bank holding companies; Commercial banks
Affiliation with bank holding companies, 293
Credit default swaps, 18, 21, 28, 35, 39
Developments in 2012, 49–51
Offices, 293
Overseas investments by, 73
Profitability of, 18
Regulation of, 71–74
Stress testing, 67
Supervision of, 51–71
Bankruptcy Code, 51
Basel Committee on Banking Supervision (BCBS)
Accounting Task Force, 64
Final and consultative papers, 63–64
International frameworks, 111
Regulatory capital framework, 112–113
Supervisory policies, 62–64
Training and technical assistance, 61
Basel III, 18, 50, 52, 61–63, 112
BCBS. *See* Basel Committee on Banking Supervision
BEA. *See* Bureau of Economic Analysis
Bear Stearns Companies, Inc., 19, 42, 380
Benefits Equalization Plan (BEP), 331, 396
BEP. *See* Benefits Equalization Plan; Bureau of Engraving and Printing
BHCPRs. *See* Bank Holding Company Performance Reports
BHCs. *See* Bank holding companies
Biggert-Waters Flood Insurance Reform Act, 81
BlackRock Financial Management, Inc., 385
Board of Governors
Accounting policies, 327–329
Accumulated other comprehensive income, 337
Advisory councils, 417–419
Audits, 320–341
Balance sheets, 323
Cash flows, 325
Commitments and contingencies, 340
Community Depository Institutions Advisory Council, 418
Division of Banking Supervision and Regulation, 76
Divisions, 411–415
Federal Advisory Council, 417–418
Financial statements, 320–341
Forecast uncertainty, 155
Functions for Reserve Banks, 337–338
Government Performance and Results Act requirements, 115
Hearings rules of practice, 120
Leases, 329–330
Litigation, 287–288
Members, 411
Model Validation Council, 419
Officers, 411–415
Operations and services, 326–327
Operations statements, 324
Payment System Risk, 97, 120
Performance plan, 115
Performance report, 115
Policy actions, 117–122
Policy statements, 120–122
Postemployment benefits, 336
Postretirement benefits, 335–336
Property, equipment, and software, 329
Retirement benefits, 330–334
Strategic plan, 115
Structure, 326
Website, 5, 66, 115
Bonds
Corporate, 17, 28, 134, 159, 220, 230–231, 255, 264
Municipal, 35, 159, 169–170, 195, 220, 231
Borrowers of Securities Credit (Regulation X), 74, 303
Branches. *See* Federal Reserve Banks
Brazil, economy of, 22, 44, 265
BSA. *See* Bank Secrecy Act
Bureau of Economic Analysis (BEA), 15, 35
Bureau of Engraving and Printing (BEP), 94–95, 340
Business continuity, 62
Business investment, 13
Business sector, 13–14, 32–34, 133, 137, 157–158, 168, 171–172, 193–194, 198, 218, 229, 233, 253, 263

C

Call Reports, 60, 68, 70
Canada
Bond yields, 42
Economy of, 21, 43
Export demand, 15, 35
CAOs. *See* Community Affairs Offices
Capital
Federal Reserve Banks, 348, 360
Capital adequacy standards, 62–63
Capital leases, 329–330
Capital One Financial Corporation, 79–80
Capital Plan Review, 70
Capital planning, 50, 54–55
Cash flows, Board of Governors, 325
Cash items in process of collection, 107
Cash-management services, 97
CBO. *See* Congressional Budget Office
CCAR. *See* Comprehensive Capital Analysis and Review
CDI. *See* Community Data Initiative
CDSs. *See* Credit default swaps
CDTR. *See* Central Document and Text Repository
Census Bureau, 13, 35
Central Data Repository, 70
Central Document and Text Repository (CDTR), 69

Certified Information System Auditor certification, 70
CFPB. *See* Consumer Financial Protection Bureau
CFTC. *See* Commodities Futures Trading Commission
Chairs, Conference of, Federal Reserve Banks, 434
Check collection service, 92–93
Chicago Board Options Exchange, 74
Chief information security officer (CISO), 99
Chile, economy of, 44
China, economy of, 22, 35, 44, 198
C&I loans. *See* Commercial and industrial loans
CISO. *See* Chief information security officer
Civil money penalties, 327
Civil Service Retirement System (CSRS), 334
CMBSs. *See* Commercial mortgage-backed securities
Coin. *See* Currency and coin operations
Collateralized debt obligations, 357
Collection of Checks and Other items by Federal Reserve Banks and Funds Transfers through Fedwire (Regulation J), 117
Collection services, Federal Reserve Banks, 96–97
Collections and Cash Management Modernization initiative, 96
Commercial and industrial (C&I) loans, 14, 28, 33, 40, 135, 159, 169, 195, 220, 231, 264
Commercial automated clearinghouse (ACH) services, 93
Commercial banks
  Assets and liabilities, 302
  Credit availability, 18
  Regulation of, 71–74
  Regulatory reports, 68–69
  Supervision of, 51–71
Commercial check collection service, 92–93
Commercial mortgage-backed securities (CMBSs), 14, 34
Commercial paper (CP) market, 14, 17, 33, 39, 134
Commercial real estate (CRE) loans, 13, 14, 33–34, 134–135, 231, 255, 265
Committee of Sponsoring Organizations of the Treadway Commission (COSO), 99
Committee on Investment Performance, 399
Commodities Futures Trading Commission (CFTC), 57, 66
Commodity prices, 35–36
Community affairs. *See* Consumer and community affairs
Community Affairs Officers (CAOs), 86
Community bank supervision, 69
Community Data Initiative (CDI), 88
Community Depository Institutions Advisory Council, 418
Community Development function, 87
Community economic development, 86–88
Community Reinvestment Act (CRA)
  Mergers and acquisitions in relation to, 79–80
  Regulation oversight and enforcement, 75
Community Reinvestment (Regulations B), 62
Complaint referrals, 84–85
Compliance risk management, 66–67
Comprehensive Capital Analysis and Review (CCAR), 28, 38, 39, 50, 54–55, 70, 112
Comptroller of the Currency, Office of the (OCC), 57, 58, 61, 70, 77–79, 114
Condition statements
  Federal Reserve Banks, 304–308, 346
Conferences, Federal Reserve Banks Officers, 434–435
Congress. *See* Monetary policy reports to Congress; *specific legislation by name*
Congressional Budget Office (CBO), 34
Consolidated Reports of Condition and Income, 70
Consolidated supervision, 53–58
Consolidated Supervision Program, 76–77
Consolidation, 352
Consultative papers, 63–64
Consumer and community affairs
  Community economic development, 86–88
  Consumer complaints and inquiries, 83–85
  Consumer laws and regulations, 88–89
  Coordination with Federal banking agencies, 81–82
  Emerging-issues analysis, 85–86
  Examinations, 75–85
  Financial services research, 85–86
  Flood insurance, 81
  Indian Country economies, 87
  Laws and regulations, 88–89
  Policy analysis, 85–87
  Supervision, 75–85
Consumer complaints, 83–85
Consumer compliance examiner training, 82–83
Consumer financial protection, 114
Consumer Financial Protection Bureau (CFPB), 69, 79, 80, 100, 114, 326, 339, 408
Consumer inquiries, 85
Consumer Leasing (Regulation M), 118
Consumer loans, 31
Consumer prices, 9, 28, 37–38, 133, 158, 168, 194, 219, 229–230, 254, 263
Consumer spending, 9, 10, 11, 30–31
Consumers and Mobile Financial Services, 85
Continuing professional development, 71
Core loans, 18, 40
CoreLogic, 12–13, 32
Corporate bonds
  Issuance of, 28, 159
  Yields, 17, 134, 220, 230–231, 255, 264
Corporate debt, 14, 28, 40–41
Corporate profits, 13–14, 33–34
COSO. *See* Committee of Sponsoring Organizations of the Treadway Commission
Cost-of-living adjustments, 34
Cost recovery, 91–92, 110
Counterterrorism activities, 66–67
CP. *See* Commercial paper (CP) market
CRA. *See* Community Reinvestment Act
CRE. *See* Commercial real estate loans
Credit
  Availability, 11–12, 14, 18, 159, 170, 172–173, 195, 231
  Consumer credit, 31, 255, 265
  Corporate, 14
  Primary, 121–122
  Risk, 383–385

Seasonal, 121–122
Secondary, 121–122
Credit by Banks and Persons other than Brokers or Dealers for the Purpose of Purchasing or Carrying Margin Stock (Regulation U), 60, 74, 303
Credit by Brokers and Dealers (Regulation T), 74, 303
Credit Card Accountability Responsibility and Disclosure Act (Credit Card Act), 31
Credit cards
Lending levels, 31
Credit default swaps (CDSs), 18, 21, 28, 35, 39, 134, 135, 220, 230, 380, 382–384
Credit risk management, 65–66
CSRS. *See* Civil Service Retirement System
Currency and coin operations, 94–95, 339, 353
Currency risk, 384

D

Daylight overdrafts, 98
DCCA. *See* Division of Community and Consumer Affairs
DCO. *See* Derivative clearing organization
De novo depository institutions
Training and technical assistance, 61–62
Debit Card Interchange Fees and Routing (Regulation II), 118–119
Debit interchange, 114
Debt
Government, 34
Household, 11–12, 30
Debt securities, 381
Deferred credit items, 360
Delinquencies. *See* Foreclosures
Deloitte & Touche LLP, 99, 320–322, 341, 342–343
Depository institutions
Deposits, 19–20, 359
Discount rates, 121–122
Loans to, 363–364
Reserve requirements, 292
Reserves of, 294–295, 298–301
Deposits
Depository institutions, 19–20, 359
Federal Reserve Banks, 295, 300–301, 359
Treasury, 359
Derivative clearing organization (DCO), 113
Derivative instruments, 382–385
Designated Financial Market Utilities (Regulation HH), 118
Directors, Federal Reserve Banks, 420–431
Disposable personal income (DPI), 11, 30, 157, 161
Division of Banking Supervision and Regulation, 69
Division of Community and Consumer Affairs (DCCA), 61, 75, 80, 85–86, 88
Do Not Pay program, 96
Dodd-Frank Wall Street Reform and Consumer Protection Act
Bank Secrecy Act regulations, 113
Capital adequacy standards, 62–63
Clearing activities, 113–114
Consumer financial protection, 114, 326–327, 339, 409
Debit interchange, 114
Enhanced prudential standards implementation, 51, 111–112
Fair credit reporting, 82
Fair lending enforcement, 80
Federal Reserve implementation, 111–114
Financial market utilities regulations, 57, 113–114
Financial stability factors, 80
Joint guidance on effective date, 120
Mortgage regulations, 89
National Information Center support, 69–70
Payments, 113–114
Recovery and resolution planning, 50–51
Regulatory capital framework, 112–113
Savings and loan holding companies authority, 52, 56, 76
Securities holding companies registration, 113
Settlement activities, 113–114
Stress testing, 50–51, 54–55, 70
Training and technical assistance responsibilities, 61
DOJ. *See* Justice, U.S. Department of
Dollar exchange rate, 21, 255
Dollar liquidity swaps, 19, 357, 374
DPI. *See* Disposable personal income

E

ECB. *See* European Central Bank
ECOA. *See* Equal Credit Opportunity Act
Economy, U.S.
Business sector, 13–14, 32–34, 133, 137, 157–158, 167, 168, 171–172, 193–194, 198, 218, 229, 233, 253, 263
External sector, 35–36
Financial markets, 18–22, 30, 38, 42–44
Forecast uncertainty, 155, 215, 250, 285
Government sector, 14–15, 34–35, 133, 157, 168, 172, 194, 218, 229, 253, 263
Household sector, 11–12, 30–32, 44, 136, 157, 171, 197, 233, 267
Housing sector, 12–13, 31–32, 46, 133, 137, 157, 171, 193–194, 197–198, 218, 229, 253, 263
Interest rates, 12, 16, 28, 31, 32, 219, 292
Labor market, 5, 8–9, 28, 30, 36–37, 44, 87–88, 133, 136, 157, 158, 161, 169, 172, 194, 198, 219, 230, 233, 254, 264, 267
M2 monetary aggregates, 20, 41–42, 135, 159, 170, 195, 231, 265
National saving, 16, 36
Outlook and projections, 27–29, 44–48, 132–134, 136–138, 141, 143–150, 160–162, 170–173, 177–178, 192–193, 196–199, 203–209, 220–223, 231–235, 238–239, 255–258, 260, 272–273, 275, 278
Policy actions, 44–48, 138–140, 162–164, 173–176, 199–202, 223–225, 235–237, 258–260, 269–271

Prices, 9, 13, 28, 37–38, 133, 158, 168, 194, 229–230, 254, 263
Productivity and labor compensation, 37
Recent economic and financial developments, 7–22, 29–44
State and local governments, 14–15, 35
Trade deficit, 15–16, 133, 158, 168, 194, 219, 229, 254, 263
Uncertainty and risk, 152–155, 186, 188–190, 213–215, 248–250, 281, 283–285
ECP. *See* Examiner Commissioning Program
Edge Act corporations, 51, 53, 57, 58, 73
Emerging market economies (EMEs), 13, 15, 21, 22, 36, 43–44
EMEs. *See* Emerging market economies
Employee Benefits, Office of, 99, 330
Employment, 8, 35, 36–37, 44, 132, 137, 157, 167, 193, 218, 228–229, 253, 263. *See also* Labor markets; Unemployment
Energy prices, 10, 36, 37
Enforcement actions
Federal Reserve System, 60, 74
Enhanced Prudential Standards (Regulation YY), 119
Equal Credit Opportunity Act (ECOA), 80–81
Equipment and software (E&S), 13, 32, 157–158, 328, 329, 393–395
Equity markets and prices, 34, 40–41, 159–160
Equity price indexes, 17, 18, 21, 39, 43, 134, 159, 219–220, 254–255, 264
E&S. *See* Equipment and software
Europe. *See also specific countries by name*
Economy of, 20, 134
Fiscal crises, 27, 35–36, 40, 42–43
Government debt spreads, 21
European Central Bank (ECB)
Bond purchases, 231
Debt purchases, 20–21, 27
Eurosystem, 43
Monetary policy, 220
Refinancing operations, 29, 38, 39, 42, 44, 160
Swap arrangement with, 36, 134
European Financial Stability Facility, 135
Eurosystem, 43
Examinations and inspections
Anti-money laundering, 59
Consumer and community affairs, 75–85
Federal Reserve Banks, 53, 99–100
Fiduciary activities, 59
Information technology activities, 59
Review of operations, 53
Securities credit lenders, 60
Securities dealers and brokers, government and municipal, 59–60
Specialized, 59–60
Training program, 82–83
Transfer agents, 59
Examiner Commissioning Program (ECP), 70–71
Expenses. *See* Income and expenses
Exports, 15–16, 35, 137, 161, 172
Extended Collateral Term Repo, 43
External sector, 35–36

F

Fair Credit Reporting Act (FCRA), 82
Fair Housing Act, 80, 84–85
Fair lending enforcement, 80–81
Fair Lending Enforcement Section, 80
Fair Lending Examination Techniques, 82–83
Fair value measurement, 386–389
FAM. *See Financial Accounting Manual for Federal Reserve Banks*
Farm Credit Administration (FCA), 60, 74
FASB. *See* Financial Accounting Standards Board
FATF. *See* Financial Action Task Force
FBIIC. *See* Financial Banking Information Infrastructure Committee
FCA. *See* Farm Credit Administration
FCRA. *See* Fair Credit Reporting Act
FDIC. *See* Federal Deposit Insurance Corporation
Fed Complete, 98
Fed Transaction Analyzer, 98
Federal Advisory Council, 417–418
Federal agency securities and obligations
Federal Reserve Bank holdings, 291
Open market transactions, 289
Federal Deposit Insurance Corporation (FDIC), 18, 51, 58, 61, 70, 79, 107, 114, 159
Federal Deposit Insurance Corporation Improvement Act, 56
Federal Emergency Management Agency (FEMA), 81, 327
Federal Employees' Retirement System (FERS), 334
Federal Financial Institutions Examination Council (FFIEC)
Bank Secrecy Act/Anti-Money Laundering Examination Manual, 59
Board responsibilities, 338–339
BSA/AML working group, 66
Commercial bank regulatory report regulations, 68
coordination with other banking agencies, 81–82
Supervisory task forces and interagency committees, 70
Task Force on Surveillance Systems, 61
Federal funds rate, 16, 22, 25–26, 29, 44, 144, 150–152, 180, 187, 205, 212, 240, 247, 254, 264, 274, 282
Federal government
Budget deficit, 15
Spending, 15, 133, 158, 168, 194, 229, 253, 263
Federal Home Loan Mortgage Association
Collateral, 354
Federal Reserve Bank services to, 97
Federal Housing Administration (FHA), 32
Federal Housing Finance Agency (FHFA), 114

Federal National Mortgage Association
Collateral, 354
Federal Reserve Bank services to, 97
Federal Open Market Committee (FOMC). *See also* Open market operations
Annual organizational matters, 125–127
Appropriate monetary policy, 144, 150, 152, 181, 186, 188, 209, 213, 244, 248, 278, 281
Authorizations, 127–130
Consensus forecast, 225–226, 237
Domestic policy directives, 5–6
Forecast uncertainty, 155, 190, 215, 250, 285
Foreign currency operations and directives, 128–138
Meeting minutes, 123–285
Members, 416
Monetary policy strategies and communications, 44–48, 164–165, 167, 217
Notation votes, 140, 165, 176, 202, 226, 237, 260, 271
Officers, 416
Policy actions, 44–48, 138–140, 162–164, 173–176, 199–202, 223–225, 235–237, 258–260, 269–271
Policy compliance, 100
Responsibilities, 349–350
Statement on longer-run goals and strategy, 7
Summary of Economic Projections, 6, 47–48, 123, 140–154, 177–189, 203–214, 237–249, 272–284
System Open Market Account, 127–128, 150, 157, 167, 217–218, 253
Federal Reserve Act, 57, 58, 72–73, 326
Federal Reserve Bank of Atlanta, 103, 306–307, 309–311, 424–425
Federal Reserve Bank of Boston, 304–305, 309–311, 420–421
Federal Reserve Bank of Chicago, 104, 306–307, 309–311, 425–426
Federal Reserve Bank of Cleveland, 103–104, 304–305, 309–311, 422
Federal Reserve Bank of Dallas, 306–307, 309–311, 429–430
Federal Reserve Bank of Kansas City, 306–307, 309–311, 428–429
Federal Reserve Bank of Minneapolis, 306–307, 309–311, 427–428
Federal Reserve Bank of Nashville, 103
Federal Reserve Bank of New York, 16, 41–42, 102, 103, 126–130, 304–305, 309–311, 330–331, 349–350, 354–358, 364–373, 380, 385–388, 421
Federal Reserve Bank of Philadelphia, 38, 304–305, 309–311, 421
Federal Reserve Bank of Pittsburgh, 103–104
Federal Reserve Bank of Richmond, 80, 304–305, 309–311, 423
Federal Reserve Bank of San Antonio, 103–104
Federal Reserve Bank of San Francisco, 103, 306–307, 309–311, 430–431
Federal Reserve Bank of St. Louis, 306–307, 309–311, 426–427
Federal Reserve Banks
Accounting policies, 350–363
Assessments, 361
Assets and liabilities, 19–20, 294–295, 298–299
Audits, 319–341
Automated clearinghouse (ACH) services, 93
Balance sheets, 19–20, 41–42, 132, 150, 157, 167, 193, 217–218, 228, 253, 262
Branches, 293, 420–433
Capital, 348, 359
Cash-management services, 97
Collection services, 96–97
Commercial check collection service, 92–93
Commitments and contingencies, 395–396
Condition statements, 304–308, 346
Conferences, 434–435
Credit outstanding, 294–295, 298–301
Currency and coin operations and developments, 94–95
Deposits, 295, 359
Directors, 420–431
Economic growth projections, 141
Equipment and software, 393–395
Examinations, 53, 99–100
Fair value, 361–362
FedLine access to services, 98
Fedwire Funds Service, 93
Fedwire Securities Service, 93–94
Financial statements, 105–110, 342–407
Fiscal agency services, 95–97
Float, 94
Government depository services, 95–97
Income and expenses, 95, 100–101, 309–314, 347, 360, 405, 407
Information technology, 98–99
Interest rates on depository institutions loans, 292
Intraday credit, 97–98
Investments of consolidated VIEs, 102
Lending, 101–102
Loans and other credit extensions, 294, 296–297, 298–299, 363–368
National Settlement Service, 93
Notes outstanding, 20, 358–359
Officers, 316, 432–433
Open market transactions, 289–290
Operations, volume of, 315
Operations and services, 349–350
Payments services, 96
Postemployment benefits, 404
Postretirement benefits, 402–404
Premises, 102–104, 317, 358, 393–395
Priced services, 91–94
Recovery of direct and indirect costs, 91–92
Restructuring charges, 362, 405–406
Retail securities programs, 96
Retirement plans, 396–401
Risk management, 94
Salaries of officers and employees, 316

Securities holdings, 100–101, 291, 298–299
Structure, 349
Supervisory information technology, 69
System Open Market Account holdings and loans, 100–102, 368–377
Taxes, 362
Thrift plans, 401
Treasury securities services, 95–96
Wholesale securities programs, 96
Federal Reserve Consumer Help (FRCH), 83
Federal Reserve Information Technology (FRIT), 99
Federal Reserve System. *See also* Board of Governors; Federal Reserve Banks
Accounting policies, 64–65
Audits, 55
Community Development function, 87
Developments in 2012, 49–51
Dodd-Frank Act implementation, 111–114
Enforcement actions, 60, 74
Examinations and inspections, 53
Independent Foreclosure Review (IFR), 77–78
International activities, 57–58
Joint Forum, 64
Large-scale asset purchase program, 23–24
Maps, 2–3
Organization, 411–435
Overview, 1–2
Public notice of decisions, 73–74
Regulatory responsibilities, 71–74
Retirement benefits, 330–334
Safety and soundness responsibilities, 52–62
Staff development, 70–71
Supervision responsibilities, 51–71
Supervisory information technology, 69–70
Supervisory policy, 62–69
Surveillance and off-site monitoring, 60–61
Training and technical assistance, 61–62
Website, 74
FedLine Access Solutions, 98
Fedwire Funds Service, 93
Fedwire Securities Service, 93–94
FEMA. *See* Federal Emergency Management Agency
FERS. *See* Federal Employees' Retirement System
FFETF. *See* Financial Fraud Enforcement Task Force
FFIEC. *See* Federal Financial Institutions Examination Council
FHA. *See* Federal Housing Administration
FHFA. *See* Federal Housing Finance Agency
Finance
Business, 13–14, 33–34
Household, 11–12, 30–31
Housing, 31–32
Financial Accounting Foundation, 64
Financial Accounting Manual for Federal Reserve Banks (FAM), 350–351
Financial Accounting Standards Board (FASB), 64, 108, 328–329
Financial accounts, U.S., 36
Financial Action Task Force (FATF), 66
Financial Banking Information Infrastructure Committee (FBIIC), 62
Financial Crimes Enforcement Network (FinCEN), 66
Financial Fraud Enforcement Task Force (FFETF), 81
Financial holding companies
Supervision of, 56
Financial Industry Regulatory Authority, 74
Financial Institution Symposium, 66
Financial market utilities (FMUs), 51–52, 57, 113–114
Financial Market Utilities Supervision Committee (FMU-SC), 57
Financial markets, 18–22, 30, 38, 42–44, 49–52, 132, 137, 157, 158–160, 167, 193, 217–218, 228, 234, 253, 262
Financial Regulators' Training Initiative, 61
Financial Research, Office of (OFR), 100, 339
Financial services research, 85–86
Financial Stability Board (FSB), 64
Financial Stability Oversight Council (FSOC), 52, 57, 113, 326–327
Financial statements
Board of Governors, 320–341
Federal Reserve Banks, 105–110, 342–407
FinCEN. *See* Financial Crimes Enforcement Network
First Vice-Presidents, Conference of, Federal Reserve Banks, 435
Fiscal agency services, 95–97
Fixed investment, 32
Float, Federal Reserve Banks, 94, 294, 298–299
Flood insurance, 81
FMU-SC. *See* Financial Market Utilities Supervision Committee
FMUs. *See* Financial market utilities
FOMC. *See* Federal Open Market Committee
Food prices, 38
Forecast uncertainty, 155, 190, 250, 285
Foreclosures
Independent Foreclosure Review, 77–78
Foreign Assets Control, Office of (OFAC), 66
Foreign Bank Supervision Enhancement Act, 73
Foreign banks. *See also specific banks by name*
Deposits, 295, 300–301
Prudential standards, 50, 51, 111–112
Supervision of, 57–58
U.S. activities, 51, 58, 73
Foreign currency operations
Authorization, 128–130
Denominated assets, 355–356, 372–374
Directives, 130
Liquidity swaps, 357, 374
Procedural instructions, 130–138
Foreign economies, 133–134, 158, 169, 195–196, 230, 231, 232, 254, 264, 265. *See also* Advanced foreign economies; Emerging market economies; *specific countries by name*
Foreign equity indexes, 21
Fraud
Financial Fraud Enforcement Task Force (FFETF), 81

FRBNY. *See* Federal Reserve Bank of New York
FRCH. *See* Federal Reserve Consumer Help
Freedom on Information Act, 117
FRIT. *See* Federal Reserve Information Technology
FSB. *See* Financial Stability Board
Funding for Lending Scheme, 22, 43

G

GAAP. *See* Generally accepted accounting principles
GAO. *See* Government Accountability Office, U.S.
GDP. *See* Gross domestic product
GEIC. *See Growing Economies in Indian Country*
Generally accepted accounting principles, 327, 351
Germany
  Bond yields, 21, 42, 196, 265
  Economy of, 43, 170
Go Direct program, 96
Gold stock, 294, 298–299, 352–353
GOVerify program, 96
Government Accountability Office, U.S. (GAO), 409
Government depository services, 95–97
Government National Mortgage Association
  Collateral, 354–355
  Federal Reserve Bank services to, 97
Government Performance and Results Act (GPRA), 115
Government sector, 14–15, 34–35, 133, 157, 168, 172, 194, 218, 229, 253, 263. *See also* Federal government; State and local governments
Government securities dealers and brokers, Federal Reserve examination, 59–60
Government-sponsored enterprises (GSEs), 32, 100–101, 355–356, 368–372, 374–376
GPRA. *See* Government Performance and Results Act
GPRA Modernization Act, 115
Gramm-Leach Bliley Act, 56, 72
Greece, economy of, 20, 27, 42–44, 265
Gross domestic product, 5, 7–8, 15–16, 27–29, 34–36, 135–136, 141–143, 145–146, 152, 155, 160, 170, 182, 207, 239, 242, 265–266, 273, 276
Growing Economies in Indian Country (GEIC), 87
GSEs. *See* Government-sponsored enterprises

H

H.2 statistical releases, 74
HARP. *See* Home Affordable Refinance Program
HOLA. *See* Home Owners' Loan Act
Home Affordable Refinance Program (HARP), 28, 30, 32
Home Owners' Loan Act (HOLA), 73
Household sector, 11–12, 28, 30–32, 44, 136, 157, 171, 197, 233, 267
Housing activity, 12–13, 31–32, 46, 133, 137, 157, 168, 171, 193–194, 197–198, 218, 229, 253, 263
Housing and Urban Development, U.S. Department of (HUD)
  Consumer complaint referrals, 84–85
HUD. *See* Housing and Urban Development, U.S. Department of

I

IFR. *See* Independent Foreclosure Review
IHC. *See* Intermediate holding company
IMF. *See* International Monetary Fund
Imports, 15–16, 35
Income and expenses
  Board of Governors, 327
  Disposable personal income, 11, 30
  Federal Reserve Banks, 95, 100–101, 309–314, 347, 360, 405, 407
  Priced services, 91–94
Independent Foreclosure Review (IFR), 77–78, 85
India, economy of, 22, 44
Indian Country economies, 87
Indonesia, economy of, 44
Inflation, 7, 9–11, 26, 28, 30, 37–38, 44, 132, 138, 142, 145, 148–150, 152, 154, 173, 181, 184–185, 198, 206, 209, 232, 234, 238, 241, 244, 266, 273, 275, 278
Information security (IS), 99
Information Systems Audit Control Association, 70
Information technology (IT)
  Federal Reserve Bank developments, 98–99
  Federal Reserve examination of activities, 59
  Security practices, 69
  Supervisory activities, 69–70
ING Bank, 79–80
Initial public offerings, 34
Inspections. *See* Examinations and inspections
Inspector General, Office of (OIG), 326, 408
Institute of Internal Auditors, 99–100
Insured commercial banks. *See* Commercial banks
Interagency Minority Depository Institutions National Conference, 62
Interagency Task Force on Strengthening and Clarifying the BSA/AML Framework, 66
Interest
  Federal Reserve notes, 360
  Rates, 12, 16, 28, 31, 32, 219, 292
Intermediate holding company (IHC), 111
Internal Revenue Service (IRS), 66
International Association of Insurance Supervisors, 64
International Banking Act, 73
International financial markets, 20–22, 42–44
International Monetary Fund (IMF), 61, 265, 353
International Organization of Securities Commissions, 64
International Standards for the Professional Practice of Internal Auditing, 99–100
International trade, 15–16, 133, 158, 168, 194, 219, 229, 254, 263
International training, 61
Intraday credit, 97
Inventory investment, 32–33
Investments
  Business sector, 13, 32
  Fixed, 32
  Inventory, 32–33
Invoice Processing Platform (IPP), 96
IPOs. *See* Initial public offerings

IPP. *See* Invoice Processing Platform
IRS. *See* Internal Revenue Service
IS. *See* Information security
IT. *See* Information technology
Italy, economy of, 43, 170, 265

J

Japan
  Economy of, 21, 43, 170, 265
  Export sales to, 15
  Imports from, 35
Job losses. *See* Unemployment
JOBS Act. *See* Jumpstart our Business Startups Act
Joint Forum, 64
JPMorgan Chase & Co., 380
Jumpstart our Business Startups Act (JOBS Act), 74
Justice, U.S. Department of (DOJ)
  Fair lending laws enforcement, 81

L

Labor markets, 5, 8–9, 28, 30, 36–37, 44, 87–88, 133, 136, 157, 158, 161, 169, 172, 194, 198, 219, 230, 233, 254, 264, 267
Large bank supervision, 50, 69, 76
Large Institution Supervision Coordinating Committee (LISCC), 50, 54, 70
Large-scale asset purchase programs, 23–24, 228, 234
Legal Entity Identifier, 69
Legislative and Regulatory Conference, 62
Leveraged Lending practices, 65
Liabilities. *See* Assets and liabilities
Libor. *See* London interbank offered rates
Liquidity swap arrangements, 19, 356–357, 374
LISCC. *See* Large Institution Supervision Coordinating Committee
Litigation involving Board of Governors
  Artis, 288
  Barragan, 288
  CitiMortgage, Inc., 288
  Conover, 287
  Crisman, 287
  DeNaples, 287
  Estate of Deleon, 287
  Farrell, 288
  First Citizens Banks and Trust Co., 288
  First Pryority Bank, 287
  Freedom Watch, 287
  Gelb, 287
  Haller, 288
  Handy, 288
  Judicial Watch, Inc., 287
  Marcusse, 287
  Mashak, 287
  McKinley, 287, 288
  Murray, 288
  NACS, 288
  Perry, 288
  State National Bank of Big Spring, 287
  Von Brincken, 287
  Wise, 287
LMI consumers. *See* Low- and moderate-income consumers
Loans. *See also specific types of loans*
  Federal Reserve Bank holdings, 294, 296–297, 298–299, 353–354, 363–368
Local governments. *See* State and local governments
London interbank offered rates (Libor), 134, 159, 160, 196
Longer-term refinancing operations (LTRO), 134
Low- and moderate-income consumers (LMI), 79–80, 86–88
LSAP. *See* Large-scale asset purchase programs
LTRO. *See* Longer-term refinancing operations

M

M2 monetary aggregates. *See* Monetary aggregates
Maiden Lane II LLC, 41–42, 102, 385
Maiden Lane III LLC, 19, 41–42, 99, 102, 386
Maiden Lane LLC, 19, 41–42, 99, 102, 380–385
Maps, Federal Reserve System, 2–3
Margin requirements, 303
Mark-to-market variations, 382
Market risk, 383
Maturity extension program (MEP), 17–18, 19, 22–23, 27, 29, 38–39, 41, 44, 46, 203
MBSs. *See* Mortgage-backed securities
Medicaid, 34
Medicare Prescription Drug, Improvement and Modernization Act, 403
Members
  Board of Governors, 411
  Federal Advisory Council, 417–418
  Federal Open Market Committee, 416
Membership of State Banking Institutions in the Federal Reserve System (Regulation H), 118
MEP. *See* Maturity extension program
Mergers and acquisitions, 79–80
Mexico
  Economy of, 22, 44
  Export demand, 35
  Imports from, 35
MHC. *See* Mutual holding companies
Michigan Survey. *See* Thomson Reuters/University of Michigan Surveys of Consumers
Middle East
  Financial Regulators' Training Initiative, 61
Middle East Partnership Initiative, 61
Military homeowners
  Mortgage servicing, 82
Minority Council of the Independent Community Bankers Association, 61
Minority-owned institutions (MOIs)
  Training and technical assistance, 61–62
Mitsubishi UFJ Financial Group, Inc., 79–80
MMFs. *See* Money market funds

Mobile financial services, 85–86
Model Validation Council, 419
MOIs. *See* Minority-owned institutions
Monetary aggregates (M2), 20, 41–42, 135, 159, 170, 195, 231, 265
Monetary Control Act, 91
Monetary policy
  Alternative scenarios, 167
  Communications, 164–165
  Developments and outlook, 44–48
  Expectations, 22–26, 38–39
  Overview, 5–6, 180
  Statement on longer-run goals and strategy, 7, 131–132
Monetary policy reports to Congress
  February 2013, 5–26
  July 2012, 27–48
Money laundering prevention. *See* Anti-money laundering
Money market funds (MMFs), 18
Moody's Investors Service, 35
Morgan Stanley Capital International Index, 399
Mortgage-backed securities (MBSs), 6, 12, 16–17, 19, 22–25, 32, 40–42, 44, 46, 100–101, 132, 135, 167, 217, 235, 257–259, 262, 268, 269, 289, 291, 355–356, 370–372, 374–376
Mortgage interest rates, 12, 28, 32, 159, 195, 231, 255, 265
Mortgage regulations
  Commercial mortgage loans, 381–382
  Higher-risk loan appraisal requirements, 88–89
  Independent Foreclosure Review, 77–78
  Military homeowners, 82
Municipal bonds, 35, 159, 169–170, 195, 220, 231
Municipal securities dealers and brokers, Federal Reserve examination, 59–60
Mutual holding companies (MHC), 73

N

National Bankers Association (NBA), 61–62
National Cash Data Warehouse, 94
National Credit Union Administration (NCUA), 60, 74, 114
National Data Inventory Project, 70
National Examination Data (NED), 69
National Federation of Independent Business (NFIB), 14, 33
National Flood Insurance Act, 81
National income and product accounts (NIPAs), 9, 15, 34, 37
National Information Center (NIC), 60, 69–70
National saving, 16, 36
National Settlement Service, 93
National Urban League, 61
Native Americans
  Growing Economies in Indian Country, 87
NBA. *See* National Bankers Association
NCUA. *See* National Credit Union Administration
NED. *See* National Examination Data
NeighborWorks America® (NWA), 88
NFIB. *See* National Federation of Independent Business
NIC. *See* National Information Center
NIPAs. *See* National income and product accounts
Non-Discrimination Working Group, 81
North Africa
  Financial Regulators' Training Initiative, 61
Notice of proposed rulemaking (NPR), 51, 52, 62–63, 112–113
NPR. *See* Notice of proposed rulemaking
NWA. *See* NeighborWorks America®

O

OCC. *See* Comptroller of the Currency, Office of the
OFAC. *See* Foreign Assets Control, Office of
Off-site monitoring, 60–61
Officers
  Board of Governors, 411–415
  Conferences of, 434–435
  Federal Advisory Council, 417–418
  Federal Open Market Committee, 416
  Federal Reserve Banks, 316, 432–433
OFR. *See* Financial Research, Office of
OIG. *See* Inspector General, Office of
Oil prices. *See* Energy prices
OIS. *See* Overnight index swaps
OMT. *See* Outright Monetary Transactions
Open Market Desk, 16–17, 41, 46
Open market operations. *See also* Federal Open Market Committee
  Volume of transactions, 289–290
Operating leases, 330
OREO. *See* Other real estate owned
Other real estate owned (OREO), 65
OTS. *See* Thrift Supervision, Office of
Outright Monetary Transactions (OMT), 20
Overdraft services, 98
Overnight index swaps (OIS), 16, 134, 158–160, 169

P

Pacific Capital Bancorp, 79–80
Partnership for Progress (PFP), 61–62
Pay.gov, 97
Payment System Risk (PSR), 97, 120
Payments services, Federal Reserve Banks, 96
PCEs, Personal consumption expenditures
PCS. *See* Permanent Change of Station
Penalties. *See* Civil money penalties
Pension Enhancement Plan (PEP), 332–333
PEP. *See* Pension Enhancement Plan
Performance Report Information and Surveillance Monitoring (PRISM), 60–61
Permanent Change of Station (PCS), 82
Personal consumption expenditures (PCEs), 9, 10, 11, 28, 30, 37–38, 133, 141–142, 148–149, 157, 168, 184–185, 193, 203, 210–211, 218, 229, 239, 245–246, 253, 263, 273, 279–280
Personnel, Management, Office of, 334

PFP. *See* Partnership for Progress
Philippines, economy of, 44
Policy actions
Board of Governors, 117–122
Federal Open Market Committee, 44–48, 138–140, 162–164, 173–176, 199–202, 223–225, 235–237, 258–260, 269–271
Policy statements, Board of Governors, 120–122
Postemployment benefits, 336, 404
Postretirement benefits, 335–336, 402–404
Preferred interests, 358
Premises, Federal Reserve Banks, 102–104, 317, 358, 393–395
Presidents, Conference of, Federal Reserve Banks, 434
Priced services, 91–94, 105–110
Prices
Consumer, 9, 28, 37–38, 133, 158, 168, 194, 219, 229–230, 254, 263
Energy, 37–38
Food, 38
Housing, 13
Primary credit, 121–122
PRISM. *See* Performance Report Information and Surveillance Monitoring
Private Company Standards Improvement Council, 64
Private sector adjustment factor (PSAF), 91–93, 107, 109, 121
Productivity and labor compensation, 37
Professional development, 71
Prudential standards, 50, 51, 111–112
PSAF. *See* Private sector adjustment factor
PSR. *See* Payment System Risk
Public notice, Federal Reserve decisions, 73–74

Q

Qualified Thrift Lender, 68
Quarterly Savings and Loan Holding Company Report, 70

R

Rapid Response® program, 71, 83
Real estate investment trusts, 19
Real estate loans. *See* Commercial real estate (CRE) loans
Real estate owned (REO) properties, 85, 87
Recovery planning, 50–51
Regional bank supervision, 69
Regulations
AA, Unfair or Deceptive Acts or Practices, 75
B, Community Reinvestment, 62
D, Reserve Requirements of Depository Institutions, 117
H, Membership of State Banking Institutions in the Federal Reserve System, 118
HH, Designated Financial Market Utilities, 57, 118
II, Debit Card Interchange Fees and Routing, 118–119
J, Collection of Checks and Other items by Federal Reserve Banks and Funds Transfers through Fedwire, 117
M, Consumer Leasing, 118
OO, Securities Holding Companies, 119
T, Credit by Brokers and Dealers, 74, 303
U, Credit by Banks and Persons other than Brokers or Dealers for the Purpose of Purchasing or Carrying Margin Stock, 60, 74, 303
X, Borrowers of Securities Credit, 74, 303
Y, Bank Holding Companies and Change in Bank Control, 118
YY, Enhanced Prudential Standards, 119
Z, Truth in Lending, 82, 118
Regulatory reports, 67–69
REITs. *See* Real estate investment trusts
Rental housing, 31–32
REO. *See* Real estate owned properties
Reports of Condition and Income (Call Reports), 60
Repurchase agreements, 17, 290, 291, 294–295, 298–299, 354–355. *See also* Reverse repurchase agreements
Resell agreements, 354–355
Reserve Requirements of Depository Institutions (Regulation D), 117
Residential mortgage-backed securities (RMBS), 135, 357, 385
Residential other real estate owned (OREO), 65
Resolution planning, 50–51
Retail E-Services initiative, 96
Retail securities program, 96
Retirement plans, 396–401
Revenue. *See* Income and expenses
Reverse repurchase agreements, 20, 290, 291, 295
RFI/C(D) system, 56
Riegle Community Development and Regulatory Improvement Act, 56
Risk management, 94
RMBS. *See* Residential mortgage-backed securities
Roth 401(k), 334

S

Saudi Arabia
crude oil supply, 35
Savings and loan holding companies (SLHCs)
Number of, 56
Regulatory reports, 68
Stress testing, 112
Supervision and regulation of, 52, 56–57, 69–70, 72–73, 76, 112
Savings rate. *See* National saving
SBA. *See* Small Business Administration
SCOOS. *See* Senior Credit Officer Opinion Survey on Dealer Financing Terms
SDR. *See* Special drawing rights certificates
Seasonal credit, 121–122
SEC. *See* Securities and Exchange Commission
Secondary credit, 121–122
Securities. *See also* Federal agency securities; Treasury securities; *specific types of securities*
Domestic holdings, 368–372

Government and municipal, examination of dealers and brokers, 59–60
Lending, 354–355
Resell and repurchase agreements, 354–355
Transfer agents, 59
Securities and Exchange Commission (SEC), 57, 66, 113
Securities credit, 74
Securities credit lenders, 60
Securities Exchange Act, 60, 74
Securities Holding Companies (Regulation OO), 119
Securities holding companies (SHCs)
Registration of, 113
Supervision of, 67
Security
Information technology, 69
Senior Credit Officer Opinion Survey on Dealer Financing Terms (SCOOS), 18–19, 39, 134, 159, 195, 196, 230, 264
Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS), 12, 14, 30, 33, 40, 134–135, 170, 220, 255
SEP. *See* Summary of Economic Projections
Separate Trading of Registered Interest and Principal of Securities, 354, 399
SFAS. *See* Statement of Financial Accounting Standards
Shared National Credit Modernization (SNC Mod) initiative, 69
Shared National Credit (SNC) Program, 65–66, 69
SHCs. *See* Securities holding companies
Short-term funding markets, 17–18, 39
SLHCs. *See* Savings and loan holding companies
SLOOS. *See* Senior Loan Officer Opinion Survey on Bank Lending Practices
Small Bank Holding Company Policy Statement, 52
Small Business Administration (SBA), 62
Small businesses
Credit availability, 14
SNC. *See* Shared National Credit Program
SNC Mod. *See* Shared National Credit Modernization initiative
Social Security, 34
Software. *See* Equipment and software
SOMA. *See* System Open Market Account
South Korea, economy of, 44
S&P. *See* Standard and Poor's 500
Spain, economy of, 20, 27, 42–43, 170, 265
Special drawing rights certificate account, 294, 298–299
Special drawing rights certificates (SDR), 352–353
Specialized examinations, 59
SR-SABR. *See* Supervision and Regulation Statistical Assessment of Bank Risk
Staff development, 70–71
Standard and Poor's 500 (S&P 500), 13, 17, 33, 40, 195
Standing Committee on Supervisory and Regulatory Cooperation, 64
State and local governments, 14–15, 35
State member banks
Complaints against, 83–84
Developments in 2012, 49
Financial disclosures, 74
Number of, 55
Regulation of, 71–74
Supervision of, 55–56
Surveillance and off-site monitoring, 60–61
Statement of Financial Accounting Standards (SFAS), 108
Statements of Condition
Federal Reserve Banks, 304–308, 346
Statements of operations, 324
STBL. *See* Survey of Terms of Business Lending
Stimulating Bank Lending Facility, 22
Stored Value Card (SVC) program, 96
Stress testing, 50, 54–55, 67, 70, 112, 120–121
STRIPS. *See* Separate Trading of Registered Interest and Principal of Securities
Student loans, 31
Summary of Economic Projections, 6, 47–48, 123, 140–154, 177–189, 203–214, 237–249, 272–284
Supervision and Regulation National Data Inventory Project, 70
Supervision and Regulation Statistical Assessment of Bank Risk (SR-SABR), 60
Supervisory Capital Assessment Program, 112
Supervisory policy
Accounting policy, 64–65
Capital adequacy standards, 62–63
Compliance risk management, 66–67
Consumer and community affairs, 75–85
Credit-risk management, 65–66
Information technology, 69–70
International coordination, 63–64
Policymaking initiatives, 67
Regulatory capital framework, 112–113
Regulatory reports, 67–69
Staff development, 70–71
Supplemental Retirement Plan for Select Officers of the Federal Reserve Banks, 396
Supplementary Financing Account, 295
Surveillance, 60–61
Survey of Primary Dealers, 16
Survey of Professional Forecasters, 10, 38
Survey of Terms of Business Lending (STBL), 33
SVC. *See* Stored Value Card program
Swap arrangements, 19, 36, 39, 129, 134
Swiss National Bank, 42
System Open Market Account (SOMA), 100–102, 127–128, 150, 157, 167, 217–219, 253, 351, 368–377

T

TALF. *See* Term Asset-Backed Securities Loan Facility
TARP. *See* Troubled Asset Relief Program
Task Force on Surveillance Systems, 61
TDF. *See* Term Deposit Facility
Technical assistance, 61–62
Temporary Liquidity Guarantee Program, 159

Term Asset-Backed Securities Loan Facility (TALF), 19, 42, 99, 101, 121, 353, 364–367, 386, 407
Term Deposit Facility (TDF), 20, 359
Thailand, economy of, 43–44, 134
Thomson Reuters/University of Michigan Surveys of Consumers, 10, 38
Thrift plans, 401
Thrift Supervision, Office of (OTS), 52, 69, 77
TILA. *See* Truth in Lending Act
Total return swap, 382–383
Trade deficit, 15–16, 133, 158, 168, 194, 219, 229, 254, 263
Trade prices, 35–36
Training programs, 82–83
Transaction Account Guarantee program, 18
Transfer agents, 59
Travel Related Services Company, 78
Treasury, U.S. Department of the. *See also* Troubled Asset Relief Program
  Bureau of Engraving and Printing, 94–95
  Cash holdings, 295, 300–301
  Cash-management services, 97
  Collection services, 96–97
  Collections and Cash Management Modernization initiative, 96
  Currency in circulation and outstanding, 294–295, 298–299, 300–301
  Deposits, 359
  Interagency Task Force on Strengthening and Clarifying the BSA/AML Framework, 66
  Payments services, 96
Treasury securities
  Collection services, 96–97
  Federal Reserve Bank holdings, 100–101, 291, 294, 298–299
  FOMC purchases, 22–23
  Interest income, 355–356
  Interest rates, 16
  Longer-term, 262
  Open market transactions, 289–290
  Payment services, 96
  Retail securities program, 96
  Services, 95
  SOMA holdings, 100–101
  Wholesale securities program, 96
  Yields, 16–17, 38–39, 134, 169, 194–195, 254
Troubled Asset Relief Program (TARP), 19, 34
TRS. *See* American Express Travel Related Services Company
Truth in Lending Act (TILA), 88–89, 114
Truth in Lending (Regulation Z), 82, 118

U

UDAP. *See* Unfair or Deceptive Acts or Practices
Unemployment, 8–9, 28, 29, 30, 36–37, 87–88, 133, 142–143, 145, 147, 167, 183, 198, 208, 239, 243, 273, 277
Unfair or Deceptive Acts or Practices (Regulation AA), 75
UnionBanCal Corporation, 79–80
United Kingdom
  Bond yields, 42, 196
  Economy of, 21, 43
Unregulated practices, consumer complaints, 84
U.S. Congress. *See* Monetary policy reports to Congress; *specific legislation by name*
U.S. Secret Service, 94
Utah Department of Financial Institutions, 79

V

Variable interest entities (VIEs), 99, 102–103, 352, 357, 359, 377–393
Vice-Presidents, Conference of, Federal Reserve Banks, 435
VIEs. *See* Variable interest entities
Volcker Rule, 120

W

Warehousing agreements, 355–356
Websites
  Board of Governors, 5, 66, 115
  Federal Reserve, 74
Wholesale securities program, 96
World Bank, 61

www.federalreserve.gov
0513