101st Annual Report

2014

Board of Governors of the Federal Reserve System

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Letter of Transmittal

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

June 2015

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 101st annual report of the Board of Governors of the Federal Reserve System.

This report covers operations of the Board during calendar year 2014.

Sincerely,

Janet L. Yellen

Janet L. Yellen
Chair

Contents

1 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 2,745-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 2014. The report includes the following sections:

- **Monetary policy and economic developments.** Section 2 provides adapted versions of the Board's semiannual monetary policy reports to Congress.
- **Federal Reserve operations.** Section 3 provides a summary of Board and System activities in the areas of financial stability policy and research; section 4, in supervision and regulation; section 5, in consumer and community affairs; and section 6, in Reserve Bank operations.
- **Dodd-Frank Act implementation and other requirements.** Section 7 summarizes the Board's efforts in 2014 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.

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/publications/annual-report/default.htm.

- **Policy actions and litigation.** Section 8 and section 9 provide accounts of policy actions taken by the Board in 2014, including new or amended rules and regulations and other actions as well as the deliberations and decisions of the Federal Open Market Committee (FOMC);[1] section 10 summarizes litigation involving the Board.
- **Statistical tables.** Section 11 includes 14 statistical tables that provide updated historical data concerning Board and System operations and activities.
- **Federal Reserve System audits.** Section 12 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 budgets.** Section 13 presents information on the 2014 budget performance of the Board and Reserve Banks, as well as their 2015 budgets, budgeting processes, and trends in their expenses and employment.
- **Federal Reserve System organization.** Section 14 provides listings of key officials at the Board and in the Federal Reserve System, including the Board of

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

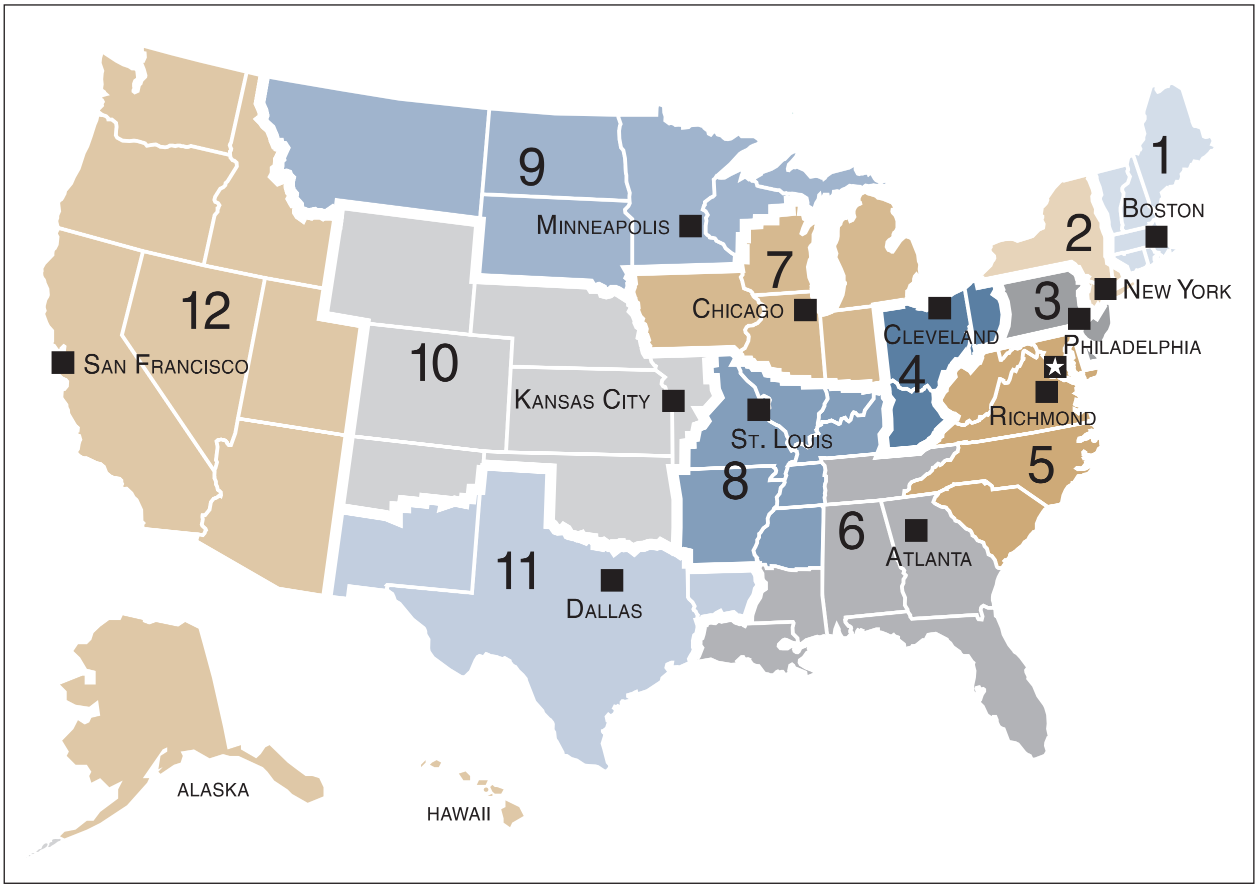
Governors, its officers, FOMC members, several System councils, and Federal Reserve Bank and Branch officers and directors.

About the Federal Reserve System

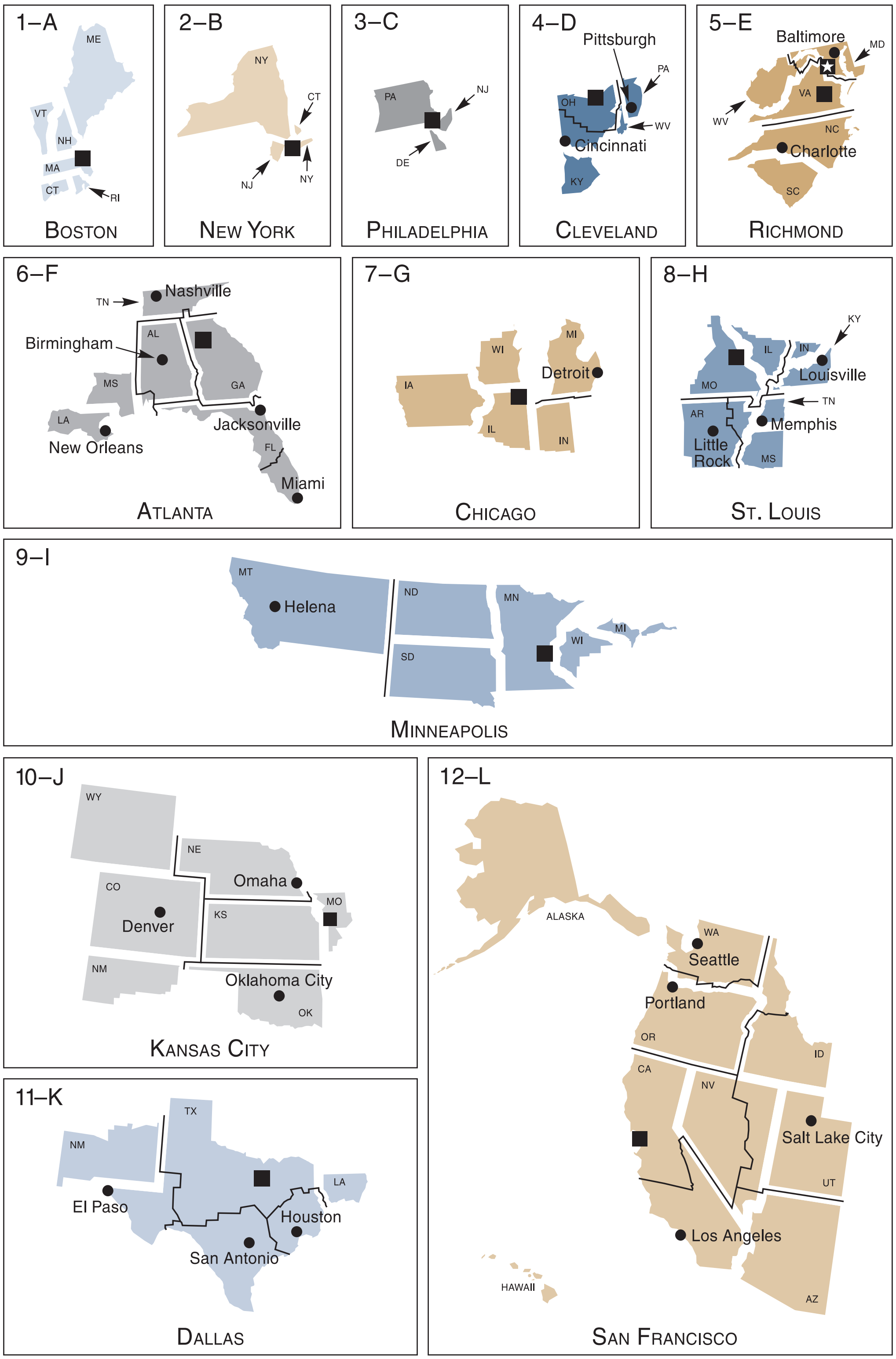
The Federal Reserve System, which serves as the nation's central bank, was created by an act of Congress on December 23, 1913. The System consists of a seven-member Board of Governors with headquarters in Washington, D.C., and the 12 Reserve Banks located in major cities throughout the United States.

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 following maps 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

2 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 Chair.

The following discussion is a review of U.S. monetary policy and economic developments in 2014, excerpted from the *Monetary Policy Report*s published in February 2015 and July 2014. Those complete reports are available on the Board's website at www.federalreserve.gov/monetarypolicy/files/20150224_mprfullreport.pdf (February 2015) and www.federalreserve.gov/monetarypolicy/files/20140715_mprfullreport.pdf (July 2014).

Other materials in this annual report related to the conduct of monetary policy can be found in section 9, "Minutes of Federal Open Market Committee Meetings," and section 11, "Statistical Tables" (see tables 1–4).

Monetary Policy Report of February 2015

Summary

The labor market improved further during the second half of last year and into early 2015, and labor market conditions moved closer to those the Federal Open Market Committee (FOMC) judges consistent with its maximum employment mandate. Since the middle of last year, monthly payrolls have expanded by about 280,000, on average, and the unemployment rate has declined nearly ½ percentage point on net. Nevertheless, a range of labor market indicators suggest that there is still room for improvement. In particular, at 5.7 percent, the unemployment rate is still above most FOMC participants' estimates of its longer-run normal level, the labor force participation rate remains below most assessments of its trend, an unusually large number of people continue to work part time when they would prefer full-time employment, and wage growth has continued to be slow.

A steep drop in crude oil prices since the middle of last year has put downward pressure on overall inflation. As of December 2014, the price index for personal consumption expenditures was only ¾ percent higher than a year earlier, a rate of increase that is well below the FOMC's longer-run goal of 2 percent. Even apart from the energy sector, price increases have been subdued. Indeed, the prices of items other than food and energy products rose at an annual rate of only about 1 percent over the last six months of 2014, noticeably less than in the first half of the year. The slow pace of price increases during the second half was likely associated, in part, with falling import prices and perhaps also with some pass-through of lower oil prices. Survey-based measures of longer-term inflation expectations have remained stable; however market-based measures of inflation compensation have declined since last summer.

Economic activity expanded at a strong pace in the second half of last year. Notably reflecting solid gains in consumer spending, real gross domestic product (GDP) is estimated to have increased at an annual rate of 3¾ percent after a reported increase of just 1¼ percent in the first half of the year. The growth in GDP was supported by accommodative monetary policy, a reduction in the degree of restraint imparted by fiscal policy, and the increase in households' purchasing power arising from the drop in oil prices. The gains in GDP have occurred despite continued sluggish growth abroad and a sizable appreciation of the U.S. dollar, both of which have weighed on net exports.

Financial conditions in the United States have generally remained supportive of economic growth. Longer-term interest rates in the United States and other advanced economies have continued to move down, on net, since the middle of 2014 amid disappointing economic growth and low inflation abroad as well as the associated anticipated and actual monetary policy actions by foreign central banks. Broad indexes of U.S. equity prices have risen moderately, on net, since the end of June. Credit flows to nonfinancial businesses largely remained solid in the second half of last year. Overall borrowing conditions for households eased further, but mortgage lending standards are still tight for many potential borrowers.

The vulnerability of the U.S. financial system to financial instability has remained moderate, primarily reflecting low-to-moderate levels of leverage and maturity transformation. Asset valuation pressures have eased a little, on balance, but continue to be notable in some sectors. The capital and liquidity positions of the banking sector have improved further. Over the second half of 2014, the Federal Reserve and other agencies finalized or proposed several more rules related to the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, which were designed to further strengthen the resilience of the financial system.

At the time of the FOMC meeting in late January of this year, the Committee saw the outlook as broadly similar to that at the time of its December meeting, when the most recent Summary of Economic Projections (SEP) was compiled. (The December SEP is included as Part 3 of the February 2015 *Monetary Policy Report* on pages 39–52; it is also included in section 9 of this annual report.) The FOMC expects that, with appropriate monetary policy accommodation, economic activity will expand at a moderate pace, and that labor market indicators will continue to move toward levels the Committee judges consistent with its dual mandate of maximum employment and price stability. In addition, the Committee continues to see the risks to the outlook for economic activity and the labor market as nearly balanced. Inflation is anticipated to decline further in the near term, mainly reflecting the pass-through of lower oil prices to consumer energy prices. However, the Committee expects inflation to rise gradually toward its 2 percent longer-run objective over the medium term as the labor market improves further and the transitory effects of lower energy prices and other factors dissipate.

At the end of October, and after having made further measured reductions in the pace of its asset purchases at its July and September meetings, the FOMC concluded the asset purchase program that began in September 2012. The decision to end the purchase program reflected the substantial improvement in the outlook for the labor market since the program's inception—the stated aim of the asset purchases—and a judgment that the underlying strength of the broader economy was sufficient to support ongoing progress toward the Committee's policy objectives.

Nonetheless, the Committee continued to judge that a high degree of policy accommodation remained appropriate. As a result, the FOMC has maintained the exceptionally low target range of 0 to ¼ percent for the federal funds rate and kept the Federal Reserve's holdings of longer-term securities at sizable levels. The Committee has also continued to provide forward guidance bearing on the anticipated path of the federal funds rate. In particular, the FOMC has stressed that in deciding how long to maintain the current target range, it will consider a broad set of indicators to assess realized and expected progress toward its objectives. On the basis of its assessment, the Committee indicated in its two most recent post-meeting statements that it can be patient in beginning to normalize the stance of monetary policy.

To further emphasize the data-dependent nature of its policy stance, the FOMC has stated that if incoming information indicates faster progress toward its policy objectives than the Committee currently expects, increases in the target range for the federal funds rate will likely occur sooner than the Committee anticipates. The FOMC has also indicated that in the case of slower-than-expected progress, increases in the target range will likely occur later than currently anticipated. Moreover, the Committee continues to expect that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run.

As part of prudent planning, the Federal Reserve has continued to prepare for the eventual normalization of the stance and conduct of monetary policy. The FOMC announced updated principles and plans for the normalization process following its September meeting and has continued to test the operational readiness of its monetary policy tools. The Committee remains confident that it has the tools it needs to raise short-term interest rates when doing so becomes appropriate, despite the very large size of the Federal Reserve's balance sheet.

Part 1: Recent Economic and Financial Developments

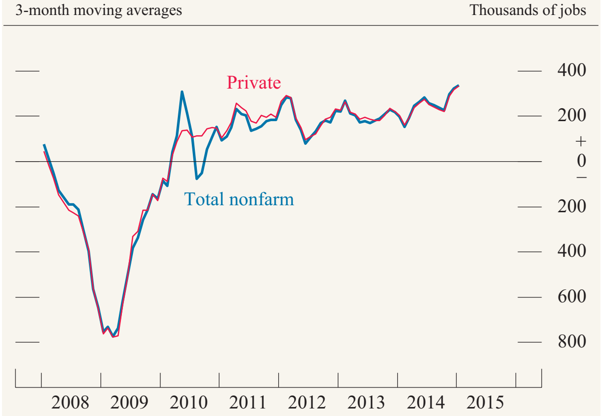
The labor market continued to improve in the second half of last year and early this year. Job gains have averaged close to 280,000 per month since June, and the unemployment rate fell from 6.1 percent in June to 5.7 percent in January. Even so, the labor market likely has not yet fully recovered, and wage growth has remained slow. Since June, a steep drop in crude oil prices has exerted downward pressure on overall inflation, and non-energy price increases have been subdued as well. The price index for personal consumption expenditures (PCE) increased only ¾ percent during the 12 months ending in December, a rate that is well below the Federal Open Market Committee's (FOMC) longer-run objective of 2 percent; the index excluding food and energy prices was up 1¼ percent over this period. Survey measures of longer-run inflation expectations have been stable, but measures of inflation compensation derived from financial market quotes have moved down. Meanwhile, real gross domestic product (GDP) increased at an estimated annual rate of 3¾ percent in the second half of the year, up from a reported rate of just 1¼ percent in the first half. The growth in GDP has been supported by accommodative monetary policy and generally favorable financial conditions, the boost to households' purchasing power from lower oil prices, and improving consumer and business confidence. However, housing market activity has been advancing only slowly, and sluggish growth abroad and the higher foreign exchange value of the dollar have weighed on net exports. Longer-term interest rates in the United States and other advanced economies declined, on net, amid disappointing growth and low inflation abroad and the associated actual and anticipated accommodative monetary policy actions by foreign central banks.

Domestic Developments

The labor market has strengthened further . . .

Employment rose appreciably and the unemployment rate fell in the second half of 2014 and early this year. Payroll employment has increased by an average of about 280,000 per month since June, almost 40,000 faster than in the first half of last year (figure 1). The gain in payroll employment for 2014 as a whole was the largest for any year since 1999. In addition, the unemployment rate continued to move down, declining from 6.1 percent in June to 5.7 percent in January of this year, a rate more than 4 percentage points below its peak in 2009. Furthermore, a substantial portion of the decline in unemployment over the past year came from a decrease in the number of individuals reporting unemployment spells longer than six months.

Figure 1. Net change in payroll employment



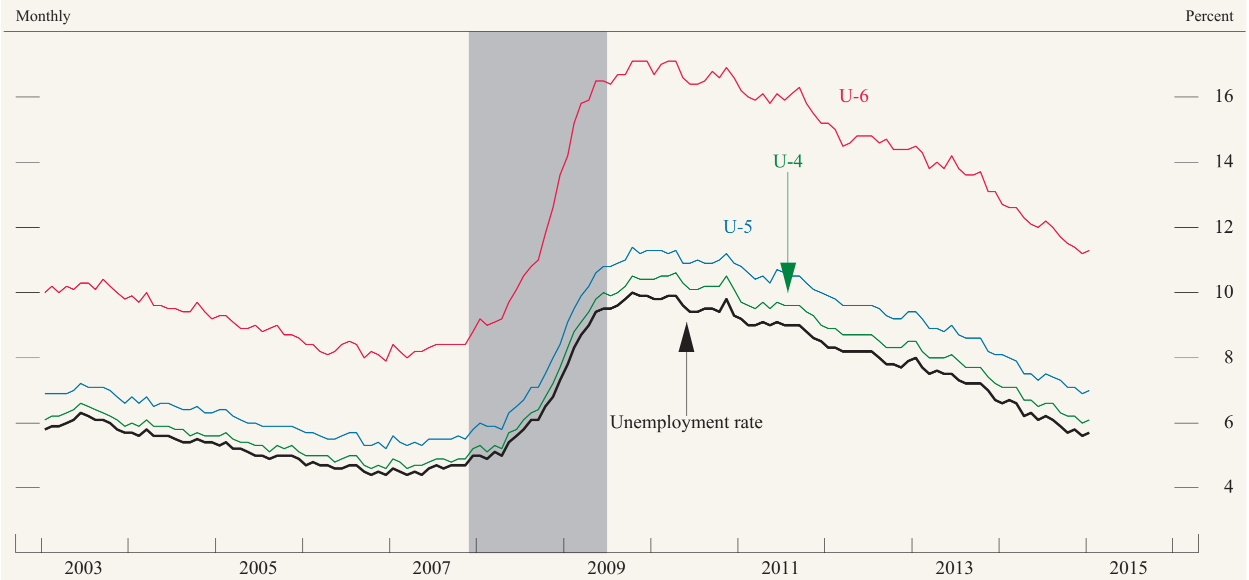
Source: Department of Labor, Bureau of Labor Statistics.

The labor force participation rate has been roughly flat since late 2013 after having declined not only during the recession, but also during much of the recovery period when most other indicators of labor market health were improving. While much of that decline likely reflected ongoing demographic trends—such as the aging of members of the baby-boom generation into their retirement years—some of the decline likely reflected workers' perceptions of poor job opportunities. Judged against the backdrop of a declining trend, the recent stability of the participation rate likely represents some cyclical improvement. Nevertheless, the participation rate remains lower than would be expected given the unemployment rate, and thus it continues to suggest more cyclical weakness than is indicated by the unemployment rate.

Another sign that the labor market remains weaker than indicated by the unemployment rate alone is the still-elevated share of workers who are employed part time but would like to work full time. This share of involuntary part-time employees has generally shown less improvement than the unemployment rate over the past few years; in part for this reason, the more comprehensive U-6 measure of labor underutilization remains quite elevated (figure 2).

Nevertheless, most broad measures of labor market health have improved. With employment rising and the participation rate holding steady, the

Figure 2. Measures of labor underutilization



Note: U-4 measures total unemployed plus discouraged workers, as a percent of the labor force plus discouraged workers. Discouraged workers are a subset of marginally attached workers who are not currently looking for work because they believe no jobs are available for them. U-5 measures total unemployed plus all marginally attached to the labor force, as a percent of the labor force plus persons marginally attached to the labor force. Marginally attached workers are not in the labor force, want and are available for work, and have looked for a job in the past 12 months. U-6 measures total unemployed plus all marginally attached workers plus total employed part time for economic reasons, as a percent of the labor force plus all marginally attached workers. The shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research.

Source: Department of Labor, Bureau of Labor Statistics.

employment-to-population ratio climbed noticeably higher in 2014 and early 2015 after having moved more or less sideways for much of the recovery. The quit rate, which is often perceived as a measure of worker confidence in labor market opportunities, has largely recovered to its pre-recession level. Moreover, an index constructed by Federal Reserve Board staff that aims to summarize movements in a wide array of labor market indicators also suggests that labor market conditions strengthened further in 2014, and that the gains have been quite strong in recent months.[1]

. . . while gains in compensation have been modest . . .

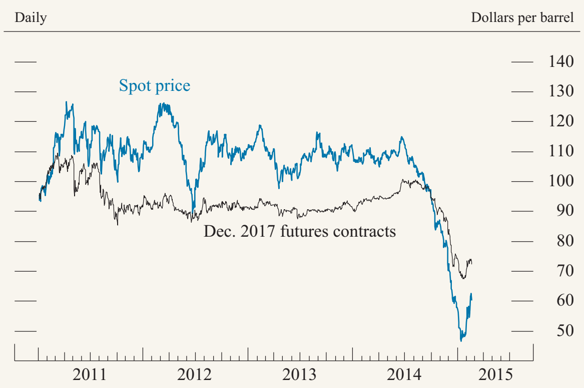
Even as the labor market has been improving, most measures of labor compensation have continued to show only modest gains. The employment cost index (ECI) for private industry workers, which measures both wages and the cost of employer-provided benefits, rose 2¼ percent over the 12 months ending in December, only slightly faster than the gains of about 2 percent that had prevailed for several years. Two other prominent measures of compensation—average hourly earnings and business-sector compensation per hour—increased slightly less than the ECI over the past year and have shown fewer signs of acceleration. Over the past five years, the gains in all three of these measures of nominal compensation have fallen well short of their pre-recession averages and have only slightly outpaced inflation. That said, the drop in energy prices has pushed up real wages in recent months.

. . . and productivity growth has been lackluster

Over time, increases in productivity are the central determinant of improvements in living standards. Labor productivity in the private business sector has increased at an average annual pace of 1¼ percent since the recession began in late 2007. This pace is close to the average that prevailed between the mid-1970s and the mid-1990s, but it is well below the pace of the earlier post–World War II period and the period from the mid-1990s to the eve of the financial crisis. In recent years, productivity growth has been

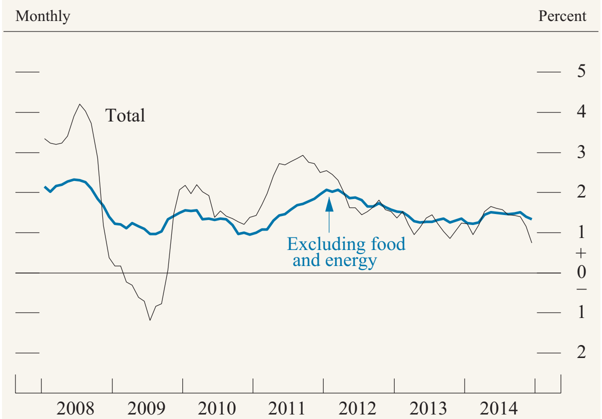
[1] For details on the construction of the labor market conditions index, see Hess Chung, Bruce Fallick, Christopher Nekarda, and David Ratner (2014), "Assessing the Change in Labor Market Conditions," Finance and Economics Discussion Series 2014-109 (Washington: Board of Governors of the Federal Reserve System, December), www.federalreserve.gov/econresdata/feds/2014/files/2014109pap.pdf.

Figure 3. Brent spot and futures prices



Source: NYMEX.

Figure 4. Change in the chain-type price index for personal consumption expenditures



Note: The data extend through December 2014; changes are from one year earlier.

Source: Department of Commerce, Bureau of Economic Analysis.

held down by, among other factors, the sharp drop in businesses' capital expenditures over the recession and the moderate recovery in expenditures since then. Productivity gains may be better supported in the future as investment continues to strengthen.

A plunge in crude oil prices has held down consumer prices . . .

As discussed in the box "The Effect of the Recent Decline in Oil Prices on Economic Activity" on pages 8–9 of the February 2015 *Monetary Policy Report*, crude oil prices have plummeted since June 2014 (figure 3). This sharp drop has caused overall consumer price inflation to slow, mainly due to falling gasoline prices: The national average of retail gasoline prices moved down from about $3.75 per gallon in June to about $2.20 per gallon in January. Crude oil prices have turned slightly higher in recent weeks, and futures markets suggest that prices are expected to edge up further in coming years; nevertheless, oil prices are still expected to remain well below the levels that had prevailed through last June.

Over the past six months, increases in food prices have moderated. Consumer food price increases had been somewhat elevated in early 2014 as a result of rising food commodity prices, but those commodity prices have since eased, and increases at the retail level have slowed accordingly.

. . . but even outside of the energy and food categories, inflation has remained subdued

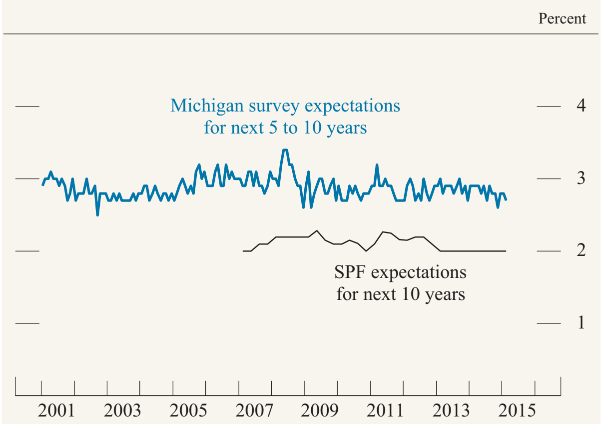
Inflation for items other than food and energy (so-called core inflation) remains modest. Core PCE prices rose at an annual rate of only about 1 percent over the last six months of 2014 after having risen at a 1¾ percent rate in the first half of the year; for 2014 as a whole, core PCE prices were up a little more than 1¼ percent (figure 4). The trimmed mean PCE price index, an alternative indicator of underlying inflation constructed by the Federal Reserve Bank of Dallas, also increased more slowly in the second half of last year. Falling import prices likely held down core inflation in the second half of the year; lower oil prices, and easing prices for commodities more generally, may have played a role as well. In addition, ongoing resource slack has reinforced the low-inflation environment, though with the improving economy, downward pressure from this factor is likely waning.

Looking at the overall basket of items that people consume, price increases remain muted and below the FOMC's longer-run objective of 2 percent. In December, the PCE price index was only ¾ percent above its level from a year earlier. With retail surveys showing a further sharp decline in gasoline prices in January, overall consumer prices likely moved lower early this year.

Survey-based measures of longer-term inflation expectations have remained stable, while market-based measures of inflation compensation have declined

The Federal Reserve tracks indicators of inflation expectations because such expectations likely factor into wage- and price-setting decisions and so influence actual inflation. Survey-based measures of longer-term inflation expectations, including surveys of both households and professional forecasters, have

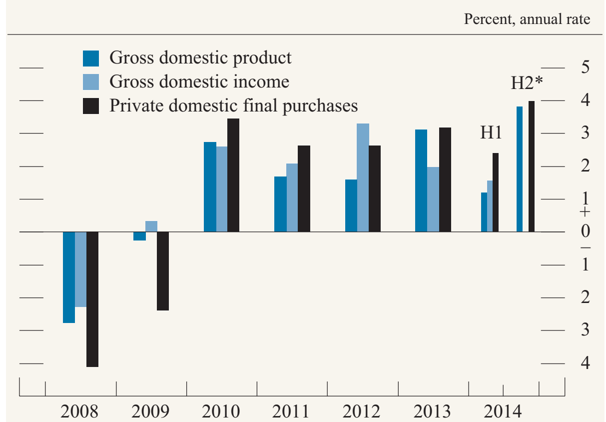
Figure 5. Median inflation expectations



Note: The Michigan survey data are monthly and extend through February 2015. The SPF data for inflation expectations for personal consumption expenditures are quarterly and extend from 2007:Q1 through 2015:Q1.

Source: University of Michigan Surveys of Consumers; Survey of Professional Forecasters (SPF).

Figure 6. Change in real gross domestic product, gross domestic income, and private domestic final purchases



* Gross domestic income is not yet available for 2014:H2.

Source: Department of Commerce, Bureau of Economic Analysis.

been quite stable over the past 15 years; in particular, they have changed little, on net, over the past few years (figure 5). In contrast, measures of longer-term inflation compensation derived from financial market instruments have fallen noticeably during the past several months. As is discussed in more detail in the box "Challenges in Interpreting Measures of Longer-Term Inflation Expectations" on pages 12–13 of the February 2015 *Monetary Policy Report*, deducing the sources of changes in inflation compensation is difficult because such movements may be caused by factors other than shifts in market participants' inflation expectations.

Economic activity expanded at a strong pace in the second half of 2014

Real GDP is estimated to have increased at an annual rate of 3¾ percent in the second half of last year after a reported increase of just 1¼ percent in the first half, when output was likely restrained by severe weather and other transitory factors (figure 6). Private domestic final purchases—a measure of household and business spending that tends to exhibit less quarterly variation than GDP—also advanced at a substantial pace in the second half of last year.

The second-half gains in GDP reflected solid advances in consumer spending and in business investment spending on equipment and intangibles (E&I) as well as subdued gains for both residential investment and nonresidential structures. More generally, the growth in GDP has been supported by accommodative financial conditions, including declines in the cost of borrowing for many households and businesses; by a reduction in the restraint from fiscal policy relative to 2013; and by increases in spending spurred by continuing job gains and, more recently, by falling oil prices. The gains in GDP have occurred despite an appreciating U.S. dollar and concerns about global economic growth, which remain an important source of uncertainty for the economic outlook.

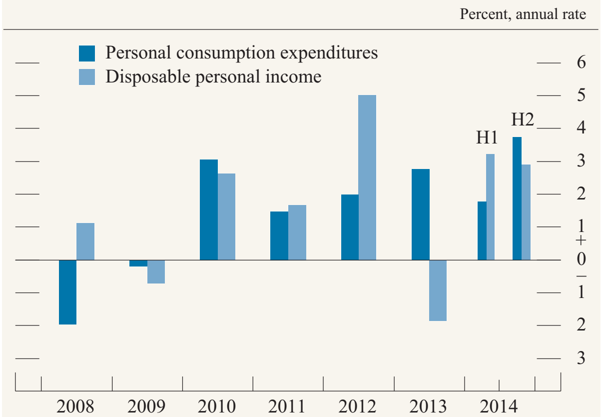
Consumer spending was supported by continuing improvement in the labor market and falling oil prices, . . .

Real PCE rose at an annual rate of 3¾ percent in the second half of 2014—a noticeable step-up from the sluggish rate of only about 2 percent in the first half (figure 7). The increases in spending have been supported by the improving labor market. In addition, the fall in gasoline and other energy prices has boosted purchasing power for consumers, especially those in lower- and middle-income brackets who spend a sizable share of their income on gasoline. Real disposable personal income—that is, income after taxes and adjusted for price changes—rose 3 percent at an annual rate in the second half of last year, roughly double the average rate recorded over the preceding five years.

. . . further increases in household wealth and low interest rates, . . .

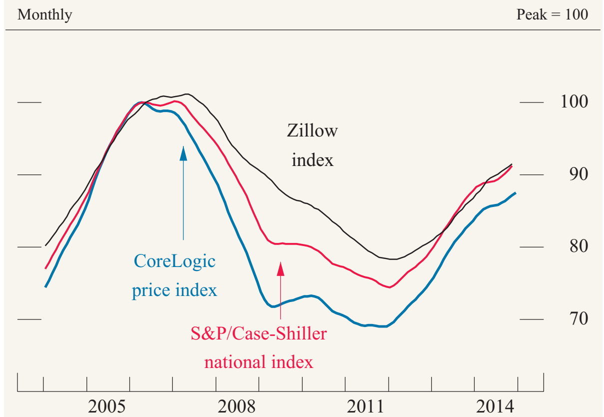
Consumer spending growth was also likely supported by further increases in household net worth, as the stock market continued to rise and house prices moved up in the second half of last year. The value

Figure 7. Change in real personal consumption expenditures and disposable personal income



Source: Department of Commerce, Bureau of Economic Analysis.

Figure 8. Prices of existing single-family houses



Note: The data for the Zillow and S&P/Case-Shiller indexes extend through November 2014. The data for the CoreLogic index extend through December 2014. Each index has been normalized so that its peak is 100. The CoreLogic price index includes purchase transactions only and is adjusted by Federal Reserve Board staff. The S&P/Case-Shiller index reflects all arm's-length sales transactions nationwide.

Source: The S&P/Case-Shiller U.S. National Home Price Index ("Index") is a product of S&P Dow Jones Indices LLC and/or its affiliates and has been licensed for use by the Board. Copyright © 2015 S&P Dow Jones Indices LLC, a subsidiary of the McGraw Hill Financial Inc., and/or its affiliates. All rights reserved. Redistribution, reproduction and/or photocopying in whole or in part are prohibited without written permission of S&P Dow Jones Indices LLC. For more information on any of S&P Dow Jones Indices LLC's indices please visit www.spdji.com. S&P® is a registered trademark of Standard & Poor's Financial Services LLC and Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC. Neither S&P Dow Jones Indices LLC, Dow Jones Trademark Holdings LLC, their affiliates nor their third party licensors make any representation or warranty, express or implied, as to the ability of any index to accurately represent the asset class or market sector that it purports to represent and neither S&P Dow Jones Indices LLC, Dow Jones Trademark Holdings LLC, their affiliates nor their third party licensors shall have any liability for any errors, omissions, or interruptions of any index or the data included therein.

of corporate equities rose about 10 percent in 2014, on top of the 30 percent gain seen in 2013. Although the gains in house prices slowed last year—for example, the CoreLogic national index increased only 5 percent after having risen more substantially in 2012 and 2013—these gains affected a larger share of the population than did the gains in equities, as more individuals own homes than own stocks (figure 8). Reflecting increases in home and equity prices, aggregate household net wealth has risen appreciably from its levels during the recession and its aftermath to more than six times the value of disposable personal income.

Coupled with low interest rates, the rise in incomes has lowered debt payment burdens for many households. The household debt service ratio—that is, the ratio of required principal and interest payments on outstanding household debt to disposable personal income—has remained at a very low level by historical standards.

. . . and increased credit availability for consumers

Consumer credit continued to expand through late 2014, as auto and student loans have remained available even to borrowers with lower credit scores. In addition, credit cards have become somewhat more accessible to individuals on the lower end of the credit spectrum, and overall credit card debt increased moderately last year.

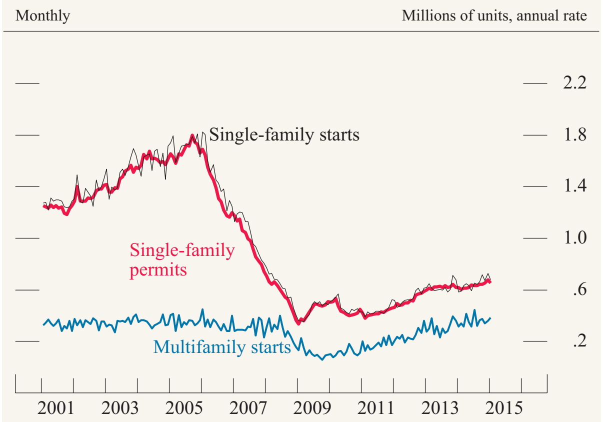
Consumer confidence has moved up

Consistent with the improvement in the labor market and the fall in energy prices, indicators of consumer sentiment moved up noticeably in the second half of last year. The University of Michigan Surveys of Consumers' index of consumer sentiment—which incorporates households' views about their own financial situations as well as broader economic conditions—has moved up strongly, on net, in recent months and is now close to its long-run average. The Michigan survey's measure of households' expectations of real income changes in the year ahead has also continued to trend up over the past several months, perhaps reflecting the fall in gasoline prices. However, this measure remains substantially below its historical average and suggests a more guarded outlook than the headline sentiment index.

However, the pace of homebuilding has improved only slowly

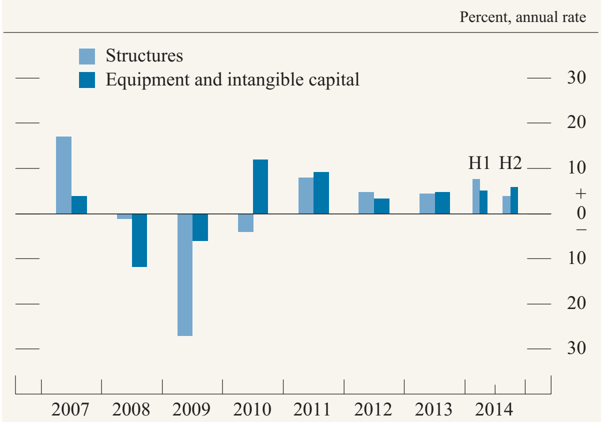
After advancing reasonably well in 2012 and early 2013, the recovery in residential construction activity has slowed markedly. Single-family housing starts only edged up in 2014, and multifamily construction

Figure 9. Private housing starts and permits



Source: Department of Commerce, Bureau of the Census.

Figure 10. Change in real business fixed investment



Source: Department of Commerce, Bureau of Economic Analysis.

activity was also little changed (figure 9). And sales of both new and existing homes were flat, on net, last year. In all, real residential investment rose only 2½ percent in 2014, and it remains well below its pre-recession peak. The weak recovery in construction likely relates to the rate of household formation, which, notwithstanding tentative signs of a recent pickup, has generally stayed very low despite the improvement in the labor market.

Lending policies for home purchases remained tight overall, although there are some indications that mortgage credit has started to become more widely accessible. Over the course of 2014, the fraction of home-purchase mortgages issued to borrowers with credit scores on the lower end of the spectrum edged up. Additionally, in the Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS), several large banks reported having eased lending standards on prime home-purchase loans in the third and fourth quarters of last year.[2] In January, the Federal Housing Administration reduced its mortgage insurance premiums by about one-third of the level that had prevailed during the past four years—a step that may lower the cost of credit for households with small down payments and low credit scores. Even so, mortgages have remained difficult to obtain for many households.

Meanwhile, for borrowers who can qualify for a mortgage, the cost of credit is low. After rising appreciably around mid-2013, mortgage interest rates have since retraced much of those increases. The 30-year fixed mortgage rate declined roughly 60 basis points in 2014, and it has edged down further, on net, this year to a level not far from its all-time low in 2012. Likely related to the most recent decline in mortgage rates, refinancing activity rose modestly in January.

Overall business investment has moved up, but investment in the energy sector is starting to be affected by the drop in oil prices

Business fixed investment rose at an annual rate of 5¼ percent in the second half of 2014, close to the rate of increase seen in the first half. Spending on E&I capital rose at an annual rate of about 6 percent, while spending on nonresidential structures moved up about 4 percent (figure 10). Business investment has been supported by strengthening final demand as well as by low interest rates and generally accommodative financial conditions. Regarding nonresidential structures, vacancy rates for existing properties have been declining, and financing conditions for new construction have eased further—both factors that bode well for future construction. More recently, however, the steep decline in the number of drilling rigs in operation suggests that a sharp falloff in the drilling and mining component of investment in nonresidential structures may be under way.

Corporate financing conditions were generally favorable

The financial condition of large nonfinancial firms generally remained solid in the second half of last year; profitability stayed high, and default rates on nonfinancial corporate bonds were generally very low. Nonfinancial firms have continued to raise funds

2 The SLOOS is available on the Board's website at www.federalreserve.gov/boarddocs/snloansurvey.

through capital markets at a robust pace, given sturdy corporate credit quality, historically low interest rates on corporate bonds, and highly accommodative lending conditions for most firms. Bond issuance by investment-grade nonfinancial firms, and syndicated lending to those firms, have both been particularly strong. However, speculative-grade issuance in those markets, which had remained elevated for most of 2014, diminished late in the year, because volatility increased and spreads widened and perhaps also because of greater scrutiny by regulators of syndicated leveraged loans with weaker credit quality and lower repayment capacity.

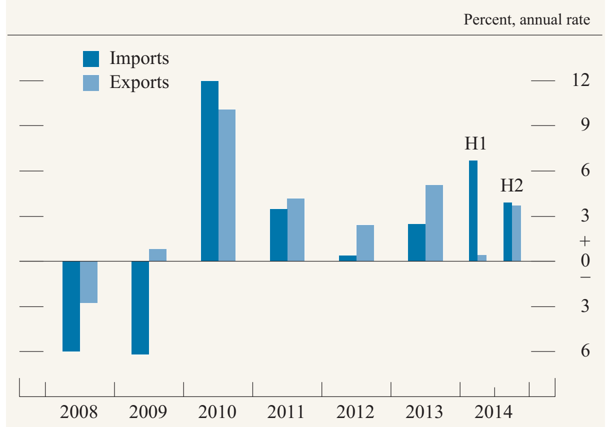
Credit also was readily available to most bank-dependent businesses. According to the October 2014 and January 2015 SLOOS reports, banks generally continued to ease price and nonprice terms on commercial and industrial (C&I) loans to firms of all sizes in the second half of 2014. That said, in the fourth quarter, several banks reported having tightened lending policies for oil and gas firms or, more broadly, in response to legislative, supervisory, or accounting changes. In addition, although overall C&I loans on banks' books registered substantial increases in the second half of 2014, loans to businesses in amounts of $1 million or less—a proxy for lending to small businesses—increased only modestly. The weak growth in these small loans appears largely due to sluggish demand; however, bank lending standards to small businesses are still reportedly somewhat tighter than the midpoint of their range over the past decade despite considerable loosening over the past few years.

Net exports held down second-half real GDP growth slightly

Exports increased at a modest pace in the second half of 2014, held back by lackluster growth abroad as well as the appreciation of the dollar. Import growth was also relatively subdued, despite the impetus from the stronger dollar, and was well below the pace observed in the first half (figure 11). All told, real net trade was a slight drag on real GDP growth in the second half of 2014.

The current account deficit was little changed in the third quarter of 2014 and, at 2¼ percent of nominal GDP, was near its narrowest reading since the late 1990s. The current account deficit in the first three quarters of 2014 was financed mainly by purchases of Treasury and corporate securities by foreign private investors. In contrast, the pace of foreign official purchases in the first three quarters of the year was

Figure 11. Change in real imports and exports of goods and services



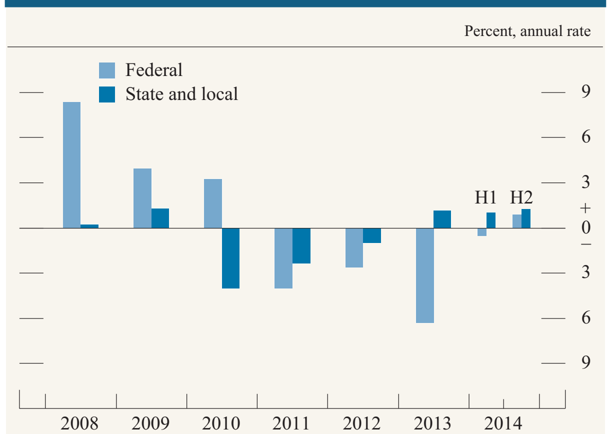
Source: Department of Commerce, Bureau of Economic Analysis.

the slowest in more than a decade, reflecting a significant slowdown in reserve accumulation by emerging market economies (EMEs).

Federal fiscal policy was less of a drag on GDP . . .

Fiscal policy at the federal level had been a factor restraining GDP growth for several years, especially in 2013. In 2014, however, the contractionary effects of tax and spending changes eased appreciably as the restraining effects of the 2013 tax increases abated and there was a slowing in the declines in federal purchases due to sequestration and the Budget Control Act of 2011 (figure 12). Moreover, some of the over-

Figure 12. Change in real government expenditures on consumption and investment



Source: Department of Commerce, Bureau of Economic Analysis.

all drag on demand was offset in 2014 by an increase in transfers resulting from the Affordable Care Act.

The federal unified deficit narrowed further last year, reflecting both the previous years' spending cuts and an increase in tax receipts resulting from the ongoing economic expansion. The budget deficit was 2¾ percent of GDP for fiscal year 2014, and the Congressional Budget Office projects that it will be about 2½ percent in 2015. As a result, overall federal debt held by the public stabilized as a share of GDP in 2014, albeit at a relatively high level.

. . . and state and local government expenditures are also turning up

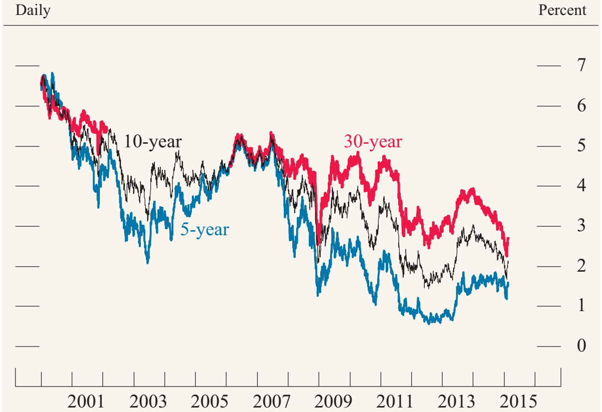
The expansion of economic activity has also led to continued slow improvements in the fiscal position of most state and local governments. Consistent with improving finances, states and localities expanded employment rolls in 2014. Furthermore, state and local expenditures on construction projects rose a touch last year following several years of declines.

Financial Developments

The expected path for the federal funds rate flattened

Market participants seemed to judge the incoming domestic economic data since the middle of last year, especially the employment reports, as supporting expectations for continued economic expansion in the United States; however, concerns about the foreign economic outlook weighed on investor sentiment. On balance, market-based measures of the expected (or mean) path of the federal funds rate through late 2017 have flattened, but the expected timing of the initial increase in the federal funds rate from its current target range was about unchanged. In addition, according to the results of the most recent Survey of Primary Dealers and the Survey of Market Participants, both conducted by the Federal Reserve Bank of New York just prior to the January FOMC meeting, respondents judged that the initial increase in the target federal funds rate was most likely to occur around mid-2015, little changed from the results of those surveys from last June.[3] Meanwhile, in part because the passage of time brought the anticipated date of the initial increase in the federal funds rate closer, measures of policy rate uncertainty based on interest rate derivatives edged higher, on net, from their mid-2014 levels.

Figure 13. Yields on nominal Treasury securities



Note: The Treasury ceased publication of the 30-year constant maturity series on February 18, 2002, and resumed that series on February 9, 2006.

Source: Department of the Treasury.

Longer-term Treasury yields and other sovereign benchmark yields declined

Yields on longer-term Treasury securities have continued to move down since the middle of last year on net (figure 13). In particular, the yields on 10- and 30-year nominal Treasury securities declined about 40 basis points and 60 basis points, respectively, from their levels at the end of June 2014. The decreases in longer-term yields were driven especially by reductions in longer-horizon forward rates. For example, the 5-year forward rate 5 years ahead dropped about 80 basis points over the same period. Long-term benchmark sovereign yields in advanced foreign economies (AFEs) have also moved down significantly in response to disappointing growth and very low and declining rates of inflation in a number of foreign countries as well as the associated actual and anticipated changes in monetary policy abroad.

The declines in longer-term Treasury yields and long-horizon forward rates seem to largely reflect reductions in term premiums—the extra return investors expect to obtain from holding longer-term securities as opposed to holding and rolling over a sequence of short-term securities for the same period. Market participants pointed to several factors that may help to explain the reduction in term premiums. First, very low and declining AFE yields and safe-haven flows associated with the deterioration in the foreign economic outlook likely have increased demand for Treasury securities. Second, the weaker foreign eco-

3 The results of the Survey of Primary Dealers and of the Survey of Market Participants are available on the Federal Reserve Bank of New York's website at www.newyorkfed.org/markets/primarydealer_survey_questions.html and www.newyorkfed.org/markets/survey_market_participants.html, respectively.

nomic outlook coupled with the steep decline in oil prices may have led investors to put higher odds on scenarios in which U.S. inflation remains quite low for an extended period. Investors may see nominal long-term Treasury securities as an especially good hedge against such risks. Finally, market participants may have increased the probability they attach to outcomes in which U.S. economic growth is persistently subdued. Indeed, the 5-year forward real yield 5 years ahead, obtained from yields on Treasury Inflation-Protected Securities, has declined further, on net, since the middle of last year and stands well below levels commonly cited as estimates of the longer-run real short rate.

Consistent with moves in the yields on longer-term Treasury securities, yields on 30-year agency mortgage-backed securities (MBS)—an important determinant of mortgage interest rates—decreased about 30 basis points, on balance, over the second half of 2014 and early 2015.

Liquidity conditions in Treasury and agency MBS markets were generally stable . . .

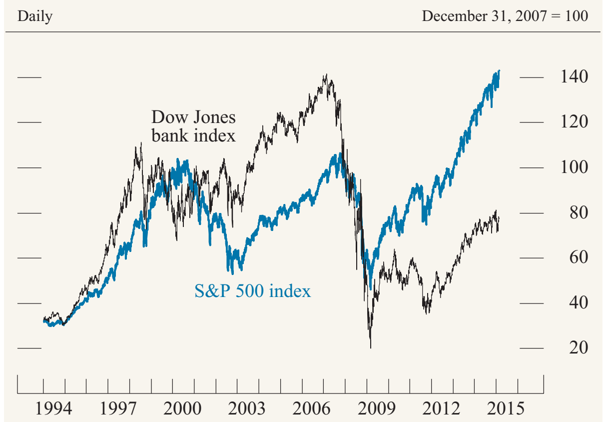
On balance, indicators of Treasury market functioning remained stable over the second half of 2014 even as the Federal Reserve trimmed the pace of its asset purchases and ultimately brought the purchase program to a close at the end of October. The Treasury market experienced a sharp drop in yields and significantly elevated volatility on October 15, as technical factors reportedly amplified price movements following the release of the somewhat weaker-than-expected September U.S. retail sales data. However, market conditions recovered quickly and liquidity measures, such as bid-asked spreads, have been generally stable since then. Moreover, Treasury auctions generally continued to be well received by investors.

As in the Treasury market, liquidity conditions in the agency MBS market were generally stable, with the exception of mid-October. Dollar-roll-implied financing rates for production coupon MBS—an indicator of the scarcity of agency MBS for settlement— suggested limited settlement pressures in these markets over the second half of 2014 and early 2015.

. . . and short-term funding markets also continued to function well as rates moved slightly higher overall

Conditions in short-term dollar funding markets also remained stable during the second half of 2014 and early 2015. Both unsecured and secured money market rates moved modestly higher late in 2014 but remained close to their averages since the federal funds rate reached its effective lower bound. Unsecured offshore dollar funding markets generally did not exhibit signs of stress, and the repurchase agreement, or repo, market functioned smoothly with modest year-end pressures.

Figure 14. Equity prices



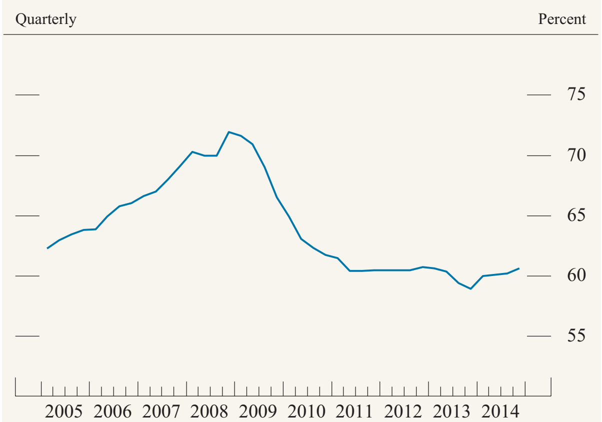
Source: Dow Jones bank index and Standard & Poor's 500 index via Bloomberg.

Money market participants continued to focus on the ongoing testing of the Federal Reserve's monetary policy tools. The offering rate in the overnight reverse repurchase agreement (ON RRP) exercise has continued to provide a soft floor for other rates on secured borrowing, and the term RRP testing operations that were conducted in December and matured in early January seemed to help alleviate year-end pressures in money markets. For a detailed discussion of the testing of monetary policy tools, see the box "Additional Testing of Monetary Policy Tools" on pages 36–37 of the February 2015 *Monetary Policy Report*.

Broad equity price indexes rose despite higher volatility, while risk spreads on corporate debt widened

Over the second half of 2014 and early 2015, broad measures of U.S. equity prices increased further, on balance, but stock prices for the energy sector declined substantially, reflecting the sharp drops in oil prices (figure 14). Although increased concerns about the foreign economic outlook seemed to weigh on risk sentiment, the generally positive tone of U.S. economic data releases as well as declining longer-term interest rates appeared to provide support for equity prices. Overall equity valuations by some conventional measures are somewhat higher than their historical average levels, and valuation metrics in

Figure 15. Ratio of total commercial bank credit to nominal gross domestic product



Source: Federal Reserve Board, Statistical Release H.8, "Assets and Liabilities of Commercial Banks in the United States"; Department of Commerce, Bureau of Economic Analysis.

some sectors continue to appear stretched relative to historical norms. Implied volatility for the S&P 500 index, as calculated from options prices, increased moderately, on net, from low levels over the summer.

Corporate credit spreads, particularly those for speculative-grade bonds, widened from the fairly low levels of last summer, in part because of the underperformance of energy firms. Overall, corporate bond spreads across the credit spectrum have been near their historical median levels recently. For further discussion of asset prices and other financial stability issues, see the box "Developments Related to Financial Stability" on pages 24–25 of the February 2015 *Monetary Policy Report*.

Bank credit and the M2 measure of the money stock continued to expand

Aggregate credit provided by commercial banks increased at a solid pace in the second half of 2014 (figure 15). The expansion in bank credit was mainly driven by moderate loan growth coupled with continued robust expansion of banks' holdings of U.S. Treasury securities, which was reportedly influenced by efforts of large banks to meet the new Basel III Liquidity Coverage Ratio requirements. The growth of loans on banks' books was generally consistent with the SLOOS reports of increased loan demand and further easing of lending standards for many loan categories over the second half of 2014. Meanwhile, delinquency and charge-off rates fell across most major loan types.

Measures of bank profitability were little changed in the second half of 2014, on net, and remained below their historical averages. Equity prices of large domestic bank holding companies (BHCs) have increased moderately, on net, since the middle of last year. Credit default swap (CDS) spreads for large BHCs were about unchanged.

The M2 measure of the money stock has increased at an average annualized rate of about 5½ percent since last June, below the pace registered in the first half of 2014 and about in line with the pace of nominal GDP. The deceleration was driven by a moderation in the growth rate of liquid deposits in the banking sector relative to the first half of 2014. Although demand for currency weakened in the third quarter of 2014 relative to the first half of the year, currency growth has been strong since November.

Municipal bond markets functioned smoothly, but some issuers remained strained

Credit conditions in municipal bond markets have generally remained stable since the middle of last year. Over that period, the MCDX—an index of CDS spreads for a broad portfolio of municipal bonds—and ratios of yields on 20-year general obligation municipal bonds to those on longer-term Treasury securities increased slightly.

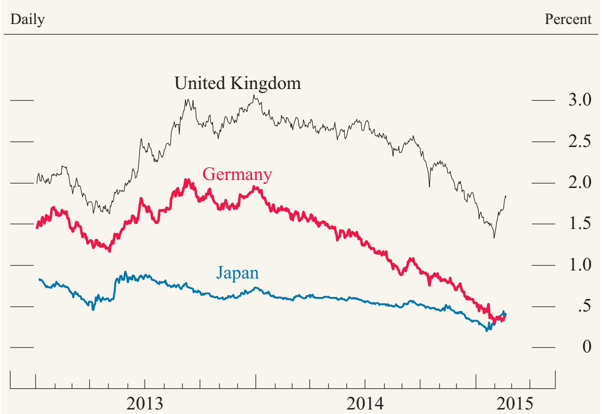
Nevertheless, significant financial strains were still evident for some issuers. Puerto Rico, with speculative-grade-rated general obligation bonds, continued to face challenges from subdued economic performance, severe indebtedness, and other fiscal pressures. Meanwhile, the City of Detroit emerged from bankruptcy late in 2014 after its debt restructuring plan was approved by a federal judge.

International Developments

Bond yields in the advanced foreign economies continued to decline . . .

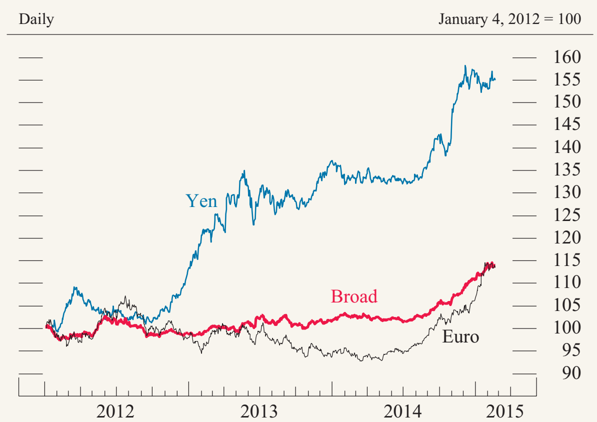
As noted previously, long-term sovereign yields in the AFEs moved down further during the second half of 2014 and into early 2015 on continued low inflation readings abroad and heightened concerns over the strength of foreign economic growth as well as amid substantial monetary policy accommodation (figure 16). German yields fell to record lows, as the European Central Bank (ECB) implemented new liquidity facilities, purchased covered bonds and asset-backed securities, and announced it would begin buying euro-area sovereign bonds. Specifically, the ECB said that it would purchase €60 billion per

Figure 16. 10-year nominal benchmark yields in advanced foreign economies



Source: Bloomberg.

Figure 17. U.S. dollar exchange rate against broad index and selected major currencies



Note: The data are in foreign currency units per dollar.

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

month of euro-area public and private bonds through at least September 2016. Japanese yields also declined, reflecting the expansion by the Bank of Japan (BOJ) of its asset purchase program. In the United Kingdom, yields fell as data showed declining inflation and some moderation in economic growth, although they have retraced a little of that move in recent weeks, in part as market sentiment toward the U.K. outlook appears to have improved somewhat. In emerging markets, yields were mixed—falling, for the most part, in Asia and generally rising modestly in Latin America—as CDS spreads widened amid growing credit concerns, particularly in some oil-exporting countries.

. . . while the dollar has strengthened markedly

The broad nominal value of the dollar has increased markedly since the middle of 2014, with the U.S. dollar appreciating against almost all currencies (figure 17). The increase in the value of the dollar was largely driven by additional monetary easing abroad and rising concerns about foreign growth—forces similar to those that drove benchmark yields lower—in the face of expectations of solid U.S. growth and the anticipated start of monetary tightening in the United States later this year. Both the euro and the yen have depreciated about 20 percent against the dollar since mid-2014. Notwithstanding the sharp nominal appreciation of the dollar since mid-2014, the real value of the dollar, measured against a broad basket of currencies, is currently somewhat below its historical average since 1973 and well below the peak it reached in early 1985.

Foreign equity indexes were mixed over the period. Japanese equities outperformed other AFE indexes, helped by the BOJ's asset purchase expansion. Euro-area equities are up modestly from their mid-2014 levels, boosted recently by monetary easing. However, euro-area bank shares substantially underperformed broader indexes, partly reflecting low profitability, weak operating environments, and lingering vulnerabilities to economic and financial shocks. EME equities indexes were mixed, with most emerging Asian indexes rising and some of the major Latin American indexes moving down.

Economic growth in the advanced foreign economies, while still generally weak, firmed toward the end of the year

Economic growth in the AFEs, which was weak in the first half of 2014, firmed toward the end of the second half of the year, supported in part by lower oil prices and more accommodative monetary policies. The euro-area economy barely grew in the third quarter and unemployment remained near record highs, but the pace of economic activity moved up in the fourth quarter. Notwithstanding more supportive monetary policy and the recent pickup in euro-area growth, negotiations over additional financial assistance for Greece have the potential to trigger adverse market reactions and resurrect financial stresses that might impair growth in the broader euro-area economy. Japanese real GDP contracted again in the third quarter, following a tax hike–induced plunge in the second quarter, but it rebounded toward the end of the year as exports and household spending increased. In contrast, economic activity in the United Kingdom and Canada was robust in the third quarter but moderated in the fourth quarter.

The fall in oil prices and other commodity prices pushed down headline inflation across the major AFEs. Most notably, 12-month euro-area inflation continued to trend down, falling to negative 0.6 percent in January. Declines in inflation and in market-based measures of inflation expectations since mid-2014 prompted the ECB to increase its monetary stimulus. Similar considerations led the BOJ to step up its pace of asset purchases in October. The Bank of Canada lowered its target for the overnight rate in January in light of the depressing effect of lower oil prices on Canadian inflation and economic activity, as oil exports are nearly 20 percent of total goods exports. Several other foreign central banks lowered their policy rates, either reaching or pushing further into negative territory, including in Denmark, Sweden, and Switzerland—the last of which did so in the context of removing its floor on the euro-Swiss franc exchange rate.

Growth in the emerging market economies improved but remained subdued

Following weak growth earlier last year, overall economic activity in the EMEs improved a bit in the second half of 2014, but performance varied across economies. Growth in Asia was generally solid, supported by external demand, particularly from the United States, and improved terms of trade due to the sharp decline in commodity prices. In contrast, the decline in commodity prices, along with macroeconomic policy challenges, weighed on economic activity in several South American countries.

In China, exports expanded rapidly in the second half of last year, but fixed investment softened, as real estate investment slowed amid a weakening property market. Responding to increased concerns over the strength of growth, the authorities announced additional targeted stimulus measures in an effort to prevent the economy from slowing abruptly. In much of the rest of emerging Asia, exports, particularly to the United States, supported a step-up in growth from the first half of the year. The Mexican economy continued to grow at a moderate pace in the second half of 2014, with solid exports to the United States but lingering softness in household demand. In Brazil, economic activity remained lackluster amid falling commodity prices, diminished business confidence, and tighter macroeconomic policy. Declining oil prices were especially disruptive for several economies with heavy dependence on oil exports, including Russia and Venezuela.

Inflation continued to be subdued in most EMEs. The fall in the price of oil contributed to a moderation of headline inflation in several EMEs, including China. However, this contribution was limited in many EMEs due to the prevalence of administered energy prices, which lower the pass-through of changes in oil prices to consumer prices. In several countries, including Indonesia and Malaysia, the fall in energy prices prompted governments to cut fuel subsidies, leading to a rise in domestic prices of fuel and in inflation late in 2014. With inflation low or declining, some central banks, including those of China, Korea, and Chile, loosened monetary policy to support growth. In other EMEs, including Brazil and Malaysia, inflationary pressures stemming from depreciating currencies or from reductions in fuel subsidies prompted central banks to raise policy rates. The central bank of Russia sharply tightened monetary policy to combat inflationary pressures and stabilize its financial markets, which came under considerable pressure in late 2014.

Part 2: Monetary Policy

The Federal Open Market Committee (FOMC) concluded its asset purchase program at the end of October in light of the substantial improvement in the outlook for the labor market since the inception of the program. To support further progress toward maximum employment and price stability, the FOMC has kept the target federal funds rate at its effective lower bound and maintained the Federal Reserve's holdings of longer-term securities at sizable levels. To give greater clarity to the public about its policy outlook, the Committee has also continued to provide qualitative guidance regarding the future path of the federal funds rate. In particular, the Committee indicated at its two most recent meetings that it can be patient in beginning to normalize the stance of monetary policy and continued to emphasize the data-dependent nature of its policy stance. Following its September meeting, and as part of prudent planning, the Committee announced updated principles and plans for the eventual normalization of monetary policy.

The FOMC concluded its asset purchases at the end of October in light of substantial improvement in the outlook for the labor market

At the end of October, the FOMC ended the asset purchase program that began in September 2012 after having made further measured reductions in the pace of its asset purchases at the prior meetings in July and September.[4] The decision to end the purchase program reflected the substantial improvement in the outlook for the labor market since the program's inception—which had been the goal of the asset purchases—and the Committee's judgment that the overall recovery was sufficiently strong to support ongoing progress toward the Committee's policy objectives. However, the Committee judged that a high degree of policy accommodation still remained appropriate and maintained its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities (MBS) in agency MBS and of rolling over maturing Treasury securities at auction. By keeping the Federal Reserve's holdings of longer-term securities at sizable levels, this policy is expected to help maintain accommodative financial conditions by putting downward pressure on longer-term interest rates and supporting mortgage markets. In turn, those effects are expected to contribute to progress toward both the maximum employment and price stability objectives of the FOMC.

To support further progress toward its objectives, the Committee has kept the target federal funds rate at its lower bound and updated its forward rate guidance

The Committee has maintained the exceptionally low target range of 0 to ¼ percent for the federal funds rate to support further progress toward its objectives of maximum employment and price stability. In addition, the FOMC has provided guidance about the likely future path of the federal funds rate in an effort to give greater clarity to the public about its policy outlook. In particular, the Committee has reiterated that, in determining how long to maintain this target range, it will assess realized and expected progress toward its objectives. This assessment will continue to take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments. Based on its assessment of these factors, before updating its guidance in December, the Committee had been indicating that it likely would be appropriate to maintain the current target range for the federal funds rate for a considerable time following the end of the asset purchase program, especially if projected inflation continued to run below the Committee's 2 percent longer-run goal and provided that longer-term inflation expectations remained well anchored.

In light of the conclusion of the asset purchase program at the end of October and the further progress that the economy had made toward the Committee's objectives, the FOMC updated its forward guidance at its December meeting. In particular, the Committee stated that it can be patient in beginning to normalize the stance of monetary policy, but it also emphasized that the Committee saw the revised language as consistent with the guidance in its previous statement.[5] The Committee restated the updated forward guidance following its January meeting based on its assessment of the economic information available at that time.[6]

In her December press conference, Chair Yellen emphasized that the update to the forward guidance did not signify a change in the Committee's policy intentions, but rather was a better reflection of the Committee's focus on the economic conditions that would make an increase in the federal funds rate appropriate.[7] Chair Yellen additionally indicated that, consistent with the new language, the Committee was unlikely to begin the normalization process for at least the following two meetings. There are a range of views within the Committee regarding the appropriate timing of the first increase in the federal funds rate, in part reflecting differences in participants' expectations for how the economy would evolve. By the time of liftoff, the Committee expects some further decline in the unemployment rate and additional improvement in labor market conditions. In addition, the Committee anticipates that, on the basis of incoming data, it will be reasonably confident that inflation will move back over the medium term to its 2 percent objective.

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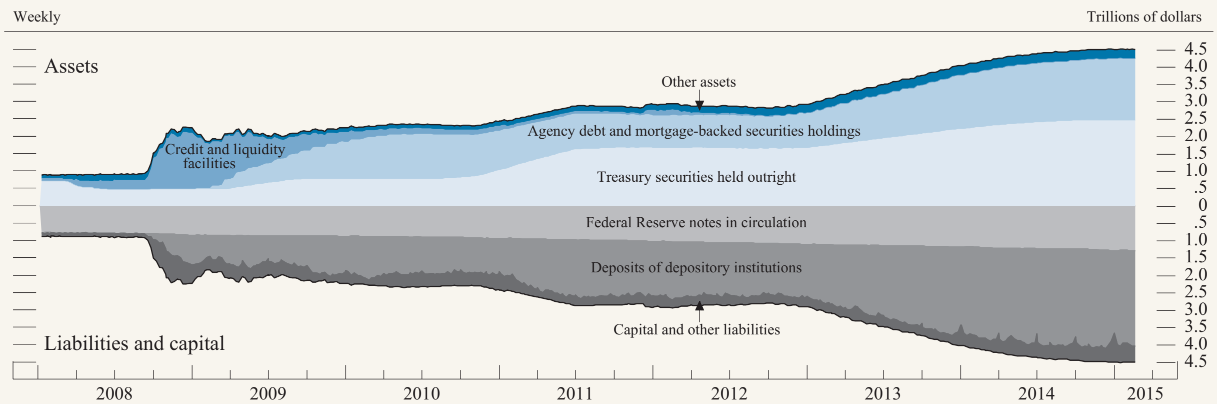
4 See Board of Governors of the Federal Reserve System (2014), "Federal Reserve Issues FOMC Statement," press release, October 29, www.federalreserve.gov/newsevents/press/monetary/20141029a.htm.

5 See Board of Governors of the Federal Reserve System (2014), "Federal Reserve Issues FOMC Statement," press release, December 17, www.federalreserve.gov/newsevents/press/monetary/20141217a.htm.

6 See Board of Governors of the Federal Reserve System (2015), "Federal Reserve Issues FOMC Statement," press release, January 28, www.federalreserve.gov/newsevents/press/monetary/20150128a.htm.

7 See Board of Governors of the Federal Reserve System (2014), "Transcript of Chair Yellen's FOMC Press Conference," December 17, www.federalreserve.gov/mediacenter/files/FOMCpresconf20141217.pdf.

Figure 18. Federal Reserve assets and liabilities



Note: "Credit and liquidity facilities" consists of primary, secondary, and seasonal credit; term auction credit; central bank liquidity swaps; support for Maiden Lane, Bear Stearns, and AIG; and other credit facilities, including the Primary Dealer Credit Facility, the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility, the Commercial Paper Funding Facility, and the Term Asset-Backed Securities Loan Facility. "Other assets" includes unamortized premiums and discounts on securities held outright. "Capital and other liabilities" includes reverse repurchase agreements, the U.S. Treasury General Account, and the U.S. Treasury Supplementary Financing Account. Data extend through February 18, 2015.

Source: Federal Reserve Board, Statistical Release H.4.1, "Factors Affecting Reserve Balances."

The Committee has reiterated that, when it 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. In addition, the Committee continues to anticipate that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run. As emphasized by Chair Yellen in her recent press conferences, FOMC participants provide a number of explanations for this view, with many citing the residual effects of the financial crisis. These effects are expected to ease gradually, but they are seen as likely to continue to constrain household spending for some time.

The FOMC has stressed the data-dependent nature of its policy stance and indicated that if incoming information signals faster progress than the Committee expects, increases in the target range for the federal funds rate will likely occur sooner than the Committee anticipates. The FOMC also stated that in the case of slower-than-expected progress, increases in the target range will likely occur later than anticipated.

The size of the Federal Reserve's balance sheet stabilized with the conclusion of the asset purchase program

After the conclusion of the large-scale asset purchase program at the end of October, the Federal Reserve's total assets stabilized at around $4.5 trillion (figure 18). As a result of the asset purchases over the second half of 2014, before the completion of the program, holdings of U.S. Treasury securities in the System Open Market Account (SOMA) increased $56 billion to $2.5 trillion, and holdings of agency debt and agency MBS increased $78 billion to $1.8 trillion on net. On the liability side of the balance sheet, the increase in the Federal Reserve's assets was largely matched by increases in currency in circulation and reverse repurchase agreements.

Given the Federal Reserve's large securities holdings, interest income on the SOMA portfolio continued to support substantial remittances to the U.S. Treasury Department. Preliminary estimates suggest that the Federal Reserve provided more than $98 billion of such distributions to the Treasury in 2014 and about $500 billion on a cumulative basis since 2008.[8]

The FOMC continued to plan for the eventual normalization of monetary policy . . .

FOMC meeting participants have had ongoing discussions of issues associated with the eventual normalization of the stance and conduct of monetary policy as part of prudent planning.[9] The discussions

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8 See Board of Governors of the Federal Reserve System (2015), "Reserve Bank Income and Expense Data and Transfers to the Treasury for 2014," press release, January 9, www.federalreserve.gov/newsevents/press/other/20150109a.htm.

9 See Board of Governors of the Federal Reserve System (2014), "Minutes of the Federal Open Market Committee, July 29–30, 2014," press release, August 20, www.federalreserve.gov/newsevents/press/monetary/20140820a.htm.

involved various tools that could be used to control the level of short-term interest rates, even while the balance sheet of the Federal Reserve remains very large, as well as approaches to normalizing the size and composition of the Federal Reserve's balance sheet.

To inform the public about its approach to normalization and to convey the Committee's confidence in its plans, the FOMC issued a statement regarding its intentions for the eventual normalization of policy following its September meeting. (That statement is reproduced in the box "Policy Normalization Principles and Plans" on page 35 of the February 2015 *Monetary Policy Report*.) As was the case before the crisis, the Committee intends to adjust the stance of monetary policy during normalization primarily through actions that influence the level of the federal funds rate and other short-term interest rates. Regarding the balance sheet, the Committee intends to reduce securities holdings in a gradual and predictable manner primarily by ceasing to reinvest repayments of principal on securities held in the SOMA. The Committee noted that economic and financial conditions could change, and that it was prepared to make adjustments to its normalization plans if warranted.

. . . including by testing the policy tools to be used

The Federal Reserve has continued to test the operational readiness of its policy tools, conducting daily overnight reverse repurchase agreement (ON RRP) operations, a series of term RRP operations, and several tests of the Term Deposit Facility. To date, testing has progressed smoothly, and short-term market rates have generally traded above the ON RRP rate, which suggests that the facility will be a useful supplementary tool for the FOMC to use in addition to the interest rate it pays on excess reserves (the IOER rate) to control the federal funds rate during the normalization process. Overall, testing operations reinforced the Federal Reserve's confidence in its view that it has the tools necessary to tighten policy at the appropriate time. (For more discussion of the Federal Reserve's preparations for the eventual normalization of monetary policy, see the box "Additional Testing of Monetary Policy Tools" on pages 36–37 of the February 2015 *Monetary Policy Report*.)

Monetary Policy Report of July 2014

Summary

The overall condition of the labor market continued to improve during the first half of 2014. Gains in payroll employment picked up to an average monthly pace of about 230,000, and the unemployment rate fell to 6.1 percent in June, nearly 4 percentage points below its peak in 2009. Notwithstanding those improvements, a broad array of labor market indicators—such as labor force participation, hiring and quit rates, and the number of people working part time for economic reasons—generally suggests that significant slack remains in the labor market. Continued slow increases in most measures of labor compensation also corroborate the view that labor resources are not being fully utilized.

Inflation has moved up this year following unusually low readings in 2013, but it has remained somewhat below the Federal Open Market Committee's (FOMC) longer-run goal of 2 percent. The price index for personal consumption expenditures (PCE) rose 1¾ percent over the 12 months ending in May, up from an increase of only 1 percent a year earlier. The PCE price index excluding food and energy items rose 1½ percent over the past 12 months. Meanwhile, both survey- and market-based measures of longer-term inflation expectations have remained stable.

Real gross domestic product is reported to have declined in the first quarter of this year, but a number of recent indicators suggest that economic activity rebounded in the second quarter. The pace of economic growth abroad also appears to have quickened in the second quarter following weakness earlier this year, which should provide support for export sales. Moreover, expansion in economic activity continues to be supported by ongoing job gains, a waning drag from fiscal policy, and accommodative financial conditions. However, the housing sector has shown little recent progress. While it has recovered notably from its earlier trough, activity in the sector leveled off in the wake of last year's increase in mortgage rates, and readings this year have, overall, continued to be disappointing.

The Committee expects that, with appropriate policy accommodation, economic activity will expand at a moderate pace and labor market conditions will continue to move gradually toward levels that the Committee judges consistent with its dual mandate of maximum employment and price stability. In addition, the Committee anticipates that with stable inflation expectations and strengthening economic activity, inflation will, over time, return to the Committee's 2 percent objective. Those expectations are reflected in the June Summary of Economic Projections, which is included as Part 3 of this report. (The June SEP is included as Part 3 of the July 2014 *Monetary Policy Report* on pages 41–54; it is also included in section 9 of this annual report.)

Financial conditions have generally remained supportive of economic growth. Longer-term interest rates have continued to be low by historical standards, and over the first half of the year those interest rates moved down significantly in the United States as well as in most other advanced economies. Overall, borrowing conditions for households have continued to slowly improve amid rising house and equity prices and the faster pace of employment growth so far this year. Credit flows to large nonfinancial businesses have remained strong, and small business lending activity has shown signs of improvement in recent months.

With respect to financial stability, signs of risk-taking that could leave segments of the U.S. financial sector vulnerable to possible adverse events have increased modestly this year, albeit from a subdued level. Prices for real estate, equities, and corporate debt have risen and valuation measures have increased, but valuations remain roughly in line with historical norms. Signs of excesses that could lead to higher future defaults and losses have emerged in some sectors, including for speculative-grade corporate bonds and leveraged loans. At the same time, financial firms' use of short-term wholesale funding has not increased materially and the capital and liquidity position of the banking sector continued to improve. The Federal Reserve and other agencies took further supervisory and regulatory steps to improve resilience, including conducting the 2014 stress tests of the largest bank holding companies (BHCs); finalizing rules to strengthen prudential standards for the largest domestic BHCs and for the U.S. operations of foreign banking firms; and raising leverage ratio standards for the largest, most interconnected firms.

To support continued progress toward maximum employment and price stability, the FOMC has maintained a highly accommodative stance of monetary policy. Specifically, the Committee has kept its target

range for the federal funds rate at 0 to ¼ percent; updated its forward guidance regarding the path of the federal funds rate; and continued to increase its sizable holdings of longer-term securities, though at a gradually diminishing pace. In particular, the Committee made additional measured reductions at each of its first four rebegularly scheduled meetings in 2014 in the monthly pace of its asset purchases. The FOMC also stated at each meeting that, if incoming information continued to broadly support the Committee's assessment of the economic outlook, the Committee would likely reduce the pace of asset purchases in further measured steps at future meetings. However, the Committee also noted that its asset purchases are not on a preset course, and that decisions about their pace will remain contingent on the economic outlook.

The FOMC has provided forward guidance for the federal funds rate based on its assessment of economic and financial conditions. As 2014 began, the Committee's forward rate guidance included quantitative thresholds relating to the unemployment rate and inflation. However, with the unemployment rate having neared its 6½ percent threshold, the Committee decided at its March meeting to replace the numerical thresholds with a qualitative characterization of its approach to determining how long to maintain the current 0 to ¼ percent target range for the federal funds rate. Specifically, the Committee stated that it will assess progress—both realized and expected—toward its objectives of maximum employment and 2 percent inflation, taking into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. The Committee continues to anticipate, based on its assessment of these factors, that it likely will be appropriate to maintain the current target range for the federal funds rate for a considerable time after the asset purchase program ends. The Committee additionally stated its anticipation that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run.

As part of prudent planning, the Federal Reserve has continued to prepare for the eventual normalization of the stance and conduct of monetary policy. The FOMC remains confident that it has the tools it needs to raise short-term interest rates when the time is right and to achieve the desired level of short-term interest rates thereafter, even while the Federal Reserve is holding a very large balance sheet. The Committee intends to continue its discussions about policy normalization at upcoming meetings while it proceeds with testing the operational readiness of its tools; it expects to provide to the public more information about its normalization plans later this year.

Part 1: Recent Economic and Financial Developments

Labor market conditions continued to improve over the first half of this year. Gains in payroll employment since the start of the year have averaged about 230,000 jobs per month, up a little from the average pace in 2013, and the unemployment rate declined to 6.1 percent in June, the lowest rate recorded in more than five years. Nevertheless, the jobless rate is still above Federal Open Market Committee (FOMC) participants' estimates of the longer-run normal rate. Other measures of labor utilization, as well as the continued slow increases in most measures of labor compensation, generally corroborate the view that significant slack remains in the labor market. Inflation, as measured by the price index for personal consumption expenditures (PCE), averaged 1¾ percent over the 12 months ending in May, higher than the unusually low level over the preceding 12 months but still somewhat below the Committee's 2 percent objective. Meanwhile, both survey- and market-based measures of longer-term inflation expectations have remained quite stable. Real gross domestic product (GDP) was reported to have decreased in the first quarter of this year, but the available information for the second quarter suggests that the decline was transitory. One area of concern, however, is the housing sector, where activity softened by more, relative to its earlier trajectory, than would have been expected based on last year's rise in mortgage interest rates. Financial conditions have generally remained supportive of economic growth. Longer-term interest rates in the United States as well as in most other advanced economies have partially reversed last year's increases, and borrowing conditions for households and small businesses have slowly improved, while credit flows to large nonfinancial corporations have remained strong.

Domestic Developments

Labor market conditions have strengthened further . . .

The labor market continued to improve in the first half of 2014. Payroll employment has increased by an average of about 230,000 per month so far this year, higher than the average gain in 2013. The unemployment rate continued to trend down, declining from 6.7 percent in December 2013 to 6.1 percent in June of this year, while the labor force participation rate was little changed, on net, over the first half of this year after having moved down considerably in the second half of last year. The unemployment rate has declined nearly 4 percentage points from its peak in 2009, although it remains elevated when judged against FOMC participants' estimates of the longer-run normal rate. Payrolls have reversed the cumulative job losses that occurred over the last recession, though that recovery has been achieved in the context of a larger population and labor force.

An index constructed by Board staff that aims to summarize movements in a broad array of labor market indicators also suggests that labor market conditions have strengthened further this year.[1] While increases in that index slowed a touch at the beginning of this year, partly reflecting the effects of the unseasonably cold and snowy weather this winter, the pace has picked up again in recent months.

. . . but significant slack remains . . .

Notwithstanding those improvements, various labor market indicators suggest that a significant degree of slack remains in labor utilization. For instance, measures of labor underutilization that incorporate broader definitions of unemployment are still well above their pre-recession levels, even though they have moved down further this year. The proportion of workers employed part time because they are unable to find full-time work has similarly declined but remains elevated, and hiring and quit rates are still below their pre-recession norms. Moreover, the median duration of unemployment is still well above its long-run average.

The declines in the participation rate during the past few years, within the context of a strengthening labor market, also could be an indication of continuing labor market slack. To be sure, movements in the participation rate partly reflect the changing demographic composition of the population, most notably the increasing share of older persons, who have lower-than-average participation rates because they are more likely to be retired. As such, many of those exits from the labor force probably would have occurred even if the labor market had been stronger. However, some exits are likely occurring because the prolonged period of high unemployment has led some individuals to give up their job search, and such dynamics could have harmful consequences for economic activity in the long run.

. . . and wage growth has remained tepid

Continued slow increases in most measures of labor compensation offer further evidence of labor market slack. Compensation per hour in the nonfarm business sector is estimated to have risen at a modest pace of 2¼ percent over the four quarters ending in the first quarter of this year; the employment cost index for private industry workers rose at an annual rate of only 1¾ percent in the same period; and average hourly earnings rose about 2 percent over the 12 months ending in June, little changed from the average rate of increase in hourly earnings during the past several years. Over the past five years, the various measures of nominal hourly compensation have increased roughly 2 percent per year, on average, and after adjusting for inflation, growth of real compensation has fallen short of the gains in productivity over this period.

Consumer price inflation has moved up . . .

Inflation has moved higher this year following unusually low readings in 2013. The PCE price index rose 1¾ percent over the 12 months ending in May, up from the 1 percent increase recorded over the preceding 12 months. The PCE price index excluding food and energy items rose 1½ percent over the 12 months ending in May, slightly less than the overall index. The FOMC continues to judge that inflation at the rate of 2 percent, as measured by the annual change in the PCE price index, is most consistent over the longer run with the Federal Reserve's statutory mandate. Thus, inflation remained somewhat below the Committee's goal. Some of the factors that contributed to the unusually low inflation in 2013, such as the softness seen in non-oil import prices, have begun to unwind and are pushing up inflation a little this year. More generally, however, with wages growing slowly and raw materials prices generally flat or moving downward, firms are not facing much in the way of cost pressures that they might otherwise try to pass on.

A portion of the recent increase in inflation reflects movements in energy and food prices that appear

[1] For details on the construction of the labor market conditions index, see Hess Chung, Bruce Fallick, Christopher Nekarda, and David Ratner (2014), "Assessing the Change in Labor Market Conditions," FEDS Notes (Washington: Board of Governors of the Federal Reserve System, May 22), www.federalreserve.gov/econresdata/notes/feds-notes/2014/assessing-the-change-in-labor-market-conditions-20140522.html.

transitory. Consumer energy prices rose at an annual rate of nearly 6 percent over the 12 months ending in May, partly reflecting strong demand for electricity and natural gas during the cold winter. Global oil prices have been remarkably stable for much of the past year, with oil prices remaining mostly in a narrow range of between about $105 and $110 per barrel and moving above that range only temporarily in reaction to events in Iraq. Meanwhile, adverse growing conditions in both the United States and abroad have pushed up wholesale prices for various food commodities—including corn, wheat, and coffee—and these higher raw materials prices have led to somewhat larger increases in consumer food prices this year.

. . . but inflation expectations have changed little

Survey- and market-based measures of inflation expectations at medium- and longer-term horizons have remained quite stable throughout the recent period. Readings on inflation expectations 5 to 10 years ahead, as reported in the Thomson Reuters/University of Michigan Surveys of Consumers, have continued to move within a narrow range. In the Survey of Professional Forecasters, conducted by the Federal Reserve Bank of Philadelphia, the median expectation in the second quarter for the annual rate of increase in the PCE price index over the next 10 years was 2 percent, similar to its level in recent years. Meanwhile, market-based measures of medium- (5-year) and longer-term (5-to-10-years-ahead) inflation compensation derived from differences between yields on nominal Treasury securities and Treasury Inflation-Protected Securities have also remained within their respective ranges observed over the past few years.

The first-quarter decline in real GDP appears to have been transitory

Measures of real aggregate output—that is, GDP and gross domestic income—were both reported to have declined in the first quarter of this year.[2] Part of the weakness in output was likely related to severe weather early in the year.[3] But much of the drop in first-quarter GDP reflected unusually large swings in inventories and net exports, two volatile categories for which the available monthly data point to a rebound in the second quarter. In addition, a number of recent indicators of second-quarter spending, including motor vehicle sales, retail sales, and shipments of capital goods, suggests that the overall pace of consumer and business spending also picked up in the second quarter. Expansion in real activity continues to be supported by ongoing job gains, a waning drag from fiscal policy, and accommodative financial conditions. However, activity in the housing sector has yet to show persistent gains since it slowed in the wake of last year's rise in mortgage interest rates.

Export declines weighed heavily on first-quarter GDP

Real exports of goods and services declined at an annual rate of about 9 percent in the first quarter of 2014, coinciding with a global slowdown in trade. The decline partly reflected a retrenchment in two volatile categories, petroleum and agriculture, that had surged in the fourth quarter of 2013. With real imports of goods and services advancing in the first quarter, albeit slowly, net exports subtracted 1½ percentage points—an unusually large amount—from overall GDP growth. However, available data for April and May indicate that exports rebounded in the second quarter, and net exports will likely be more supportive of growth in the second quarter.

The current account deficit widened somewhat in the first quarter of this year after having narrowed further over 2013; however, measured relative to nominal GDP, the deficit remains near its narrowest readings since the late 1990s. In the second half of 2013, the current account deficit continued to be financed mostly by purchases of Treasury and corporate securities by both foreign official investors and foreign private investors. Foreign private purchases remained strong in the first quarter of 2014, but official inflows weakened as conditions in emerging market economies (EMEs) worsened early in the quarter.

Gains in wealth and income are supporting consumer spending

Smoothing through weather-related fluctuations, consumer spending was reported to have risen at a modest annual rate of 1 percent over the first five months of this year, while disposable personal income advanced at a stronger pace of 2¼ percent over the same period.[4] The faster pace of job gains so

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2 Gross domestic income measures the same economic concept as GDP, and the two estimates would be identical if they were measured without error

3 Manufacturing output was held down by both snow and extreme cold in parts of the country in January and February. In March, output appears to have been boosted significantly by manufacturers making up for earlier production curtailments. Factory output subsequently dropped back in April, consistent with the view that this makeup production had been achieved.

4 In its third release of quarterly GDP, the Bureau of Economic Analysis reported that consumer spending on health-care services declined in the first quarter. This estimate reflected the incorporation of census data from the U.S. Census Bureau's

far this year has helped improve the economic prospects of many households and has contributed to a pickup in the pace of aggregate income growth, though it is not yet clear how widely these income gains have been shared across the population. In addition, personal tax payments and social security contributions, which surged last year as a consequence of higher federal payroll and income taxes, are no longer weighing as heavily on income growth.

Consumption growth this year also has been supported by ongoing gains in household net worth. House prices, which are of particular importance for the wealth position of many middle-income households, have continued to move higher, with the CoreLogic national index showing a rise of almost 9 percent over the 12 months ending in May. Meanwhile, the value of corporate equities has risen more than 15 percent over the past year and has added substantially to net wealth. Reflecting those solid gains, aggregate household net wealth is estimated to have approached 6½ times the value of disposable personal income in the first quarter of this year, the highest level observed for that ratio since 2007.

Coupled with low interest rates, the rise in incomes has enabled many households to reduce their debt payment burdens. The household debt service ratio—that is, the ratio of required principal and interest payments on outstanding household debt to disposable personal income—dropped further in the first quarter of this year and stood at a very low level by historical standards.

Borrowing conditions for households are slowly improving . . .

The improvements in households' balance sheets so far this year have been accompanied by a gradual easing in borrowing conditions. For example, large banks reported a net easing of standards for home purchase loans to prime borrowers in the Federal Reserve Board's April 2014 Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS).[5] SLOOS responses also indicated a net easing in credit standards for consumer loans. Even so, mortgage lending standards have remained tight for many households; indeed, standards on nontraditional mortgage loans were reported to have tightened further in the April survey. Likely reflecting, in part, the increased willingness to lend, the rate of decline in mortgage debt has slowed so far this year, and growth in other consumer credit has been robust.

. . . but consumer confidence remains tepid

Despite the strengthening in household incomes and wealth, indicators of consumer sentiment still appear somewhat depressed compared with their longer-run norms. The Michigan survey's index of consumer sentiment—which incorporates households' views about their own financial situations as well as broader economic conditions—has recovered noticeably from its recessionary low but has changed little, on net, over the past year. The responses to a separate survey question about income expectations display a similar pattern: Although an index of households' expectations of real income changes in the year ahead has recovered somewhat since 2011, it remains substantially below the historical average and suggests a more guarded outlook than the headline index.

Business investment has been lackluster, . . .

After recording modest gains in 2013, business fixed investment ticked down in the first quarter of this year, as a large decline in spending on nonresidential structures was partly offset by a small increase in outlays for equipment and intangible (E&I) capital. Although the expiration of a tax provision allowing 50 percent bonus depreciation may have pulled some capital investment forward into late 2013, looking over a longer period, the pattern of investment outlays over the past year and a half appears broadly consistent with the sluggish pace of business output growth during the period. Nevertheless, various forward-looking indicators, such as business sentiment and earnings expectations of capital goods producers, paint a fairly upbeat picture and point to a pickup in the growth of E&I investment.

Business investment in structures has been relatively weak this year, as demand for nonresidential buildings continues to be restrained by high vacancy rates for existing properties and tight financing conditions for new construction. However, the level of investment in drilling and mining structures is extremely high by historical standards, a reflection of the boom in oil and natural gas extraction.

Quarterly Services Survey, which showed a decline in the revenues of health-care providers. By contrast, a variety of other indicators, including data on Medicaid payments as well as health-care exchange enrollments and subsidies related to the Affordable Care Act, are suggestive of greater strength in health-care spending.

5 The SLOOS is available on the Board's website at www.federalreserve.gov/boarddocs/snloansurvey.

. . . even as corporate borrowing has expanded and loan terms and standards appear to be easing

The financial condition of large nonfinancial firms has remained strong so far this year, with profitability high and the default rate on nonfinancial corporate bonds generally low. Nonfinancial firms have continued to raise funds at a robust pace, given strong corporate credit quality and historically low interest rates on corporate bonds. Indeed, bond issuance by both investment- and speculative-grade nonfinancial firms has been strong.

Moreover, credit availability in business loan markets has shown further improvement. According to the April SLOOS, banks again eased standards on commercial and industrial (C&I) loans to firms of all sizes in the first quarter, and many banks have eased price-related and other terms on such loans. In addition, according to the Federal Reserve Board's May 2014 Survey of Terms of Business Lending, loan rate spreads over market interest rates for newly originated C&I loans have continued to decline. In this environment, C&I loans on banks' books and commercial paper outstanding both have registered solid increases. Issuance of leveraged loans continued to be rapid in the first half of 2014, and issuance of collateralized loan obligations reached very high levels in the period from February to April.[6] Small business lending activity has picked up as well in recent months, likely reflecting some increase in credit availability as well as a strengthening in businesses' demand for credit.

In the commercial real estate (CRE) sector, loans continued to expand at a moderate pace, and increases in banks' CRE loans remained widespread across all major CRE segments (that is, loans secured by nonfarm nonresidential properties, multifamily residential properties, and construction and land development loans). According to the April SLOOS, standards on CRE loans extended by banks also eased in the first quarter. Special survey questions asked about changes in terms on CRE loans over the past year, and many banks reported having eased interest rate spreads and increased maximum loan sizes and terms to maturity. Nevertheless, standards for construction and land development loans appear to have remained relatively tight.

The drag from federal fiscal restraint is waning . . .

Fiscal policy has been a contractionary force through most of the past three years and was especially so in 2013, when the temporary payroll tax cut expired, taxes increased for high-income households, and federal purchases were pushed down by the sequestration and caps on discretionary spending. Moreover, in the fourth quarter of last year, disruptions related to the government shutdown led to a sharp but temporary reduction in federal purchases. For 2013 as a whole, real federal purchases (as measured in the national income and product accounts) fell 6¼ percent, twice as large as the average decline in the previous two years.

This year, however, fiscal policy has become somewhat less restrictive for GDP growth, as the effects of the 2013 tax and spending changes are fading. While the expiration of emergency unemployment compensation at the beginning of the year has exerted a drag on consumer spending, medical benefits provided for under the Affordable Care Act will likely support increased consumption of medical services.

With few major changes in tax policy in 2014, federal receipts have edged up to around 17 percent of GDP, their highest level since before the recession. Meanwhile, nominal federal outlays as a share of GDP have continued to trend downward but have remained above the levels observed before the start of the recession. Thus, the federal unified budget deficit has narrowed again this year; the Congressional Budget Office projects that the budget deficit for fiscal year 2014 as a whole will be 3 percent of GDP, compared with the fiscal 2013 deficit of 4 percent of GDP. Overall federal debt held by the public has continued to rise, and the ratio of nominal federal debt to GDP moved up to near 75 percent in early 2014.

. . . and state and local government expenditures are turning up

At the state and local level, the ongoing strengthening in economic activity, as well as previous spending cuts, has helped foster a gradual improvement in the budget situations of most jurisdictions. Consistent with improving sector finances, states and localities have been expanding their workforces; employment accelerated in the first half of the year after rising

[6] New collateralized loan obligation (CLO) deals over this period were reportedly structured to address certain restrictions in the Volcker rule. In addition, the Federal Reserve Board announced that bank holding companies have until July 21, 2017, to divest from non-Volcker-compliant CLOs originated prior to the end of 2013. The extension for complying with the requirement reportedly alleviated the risk of forced liquidations of such instruments in the near term.

modestly in the second half of 2013. Construction expenditures by those governments, however, have yet to show a sustained recovery.

The recovery in the housing market has lost traction

After proceeding briskly in 2012 and the first half of 2013, the recovery in residential construction seems to have faltered. Real residential investment declined for two successive quarters around the turn of the year, and the available data point to only a modest gain in the second quarter. The renewed softness of late has proven more extensive and persistent than would have been expected given the rise in mortgage interest rates around the middle of last year (see the box "The Slow Recovery of Housing Activity" on pages 16–17 of the July 2014 *Monetary Policy Report*). That said, household formation remains depressed relative to demographic norms, and the ongoing improvement in labor market conditions could help spur a more decisive return to those norms.

Productivity growth has been modest

In general, gains in labor productivity have been modest in recent years. Output per hour in the nonfarm business sector has risen at an annual rate of less than 1½ percent since 2007, well below the pace of gains observed over the late 1990s and early 2000s. The relatively slow pace of productivity growth likely reflects, in part, the sustained weakness in capital investment over the recession and recovery period, and productivity gains may be better supported in the future as outlays for productivity-enhancing capital equipment strengthen.

Financial Developments

The expected path for the federal funds rate edged down

Market-based measures of the expected path of the federal funds rate through late 2017 edged down, on balance, over the first half of the year. After accounting for transitory factors such as weather, market participants appeared to judge the incoming economic data as somewhat better than they had expected but as still continuing to point to subdued inflationary pressures and an accommodative policy stance by the FOMC. The relatively small movements of the market-based measures are consistent with the results of the most recent Survey of Primary Dealers and the pilot survey of market participants, each conducted just prior to the June FOMC meeting by the Open Market Desk at the Federal Reserve Bank of New York. Those surveys suggest that dealers and buy-side respondents both anticipate that the initial increase in the target federal funds rate from its current range will occur in the third quarter of 2015, slightly earlier than dealers had anticipated at the beginning of this year and about the same as what buy-side respondents had anticipated.[7] Finally, while some forward measures of policy rate uncertainty have risen, overall policy rate uncertainty has generally remained relatively low.

However, Treasury yields declined significantly, especially at longer maturities, as have sovereign bond yields in other advanced economies

After rising notably over the spring and summer months of 2013, yields on longer-term Treasury securities drifted down over the first half of 2014 and now stand at fairly low levels by historical standards. In particular, while the yield on 5-year nominal Treasury securities edged down only about 5 basis points from its level at the end of December 2013, the yields on the 10- and 30-year securities decreased about 50 basis points and 60 basis points, respectively. The decline in longer-term yields reflects a notable reduction in longer-horizon forward rates, with the 5-year-forward rate 5 years ahead dropping about 105 basis points since year-end. Five-year-forward inflation compensation over this period declined 20 basis points, implying that much of this reduction in nominal forward rates was concentrated in forward real rates. Yields on 30-year agency mortgage-backed securities (MBS) decreased about 35 basis points, on balance, over the same period.

Long-term benchmark sovereign yields in advanced foreign economies (AFEs) have also moved down since late last year, with particularly marked reductions in the euro area. Market participants have pointed to several potential explanations for the declines in U.S. and foreign yields. One possible explanation is that market participants have lowered their expectations for future short-term interest rates around the globe. This downward adjustment in expectations may be due to a combination of a lower assessment of the global economy's long-run potential growth rate and a decrease in long-run inflation expectations. Indeed, the lower yields in the euro area are consistent with indications of declining inflation

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7 The results of the Survey of Primary Dealers and of the pilot survey of market participants are available on the Federal Reserve Bank of New York's website at www.newyorkfed.org/markets/primarydealer_survey_questions.html and www.newyorkfed.org/markets/pilot_survey_market_participants.html, respectively.

and weak growth in the euro area in recent months, bolstering expectations that the European Central Bank (ECB) would loosen its monetary policy, as it eventually did at its meeting in early June.

In addition, term premiums—the extra return investors expect to obtain from holding longer-term securities as opposed to holding and rolling over a sequence of short-term securities for the same period—may have come down, reflecting several potential factors. One potential factor is a reduction in the amount of compensation for interest rate risk that investors require to hold fixed-income securities, likely due in part to perceptions that uncertainty about the outlook for monetary policy and economic growth has decreased; indeed, swaption-implied volatility on longer-term rates has fallen noticeably since the beginning of the year. Another potential factor is increased demand for Treasury securities from price-insensitive investors, such as pension funds and commercial banks. Lastly, in light of the notable co-movements between forward interest rates at longer horizons in the United States and other advanced economies, it appears likely that there is a global component of term premiums that is affected not only by U.S. developments, but also by foreign developments, such as investors becoming increasingly confident that policy rates at the major foreign central banks will remain low for an extended period.

Broad equity price indexes increased further, and risk spreads on corporate debt declined

Although equity investors appeared to pull back from the market for a time early in the year in reaction to concerns about the strength of some EMEs and the possible implications for global growth, broad measures of U.S. equity prices have posted solid gains of 6 percent since the beginning of 2014, on balance, after having risen 30 percent in 2013. Overall, equity investors appeared to become more confident in the near-term economic outlook amid somewhat better-than-expected economic data releases, declining longer-term interest rates, and upward revisions to expected year-ahead earnings per share for firms in the S&P 500 index.

Some broad equity price indexes have increased to all-time highs in nominal terms since the end of 2013. However, valuation measures for the overall market in early July were generally at levels not far above their historical averages, suggesting that, in aggregate, investors are not excessively optimistic regarding equities. Nevertheless, valuation metrics in some sectors do appear substantially stretched—particularly those for smaller firms in the social media and biotechnology industries, despite a notable downturn in equity prices for such firms early in the year. Moreover, implied volatility for the overall S&P 500 index, as calculated from option prices, has declined in recent months to low levels last recorded in the mid-1990s and mid-2000s, reflecting improved market sentiment and, perhaps, the influence of "reach for yield" behavior by some investors.

Credit spreads in the corporate sector have also declined, on balance, in recent months. After having temporarily increased early in the year, the spreads of yields on corporate bonds to yields on Treasury securities of comparable maturities ended the first half of the year about unchanged or a bit narrower. Credit spreads on high-yield corporate bonds are near the bottom of their range over the past decade. While spreads on syndicated loans have changed little this year, they are also relatively low. For further discussion of asset prices and other financial stability issues, see the box "Developments Related to Financial Stability" on pages 22–23 of the July 2014 *Monetary Policy Report*.

Treasury market functioning and liquidity conditions in the MBS market were generally stable . . .

Indicators of Treasury market functioning remained stable amid ongoing reductions in the pace of the Federal Reserve's asset purchases over the first half of 2014. In particular, liquidity conditions in Treasury markets remained stable, with with bid–asked spreads in the Treasury market staying in line with recent averages. In addition, the Treasury's first-ever auction of a Floating Rate Note in January was well received, as were subsequent auctions of those notes.

Liquidity conditions in the MBS markets were also generally stable, though there have been some signs of scarcity of certain securities, as evidenced by somewhat low levels of implied financing rates in the production-coupon "dollar roll" markets during the first half of this year. However, the implied financing rates rose in recent days, suggesting easing of settlement pressures in these markets of late.[8] Gross issu-

[8] 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 Federal Reserve engages in these transactions as necessary to facilitate settlement of its agency MBS purchases.

During April and May, the Open Market Desk transitioned purchases of agency MBS to FedTrade, the Desk's proprietary trading system that uses multiple-price competitive auctions.

ance of these securities remained somewhat lower than in the past two years, reflecting relatively low mortgage originations.

. . . and short-term funding markets also continued to function well

Conditions in short-term dollar funding markets also remained stable during the first half of 2014. Early in the year, yields on Treasury bills maturing between late February and mid-March of 2014—those that could have been affected by delayed payments if a debt ceiling agreement had not been reached—were elevated for a time, but those yields declined in mid-February in response to news of pending legislation to suspend the debt ceiling until March 2015. The federal funds rate remained at very low levels, and broader measures of unsecured dollar bank funding costs, such as the LIBOR, or London interbank offered rate, remain at very low levels, reflecting the absence of major funding pressures.

Money market participants continued to focus on the Federal Reserve's testing of its monetary policy tools. Daily awards at the overnight reverse repurchase agreement (ON RRP) exercise have ranged between about $50 billion and about $340 billion since early 2014. The number of counterparties participating and the dollar volume of take-up have been sensitive to the spread between market rates for repurchase agreements and the fixed ON RRP rate offered in the exercise.[9] Indeed, take-up has been large at quarter-ends, when balance sheet adjustments by financial institutions tend to limit other investment options. Experience to date suggests that ON RRP operations have helped establish a floor on money market interest rates. Testing of the Term Deposit Facility, as well as take-up of and participation in its test offerings, has expanded during the first half of 2014. (For further discussion of the testing of monetary policy tools, see the box "Planning for Monetary Policy Implementation during Normalization" on pages 38–39 of the July 2014 *Monetary Policy Report*.)

The condition of financial institutions improved further, although profitability remained below its historical average

Regulatory capital ratios at bank holding companies (BHCs) increased further during the first half of 2014, and measures of bank liquidity remained robust. In addition, credit quality at BHCs continued to improve across major loan categories, and the ratios of loss reserves to delinquencies and to charge-offs each edged up. At the same time, standard measures of the profitability of BHCs have been little changed for the past six months. Profitability of these companies remained below its historical average, in part because of subdued income from mortgage and trading businesses and compressed net interest margins at large banks. A few large banks have also incurred sizable costs from legal settlements associated with the origination of mortgages prior to the recent financial crisis. Aggregate credit provided by commercial banks grew at a solid pace in the first half of 2014. The increase was driven by a pickup in loan growth and a rise in holdings of U.S. Treasury securities that was reportedly influenced by banks' efforts to meet new liquidity regulations. Equity prices of large domestic banks increased a bit from the beginning of the year, on net, but underperformed the overall market. Credit default swap (CDS) spreads for large BHCs remain low.

Among nonbank financial institutions, equity prices of insurance companies have also increased slightly, on net, since the beginning of the year. Nonbank financial institutions continued to grow at a very strong pace, as assets under management at hedge funds and private equity groups each reached record highs, reflecting modest increases in asset values as well as net inflows. Nevertheless, in response to the Federal Reserve Board's Senior Credit Officer Opinion Survey on Dealer Financing Terms for March and June, most dealers indicated that hedge funds had not changed their use of leverage since the beginning of the year.[10] In the same survey, some dealers noted that the use of financial leverage by trading REITs, or real estate investment trusts, had decreased, continuing a trend that began in the summer of 2013. Assets under management at bond mutual funds also reached a record high.

Municipal bond markets functioned smoothly, but some issuers remained strained

Credit conditions in municipal bond markets generally appeared to remain stable over the first half of the year. Yields on 20-year general obligation municipal bonds have declined slightly since the beginning of the year, and the MCDX, an index of CDS for a

9 Fixed-rate ON RRP operations were first authorized by the FOMC at the September 2013 meeting, and were reauthorized in January 2014, for the purpose of assessing operational readiness. The Committee authorized the Open Market Desk to conduct such operations involving 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.

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

broad portfolio of municipal bonds, has also moved down. However, the ratio of an index of municipal bond yields to Treasury yields has increased a bit.

Nevertheless, significant financial strains have been evident for some issuers. Standard & Poor's, Moody's Investors Service, and Fitch Ratings downgraded Puerto Rico's general obligation bonds from investment grade to speculative grade in February. In addition, the City of Detroit continues to negotiate the terms of its bankruptcy plan.

Liquid deposits in the banking sector continued to advance briskly, boosting M2

M2 has increased at an annual rate of about 7 percent since December, about the same pace registered in the second half of 2013 and somewhat faster than the pace of nominal GDP. The growth in M2 has been driven by an increase in liquid deposits as well as an uptick in demand for currency.

International Developments

As in the United States, foreign bond yields declined and asset prices increased, on net . . .

As noted earlier, foreign long-term benchmark sovereign yields have moved significantly lower since the beginning of the year. Factors contributing to the decline include expectations for lower policy interest rates, a decline in the required compensation for risk, and increased demand by price-insensitive investors for these assets. Similarly, foreign corporate and sovereign yield spreads have also declined since the start of the year. In particular, peripheral euro-area sovereign yield spreads narrowed substantially, on balance, as financial stresses in the euro area have eased and central banks in the advanced economies have emphasized that they will keep monetary policy accommodative for some time, though spreads in a few economies have moved up more recently. Sovereign yield spreads in EMEs have also declined, on net, consistent with measures adopted by EME central banks to reduce vulnerabilities and with the general increase in the prices for risky assets.

Foreign equity indexes rose, on net, during the first half of the year. Stock prices increased, on balance, in most of the AFEs. Japanese equities underperformed early in the year, but they have moved up recently on stronger-than-expected incoming economic data. And European bank stock prices declined lately in part on concerns over troubles at several banks. Equities in most EMEs have also moved higher, as market sentiment toward these economies has continued to improve. However, the Chinese stock market fell on concerns over the economic outlook. Realized volatility across most financial markets and countries has declined since January, in part as sentiment toward risky assets generally improved.

. . . and the dollar is about unchanged

The broad nominal value of the dollar is little changed, on net, since the beginning of the year. The U.S. dollar appreciated notably against the Chinese renminbi in the first months of the year. However, the People's Bank of China has since kept the value of the renminbi steady. In contrast, the dollar depreciated against most other emerging market currencies, as financial stresses earlier in the year unwound. In addition, the dollar depreciated against the British pound, as macroeconomic conditions improved in the United Kingdom and markets moved forward their expectations for the first rate hike by the Bank of England, and also depreciated against the Japanese yen, as investors reduced their expectations for stronger policy accommodation in Japan.

Activity in the emerging market economies slowed in the first quarter but showed signs of picking up in the second quarter . . .

Aggregate real GDP growth in the EMEs slowed in the first quarter of this year, led by a step-down in China's economy that also weighed on activity in many of its trading partners, especially in emerging Asia. The slowing in China reflected a sharp fall in exports, as well as a restraint on domestic demand from tighter financial conditions, as the government attempted to rein in credit. In Mexico, growth remained weak in the first quarter, likely restrained by hikes in tax rates and administered fuel prices and softer U.S. demand for Mexican exports. Brazilian real GDP rose at a tepid pace in the first quarter, extending the lackluster performance of the past two years.

Recent indicators, notably exports, suggest that EME growth picked up in the second quarter. In particular, Chinese exports grew robustly in the second quarter, reversing most of the sharp decline in February, and the authorities announced a series of small targeted stimulus measures to support growth. The improvement in Chinese growth, along with firmer growth in the advanced economies, will help boost global economic activity in the rest of emerging Asia. Growth in Mexico is also expected to step up in the second quarter, in line with U.S. manufacturing output, and recent data in Brazil point to some, albeit modest, improvement.

Inflation remained subdued in most EMEs, and central banks in some countries, such as Chile, Mexico, and Thailand, cut rates to support growth. In contrast, the central banks of a few EMEs, such as Brazil and India, where inflation remained elevated, raised policy rates.

. . . while economic growth in most advanced foreign economies remained moderate

Indicators suggest that average economic growth in the AFEs remained moderate in the first half of 2014. The severe winter weather that hampered growth in the United States also weighed on real GDP in Canada, where growth slowed to an annualized 1¼ percent pace in the first quarter. However, data including the purchasing managers index are consistent with Canadian growth bouncing back in the second quarter. In Japan, GDP growth surged in the first quarter at a nearly 7 percent pace, led by household spending ahead of the April hike in the Japanese consumption tax, but recent retail sales data suggest that activity fell back sharply in April. In the United Kingdom, GDP growth remained robust in the first quarter at 3¼ percent, and the unemployment rate fell about 1 percentage point between mid-2013 and the first quarter of 2014. The euro area's recovery continued at a subdued pace—with GDP rising at an annual rate of around ¾ percent in the first quarter—and recent indicators point to a firming in growth in the second quarter as financial and credit conditions continue to normalize.

Inflation during the first half of the year has been around 2 percent in Canada and somewhat below that level in the United Kingdom. In Japan, the April tax hike as well as rising import prices in response to recent yen depreciation pushed up the 12-month rate of consumer price inflation in April. However, inflation excluding taxes remained much lower, and the Bank of Japan continued its aggressive program of asset purchases aimed at achieving its inflation target of 2 percent in a stable manner. In the euro area, inflation slowed to just ½ percent in May, and the ECB responded in June by cutting its key policy rates—taking the deposit rate into negative territory—and by announcing measures to ease credit conditions. (For further discussion of monetary policy at foreign central banks, see the box "Prospects for Monetary Policy Normalization in the Advanced Economies" on pages 30–31 of the July 2014 *Monetary Policy Report*.)

Part 2: Monetary Policy

To support further progress toward maximum employment and price stability, monetary policy has remained highly accommodative. The Federal Reserve kept the target federal funds rate at its effective lower bound, updated its forward guidance regarding the path of the federal funds rate, and added to its sizable holdings of longer-term securities, albeit at a reduced pace. The Federal Reserve has also continued to plan for the eventual normalization of monetary policy.

The Federal Open Market Committee continued to use large-scale asset purchases and forward rate guidance to support further progress toward maximum employment and price stability

The Committee has continued to judge that a highly accommodative stance of monetary policy remains warranted to support progress toward its dual mandate of maximum employment and price stability. With the target range for the federal funds rate remaining at its effective lower bound, the Federal Open Market Committee (FOMC) has made further use of nontraditional policy tools to provide appropriate monetary stimulus. In particular, the FOMC has used large-scale asset purchases to put downward pressure on longer-term interest rates and to ease financial conditions more broadly so as to promote the more rapid achievement of its dual objectives. In addition, the FOMC has provided guidance about the likely future path of the federal funds rate in an effort to give greater clarity to the public about its policy outlook and intentions. In light of the cumulative progress toward its monetary policy objectives and the outlook for further progress over coming years, the Committee made adjustments during the first half of 2014 to both its asset purchase program and its forward guidance about the path of the federal funds rate.

The FOMC made further measured reductions in the pace of its asset purchases . . .

During the first half of 2014, the Committee made further measured reductions in the pace of its asset purchases, following the initial modest reduction announced at the December 2013 meeting.[11] These actions reflected the cumulative progress toward

[11] See Board of Governors of the Federal Reserve System (2013), "Federal Reserve Issues FOMC Statement," press release,

maximum employment and the improvement in the outlook for labor market conditions since the inception of the current asset purchase program in the fall of 2012 as well as the Committee's judgment that there was sufficient underlying strength in the broader economy to support ongoing improvement in labor market conditions and inflation moving back toward its longer-run objective.

Specifically, at its four meetings in the first half of 2014, the Committee reduced the monthly pace of its purchases of agency mortgage-backed securities (MBS) and of longer-term Treasury securities by $5 billion each. Accordingly, beginning in July, the Committee is adding to its holdings of agency MBS at a pace of $15 billion per month (compared with $35 billion per month at the beginning of the year) and is adding to its holdings of longer-term Treasury securities at a pace of $20 billion per month (compared with $40 billion per month at the beginning of the year). The FOMC also maintained its existing policy of reinvesting principal payments from its holdings of agency debt and agency MBS in agency MBS and of rolling over maturing Treasury securities at auction.

While making measured reductions in the pace of its purchases, the Committee noted that its sizable and still-increasing holdings of longer-term securities should maintain downward pressure on longer-term interest rates, support mortgage markets, and help make broader financial conditions more accommodative. More accommodative financial conditions, in turn, should promote a stronger economic recovery, a further improvement in labor market conditions, and a return of inflation, over time, toward the Committee's 2 percent objective.

At each of its meetings so far this year, the FOMC reiterated that it would closely monitor incoming information on economic and financial developments, and that it would continue asset purchases and employ its other policy tools as appropriate until the outlook for the labor market had improved substantially in a context of price stability. The Committee also noted that if incoming information broadly supports its expectation of ongoing improvement in labor market conditions and inflation moving back toward its longer-run objective, it would likely reduce the pace of asset purchases in further measured steps at future meetings. However, the Committee also emphasized that asset purchases are not on a preset course, and that decisions about their pace would remain contingent on the Committee's outlook for the labor market and inflation as well as its assessment of the likely efficacy and costs of such purchases.

December 18, www.federalreserve.gov/newsevents/press/monetary/20131218a.htm.

. . . updated its forward guidance with a qualitative description of the factors that will influence its decision to begin raising the federal funds rate . . .

As 2014 began, the Committee's forward guidance included quantitative thresholds, stating that the exceptionally low target range for the federal funds rate of 0 to ¼ percent would be appropriate at least as long as the unemployment rate remained above 6½ percent, inflation between one and two years ahead was projected to be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continued to be well anchored.[12] The Committee also indicated that in determining how long to maintain a highly accommodative stance of monetary policy, it would consider not only the unemployment rate but also other indicators, including additional measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. Based on its assessment of these factors, the Committee noted that it likely would be appropriate to maintain the current target range for the federal funds rate well past the time the unemployment rate declines below 6½ percent, especially if projected inflation continues to run below the Committee's 2 percent longer-run goal.

At the time of the March meeting, with the unemployment rate quickly approaching the threshold of 6½ percent, the FOMC decided to update its forward guidance by providing a qualitative description of the factors that would influence its decision regarding the appropriate time of the first increase in the target federal funds rate from its current 0 to ¼ percent target range.[13] The Committee agreed that while reliance on a single indicator—the unemployment rate—had been useful for communications purposes when employment conditions were much further from

12 See Board of Governors of the Federal Reserve System (2014), "Federal Reserve Issues FOMC Statement," press release, January 29, www.federalreserve.gov/newsevents/press/monetary/20140129a.htm.

13 See Board of Governors of the Federal Reserve System (2014), "Federal Reserve Issues FOMC Statement," press release, March 19, www.federalreserve.gov/newsevents/press/monetary/20140319a.htm.

mandate-consistent levels, with labor market conditions improving, the Committee would base its judgment concerning progress in the labor market on a much broader set of indicators from that point forward. Specifically, the Committee indicated that in determining how long to maintain the current target range, it would assess progress—both realized and expected—toward its objectives of maximum employment and 2 percent inflation. This assessment would take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. Based on its assessment of these factors, the Committee indicated that it likely would be appropriate to maintain the current target range for the federal funds rate for a considerable time after the asset purchase program ends, especially if projected inflation continued to run below the Committee's 2 percent longer-run goal and provided that longer-term inflation expectations remained well anchored. To help forestall misinterpretation of the new forward guidance, the Committee noted that the change in its guidance did not indicate any change in its policy intentions as set forth in its recent statements.

. . . and added information regarding the likely behavior of the target federal funds rate after the rate is raised above its effective lower bound

The Committee also stated that, when it 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. In addition, the Committee indicated its anticipation that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run.

Committee participants have noted that a prolonged period of low interest rates could lead investors to take on excessive risk, potentially posing risks to longer-term financial stability. The Federal Reserve will continue to monitor the financial system for any signs of the buildup of such risks and will take appropriate steps to address such risks as needed (see the box "Developments Related to Financial Stability" on pages 22–23 of the July 2014 *Monetary Policy Report*).

The Committee's large-scale asset purchases led to a further increase in the size of the Federal Reserve's balance sheet

As a result of the FOMC's ongoing large-scale asset purchase program, Federal Reserve assets have increased further since the end of last year. Holdings of U.S. Treasury securities in the System Open Market Account (SOMA) increased $200 billion to $2.4 trillion, and holdings of agency debt and MBS increased $160 billion, on net, to $1.7 trillion.[14] On the liability side of the balance sheet, the increase in the Federal Reserve's assets was largely matched by increases in reserve balances, currency in circulation, deposits with Federal Reserve banks, and reverse repurchase agreements.

Given the Federal Reserve's large and growing balance sheet, interest income on the SOMA portfolio continued to support substantial remittances to the U.S. Treasury. Last year, remittances totaled $80 billion, and remittances over the first quarter of this year remained very high. Cumulative remittances to the Treasury from 2008 through the first quarter of 2014 exceeded $420 billion.[15]

The Federal Reserve continued to plan for the eventual normalization of monetary policy

At its April meeting, the FOMC discussed issues associated with the eventual normalization of the stance and conduct of monetary policy during a period when the Federal Reserve's balance sheet will be very large.[16] The Committee's discussion of this topic was undertaken as part of prudent planning and did not imply that normalization will begin soon. The Committee discussed various tools that could be used to raise short-term interest rates—and to con-

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[14] The changes in the par value of SOMA holdings, noted earlier, can differ from the amount of securities purchased over the same period, largely because of lags in the settlement of the purchases. Among other assets, the outstanding amount of dollars provided through the temporary U.S. dollar liquidity swap arrangements with foreign central banks edged lower since the end of last year and remains close to zero, reflecting the continued stability in offshore U.S. dollar funding markets.

[15] See Board of Governors of the Federal Reserve System (2014), *Quarterly Report on Federal Reserve Balance Sheet Developments* (Washington: Board of Governors, May), www.federalreserve.gov/monetarypolicy/files/quarterly_balance_sheet_developments_report_201405.pdf.

[16] See Board of Governors of the Federal Reserve System (2014), "Minutes of the Federal Open Market Committee, April 29–30, 2014," press release, May 21, www.federalreserve.gov/newsevents/press/monetary/20140521a.htm.

trol the level of short-term interest rates once they are above the effective lower bound—even while the balance sheet of the Federal Reserve remains very large. Those tools included the rate of interest paid on excess reserve balances, fixed-rate overnight reverse repurchase agreement (ON RRP) operations, term reverse repurchase agreements, and the Term Deposit Facility (TDF). Participants considered how various combinations of tools could have different implications for the degree of control over short-term interest rates, the Federal Reserve's balance sheet and remittances to the Treasury, the functioning of the federal funds market, and financial stability in both normal times and periods of stress.

At the June FOMC meeting, participants continued their discussion of normalization issues and considered some possible strategies for implementing and communicating monetary policy during that process.[17] Most participants agreed that adjustments in the rate of interest on excess reserves (IOER) should play a central role during the normalization process. It was generally agreed that an ON RRP facility with an interest rate set below the IOER rate could play a useful supporting role by helping to firm the floor under money market interest rates. A few participants commented that the Committee should also be prepared to use its other policy tools, including term deposits and term reverse repurchase agreements, if necessary. Most participants thought that the federal funds rate should continue to play a role in the Committee's operating framework and communications during normalization, with many of them indicating a preference for continuing to announce a target range. While generally agreeing that an ON RRP facility could play an important role in the policy normalization process, participants discussed several possible concerns about using such a facility, including the potential for substantial shifts in investments toward the facility and away from financial and nonfinancial firms in times of financial stress, the potential expansion of the Federal Reserve's role in financial intermediation, and the extent to which monetary policy operations might be conducted with nontraditional counterparties. Participants discussed design features that could help address these concerns. Several participants emphasized that, although the ON RRP rate would be useful in controlling short-term interest rates during normalization, they did not anticipate that such a facility would be a permanent part of the Committee's longer-run operating framework. Overall, participants generally expressed a preference for a simple and clear approach to normalization, and it was observed that it would be useful for the Committee to develop its plans and communicate them to the public later this year, well before the first steps in normalizing policy become appropriate, and to maintain flexibility about the evolution of the normalization process as well as the Committee's longer-run operating framework.

The Federal Reserve has continued to test the operational readiness of its policy tools, conducting daily ON RRP operations and several tests of the TDF during the first half of 2014. To date, testing has progressed smoothly, and, in recent months, short-term market rates have generally traded above the ON RRP rate. (For more discussion of the Federal Reserve's preparations for the eventual normalization of monetary policy, see the box "Planning for Monetary Policy Implementation during Normalization" on pages 38–39 of the July 2014 *Monetary Policy Report*.)

[17] See Board of Governors of the Federal Reserve System (2014), "Minutes of the Federal Open Market Committee, June 17–18, 2014," press release, July 9, www.federalreserve.gov/newsevents/press/monetary/20140709a.htm.

3 Financial Stability

A primary objective of the Federal Reserve since its inception has been the promotion of financial stability (box 1). As the U.S. and global financial systems have evolved, the Federal Reserve's role in helping maintain financial system stability has necessarily adapted.

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank Act), for example, explicitly assigned the Federal Reserve new responsibilities for promoting financial stability. A central element in the Dodd-Frank Act is the requirement that the Federal Reserve and other financial regulatory agencies adopt a macroprudential approach to supervision and regulation. Whereas a traditional—or microprudential—approach to supervision and regulation focuses on the safety and soundness of individual institutions, the macroprudential approach centers on the stability of the financial system as a whole.

In particular, the macroprudential approach informs the supervision of systemically important financial institutions—including large bank holding companies (BHCs), the U.S. operations of certain foreign banking organizations (FBOs), and financial market utilities (FMUs). In addition, the Federal Reserve serves as a "consolidated supervisor" of nonbank financial companies that have been designated by the Financial Stability Oversight Council (FSOC) as institutions whose distress or failure could pose a threat to the stability of the U.S. financial system as a whole (see "Financial Stability Oversight Council Activities" later in this section).

Furthermore, the changing nature of risks and fluctuations in financial markets and the broader economy require timely monitoring of conditions in domestic and foreign financial markets, among financial institutions, and in the nonfinancial sector in order to identify the buildup of vulnerabilities that might require further study or policy action.

Promotion of financial stability strongly complements the primary goals of monetary policy—price stability and full employment. A smoothly operating financial system promotes the efficient allocation of

Box 1. Financial Stability and the Founding of the Federal Reserve

In 2014, the Federal Reserve marked the centennial anniversary of its activities since the passage of the Federal Reserve Act in 1913. Financial stability considerations were a key element in the founding of the System. Indeed, the Federal Reserve was created in response to the Panic of 1907, the latest in a series of severe financial panics that befell the nation in the late 19th and early 20th centuries.

This panic led to the creation of the National Monetary Commission, whose 1911 report was a major impetus to the Federal Reserve Act, signed into law by President Woodrow Wilson on December 23, 1913. Upon enactment, the process of organizing and opening the Board and the Reserve Banks across the country began. On November 16, 1914, the Federal Reserve System began full-fledged operations.

In the words of one author of the Federal Reserve Act, U.S. Senator Robert Latham Owen of Oklahoma, "It should always be kept in mind that . . . it is the prevention of panic, the protection of our commerce, the stability of business conditions, and the maintenance in active operation of the productive energies of the nation which is the question of vital importance."[1] The Federal Reserve has continued to serve this function and adapt to U.S. and global economic and financial system evolution, innovation, conditions, and dynamics.

[1] See Robert L. Owen (1919), *The Federal Reserve Act: Its Origin and Principles* (New York: Century Company), pp. 43–44.

saving and investment, facilitating economic growth and employment. And price stability contributes not only to the efficient allocation of resources in the real economy, but also to reduced uncertainty and efficient pricing in financial markets, thereby supporting financial stability.

This section discusses key financial stability activities undertaken by the Federal Reserve in 2014, which include monitoring risks to financial stability; macroprudential supervision and regulation of large, complex financial institutions; and domestic and international cooperation and coordination.

Some of these activities are also discussed elsewhere in this annual report. A broader set of economic and financial developments are discussed in section 2, "Monetary Policy and Economic Developments," with the discussion that follows concerning surveillance of economic and financial developments focused on financial stability. The full range of activities associated with supervision of systemically important financial institutions, designated nonbank companies, and designated FMUs is discussed in section 4, "Supervision and Regulation."

Monitoring Risks to Financial Stability

Financial institutions are linked together through a complex set of relationships. Moreover, the condition of financial institutions and financial stability depends on the economic condition of the nonfinancial sector, whose borrowing from the financial sector implies that the strength of financial institutions' balance sheets depends on the condition of the nonfinancial sector. As a result, research on financial stability has been an important part of Federal Reserve efforts in pursuit of overall economic stability (see box 2 for information on recent research).

In order to understand the interaction among these factors and consider appropriate policy responses, the Federal Reserve maintains a flexible, forward-looking financial stability monitoring program to help inform policymakers of the financial system's vulnerabilities to a range of potential adverse events or shocks. Such a monitoring program is a critical part of a broader program in the Federal Reserve System to assess and address vulnerabilities in the U.S. financial system.

Each quarter, Federal Reserve Board staff systematically assess a standard set of vulnerabilities relevant for financial stability: asset valuations and risk appetite, leverage in the financial system, liquidity risks and maturity transformation by the financial system, and borrowing by the nonfinancial sector (households and nonfinancial businesses). These monitoring efforts inform internal discussions concerning both macroprudential supervision and regulatory policies and monetary policy. They also inform Federal Reserve interactions with broader monitoring efforts, such as those by the FSOC and the Financial Stability Board (FSB).

The more specific discussion that follows focuses on a subset of the most important developments over the course of 2014 concerning specific indicators, including asset valuations and risk appetite, leverage, maturity and risk transformation, and nonfinancial-sector borrowing.

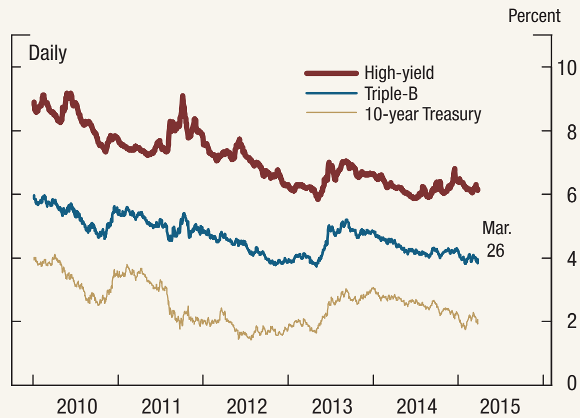
Asset Valuations and Risk Appetite

Overvalued assets constitute a fundamental vulnerability because the unwinding of high prices can be destabilizing, especially if the assets are widely held and the values are supported by excessive leverage, maturity transformation, or risk opacity.

Moreover, stretched asset valuations may be an indicator of a broader buildup in risk-taking. Nonetheless, it is very difficult to judge whether an asset price is overvalued relative to fundamentals. As a result, analysis typically considers a range of possible valuation metrics, developments in areas in which asset prices are rising especially rapidly or into which investor flows have been considerable, or the implications of unusually low or high levels of volatility in certain markets.

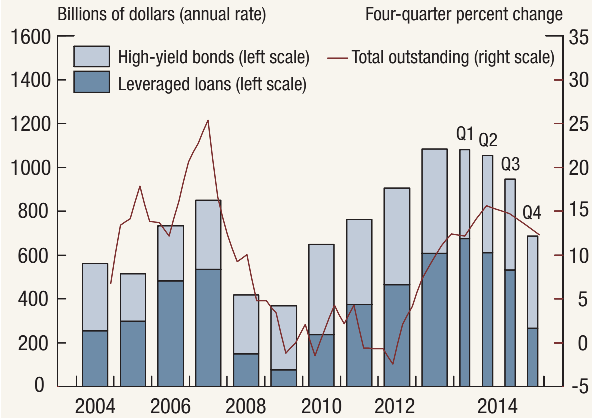
Looking across markets, valuation pressures were notable or building in several areas. Over the course of 2014, yields fell in investment-grade and in the upper end of the speculative-grade corporate debt markets, and yields on corporate debt are historically low. A key contributing factor to the decline in corporate bond yields over 2014 was the sizable decline in U.S. Treasury yields over the year (figure 1). Spreads relative to Treasury yields, a gauge of the compensation investors demand as compensation for exposure to the credit risk associated with riskier corporate borrowers, rose somewhat in late 2014 from low levels and suggested moderate valuation pressure in corporate bonds overall. The spread on high-yield

Figure 1. Bond yields, 2010–15



Source: Staff estimates of smoothed corporate yield curves based on data from BofA Merrill Lynch Global Research, used with permission, and smoothed Treasury yield curve.

Figure 2. Leveraged loan and high-yield bond issuance, 2004–14



Note: Total outstanding is quarterly data. Data include bonds and loans to both financial and nonfinancial companies, as well as unrated bonds and loans.

Source: Standard & Poor's Leveraged Commentary & Data (LCD); Mergent Corporate Fixed Income (FISD). S&P and its third-party information providers expressly disclaim the accuracy and completeness of the information provided to the Board, as well as any errors or omissions arising from the use of such information. Further, the information provided herein does not constitute, and should not be used as, advice regarding the suitability of securities for investment purposes or any other type of investment advice.

bonds widened more notably than that on investment-grade corporate bonds.

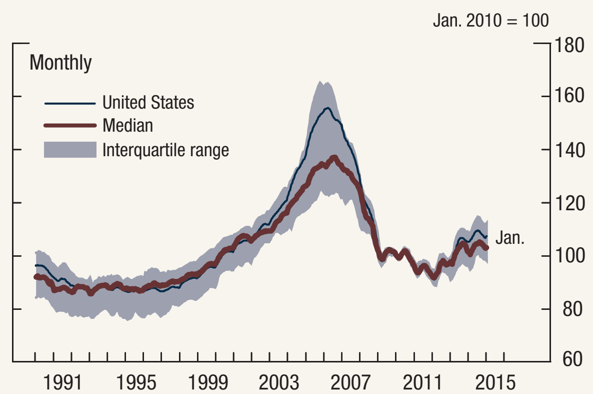
Some of this widening in spreads reflected increased concerns about the ability of firms in the energy sector to repay their borrowing in light of the sharp decline in the price of oil over the second half of the year. Despite the widening in spreads over Treasury securities, valuation pressures appeared notable in riskier corporate debt markets. Issuance of high-yield bonds remained high in 2014, as did issuance of leveraged loans (figure 2)—although the pace of issuance slowed late in the year.

As a result, the level of such risky debt grew more than 10 percent in 2014, the third year of growth in excess of 10 percent. In addition, the underwriting quality of leveraged loans arranged or held by banking institutions remained relatively weak in 2014, although there may have been some improvement late in the year in response to supervisory enforcement of the 2013 guidance for leveraged lending. For example, debt multiples over earnings on new deals remain high relative to historical averages but decreased somewhat, on balance, in the fourth quarter of 2014. Even so, the increase in borrowing and loose standards for lending over recent years could imply that investors in high-yield bonds and leveraged loans are exposed to larger risks of low returns or losses in coming years, and the growth in debt among lower-rated corporations may place strains on these firms, especially if macroeconomic conditions turn out to be weaker than expected. Indeed, as described in more detail later, the 2015 round of Federal Reserve stress testing explored the potential strains on participating institutions that could stem from a large deterioration in the credit quality of risky corporate borrowers in its severely adverse scenario.

The commercial real estate market exhibited growing valuation pressures over the course of 2014. Prices have risen relative to rents, and lending standards have eased. There have also been indications of weakening in underwriting standards in securitizations, such as an increased share of interest-only loans and rising loan-to-value ratios in commercial mortgage-backed securities (CMBS) pools. However, unlike corporate debt more broadly, the volume of commercial real estate debt outstanding has begun to accelerate appreciably only over the past year.

In other markets, valuation pressures appear moderate. Broad measures of equity prices rose about 10 percent over the course of 2014, but the equity premium, measured as the gap between the expected return on equity and the real long-term Treasury yield, is estimated to have remained relatively wide. However, equity prices were high relative to aggregate sales, reflecting high profit margins. In addition, residential real estate valuations appear within historical norms. For example, house prices relative to rents—one measure of valuations—have remained well

Figure 3. Ratio of prices to rents, 1990–2015



Note: Percentiles are based on 25 metropolitan statistical areas.

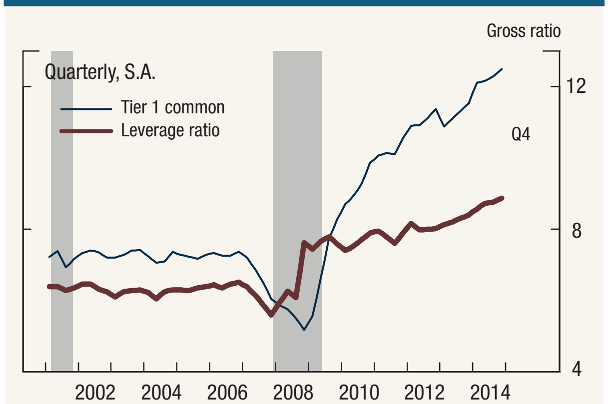
Source: For house prices, CoreLogic; for rent data, Bureau of Labor Statistics.

within a typical range and remain far below the levels seen in the past decade across much of the country (figure 3).

Leverage in the Financial System

The financial strength of the banking sector has continued to improve. Both the ratio of Tier 1 common equity to risk-weighted assets and the leverage ratio have risen to levels far above those seen in the mid-2000s (figure 4). The increase in capital reflects the tougher standards implemented globally as part of the Basel III process and additional efforts implemented following the passage of the Dodd-Frank Act, including more stringent standards and the

Figure 4. Regulatory capital ratios, CCAR bank holding companies, 2001–14



Note: The shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research. CCAR is Comprehensive Capital Analysis and Review.

Source: Federal Reserve Board, FR Y-9C, Consolidated Financial Statements for Bank Holding Companies.

annual stress tests for larger banking organizations. As a result of steady improvements in capital positions since the financial crisis, U.S. banks, in aggregate, appear to be better positioned to absorb potential shocks, such as those related to litigation, falling oil prices, and financial contagion stemming from abroad.

Securitization, which continues to be an important means of financing for several asset classes, remains relatively subdued, though issuance of non-agency CMBS and collateralized loan obligations (CLOs) continued to be robust amid continued reports of relatively accommodative underwriting standards for the underlying assets. Recent results from the Federal Reserve's Senior Credit Officer Opinion Survey on Dealer Financing Terms indicate that the use of financial leverage by institutional investor clients to fund the purchases of securities was little changed over recent quarters, although demand for funding non-agency residential mortgage-backed securities and high-yield bonds has been rising recently.[1]

Liquidity Risks and Maturity Transformation by the Financial System

Bank balance sheets show continued improvement in liquidity positioning as the largest BHCs transition to Basel III liquidity requirements. The Basel III liquidity coverage ratio (LCR) requirement began phasing in for U.S. BHCs with greater than $250 billion in consolidated assets on January 1, 2015, and will take full effect in January 2017. In January 2016, a "modified" LCR requirement for BHCs with between $50 billion and $250 billion in assets will begin to be phased in.

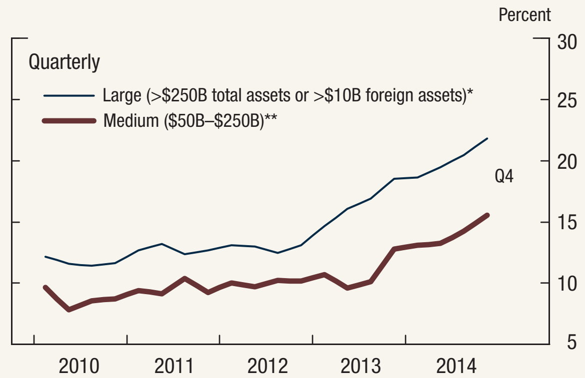
Against this backdrop, balance sheet data through 2014:Q4 show the ratio of high-quality liquid assets to total assets at large- and medium-sized BHCs continued to grow (figure 5).

Short-term wholesale funding remained subdued throughout 2014. Net overnight borrowing at broker-dealers against fixed-income securities continued to trend down (figure 6).

The total outstanding dollar values of commercial paper and money market mutual funds (MMFs) were relatively unchanged in 2014. Structural vulnerabilities at MMFs persist: In particular, prime MMFs are

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

Figure 5. Ratio of high-quality liquid assets to total assets, 2010–14



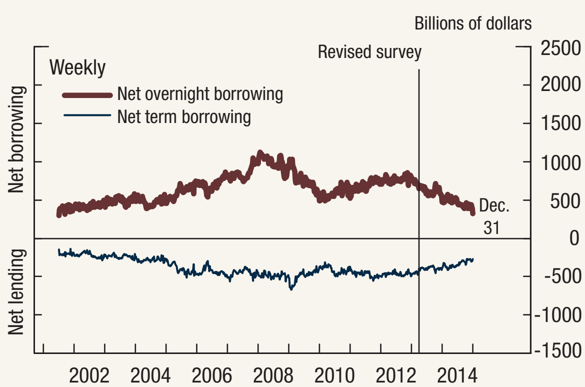
* Bank holding companies (BHCs) subject to the full liquidity coverage ratio (LCR) rule.

** BHCs subject to modified LCR rule.

Source: High-quality liquid assets estimated using quarter-end balances reported in filings of Federal Reserve Board reporting forms FR Y-9C (Consolidated Financial Statements for Bank Holding Companies) and FR 2900 (Report of Transaction Accounts, Other Deposits, and Vault Cash).

vulnerable to investor runs if a drop in the credit quality of their assets or a decline in the willingness of market participants to bear credit risk induces a fall in the market value of their assets. The U.S. Securities and Exchange Commission (SEC) rules that will require institutional prime MMFs to move from a fixed to a floating net asset value starting in 2016 may mitigate their susceptibility to runs. The SEC

Figure 6. Primary dealer net borrowing, by maturity, 2001–14



Note: Term financing refers to agreements with an original fixed maturity of more than one business day. Overnight financing refers to agreements with an original fixed maturity of one business day and agreements with no specific maturity that can be terminated on demand by either the borrower or lender. Net borrowing is the difference between funds received (borrowing) and funds paid (lending).

Source: Federal Reserve Board, FR 2004C, Weekly Report of Dealer Financing and Fails.

will monitor the effects of the new rules after they are implemented.

There are signs that the structure of some asset markets is changing due to changes in broker-dealer activities and increased trading speeds that are contributing to a buildup of liquidity risks in some markets. In addition, the growth of bond mutual funds and exchange-traded funds (ETFs) in recent years means that these funds now hold a much higher fraction of the available stock of relatively less liquid assets—such as high-yield corporate debt, bank loans, and international debt—than they did before the financial crisis. It is possible that, because mutual funds and ETFs may appear to offer greater liquidity than the markets in which they transact, their growth heightens the potential for a forced sale in the underlying markets if some event were to trigger large volumes of redemptions. This possibility—among other potential vulnerabilities—was the subject of a recent request for comments from the public issued by the FSOC (see “Financial Stability Oversight Council Activities” later in this section).

Borrowing by the Nonfinancial Sector

Excessive borrowing by the private nonfinancial sector has been an important contributor to financial crises. Highly indebted households and nonfinancial businesses may have a difficult time withstanding negative shocks to incomes or asset values and may be forced to curtail spending in ways that amplify the effects of financial shocks. In turn, losses among households and businesses can lead to mounting losses at financial institutions, creating an “adverse feedback loop” in which weakness among households, nonfinancial businesses, and financial institutions causes further declines in income and financial losses, potentially leading to financial instability and a sharp contraction in economic activity.

Borrowing by households remained relatively subdued through the fourth quarter of 2014. At the same time, borrowing by the nonfinancial business sector has grown only moderately. As a result, the ratio of household and nonfinancial business credit to nominal GDP has remained significantly below the peak seen in the 2000s (figure 7). Nonetheless, this ratio remains above levels seen prior to the mid-2000s.

Within the household sector, the level of borrowing has edged up among households with strong credit histories, while borrowing by households with dam-

Box 2. 2014 Research on Financial Stability

The macroprudential approach to ensuring financial stability builds on a substantial and growing body of research on the factors that lead to vulnerabilities in the financial system and how policies can mitigate such risks.

It remains the case, however, that understanding of the array of factors important for financial stability is incomplete and evolving. As a result, the Federal Reserve engages actively in financial stability research. This research seeks to improve understanding of related issues, engages the broader research community in policy issues, and often involves collaboration with academia and researchers at other domestic and international institutions.

Finally, research efforts by Federal Reserve staff reflect their attempts to identify and grapple with topics of concern to the Federal Reserve, and the views expressed are those of the individual authors and not those of the Federal Reserve. Examples of research on financial stability in 2014 include the following:

- **Tracking time-varying sources of systemic risk.** A research note presenting a forward-looking monitoring program to identify and track time-varying sources of systemic risk. The program distinguishes between shocks, which are difficult to prevent, and the vulnerabilities that amplify shocks, which can be addressed. Drawing on a substantial body of research, the authors identify leverage, maturity transformation, interconnectedness, complexity, and the pricing of risk as the primary vulnerabilities in the financial system. The monitoring program tracks these vulnerabilities in four sectors of the economy: asset markets, the banking sector, shadow banking, and the nonfinancial sector. The framework also highlights the policy tradeoff between reducing systemic risk and raising the cost of financial intermediation by taking preemptive actions to reduce vulnerabilities.[1]
- **Spillovers between distress among sovereigns and banks.** A working paper examining the transmission channels between sovereigns and banks, with a focus on the effect of sovereign distress on bank solvency and financing. It also highlights the notable cost to the real economy of the close connection between sovereigns and banks.[2]
- **Systemic risk and policy actions.** A working paper studying the impact of capital injections on the systemic risk in the banking sector in the United States and the euro area.[3]
- **Capital and liquidity regulation.** A working paper studying the interaction of capital and liquidity regulation in a macroeconomic model.[4]
- **Lender of last resort in the 2007–09 crisis.** A working paper studying lender-of-last-resort actions during the recent financial crisis.[5]
- **Capital and liquidity reforms and Basel III.** Two published journal articles studying the effects of capital reforms, liquidity reforms, or both that are similar to those associated with the Basel III process on economic activity in the medium and long run.[6]

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1 See Tobias Adrian, Daniel Covitz, and Nellie Liang (2014), “Financial Stability Monitoring,” FEDS Notes (Washington: Board of Governors of the Federal Reserve System, August), www.federalreserve.gov/econresdata/notes/feds-notes/2014/financial-stability-monitoring-20140804.html.

2 See Ricardo Correa and Horacio Sapriza (2014), “Sovereign Debt Crises,” International Finance Discussion Papers 2014-1104 (Washington: Board of Governors of the Federal Reserve System, May), www.federalreserve.gov/pubs/ifdp/2014/1104/ifdp1104.pdf.

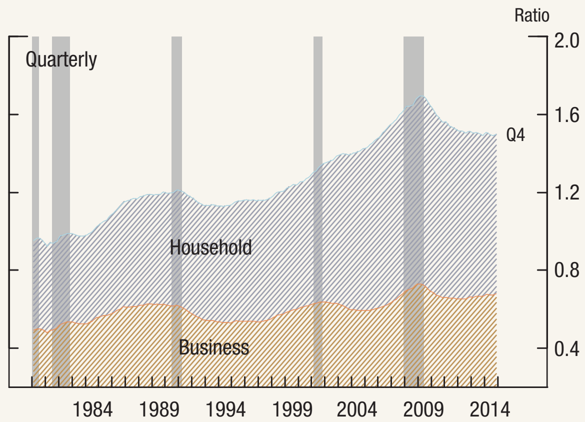
3 See Juan M. Londono and Mary Tian (2014), “Bank Interventions and Options-Based Systemic Risk: Evidence from the Global and Euro-Area Crisis,” International Finance Discussion Papers 2014-1117 (Washington: Board of Governors of the Fed-eral Reserve System, September), www.federalreserve.gov/econresdata/ifdp/2014/files/ifdp1117.pdf.

4 See Francisco Covas and John C. Driscoll (2014), “Bank Liquidity and Capital Regulation in General Equilibrium,” Finance and Economics Discussion Series 2014-85 (Washington: Board of Governors of the Federal Reserve System, September), www.federalreserve.gov/econresdata/feds/2014/files/201485pap.pdf.

5 See Dietrich Domanski, Richhild Moessner, and William Nelson (2014), “Central Banks as Lender of Last Resort: Experiences during the 2007-2010 Crisis and Lessons for the Future,” Finance and Economics Discussion Series 2014-110 (Washington: Board of Governors of the Federal Reserve System, May), www.federalreserve.gov/econresdata/feds/2014/files/2014110pap.pdf.

6 See Michael T. Kiley and Jae W. Sim (2014), “Bank Capital and the Macroeconomy: Policy Considerations,” *Journal of Economic Dynamics and Control*, vol. 43 (June), pp. 175–98, doi: 10.1016/j.jedc.2014.01.024; and Paolo Angelini, Laurent Clerc, Vasco Cúrdia, Leonardo Gambacorta, Andrea Gerali, Alberto Locarno, Roberto Motto, Wermer Roeger, Skander Van den Heuvel, and Jan Vlek (2015), “Basel III: Long-Term Impact on Economic Performance and Fluctuations,” *Manchester School,* vol. 83 (March), pp. 217–51, doi: 10.1111/manc.12056.

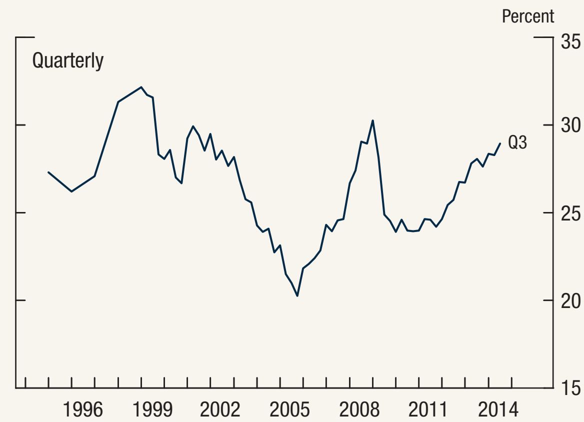
Figure 7. Ratio of nonfinancial sector credit to GDP, 1980–2014



Note: The shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research.

Source: Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States."

Figure 8. Speculative-grade and unrated firm net leverage, 1995–2014



Note: Data are annual until 1999 and quarterly thereafter. Net leverage is the ratio of the book value of total debt minus cash and cash equivalents to the book value of total assets.

Source: S&P Capital IQ Compustat© 2015 Standard & Poor's Financial Services LLC ("S&P"). All rights reserved. For intended recipient only. No further distribution and/or reproduction permitted.

aged credit histories—so-called subprime borrowing—contracted further, in the aggregate, in 2014. The combination of anemic growth in borrowing in the aggregate and the tendency for such growth to represent borrowing by households with strong credit histories suggests that vulnerabilities from household borrowing did not rise in 2014. Nonetheless, pockets of household credit markets witnessed a shift toward borrowing in riskier credit segments—for example, in subprime auto lending—a trend that should be monitored.

In the business sector, the rapid growth in borrowing in riskier segments of corporate debt markets, highlighted in the discussion of asset valuations earlier, has led to a notable increase in leverage—that is, debt relative to book equity—among speculative-grade corporations (figure 8).

Macroprudential Supervision of Large, Complex Financial Institutions

Large, complex financial institutions interact with financial markets and the broader economy in a manner that may—during times of stress and in the absence of an appropriate regulatory framework and effective supervision—lead to financial instability.[2]

Key Supervisory Activities

One important element of enhanced supervision of large banking organizations is the stress-testing process, which includes the Dodd-Frank Act stress tests and the Comprehensive Capital Analysis and Review. In addition to fostering the safety and soundness of the participating institutions, stress tests embed macroprudential elements by

- examining the loss-absorbing capacity of institutions under a common macroeconomic scenario that has features similar to the strains experienced in a severe recession and which includes, as appropriate, identified salient risks;
- conducting horizontal testing across large institutions to understand the potential correlated exposures; and
- considering the effects of counterparty distress on the largest, most interconnected firms.

The macroeconomic and financial scenarios that are used in the stress tests have proved to be an important macroprudential tool. As described in the 2013 policy statement on developing scenarios for stress tests, the Federal Reserve adjusts the severity of the macroeconomic scenario in a way that counteracts the natural tendency for risks to build within the

[2] For more on the Federal Reserve's supervision and regulation of large institutions, and especially related to the integration of the microprudential objective of safety and soundness of individual institutions with the macroprudential efforts outlined later in this section, see section 4, "Supervision and Regulation."

financial system during periods of strong economic activity.[3] The scenarios can also be used to assess the financial system's vulnerability to particularly significant risks and to highlight certain risks to institutions participating in the testing.[4] In a severely adverse scenario for 2015 (released in October 2014), the U.S. corporate sector experiences increases in financial distress that are even larger than would be expected in a severe recession.[5] This deterioration in credit quality is particularly concentrated in riskier firms. Investors pull back from a variety of assets linked to risky corporate borrowers and, in particular, highly leveraged corporations. Spreads on assets linked to these corporations, particularly high-yield bonds, leveraged loans, and CLOs backed by leveraged loans, widen to the same levels as the peaks reached in the 2007–09 recession. These developments were motivated, in part, by the rapid growth in debt owed by risky firms and valuation pressures observed in related markets that were highlighted earlier in this section.

The Federal Reserve incorporates a macroprudential approach, too, in its supervision of FMUs. In 2014, the Federal Reserve Board updated its risk-management expectations for FMUs. For designated FMUs for which the Board or another federal banking agency serves as the supervisory agency under title VIII of the Dodd-Frank Act, the Board amended its risk-management standards to take into account new international standards for such entities (effective December 2014).

As with other elements of supervision, a more thorough review of activities in 2014 is discussed in section 4, "Supervision and Regulation."

Key Regulatory Activities

Over the course of 2014, the Federal Reserve has taken a number of steps to continue improving the resiliency of the financial system, including approval of a final rule establishing enhanced prudential standards with respect to capital, liquidity, and risk management for large U.S. BHCs and FBOs (pursuant to section 165 of the Dodd-Frank Act).

The enhanced prudential standards, together with stress testing and other regulatory safeguards, help ensure that large U.S. BHCs and FBOs operating in the United States have robust levels of capital and liquidity and strong risk management. Together, these efforts not only help ensure that these firms are financially robust individually, but also limit the risk that financial distress at these firms could cause negative spillovers to the financial sector and the broader economy. They are complemented by new rules and proposals concerning liquidity coverage ratios and strengthened capital requirements for global systemically important financial institutions, including proposed higher capital requirements for institutions more reliant on wholesale short-term funding. For more information on enhanced prudential standards activity, see section 4, "Supervision and Regulation."

During the 2007–09 financial crisis, the lack of effective resolution strategies contributed to the pernicious spillovers of distress at or between individual institutions and from those institutions to the broader economy. The Federal Reserve, in collaboration with other U.S. agencies, has continued to work with large financial institutions to develop a range of recovery and resolution strategies in the event of their distress or failure. Improvements in resolution planning will mitigate adverse effects from perceptions of "too big to fail" and contribute to more orderly conditions in the financial system if institutions face strains. For more information on recovery and resolution planning activity, see section 4, "Supervision and Regulation."

Domestic and International Cooperation and Coordination

The Federal Reserve cooperated or coordinated with both domestic and international institutions in 2014 to promote financial stability.

Financial Stability Oversight Council Activities

As mandated by the Dodd-Frank Act, the FSOC was created in 2010 and is chaired by the Treasury Secretary (box 3). It establishes an institutional framework

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3 See Board of Governors of the Federal Reserve System (2013), "Federal Reserve Board Issues Final Policy Statement for Developing Scenarios for Future Capital Planning and Stress Testing Exercises," press release, November 7, www.federalreserve.gov/newsevents/press/bcreg/20131107a.htm.

4 In 2014, 30 institutions participated in these stress tests. For more information, see "Stress Tests and Capital Planning" on the Federal Reserve Board's website at www.federalreserve.gov/bankinforeg/stress-tests-capital-planning.htm.

5 See Board of Governors of the Federal Reserve System (2014), *2015 Supervisory Scenarios for Annual Stress Tests Required under the Dodd-Frank Act Stress Testing Rules and the Capital Plan Rule* (Washington: Board of Governors, October), www.federalreserve.gov/newsevents/press/bcreg/bcreg20141023a1.pdf.

Box 3. Regular Reporting on Financial Stability Oversight Council Activities

The Financial Stability Oversight Council (FSOC), created under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 and chaired by the Secretary of the Treasury Department, meets regularly to coordinate on financial stability topics that potentially affect the U.S. economy and discloses its activities.

- **Monthly meeting minutes.** In 2014, the FSOC met monthly, and the minutes for each meeting are available on the U.S Treasury website (www.treasury.gov/initiatives/fsoc/council-meetings/Pages/meeting-minutes.aspx).
- **FSOC annual report.** On May 7, 2014, the FSOC released its fourth annual report (www.treasury.gov/initiatives/fsoc/studies-reports/Pages/2014-Annual-Report.aspx), which includes a review of key developments through the beginning of 2014 and a set of recommended actions that could be taken to ensure financial stability and to mitigate systemic risks that affect the economy.

For more on the FSOC, see www.treasury.gov/initiatives/fsoc/pages/home.aspx.

for identifying and responding to sources of systemic risk. The Federal Reserve Chairman, along with other financial regulators, is a member of the FSOC.

Through collaborative participation in the FSOC, U.S. financial regulators monitor not only institutions, but the financial system as a whole. The Federal Reserve plays an important role in this macroprudential framework: It assists in monitoring financial risks, analyzes the implications of those risks for financial stability, and identifies steps that can be taken to mitigate those risks. In addition, when an institution is designated by the FSOC as systemically important, the Federal Reserve assumes responsibility for supervising that institution.

In 2014, the Federal Reserve worked, in conjunction with other FSOC participants, on several major initiatives:

- **Conference examining asset management industry.** On May 19, 2014, the FSOC held a conference examining the asset management industry and its relationship to financial stability. Participants included staff from U.S. government agencies, the private sector (including individuals from the asset management industry), and academic participants, among others.
- **Roundtable on designation process.** On November 12, 2014, the FSOC hosted a roundtable to discuss possible improvements to the process for designating systemically important financial institutions.
- **Request for public comments on asset management industry risks.** On December 18, 2014, as part of its ongoing analysis of potential risks to the financial system posed by the asset management industry, the FSOC released a notice seeking public comment about potential risks to the system associated with certain products and activities in the asset management industry relating to liquidity and redemptions, leverage, operational functions, and resolution.
- **Determination of an additional systemically important entity.** On December 19, 2014, the FSOC announced its final determination to designate MetLife as a systemically important nonbank financial company. The determination was based on the FSOC's assessment that material financial distress at MetLife could pose a threat to the financial stability of the United States.[6]

Financial Stability Board Activities

The Federal Reserve participates in international bodies, such as the FSB, given the interconnected global financial system and the global activities of large U.S. financial institutions.

The FSB is an international body that monitors the global financial system and promotes the adoption of sound policies across countries, with much activity in recent years focused on financial stability. The Federal Reserve participates in the FSB, along with the SEC and the U.S. Treasury.[7]

In 2014, the Federal Reserve continued its active participation in the FSB. The FSB is engaged in several issues, including shadow banking, supervision of global systemically important financial institutions, and the development of effective resolution regimes for large financial institutions.

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6 For more information, see U.S. Department of the Treasury (2014), "Financial Stability Oversight Council Announces Nonbank Financial Company Designation," press release, December 19, www.treasury.gov/press-center/press-releases/Pages/jl9726.aspx.

7 See the Financial Stability Board website at www.financialstabilityboard.org.

4 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;
- taking a macroprudential approach to the supervision of the largest, most systemically important financial institutions (SIFIs);[1]
- 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.

2014 Developments

During 2014, the U.S. banking system and financial markets continued to improve following their recovery from the financial crisis that started in mid-2007.

Performance of bank holding companies. An improvement in bank holding companies' (BHCs) performance was evident during 2014. U.S. BHCs, in aggregate, reported earnings approaching an all-time high—$139 billion for 2014, up from $138 billion for the year ending December 31, 2013. The proportion of unprofitable BHCs continues to decline, reaching 4 percent, down from 6 percent in 2013, but remains elevated compared to historical rates; unprofitable BHCs now encompass less than 1 percent of banking industry assets, in line with historical norms. Net interest margin continues to decline, reaching 2.2 percent, the lowest level in over 20 years. Provisions were flat at 0.19 percent of average assets, in line with historical lows. Nonperforming assets continue to be a challenge to industry recovery, with the nonperforming asset ratio remaining elevated at 1.9 percent of loans and foreclosed assets, an improvement from 2.5 percent at year-end 2013. (Also see "Bank Holding Companies" later in this section.)

Performance of state member banks. The performance at state member banks in 2014 improved from 2013. As a group, state member banks reported a profit of $18.9 billion for 2014, up from $18.2 billion for 2013 and near pre-crisis levels. However, profitability from a return on average assets (ROA) and return on equity (ROE) perspective still lags pre-crisis levels by nearly a quarter and one-third, respectively. Provisions (as a percent of revenue) have continued to decrease and are now 2.2 percent, down from a crisis high of 32.4 percent at year-end 2009. Further, 3.6 percent of all state member banks continued to report losses, down from 4.1 percent for year-end 2013. The nonperforming assets ratio remained elevated at 1.0 percent of loans and foreclosed assets, reflecting ongoing weaknesses in asset quality since the crisis. Problem loans continued to decline during 2014; however, nonaccruals in Commercial & Industrial and Credit Cards increased from the prior year. 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 2014, one state member bank, with $155 million in assets, failed. (Also see "State Member Banks" later in this section.)

[1] For a detailed discussion of macroprudential supervision and regulation, refer to section 3, "Financial Stability."

Box 1. Recovery and Resolution Planning

The Federal Reserve, in collaboration with other U.S. agencies, has continued to work with large financial institutions to develop a range of recovery and resolution strategies in the event of their distress or failure.

Recovery Planning

The Federal Reserve has required that the largest and most globally active U.S. financial institutions develop recovery plans that describe a number of options and actions that may be taken by management to maintain the financial institution as a going concern during instances of extreme stress. On September 25, 2014, the Federal Reserve issued SR letter 14-8 ("Consolidated Recovery Planning for Certain Large Domestic Bank Holding Companies") that applies to eight domestic bank holding companies that may pose elevated risk to U.S. financial stability (www.federalreserve.gov/bankinforeg/srletters/sr1408.pdf). A key objective of SR letter 14-8 is to enhance the resiliency of a firm to adverse developments which, in turn, will lower the probability of its failure or inability to serve as a financial intermediary.

Resolution Planning

In 2011, the Federal Reserve and the FDIC jointly issued rules implementing the resolution plan requirement for financial institutions that are subject to heightened prudential standards. The Federal Reserve's final resolution plan rule, Regulation QQ, is available at www.gpo.gov/fdsys/pkg/FR-2011-11-01/html/2011-27377.htm.

In a phased approach based on nonbank asset size, initial resolution plans were submitted by the first group of 11 financial institutions in July 2012, the second group of four institutions in July 2013, and all other covered companies in December 2013. Since the passage of the rule, seven financial institutions, three of which are nonbank financial institutions, have qualified as new covered companies and filed their initial resolution plans in 2014. The initial plan submissions identified and described the firms' critical operations, core business lines, material legal entities, interconnections and interdependencies, corporate governance structure and processes related to resolution, impediments to resolution, and the actions the financial institution will take to facilitate its orderly resolution.

Under the resolution plan rule, resolution plans are required to be submitted on an annual basis after the initial filing.

Where appropriate, the second iteration plans submitted by firms addressed supplemental guidance from the Federal Reserve and the FDIC (www.federalreserve.gov/newsevents/press/bcreg/bcreg20130415c2.pdf).

- **Feedback on second round resolution plans.** In 2014, the Federal Reserve and the FDIC provided feedback on the second iteration of submissions from 12 large firms that are important to U.S. financial stability (www.federalreserve.gov/newsevents/press/bcreg/20140805a.htm and www.federalreserve.gov/newsevents/press/bcreg/20141125a.htm). The agencies require that the next round of submissions on July 1, 2015, demonstrate that the firms are making significant progress to address the shortcomings identified in the agency letters and are taking significant actions to improve their resolvability under the U.S. Bankruptcy Code.

Resolution plan submissions must include both a confidential and public portion. The public portion of each resolution plan is available on the Federal Reserve's website (www.federalreserve.gov/bankinforeg/resolution-plans.htm). The Federal Reserve and the FDIC may determine that a resolution plan is not credible or would not facilitate an orderly resolution of the institution under the U.S. Bankruptcy Code.

In accordance with principles promulgated by the Financial Stability Board, the Federal Reserve participates with other U.S. and international supervisors in crisis-management group meetings to enhance preparedness for the cross-border management and resolution of a failed global systemically important financial institution.

Enhanced prudential standards. The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank Act) directs the Board, in part, to establish prudential standards in order to prevent or mitigate risks to U.S. financial stability that could arise from the material financial distress or failure, or ongoing activities of, large, interconnected financial institutions. In 2014, the Board established or proposed to establish a variety of enhanced prudential standards. (See "Enhanced Prudential Standards" later in this section for details.)

Recovery and resolution planning. The Federal Reserve, in collaboration with other U.S. agencies, has continued to work with large financial institutions to develop a range of recovery and resolution strategies in the event of their distress or failure. (See box 1 for details.)

Community bank focus. In 2014, the Board renewed its focus on supervision and regulation of community banks (defined as a state member bank and/or holding company with $10 billion or less in total consolidated assets), with an emphasis on weighing the costs of regulatory proposals, supervisory guidance, and examination practices on these institutions against safety-and-soundness benefits. (See box 2 for details.)

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) designated by the Financial Stability Oversight Council (FSOC) 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 former 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 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.[2]

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.

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.

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

Box 2. Efforts to Tailor Supervision for Community Banking Organizations

In 2011, the Board established a community and regional bank subcommittee in order to better understand and respond to concerns raised by these institutions. The Board is committed to ensuring that regulatory requirements both suit community bank characteristics and foster healthy lending conditions. During 2014, the subcommittee sought additional perspectives on community bank concerns and explored additional opportunities to tailor community bank supervision. Key aspects of these efforts include the following:

1. **Considering the impact of new and existing regulations on community banking organizations and streamlining regulatory rules.** A subcommittee of the Board convened regularly to evaluate the effects of regulatory proposals, supervisory guidance, and examination practices on community banks. These reviews help ensure that regulatory directives are commensurate with the size and complexity of community banking organizations. In addition, throughout 2014, through an internal review of all Federal Reserve guidance and through participation in interagency efforts to comply with the Economic Growth and Regulatory Paperwork Reduction Act of 1996, the Federal Reserve began a review of outstanding supervisory guidance to identify and address any outdated, unduly burdensome, or unnecessary requirements.
2. **Risk-focusing examination activities.** The Federal Reserve enhanced its offsite financial screening process, which allows deployment of resources based on the risk profile of individual institutions. Accordingly, examinations of banks engaged in higher-risk activities will be more involved than examinations of banks engaged in less-risky activities.
3. **Enhancing communication with the community bank industry.** The Federal Reserve remains committed to fostering enhanced communication between banking supervisors and community bankers. Primary efforts to support this objective include the following:
   - **Meeting with the Community Depository Institutions Advisory Council.** Established in 2010, a council composed of community bank, thrift, and credit union representatives from each of the 12 Federal Reserve Districts provided the Board of Governors with industry input on the economy, lending conditions, and other topics of interest to community banking organizations. During 2014, this council participated in biannual meetings with Board officials to communicate their views on both the banking industry and on pertinent regulatory matters.
   - **Communicating expectations related to the supervision of community banking organizations.** In support of this objective, applicability statements were added to new supervisory proposals to help community bankers more readily identify aspects of supervisory directives pertinent to their organizations. In addition, staff from the Board of Governors had regular discussions with community bank examiners to clarify expectations related to the applicability of supervisory rules to community banks. With a similar objective, the Federal Reserve began to enhance the community bank examiner-training curriculum to ensure that supervisory expectations for larger banks do not make their way into the curriculum or the examination process.
   - **Disseminating supervisory publications with a focus on community banking organizations.** The Federal Reserve uses the following System publications to communicate with community banking organizations on emerging risks and important supervisory matters:

     —***Community Banking Connections®***—Throughout 2014, the publication offered a number of articles focused on timely regulatory topics, including loan policy development, cybersecurity, and third-party relationship management (www.communitybankingconnections.org/).

     —***FedLinks®***—Articles published throughout 2014 covered topics outlining supervisory expectations for a number of banking functions, including implementation of the new capital rules, development of contingency funding plans, and introduction of new products and services (www.communitybankingconnections.org/fedlinks).
4. **Focusing on community bank research.** In 2014, for the second consecutive year, the subcommittee worked with an informal working group of economists from the research and supervision functions in the Federal Reserve System to consider and support supervisory decisions relative to community banking organizations. Findings of research conducted by this group helped guide community bank policy development and implementation. Further, in 2014, for the second consecutive year, the Federal Reserve Bank of St. Louis, in collaboration with the Conference of State Bank Supervisors, hosted a Community Banking Research and Policy Conference focused on the role of community banks in the financial system. As with the first conference, this conference helped to highlight the issues most important to community bank vitality.

Table 1. State member banks and bank holding companies, 2010–14

Entity/item	2014	2013	2012	2011	2010
State member banks					
Total number	858	850	843	828	829
Total assets (billions of dollars)	2,233	2,060	2,005	1,891	1,697
Number of examinations	723	745	769	809	912
By Federal Reserve System	438	459	487	507	722
By state banking agency	285	286	282	302	190
Top-tier bank holding companies					
Large (assets of more than $1 billion)					
Total number	522	505	508	491	482
Total assets (billions of dollars)	16,642	16,269	16,112	16,443	15,986
Number of inspections	738	716	712	672	677
By Federal Reserve System[1]	706	695	691	642	654
On site	501	509	514	461	491
Off site	205	186	177	181	163
By state banking agency	32	21	21	30	23
Small (assets of $1 billion or less)					
Total number	3,902	4,036	4,124	4,251	4,362
Total assets (billions of dollars)	953	953	983	982	991
Number of inspections	2,824	3,131	3,329	3,306	3,340
By Federal Reserve System	2,737	2,962	3,150	3,160	3,199
On site	142	148	200	163	167
Off site	2,595	2,814	2,950	2,997	3,032
By state banking agency	87	169	179	146	141
Financial holding companies					
Domestic	426	420	408	417	430
Foreign	40	39	38	40	43

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

The framework for the consolidated supervision of LISCC firms and other large financial institutions was issued in December 2012.[3] 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 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, including the nature and degree of potential systemic risk inherent in a firm's activities and operations, and is being implemented in a multi-stage approach.

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

[3] 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.

- **Coordinated horizontal reviews.** These reviews involve examining several institutions simultaneously and encompass firm-specific supervision and the development of cross-firm perspectives. In addition, the Federal Reserve uses a multidisciplinary approach to draw on a wide range of perspectives, including those from supervisors, examiners, economists, financial experts, payments systems analysts, and other specialists. 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 processes, 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.

Capital Planning and Stress Tests

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 CCAR and the Dodd-Frank Act stress tests (DFAST).

CCAR is a horizontal exercise to evaluate capital adequacy, internal capital adequacy assessment processes, and planned capital distributions at large BHCs. In CCAR, the Federal Reserve assesses whether these BHCs have sufficient capital to withstand highly stressful operating environments and be able to continue operations, maintain ready access to funding, meet obligations to creditors and counterparties, and serve as credit intermediaries. Capital is central to a BHC's ability to absorb losses and continue to lend to creditworthy businesses and consumers. Through CCAR, a BHC's capital adequacy is evaluated on a forward-looking, post-stress basis as the BHCs are required to demonstrate in their capital plans how they will maintain, throughout a very stressful period, capital above a tier 1 common ratio of 5 percent and above minimum regulatory capital requirements. From a microprudential perspective, the CCAR provides a structured means for supervisors to assess not only whether these BHCs hold enough capital, but also whether they are able to rapidly and accurately determine their risk exposures, an essential element of effective risk management. From a macroprudential perspective, the use of a common scenario allows us to learn how a particular risk or combination of risks might affect the banking system as a whole—not just individual institutions.

In 2014, CCAR incorporated the transition arrangements and minimum capital requirements from the revised regulatory capital framework implementing the Basel III regulatory capital reforms the Board finalized in July 2013. The 2014 CCAR results are available at www.federalreserve.gov/newsevents/press/bcreg/ccar_20140326.pdf.

DFAST is a supervisory stress test conducted by the Federal Reserve to evaluate whether large BHCs and all nonbank financial companies designated by the FSOC have sufficient capital to absorb losses resulting from stressful economic and financial market conditions. The Dodd-Frank Act also requires BHCs and other financial companies supervised by the Federal Reserve to conduct their own stress tests. Together, the Dodd-Frank Act supervisory stress tests and the company-run stress tests are intended to provide company management and boards of directors, the public, and supervisors with forward-looking information to help gauge the potential effect of stressful conditions on the capital adequacy of these large banking organizations. The 2014 DFAST results are available at www.federalreserve.gov/newsevents/press/bcreg/bcreg20140320a1.pdf.

State Member Banks

At the end of 2014, 1,923 banks (excluding nondepository trust companies and private banks) were members of the Federal Reserve System, of which 858 were state chartered. Federal Reserve System member banks operated 57,265 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 15 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 438 exams of state member banks in 2014.

Bank Holding Companies

At year-end 2014, a total of 4,922 U.S. BHCs were in operation, of which 4,424 were top-tier BHCs. These organizations controlled 4,755 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 early January of 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 2014, the Federal Reserve conducted 695 inspections of large BHCs and 2,737 inspections of small, noncomplex BHCs.

Financial Holding Companies

Under the Gramm-Leach-Bliley Act, BHCs that meet certain capital, managerial, and other requirements

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4 The Office of the Comptroller of the Currency examines nationally chartered banks, and the Federal Deposit Insurance Corporation 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, most recently modified in 2013. See SR letter 13-21 for a discussion of the factors considered in determining whether a BHC is complex or noncomplex (www.federalreserve.gov/bankinforeg/srletters/sr1321.htm).

Table 2. Savings and loan holding companies, 2011–14

Entity/item	2014	2013	2012	2011[1]
Top-tier savings and loan holding companies				
Large[2]				
Total number	76	81	94	n/a
Total assets	$1,492,964,310	$1,500,412,835	$1,715,259,113	n/a
Number of examinations				
By Federal Reserve System				
On site	45	58	53	n/a
Off site	37	13	27	n/a
By states' Department of Insurance	1	1	2	n/a
Small				
Total number	221	251	272	n/a
Total assets (billions of dollars)	$ 64,813,982	$ 75,952,384	$ 81,558,809	n/a
Number of examinations				
By Federal Reserve System				
On site	10	21	46	n/a
Off site	202	237	183	n/a

1 Responsibility for SLHCs was transferred to the Board in 2011. Asset data are not available for year-end 2011 due to transition.

2 Excludes SIFI SLHCs (AIG and GE).

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 2014, 426 domestic BHCs and 40 foreign banking organizations had financial holding company status. Of the domestic financial holding companies, 23 had consolidated assets of $50 billion or more; 32, between $10 billion and $50 billion; 122, between $1 billion and $10 billion; and 249, less than $1 billion.

Savings and Loan Holding Companies

The Dodd-Frank Act transferred responsibility for supervision and regulation of SLHCs from the OTS to the Federal Reserve in July 2011. At year-end 2014, a total of 542 SLHCs were in operation, of which 297 were top tier SLHCs. These SLHCs control 305 thrift institutions and include 27 companies engaged primarily in nonbanking activities, such as insurance underwriting (15 SLHCs), securities brokerage (6 SLHCs), and commercial activities (6 SLHCs). Excluding nonbank SIFI SLHCs, the 25 largest SLHCs accounted for more than $1.3 trillion of total combined assets. Approximately 90 percent of SLHCs engage primarily in depository activities. These firms hold approximately 20.8 percent ($321 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. Table 2 provides information on examinations of SLHCs for the past three years.

Board staff continues to work on operational, policy, and supervisory issues while engaging the industry, Reserve Banks, and other regulatory agencies. Nearly all of the SLHCs are now filing all required Federal Reserve regulatory reports. Significant milestones achieved include the formal incorporation of Federal Reserve policies into the SLHC supervision program. Several complex policy issues continue to be addressed by the Board, including those related to consolidated capital requirements for insurance SLHCs, intermediate holding companies, and the adoption of formal rating systems.

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 considered bank service providers under the Bank Service Company Act.

In July 2012, the FSOC 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 designated FMUs that include promoting uniform risk-management standards, playing an enhanced role in the supervision of designated FMUs, reducing systemic risk, and supporting the stability of the broader financial system. For designated FMUs subject to the Federal Reserve's supervision, the Board established risk-management standards and expectations that are articulated in Board Regulation HH (effective September 2012). The Board subsequently revised these standards to take into account new international standards (effective December 2014). 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. Section 234.6 of Regulation HH (effective February 2014) establishes terms and conditions under which the Board may authorize a designated FMU access to Reserve Bank accounts and services.

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 works closely with the Securities and Exchange Commission (SEC) and the Commodity Futures Trading Commission, both of which also have supervisory authority for certain FMUs. The Federal Reserve's work with these agencies under title VIII, including the sharing of appropriate information and participation in designated 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.

Designated Nonfinancial Companies

In 2013, the FSOC designated three nonbank financial companies for supervision by the Board: American International Group, Inc.; General Electric Capital Corporation, Inc. (GECC); and Prudential Financial, Inc. In late 2014, the FSOC designated a fourth nonbank financial company, Metlife, Inc. The Federal Reserve's supervisory approach for these firms as designated companies is consistent with the approach used for the largest financial holding companies, tailored to account for different material characteristics of each firm. The Dodd-Frank Act requires the Board to apply enhanced prudential standards and early remediation requirements to BHCs with at least $50 billion in consolidated assets and to the nonbank financial companies designated by the FSOC for supervision by the Board. The act authorizes the Board to tailor the application of these standards and requirements to different companies on an individual basis or by category. As discussed in "Enhanced Prudential Standards" later in this section, in November the Board invited public comment on enhanced prudential standards for the regulation and supervision of GECC.

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 2014, 39 member banks were operating 444 branches in foreign countries and overseas areas of the United States; 22 national banks were operating 391 of these branches, and 17 state member banks were operating the remaining 53. In addition, 11 nonmember banks were operating 18 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 2014, out of 44 banking organizations chartered as Edge Act or agreement corporations, 3 operated 7 Edge Act and agreement branches. 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 year-end 2014, 163 foreign banks from 49 countries operated 187 state-licensed branches and agencies, of which 6 were insured by the Federal Deposit Insurance Corporation (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 47 U.S. commercial banks. Altogether, the U.S. offices of these foreign banks controlled approximately 21 percent of U.S. commercial banking assets. These 163 foreign banks also operated 89 representative offices; an additional 34 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 512 examinations in 2014.

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.

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

[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.

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 2014, the Federal Reserve continued as the lead supervisory agency for 8 of the 16 large, multiregional data processing servicers recognized on an interagency basis.

Fiduciary Activities

The Federal Reserve has supervisory responsibility for state member banks and state member nondepository trust companies, which hold assets 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 2014, Federal Reserve examiners conducted 97 fiduciary examinations, excluding transfer agent examinations, of state member banks.

[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, and the chair of the State Liaison Committee.

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 2014, the Federal Reserve conducted transfer agent examinations at 7 of the 36 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 2014, 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 Securities Rulemaking Board's rule G-16, at least once every two calendar years. Eight of the 10 entities supervised by the Federal Reserve that dealt in municipal securities were examined during 2014.

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). 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).

Cybersecurity and Critical Infrastructure

The Federal Reserve is actively engaged with interagency groups such as the Financial and Banking Information Infrastructure Committee (FBIIC) and the FFIEC's Cybersecurity and Critical Infrastructure Working Group (CCIWG) to share information and collaborate on cyber- and critical infrastructure-related issues impacting the financial services sector.

In 2014, the Federal Reserve conducted a targeted cybersecurity assessment on a select group of large financial institutions and FMUs. The Federal Reserve and other CCIWG members also conducted cybersecurity assessments at over 500 community financial institutions to evaluate their cybersecurity risk exposure and preparedness. The cybersecurity assessment reviewed financial institutions' current practices and overall preparedness relative to risk management and oversight, threat intelligence and collaboration, cybersecurity controls, external dependency management, and cyber incident management and resilience.

The Federal Reserve is also actively engaged in raising financial institution awareness of supervisory expectations relative to cybersecurity risk assessment and risk mitigation. In 2014, the Federal Reserve contributed to the launch of the new FFIEC cybersecurity awareness web page, which is a central repository for current and future FFIEC-related materials on cybersecurity (www.ffiec.gov/cybersecurity.htm).

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 2014, the Federal Reserve completed 37 formal enforcement actions. Civil money penalties totaling $817,653,925 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 2014, the Reserve Banks completed 117 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 2014, two major and two minor upgrades to the web-based

PRISM application were completed to enhance the user's experience and provide the latest technology.

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 depository institutions.

International Training and Technical Assistance

In 2014, 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. In addition, the Middle East and North Africa (MENA) Financial Regulator's Training Initiative (FRTI) successfully concluded. This 10-year initiative was established to provide technical assistance and bank supervision training to central banks and supervisory authorities in the region. MENA FRTI's many accomplishments over the past decade include the sponsorship of over 50 programs and conferences as well as many short-term, on-the-job training opportunities provided for MENA regulators with U.S. banking agencies. Now that the MENA FRTI has concluded, the Federal Reserve will forge training partnerships with the central banks of Bahrain, United Arab Emirates, and Qatar to continue technical capacity building throughout the region.

In 2014, 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 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. Moreover, the Federal Reserve also contributes to the regional training provision under the Asia Pacific Economic Cooperation FRTI.

Efforts to Support Minority-Owned 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 technical assistance tailored to MOIs by providing targeted supervisory guidance, identifying additional resources, and fostering mutually beneficial partnerships between MOIs and community organizations. As of year-end 2014, the Federal Reserve's MOI portfolio included 18 state member banks.

Throughout 2014, the Federal Reserve System continued to support MOIs through the following activities:

- facilitating a meeting between the National Bankers Association (NBA), Chair Yellen, Vice Chairman Fischer, and Governor Powell during which the NBA shared with the governors their perspective on community banking issues of importance to MOIs;
- publishing an article in the Federal Reserve's *Community Banking Connections®* publication to highlight MOIs and their contribution to the economy (www.communitybankingconnections.org/articles/

2014/q3-q4/promoting-an-inclusive-financial-system);

- participating in the 87th annual NBA convention;
- hosting an internal Rapid Response® session on the topic of MOIs to educate the Federal Reserve's community bank examination staff on the unique characteristics of these organizations;
- providing technical assistance to MOIs on a wide variety of topics, including topics focused on improving regulatory ratings, navigating the regulatory applications process, and refining capital-planning practices;
- creating formal procedures related to monitoring MOI-related proposals and continuing to offer pre-review of MOI applications to support early identification and resolution of issues that could create delays in the review process;
- partnering with the NBA, 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, conducting several joint outreach efforts to educate MOIs on supervisory topics; and
- participating in an interagency task force to consider and address supervisory challenges facing MOIs.

Throughout 2014, PFP representatives hosted and participated in numerous banking workshops and seminars aimed at promoting and preserving MOIs, including the NBA's Legislative and Regulatory Conference and the National Urban League Convention. Further, program representatives continued to collaborate with community leaders, trade groups, the Small Business Administration, and other organizations to seek support for MOIs.

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 OCC and the FDIC (together, the federal banking agencies), issues rulemakings, public SR letters, and other policy statements and guidance in order to carry out its supervisory policies. 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 (BCBS), the Financial Stability Board, and the Joint Forum.

Enhanced Prudential Standards

The Board is responsible for issuing a number of rules and guidance statements under the Dodd-Frank Act, sometimes in conjunction with other agencies. Listed below are the initiatives undertaken by the Board in 2014.

- In January, the Board issued a supervisory guidance statement, SR 14-1, to clarify the heightened supervisory expectations for recovery and resolution preparedness for the eight largest domestic BHCs that pose elevated risk to U.S. financial stability. The Board issued this SR letter as a supplement to SR letter 12-17/CA letter 12-14, "Consolidated Supervision Framework for Large Financial Institutions." The Board plans to incorporate reviews of key capabilities for recovery and resolution preparedness in its ongoing supervisory work for each BHC subject to this guidance, which is available at www.federalreserve.gov/bankinforeg/srletters/SR1401.htm.
- In March, the Board published a final rule to implement certain enhanced prudential standards required under section 165 of the Dodd-Frank Act for BHCs, including foreign banking organizations, with total global consolidated assets of $50 billion or more. These standards include risk-based and leverage capital requirements, liquidity standards, and requirements for overall risk management. In addition, the final rule requires a foreign banking organization with $50 billion or more in U.S. non-branch assets to form an intermediate holding company over its U.S. subsidiaries. The intermediate holding company of the foreign banking organization will be required to meet substantially the same capital, liquidity, and risk-management standards as a similar U.S. BHC. The final rule also establishes risk committee requirements and capital stress-testing requirements for certain BHCs and foreign banking organizations with total consolidated assets of $10 billion or more. The final rule is available at www.gpo.gov/fdsys/pkg/FR-2014-03-27/pdf/2014-05699.pdf.
- In March, the federal banking agencies issued supervisory guidance that discusses supervisory expectations for implementing the Dodd-Frank Act company-run stress tests for banking organiza-

tions with total consolidated assets of more than $10 billion but less than $50 billion. This guidance builds upon the interagency stress testing guidance issued in May 2012 for companies with more than $10 billion in total consolidated assets. It is important to note that the guidance states that such banking organizations are not subject to other requirements and expectations applicable to BHCs with assets of at least $50 billion, including the Federal Reserve's capital plan rule, annual Comprehensive Capital Analysis and Review, supervisory stress tests for capital adequacy, or the related data collections supporting the supervisory stress test. The guidance is available at www.gpo.gov/fdsys/pkg/FR-2014-03-13/pdf/2014-05518.pdf.

- In May, the federal banking agencies issued a final rule to strengthen the leverage ratio standards for the eight largest, most systemically significant U.S. banking organizations. Under the final rule, U.S. top-tier BHCs with more than $700 billion in consolidated total assets or $10 trillion in assets under custody are required to maintain a leverage buffer greater than 2 percentage points above the 3 percent minimum supplementary leverage ratio, for a total of more than 5 percent, to avoid restrictions on capital distributions and certain discretionary bonus payments. The insured depository institution (IDI) subsidiaries of these BHCs must maintain at least a 6 percent supplementary leverage ratio to be considered "well capitalized" under the agencies' prompt corrective action framework. The final rule, which has an effective date of January 1, 2018, is available at www.gpo.gov/fdsys/pkg/FR-2014-05-01/pdf/2014-09367.pdf.
- In October, the federal banking agencies finalized a rule implementing a liquidity coverage ratio (LCR) requirement based on the BCBS's LCR standard. The LCR will be the first broadly applicable quantitative liquidity requirement for U.S. banking firms. Under the LCR, large banking organizations are required to hold an amount of high-quality liquid assets sufficient to meet expected net cash outflows over a 30-day time horizon in a standardized supervisory stress scenario. The final rule, effective January 1, 2015, applies the most stringent LCR requirements to banking organizations with consolidated total assets of $250 billion or more or consolidated total on-balance sheet foreign exposure of $10 billion or more, and their subsidiary insured depository institutions with $10 billion or more of consolidated total assets. The final rule applies a simpler, less stringent LCR requirement to depository holding companies with $50 billion or more that are not otherwise covered by the rule, effective January 1, 2016. The final rule is available at www.gpo.gov/fdsys/pkg/FR-2014-10-10/pdf/2014-22520.pdf.
- In December, the Board invited public comment on enhanced prudential standards for the regulation and supervision of General Electric Capital Corporation (GECC), a nonbank financial company that the FSOC designated for supervision by the Board. In light of the substantial similarity of GECC's activities and risk profile to that of a similarly sized BHC, the proposal would apply enhanced prudential standards to GECC that are generally similar to those that apply to large BHCs, including standards for risk-based and leverage capital, capital planning, stress testing, liquidity, and risk management. The proposal is available at www.gpo.gov/fdsys/pkg/FR-2014-12-03/pdf/2014-28414.pdf.
- In December, the Board issued a proposed rule that would establish a methodology to identify whether a U.S. BHC is a global systemically important banking organization (GSIB). As such, a GSIB would be subject to a risk-based capital surcharge that is calibrated based on its systemic risk profile. The proposal builds on a GSIB capital surcharge framework agreed to by the BCBS and is augmented to address the risk arising from the over-reliance on short-term wholesale funding. The GSIB surcharge under the proposal would generally be higher than under the BCBS approach. Failure to maintain the capital surcharge would subject the GSIB to restrictions on capital distributions and certain discretionary bonus payments. The proposal would be phased in beginning on January 1, 2016, becoming fully effective on January 1, 2019. The proposed rule is available at www.gpo.gov/fdsys/pkg/FR-2014-12-18/pdf/2014-29330.pdf.

Other Capital Adequacy Standards

In 2014, the Board issued several rulemakings and guidance documents related to capital adequacy, including joint rulemakings with the other federal banking agencies that would implement certain revisions to the Basel capital framework.

- In March, the Board and the OCC permitted certain banking organizations to exit from the parallel run stage of the agencies' advanced approaches risk-based capital framework, and henceforth, to use the advanced approaches rule to determine their risk-based capital requirements. Concurrently, the Board issued a final rule clarifying that BHCs using the advanced approaches framework incorporate such framework into their capital planning and stress testing cycles that begin October 1, 2015. The final rule is available at www.gpo.gov/fdsys/pkg/FR-2014-03-11/pdf/2014-05053.pdf.

- In April, the federal banking agencies proposed a rule to correct the definition of eligible guarantee in the risk-based capital rules by clarifying the types of guarantees that can be recognized for purposes of calculating a banking organization's regulatory capital under the advanced approaches framework. The federal banking agencies finalized the rule in July. The final rule is available at www.gpo.gov/fdsys/pkg/FR-2014-07-30/pdf/2014-17858.pdf.
- In September, the federal banking agencies adopted a final rule modifying the definition of the denominator of the supplementary leverage ratio, which applies to advanced approaches banking organizations, in a manner consistent with changes agreed to by the BCBS. The final rule strengthens the supplementary leverage ratio by modifying the methodology for including off-balance sheet items, including credit derivatives, repo-style transactions, and lines of credit, in the denominator of the supplementary leverage ratio. The final rule is available at www.gpo.gov/fdsys/pkg/FR-2014-09-26/pdf/2014-22083.pdf.
- In October, the Board issued a final rule that modifies the regulations for capital planning and stress testing and adjusts the due date for BHCs with total consolidated assets of $50 billion or more to submit their capital plans and stress test results. Beginning in 2016, the due date will shift from January to April. The final rule is available at www.gpo.gov/fdsys/pkg/FR-2014-10-27/pdf/2014-25170.pdf.
- In December, the federal banking agencies issued a proposed rule clarifying the regulatory capital rules adopted by the agencies in July 2013. The proposal applies only to large internationally active banking organizations that are subject to the advanced approaches rule. The proposed rule would make technical corrections and clarify certain aspects of the advanced approaches rule, including the qualification criteria for application of the advanced approaches and calculation requirements for risk-weighted assets. The proposed rule is available at www.gpo.gov/fdsys/pkg/FR-2014-12-18/pdf/2014-28690.pdf.
- In December, the Board issued a proposed rule to provide additional information regarding the application of the Board's regulatory capital framework to depository institution holding companies that have non-traditional capital structures. The proposal describes examples of capital instruments potentially issued by non-stock entities that may not qualify as common equity tier 1 capital, and provides suggestions on changes that would allow qualification. The proposal also notes that the Board expects to propose regulatory capital rules in the future for SLHCs that are personal or family trusts and are not business trusts, and would provide a temporary exemption for those entities from the regulatory capital rules. Similarly, the proposal states that the Board expects to clarify the application of the regulatory capital rules to depository institution holding companies that are employee stock ownership plans. The proposed rule is available at www.gpo.gov/fdsys/pkg/FR-2014-12-19/pdf/2014-29561.pdf.
- In December, the Board and the OCC issued an interim final rule to ensure that the treatment of over-the-counter derivatives, eligible margin loans, and repo-style transactions under the two agencies' regulatory capital and liquidity coverage ratio rules would be unaffected by the implementation of certain foreign special resolution regimes for financial companies or by a banking organization's adherence to the International Swaps and Derivatives Association's Resolution Stay Protocol. The interim final rule is effective as of January 1, 2015, and is available at www.federalreserve.gov/newsevents/press/bcreg/20141216a.htm.

International Coordination on Supervisory Policies

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

Basel Committee on Banking Supervision

During 2014, the Federal Reserve participated in ongoing international initiatives to track the progress of implementation of the BCBS framework in member countries.

The Federal Reserve contributed to supervisory policy recommendations, reports, and papers issued for consultative purposes or finalized by the BCBS that are designed to improve the supervision of banking organizations' practices and to address specific issues that emerged during the financial crisis. The list below includes key final and consultative papers issued in 2014.

Final papers:

- *Basel III leverage ratio framework and disclosure requirements* (issued in January and available at www.bis.org/publ/bcbs270.htm).
- *Liquidity coverage ratio disclosure standards – final document* (issued in January and available at www.bis.org/publ/bcbs272.htm).
- *The Liquidity Coverage Ratio and restricted-use committed liquidity facilities* (issued in January and available at www.bis.org/publ/bcbs274.htm).
- *The standardised approach for measuring counterparty credit risk exposures* (issued in March and available at www.bis.org/publ/bcbs279.htm).
- *Capital requirements for bank exposures to central counterparties – final standard* (issued in April and available at www.bis.org/publ/bcbs282.htm).
- *Supervisory framework for measuring and controlling large exposures – final standard* (issued in April and available at www.bis.org/publ/bcbs283.htm).
- *Basel III: the net stable funding ratio* (issued in October and available at www.bis.org/bcbs/publ/d295.htm).
- *Revisions to the securitisation framework* (issued in December and available at www.bis.org/bcbs/publ/d303.htm).

Consultative papers:

- *Basel III: the Net Stable Funding Ratio – consultative document* (issued in January and available at www.bis.org/publ/bcbs271.htm).
- *Review of Pillar 3 disclosure requirements* (issued in June and available at www.bis.org/publ/bcbs286.htm).
- *Operational risk – Revisions to the simpler approaches – consultative document* (issued in October and available at www.bis.org/publ/bcbs291.htm).
- *Net Stable Funding Ratio disclosure standards – consultative document* (issued in December and available at www.bis.org/bcbs/publ/d302.htm).
- *Fundamental review of the trading book: outstanding issues – consultative document* (issued in December and available at www.bis.org/bcbs/publ/d305.htm).
- *Capital floors: the design of a framework based on standardised approaches – consultative document* (issued in December and available at www.bis.org/bcbs/publ/d306.htm).
- *Revisions to the standardised approach for credit risk – consultative document* (issued in December and available at www.bis.org/bcbs/publ/d307.htm).

Financial Stability Board

In 2014, the Federal Reserve continued its active participation in the activities of the Financial Stability Board, 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.

For more information on the work of the Financial Stability Board, refer to section 3, “Financial Stability.”

Joint Forum

In 2014, 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 BCBS, the International Organization of Securities Commissions, and the International Association of Insurance Supervisors. Final papers issued by the Joint Forum in 2014 include:

- *Point of Sale disclosure in the insurance, banking and securities sectors – final report* (issued in April and available at www.bis.org/publ/joint35.pdf).
- *Report on supervisory colleges for financial conglomerates* (issued in September and available at www.bis.org/publ/joint36.pdf).

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 accounting policy function is responsible for providing expertise in policy development and implementation efforts, both within and outside the Federal Reserve System, on issues affecting the banking and insurance industries in the areas of accounting, auditing, internal controls over financial reporting, financial disclosure, and supervisory financial reporting.

Federal Reserve staff regularly consult with key constituents in the accounting and auditing professions, including domestic and international standard-setters, accounting firms, accounting and financial sector trade groups, and other financial sector regulators to facilitate the Board's understanding of domestic and international practices; proposed accounting, auditing, and regulatory standards; and the interactions between accounting standards and regulatory reform efforts. The Federal Reserve also participates in various accounting, auditing, and regulatory forums in order to both formulate and communicate its views.

During 2014, Federal Reserve staff addressed numerous issues including loan accounting, troubled debt restructurings, accounting alternatives for private companies, financial instrument accounting and reporting, consolidation of structured entities, securitizations, securities financing transactions, and external and internal audit processes.

The Federal Reserve shared its views with accounting and auditing standard-setters through informal discussions and public comment letters. Comment letters on the Financial Accounting Standards Board's proposal related to business combinations and on the Public Company Accounting Oversight Board's proposal related to the changes in the auditor's reporting model were issued during the past year.

The Federal Reserve staff also participated in meetings of the Basel Committee's Accounting Experts Group and the International Association of Insurance Supervisors' (IAIS) Accounting and Auditing Working Group. These groups represent their respective organizations at international meetings on accounting, auditing, and disclosure issues affecting global banking organizations. Working with international bank supervisors, Federal Reserve staff contributed to the development of numerous comment letters and publications that were issued by the Basel Committee and the IAIS. The publications issued during 2014 included guidance on the external audits of banks and the consultative document on the review of pillar 3 disclosure requirements.

In 2014, 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 on income tax allocation in a holding company structure;
- developed and participated in a number of domestic and international supervisory training programs and 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 through participation in examinations and provision of expert guidance on specific queries related to financial accounting, auditing, reporting, and disclosures.

The Federal Reserve System staff also provided their accounting and business expertise through participation in other supervisory activities during the past year. These activities included supporting Dodd-Frank Act initiatives related to stress testing of banks and credit risk retention requirements for securitization, as well as various Basel III issues.

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 management practices; and to ensure that institutions properly identify, measure, and manage credit risk.

Shared National Credit Program

In November, the Federal Reserve and the other banking agencies released summary results of the 2014 annual review of the Shared National Credit (SNC) Program, a long-standing program 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 2014 SNC review was prepared in the second quarter of 2014 using data as of December 31, 2013, and March 31, 2014. The 2014 SNC portfolio totaled $3.39 trillion, with roughly 9,800 credit facilities to approximately 6,200 borrowers. From the previous period, the dollar volume of the portfolio commitment amount rose by $379 billion or 12.6 percent, and the number of credits increased by 502 or 5.4 percent.

The SNC examination found that the volume of criticized assets increased 12.8 percent to $340.8 billion. As a percentage of total commitments, the overall criticized asset rate remained elevated at 10.1 percent, up from 10.0 percent in 2013. The elevated criticized rate is historically high when compared to SNC portfolios at this stage of the economic cycle.

For the 2014 SNC review, supervisors placed significant emphasis on reviewing leveraged loans to evaluate safety and soundness of bank underwriting and risk-management practices relative to expectations articulated in the 2013 Interagency Guidance on Leveraged Lending. The review found that risk in the overall SNC portfolio was centered in the leveraged portfolio, noting a criticized rate of 33.2 percent for leveraged loans compared with 3.3 percent for the non-leveraged portfolio. The 2014 SNC review also identified several areas where institutions need to strengthen risk-management practices, including inadequate support for enterprise valuations and/or reliance on dated valuations, weaknesses in credit analysis, and overreliance on sponsor's projections. Underwriting standards were also noted as weak in 31 percent of the SNC loan transactions sampled. Leveraged lending transactions were the primary driver of this underwriting deterioration.

Refinancing risk increased moderately in the SNC portfolio as 25.0 percent of SNC commitments will mature in 2015 and 2016, compared with 15.0 percent for the same period in the 2013 SNC Review. During 2013 and into 2014, syndicated lenders continued to refinance and modify loan agreements to extend maturities. These transactions had the effect of relieving near-term refinancing risk, but, in many instances, did not improve borrowers' ability to repay their debts in the longer term as obligors frequently added to their existing debt burden. For more information on the 2014 SNC review, visit the Board's website at www.federalreserve.gov/newsevents/press/bcreg/20141107a.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 2014, the Federal Reserve continued to actively promote the development and maintenance of effective BSA/AML compliance risk-management programs, including developing supervisory strategies and providing guidance to the industry on trends in BSA/AML compliance. For example, the Federal Reserve supervisory staff participated in a number of industry conferences to continue to communicate regulatory expectations and policy interpretations for financial institutions.

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. The Federal Reserve also participated in several Treasury-led private/public sector dialogues with Latin American and Mexican financial institutions, regulators, and supervisors. These dialogues are designed to promote information sharing and understanding of issues surrounding correspondent banking relations between U.S. and country-specific financial sectors. In addition, the Federal Reserve participated in meetings during the year to discuss BSA/AML issues with delegations from Latvia, China, and Mexico regarding managing and reporting on AML risk, customer due diligence, and emerging payments. 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 SEC, 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. In 2014, the FFIEC BSA/AML working group updated the manual to further clarify supervisory expectations and incorporate regulatory changes since its 2010 revision. The 2014 revisions also incorporate feedback from the banking industry and examination staff.

Throughout 2014, the Federal Reserve and other federal banking agencies continued to regularly share examination findings and enforcement proceedings with FinCEN as well as with OFAC under the interagency MOUs finalized in 2004 and 2006.

In 2014, the Federal Reserve continued to participate in the U.S. Treasury's Interagency Task Force on Strengthening and Clarifying the BSA/AML Framework (task force), created in 2012, which includes representatives from the Department of Justice, OFAC, FinCEN, the federal banking agencies, the SEC, 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. The Federal Reserve participated in developing the FATF guidance for the banking sector on identifying, assessing, and monitoring money laundering and the financing of terrorism on a risk-assessed basis, which was published in October 2014. The Federal Reserve also participated in efforts by FATF to more fully understand effective AML supervision and enforcement. Finally, the Federal Reserve continues to participate in a subcommittee of the Basel Committee that focuses on AML/counter-terrorism financing issues. With respect to that subcommittee, the Federal Reserve actively contributed to updating and revising a consultative paper on the general guide to account opening, originally issued in 2003.

Incentive Compensation

To foster improved incentive compensation practices in the financial industry, the Federal Reserve along with the other federal banking agencies adopted interagency guidance oriented to the risk-taking incentives created by incentive compensation arrangements.[10] The guidance is principles-based, recognizing that the methods used to achieve appropriately risk-sensitive compensation arrangements likely will differ significantly across and within firms. Three principles are at the core of the guidance:

- Incentive compensation arrangements should balance risk and financial results in a manner that does not encourage employees to expose their organizations to imprudent risks.
- A banking organization's risk-management processes and internal controls should reinforce and support the development and maintenance of balanced incentive compensation arrangements, and incentive compensation should not hinder risk management and controls.
- Banking organizations should have strong and effective corporate governance of incentive compensation.

Through two Board-led horizontal reviews and with ongoing engagement with the largest firms and our supervisory teams, we have improved practice and design of incentive compensation arrangements at firms with greater than $50 billion in U.S. assets. This supervisory work has been focused on assessing the potential for incentive compensation arrangements to encourage imprudent risk-taking; reviewing actions large banking organizations have taken to correct deficiencies in incentive compensation design; and evaluating the adequacy of firms' compensation-related risk management, controls, and corporate governance.

The Dodd-Frank Act requires the reporting to regulators of incentive compensation arrangements and prohibits incentive compensation arrangements that provide excessive compensation or that could expose the firm to inappropriate risks. Banking organizations, broker–dealers, investment advisers, and certain other firms are covered under the act if they have $1 billion or more in total consolidated assets.

10 See "Guidance on Sound Incentive Compensation Policies," 75 *Federal Register* 36395–36414 (June 25, 2010).

In 2011, the seven designated financial regulatory agencies (Federal Reserve, OCC, FDIC, OTS, NCUA, SEC, and the Federal Housing Finance Agency) issued a joint proposed incentive compensation rule. The agencies continue to work toward a rule to implement the act.

Other Policymaking Initiatives

- In March, the Board issued an advance notice of proposed rulemaking seeking comment to inform its consideration of physical commodity activities conducted by financial holding companies, including current authorizations of these activities and the appropriateness of further restrictions. The proposed rule is available at www.gpo.gov/fdsys/pkg/FR-2014-03-05/pdf/2014-04742.pdf.
- In July, the federal banking agencies with the Conference of State Bank Supervisors, issued a supervisory guidance statement, SR 14-5, to reiterate principles of sound risk management for home equity lines of credit (HELOCs) that have reached or will be reaching their end-of-draw periods. The guidance describes risk-management practices to promote a clear understanding of potential exposures and to help guide consistent, effective responses to HELOC borrowers who may be unable to meet contractual obligations at their end-of-draw periods and highlights concepts related to financial reporting for HELOCs. The guidance is available at www.federalreserve.gov/bankinforeg/srletters/sr1405.htm.
- In September, the federal banking agencies, along with the Farm Credit Administration and the Federal Housing Finance Agency, issued a proposed rule that would establish margin requirements for swap dealers, major swap participants, security-based swap dealers, and major security-based swap participants as required by the Dodd-Frank Act. The proposed rule would establish minimum requirements for the exchange of initial and variation margin between covered swap entities and their counterparties to non-cleared swaps and non-cleared security-based swaps. The proposed rule is available at www.gpo.gov/fdsys/pkg/FR-2014-09-24/pdf/2014-22001.pdf.
- In December, the federal banking agencies, along with the Department of Housing and Urban Development, the Federal Housing Finance Agency, and the SEC, issued a final rule requiring sponsors of securitization transactions to retain risk in those transactions, implementing the risk retention requirements in the Dodd-Frank Act. The final rule requires sponsors of securitizations, such as asset-backed securities (ABS), to retain not less than 5 percent of the credit risk of the assets collateralizing the ABS issuance unless certain underwriting criteria on the securitized assets are met. The rule also sets forth prohibitions on transferring or hedging the credit risk that the sponsor is required to retain. The final rule is available at www.gpo.gov/fdsys/pkg/FR-2014-12-24/pdf/2014-29256.pdf.
- In November, the Board announced that it would apply to SLHCs certain Federal Reserve supervisory guidance documents issued prior to July 21, 2011, the date of transfer of supervision and regulation of SLHCs from the former OTS to the Board. The Board's determination to apply these SR letters to SLHCs follows an extensive review of its existing guidance documents. The list of SR letters applicable to SLHCs is available at www.federalreserve.gov/bankinforeg/srletters/sr1409.pdf.
- In November, the Board issued a final rule to implement section 622 of the Dodd-Frank Act, which establishes a financial sector concentration limit that prevents a financial company from merging and consolidating with another financial company if the resulting company's consolidated liabilities would exceed 10 percent of the aggregate consolidated liabilities of all financial companies. Financial companies subject to the limit include insured depository institutions, BHCs, SLHCs, foreign banking organizations, companies that control insured depository institutions, and nonbank financial companies designated by the FSOC for Board supervision. The final rule is available at www.gpo.gov/fdsys/pkg/FR-2014-11-14/pdf/2014-26747.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.

Holding Company Regulatory Reports

The Federal Reserve requires that U.S. holding companies (HCs) periodically submit reports that provide information about their financial condition and structure.[11] 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 HCs and their nonbank subsidiaries. Foreign banking organizations (FBOs) also are required to periodically submit reports to the Federal Reserve. For more information on the various reporting forms, see www.federalreserve.gov/apps/reportforms/default.aspx.

During 2014, the following reporting forms were revised:

- FR Y-9C, FR Y-9SP, and the FFIEC 101—to reflect changes to the calculation of regulatory capital consistent with the Federal Reserve's revised regulatory capital rules. The Federal Reserve modified the FR Y-9C to split Schedule HC-R, Regulatory Capital, into two parts: Part I, which collects information on revised regulatory capital components and ratios; and Part II, which collects information on existing risk-weighted assets. The Federal Reserve (with the other FFIEC member banking agencies) modified the FFIEC 101 Schedule A, Advanced Risk-Based Capital, and nine other schedules to implement the revised advanced approaches capital rules.
- Part II of Schedule HC-R of the FR Y-9C, and line items related to securities lent and borrowed on the FR Y-9C—to ensure that all banking organizations are reporting risk-weighted assets consistent with the standardized approach outlined in the revised regulatory capital rules.
- FR Y-7Q—to require all FBOs with total consolidated assets of $50 billion or more to begin filing quarterly regardless of financial holding company status. In addition, a data item was added to Part 1 to collect the top-tier FBO's total combined assets of U.S. operations, net of intercompany balances and transactions between U.S. domiciled affiliates, branches, and agencies (effective March 2014). In December 2014, the FR Y-7Q report was revised to collect a new data item to implement the enhanced prudential standards for FBOs adopted pursuant to section 165 of the Dodd-Frank Act. The new item, Total U.S. Non-Branch Assets, is used to determine which FBOs would be required to form an intermediate holding company.
- FR 2052a and 2052b—finalized in 2014. Subsequently, in December 2014, the Federal Reserve Board proposed changes to the FR 2052a report, including increasing granularity of data items, updating reporting platform structure, and expanding the scope of those institutions reporting. These changes allow the Federal Reserve to monitor compliance with the liquidity coverage ratio, but more generally improve supervisory staff's ability to monitor liquidity risk.
- FR XX-1—created to implement a reporting requirement established by Regulation XX (Concentration Limit) for financial companies that do not otherwise report consolidated total liabilities to the Federal Reserve or other appropriate federal banking agency.
- FR Y-14—to better align FR Y-14A Schedule A (Summary) with the changes to Part II of Schedule HC-R of the FR Y-9C mentioned above. Also, numerous items were added to the counterparty collection that provides netting set and asset type information for securities financing transactions and derivative exposures to support ongoing supervision and supervisory modelling. Finally, several items were added to the collection of wholesale loan information.
- FR Y-16—to incorporate the new capital framework requirements of collecting common equity tier 1 capital and the common equity tier 1 risk-based capital ratio, and to modify the reporting instructions to clarify a number of items.

The majority of SLHCs became compliant with Federal Reserve regulatory reporting by the end of 2013. At this time, approximately 20 commercial and insurance SLHCs remain exempt from filing consolidated regulatory reports.

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 the Consolidated Reports of Condition and Income (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

[11] HCs are defined as bank holding companies, savings and loan holding companies, and securities holding companies.

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 2014, the FFIEC revised the Call Report to reflect changes to the calculation of regulatory capital consistent with the banking agencies' revised regulatory capital rules. The FFIEC modified the Call Report to split Schedule RC-R, Regulatory Capital, into two parts: Part I, which collects information on revised regulatory capital components and ratios, and Part II, which collects information on existing risk-weighted assets. The FFIEC also revised the following types of information on the Call Report: effective March 2014 (1) information about international remittance transfers; (2) information on trade names (other than an institution's legal title) used to identify physical offices and the addresses of any public-facing Internet websites (other than the institution's primary Internet website address) at which the institution accepts or solicits deposits from the public; (3) responses to a yes-no question asking whether the reporting institution offers any deposit account products (other than time deposits) primarily intended for consumers; (4) for institutions with $1 billion or more in total assets that offer one or more deposit account products (other than time deposits) primarily intended for consumers, information on the total balances of these consumer deposit account products; and, effective March 2015, (5) for institutions with $1 billion or more in total assets that offer one or more deposit account products (other than time deposits) primarily intended for consumers, information on the amount of income earned from each of three categories of service charges on their consumer deposit account products.

Also during 2014, the FFIEC proposed revisions to Part II of Schedule RC-R, and to line items related to securities lent and borrowed on Schedule RC-L, Derivatives and Off-Balance-Sheet Items, to ensure that all banking organizations are reporting risk-weighted assets consistent with the standardized approach outlined in the revised regulatory capital rules.

Supervisory Information Technology

The Federal Reserve's supervisory information technology function, 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. Initiatives include the development and maintenance of applications and tools to assist with the examination of banking institutions, data collection and storage, development and deployment of collaboration tools, and data security.

In 2014, the information technology supervisory function focused on

- **Large bank and foreign bank supervision.** Continued improving the supervision of large financial institutions and foreign banks by integrating document repositories for continuous monitoring and point-in-time examinations. One such application used to improve monitoring and tracking capabilities is C-SCAPE (Consolidated Supervision Comparative Analysis Planning and Execution).
- **Community and regional bank supervision.** For banking institutions with less than $50 billion in assets, worked with community and regional bank examiners, as well as the FDIC and state bank supervisors, to enhance supervisory tools used jointly by the federal and state banking agencies.
- **Supervisory support tools.** Continued to develop and implement administrative technical solutions to help support examiners and other supervisory staff become more efficient through the management of documentation, travel, and time. One such application implemented in 2014 is ROAM – S—a new supervisory scheduling tool that supports all supervisory programs.
- **Content, collaboration, and mobility.** (1) Provided technology development and support on a broader scale, with applications and programs designed to be used across the supervisory function to enhance efficiency and increase collaboration, mobility, and data collection and storage; (2) implemented a new document management platform to replace retired platforms used by the Reserve Banks; (3) unveiled new and enhanced collaboration tools, including business social sites for internal and external collaboration; and (4) leveraged an Interagency Steering Group to improve methods for sharing work among state and federal regulators.

Table 3. Training for banking supervision and regulation, 2014

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	1,948	489	838	1,892
FFIEC	7,445	336	428	107
Rapid Response[2]	17,146	4,022	11	90

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 Rapid Response® is a virtual program created by the Federal Reserve System as a means of providing information on emerging topics to Federal Reserve and state bank examiners.

- **Streamlined data access and improved security.** Continued to streamline data access for the supervisory function, while enhancing overall data security.

National Information Center

The National Information Center (NIC) is the Federal Reserve's comprehensive repository for supervisory, financial, banking structure data, as well as 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, an application that enables supervisory personnel and 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, an application that contains documents supporting the supervisory processes.

- **Database enhancements.** In 2014, the supervisory information technology function strengthened capabilities in the areas of data collection and data stewardship, implemented new tools for the analysis of large volumes of data, and enhanced data acquisition and analysis through the deployment of new or improved applications. The NIC team has also continued to partner with the Board's Office of the Chief Data Officer to collaborate on enterprise data inventory, application architecture, and integration activities.
- **Public website and external collaboration.** Several reports were added to the NIC public website, including the Banking Organization Systemic Risk Report, snapshots of data used in the calculation of global systemically important banks, and Risk-Based Capital Reporting for Institutions Subject to the Advanced Capital Adequacy Framework (FFIEC 101). Structure data were made available in bulk format for attributes, relationships, and transformation information for holding companies with total assets greater than $10 billion. In addition, steps were taken to improve collaboration with other agencies in terms of sharing institution-specific financial data.

Staff Development

The Federal Reserve's staff development program supports the ongoing development of about 3,000 professional supervisory staff, ensuring 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 2014 are summarized in table 3.

Examiner Commissioning Program

The Federal Reserve System's commissioning program for assistant examiners is set forth in the Examiner Commissioning Program (SR letter 98-02).[12] Examiners choose one of two specialty tracks—(1) safety and soundness or (2) consumer compliance.

On average, individuals move through a combination of classroom offerings, self-paced learning, and on-the-job training over a period of three years. Achievement is measured by completing the required course content, demonstrating adequate on-the-job knowledge, and passing a professionally validated proficiency examination.

In 2014, 156 examiners passed the first proficiency exam (113 in safety and soundness and 43 in consumer compliance).

12 SR letter 98-02 is available at www.federalreserve.gov/boarddocs/srletters/1998/sr9802.htm.

Currently, the Federal Reserve is undertaking a major initiative to modernize its Community Bank Examiner Commissioning Program. Additionally, efforts are underway to build an Examiner Commissioning Program for Large Financial Institutions.

Continuing Professional Development

As part of an ongoing strategic effort related to learning and development, the Federal Reserve is enhancing continuing professional development through the addition and modernization of several courses, tools, and programs.

Technical, professional, and leadership skill development opportunities are available to examiners in a blended learning approach. This includes self-study materials, online virtual learning options, and traditional classroom instruction. Schools, conferences, and programs covering a variety of regulatory topics are offered within the System, Board, and FFIEC. System programs are also available to state and federal banking agency personnel.

Regulation

The Federal Reserve exercises important regulatory influence over entry into the U.S. banking 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), and the International Banking Act.

In administering these statutes, the Federal Reserve acts on a variety of applications and notices 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 and notices concern BHC and SLHC formations and acquisitions, bank mergers, and other transactions involving banks and savings associations or nonbank firms. In 2014, the Federal Reserve acted on 1,133 applications filed under the six statutes.

In 2014, the Federal Reserve released its first *Semiannual Report on Banking Applications Activity*, which provides aggregate information on proposals filed by banking organizations and reviewed by the Federal Reserve. The report includes statistics on the number of proposals that have been approved, denied, and withdrawn, as well as general information about the length of time taken to process proposals. Additionally, the report discusses common reasons that proposals have been withdrawn from consideration. The first report is available at www.federalreserve.gov/newsevents/press/other/20141124a.htm.

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.[13] 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 approval, the Federal Reserve considers 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 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 must consider the views of the U.S. Department of Justice regarding

[13] Since 1996, the BHC 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 BHC 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.

the competitive aspects of any proposed BHC acquisition involving unaffiliated insured depository institutions. 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 2014, the Federal Reserve acted on 253 applications and notices filed by BHCs to acquire a bank or a nonbank firm, or to otherwise expand their activities.

A BHC may repurchase its own shares from its shareholders. Certain stock redemptions require prior Federal Reserve approval. 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 2014, 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 2014, 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. In 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, financial stability factors, 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 2014, the Federal Reserve approved 70 merger applications under the Bank Merger 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 also may contact other regulatory or law enforcement agencies for information about relevant individuals. In 2014, the Federal Reserve approved 131 change in control notices.

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 2014, the Federal Reserve acted on 47 membership applications, 525 new and merger-related domestic branch applications, and one foreign branch application.

State member banks also must 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 2014, one financial subsidiary application was approved.

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 that 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 2014, the Federal Reserve acted on 29 applications 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 2014, the Federal Reserve acted on no applications for MHC reorganizations. In 2014, the Federal Reserve acted on nine applications filed by MHCs to convert to stock form, and seven applications to waive dividends.

When reviewing an SLHC application or notice that requires approval, the Federal Reserve considers 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 must consider the views of the U.S. Department of Justice regarding the competitive aspects of any SLHC proposal involving the acquisition or merger of unaffiliated insured depository institutions.

The Federal Reserve also reviews elections submitted by SLHCs seeking status as financial holding companies under the authority granted by the Dodd-Frank Act. SLHCs seeking financial holding company status must file a written declaration with the Federal Reserve. In 2014, three 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 2014, the Federal Reserve approved 15 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 2014, the Federal Reserve approved four 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 and 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/2014orders.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

Under the Securities Exchange Act of 1934 and Federal Reserve's Regulation H, certain state member banks are required to make financial disclosures to the Federal Reserve using the same reporting forms (such as Form 10K—annual report and Schedule 14A—proxy statement) that are normally used by publicly held entities to submit information to the Securities Exchange Commission.[14] As most of the publicly held banking organizations are BHCs and the reporting threshold was recently raised, only two state member banks were required to submit data to the Federal Reserve in 2014. The information submitted by these two small state member banks is available to the public upon request and is primarily used for disclosure to the bank's shareholders and public investors.

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.

[14] Under Section 12(g) of the Securities Exchange Act, certain companies that have issued securities are subject to SEC registration and filing requirements that are similar to those imposed on public companies. Per Section 12(i) of the Securities Exchange Act, the powers of the SEC over banking entities that fall under Section 12(g) are vested with the appropriate banking regulator. Specifically, state member banks with 2,000 or more shareholders and more than $10 million in total assets are required to register with, and submit data to, the Federal Reserve. These thresholds reflect the recent amendments by the Jumpstart Our Business Startups Act (JOBS Act).

5 Consumer and Community Affairs

The Division of Consumer and Community Affairs (DCCA) has primary responsibility for carrying out the Board of Governor's role in consumer financial protection and community development. DCCA conducts consumer-focused supervision, research, and policy analysis, as well as implements relevant statutory requirements and facilitates community development. Through these efforts, the division works to ensure that consumer and community perspectives inform Federal Reserve policy, actions, and research in advancing DCCA's mission to promote a fair and transparent consumer financial services marketplace and effective community development.

Throughout 2014, the division engaged in numerous consumer and community-related functions and policy activities in the following areas:

- **Formulating consumer-focused supervision and examination policy to ensure that financial institutions for which the Federal Reserve has authority comply with consumer protection and meet requirements of community reinvestment laws and regulations.** The division provided oversight for the Reserve Bank consumer compliance supervision and examination programs in state member banks and bank holding companies (BHCs) through its policy development, examiner training, and supervision oversight programs, which include enforcement of fair lending, unfair or deceptive acts or practices (UDAP), and flood insurance rules; analysis of bank and BHC applications in regard to consumer protection; and processing of consumer complaints.
- **Conducting rigorous research, analysis, and data collection to inform Federal Reserve and other policymakers about consumer protection and community economic development issues and opportunities.** The division analyzed emerging issues in consumer financial services research, 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 related to financial services, implications of the financial crisis on young workers, and access to credit for small businesses.
- **Engaging, convening, and informing key stakeholders to identify emerging issues and advance what works in community reinvestment and consumer protection.** The division continued to promote fair and informed access to financial markets for all consumers, particularly the 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.
- **Writing and reviewing regulations that effectively implement consumer protection and community reinvestment laws.** The division manages the Board's regulatory responsibilities with respect to certain entities and specific statutory provisions of the consumer financial services and fair lending laws. DCCA drafted regulations and issued interpretations and compliance guidance for the industry and the Reserve Banks.

Supervision and Examinations

DCCA 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 the Board 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 consumer protection laws and regulations are rigorously and consistently enforced for the 850 state member banks that the Federal Reserve supervises for compliance with consumer protection and community reinvestment laws and regulations. Division staff provide guidance and expertise to the Reserve Banks on consumer protection laws and regulations, bank and BHC application analysis and processing, examination and enforcement techniques and policy matters, examiner training, and emerging issues. Finally, staff members participate in interagency activities that promote consistency in examination principles, standards, and processes.

Examinations are one of the Federal Reserve's methods of ensuring compliance with consumer protection laws and assessing the adequacy of consumer compliance risk-management systems within regulated entities. During 2014, the Reserve Banks completed 225 consumer compliance examinations of state member banks and 31 examinations of foreign banking organizations, 1 examination of an Edge Act corporation, and 1 examination of an agreement corporation.[1]

Bank Holding Company Consolidated Supervision

During 2014, staff reviewed more than 115 bank and financial holding companies to ensure consumer compliance risk was appropriately incorporated into the consolidated risk-management program for the organization. Division staff participated with staff from the Board's Division of Banking Supervision and Regulation on numerous projects related to ongoing implementation of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank Act), including standards for assessing corporate governance and continued integration of savings and loan holding companies (SLHCs) under Federal Reserve supervision.

In November 2014, the Federal Reserve issued a detailed listing of Federal Reserve supervisory guidance documents that are applicable to SLHCs.[2] The listing is supplemental to previously issued guidance that informed SLHCs to comply with Federal Reserve guidance and not Office of Thrift Supervision (OTS) guidance issued prior to July 21, 2011—the date that supervision and regulation of SLHCs transferred from the OTS to the Federal Reserve.

Mortgage Servicing and Foreclosure

Payment Agreement Status

Throughout 2014, Board staff continued to work to oversee and implement the enforcement actions against 16 mortgage loan servicers that were issued by the Federal Reserve and the Office of the Comptroller of the Currency (OCC) between April 2011 and April 2012. At that time, along with other requirements, the two regulators directed servicers to retain independent consultants to conduct comprehensive reviews of foreclosure activity to determine whether eligible[3] borrowers suffered financial injury because of servicer errors, misrepresentations, or other deficiencies. The file review initiated by the independent consultants, combined with a significant borrower outreach process, was referred to as the Independent Foreclosure Review (IFR).

In 2013, the regulators entered into agreements with 15 of the mortgage loan servicers to replace the IFR with direct cash payments to all eligible borrowers and other assistance (the Payment Agreement).[4] The participating servicers agreed to pay an estimated $3.9 billion to 4.4 million borrowers whose primary residence was in a foreclosure process in 2009 or 2010. The Payment Agreement also required the servicers to contribute an additional $5.8 billion dollars in other foreclosure prevention assistance, such as loan modifications and forgiveness of deficiency judgments. For the participating servicers, fulfillment of the agreement will satisfy the foreclosure review requirements of the enforcement actions issued by the regulators in 2011 and 2012. The Payment Agreement did not affect the servicers' continuing obligations under the enforcement actions to address defi-

1 In 2013, DCCA began reporting the number of examinations completed based on the calendar year (from January 1 to December 31); in prior years, numbers had been reported for the period from July 1 through June 30. Agency and branch offices of foreign banking organizations, Edge Act corporations, and agreement corporations fall under the Federal Reserve's purview for consumer compliance activities. An agreement corporation is a type of bank chartered by a state to engage in international banking. The bank "agrees" with the Federal Reserve Board to limit its activities to those allowed an Edge Act corporation. An Edge Act corporation is a banking institution with a special charter from the Federal Reserve to conduct international banking operations and certain other forms of business without complying with state-by-state banking laws. By setting up or investing in Edge Act corporations, U.S. banks are able to gain portfolio exposure to financial investing operations not available under standard banking laws.

2 For more information, see www.federalreserve.gov/bankinforeg/srletters/sr1409.htm.

3 Borrowers were eligible if their primary residence was in a foreclosure action with one of the 16 mortgage loan servicers at any time in 2009 or 2010.

4 One OCC-regulated servicer elected to complete the Independent Foreclosure Review, and did not, therefore, enter into the Payment Agreement.

ciencies in their mortgage servicing and foreclosure policies and procedures.

A paying agent, Rust Consulting, Inc., (Rust) was retained to administer payments to borrowers on behalf of the participating servicers. Beginning in April 2013, a letter with an enclosed check was sent to borrowers who had a foreclosure action initiated, pending, or completed in 2009 or 2010 with any of the participating servicers. Letters with checks were mailed to eligible borrowers throughout 2013 and 2014, including checks that were reissued upon the borrower's request due to expiration, a request for a change in payee, or a request by borrowers to split the check amongst the borrowers on the loan. For checks that have not been cashed or were returned undeliverable, the agencies directed Rust to expand its efforts to locate more-current address information for the unpaid borrowers. This resulted in additional consumers receiving payments under the agreements, with replacement checks scheduled to be sent to any updated address or the last known address on record for those borrowers who have not yet cashed their checks.

As of December 31, 2014, $3.4 billion has been distributed through 3.7 million checks, representing 87 percent of the total value of the funds. Receiving a payment under the agreement will not prevent borrowers from taking any action they may wish to pursue related to their foreclosure. Servicers are not permitted to ask borrowers to sign a waiver of any legal claims they may have against their servicer in connection with receiving payment.[5]

Foreclosure Prevention Actions

The Payment Agreement also required servicers to undertake well-structured loss-mitigation efforts focused on foreclosure prevention, with preference given to activities designed to keep borrowers in their homes through affordable, sustainable, and meaningful home preservation actions within two years from the date the agreement in principle was reached. The foreclosure prevention actions are expected to provide significant and meaningful relief or assistance to qualified borrowers and, as stated in the agreement, "should not disfavor a specific geography within or among states, nor disfavor low and/or moderate income borrowers, and not discriminate against any protected class."

[5] For more information, see www.federalreserve.gov/consumerinfo/independent-foreclosure-review-payment-agreement.htm.

Servicers may fulfill their obligations through three specific consumer-relief activities set forth in the National Mortgage Settlement, including first-lien loan modifications, second-lien loan modifications, and short sales or deeds-in-lieu of foreclosure. Servicers were given the option, subject to non-objection from their regulator, to meet their foreclosure prevention assistance requirements by paying additional cash into the qualified settlement funds to be used for direct payments to consumers or by providing cash or other resource commitments to borrower counseling or education. Several of the participating servicers chose this option and have met their foreclosure prevention obligations.

As of December 31, 2014, all servicers have submitted reports detailing the consumer-relief actions they have taken to satisfy these requirements. The foreclosure prevention assistance actions reported include loan modifications, short sales, deeds-in-lieu of foreclosure, debt cancellation, and lien extinguishment. In order to receive credit toward the servicer's total foreclosure prevention obligation, the actions submitted must be validated by the regulators. A process has been established for a third party to conduct this validation and ensure that the foreclosure prevention assistance amounts meet the requirements of the amendments to the enforcement actions.

Servicer Efforts to Address Deficiencies

In addition to the foreclosure review requirements, the enforcement actions required mortgage servicers to submit acceptable written plans to address various mortgage loan servicing and foreclosure processing deficiencies. In the time since the enforcement actions were issued, the banking organizations have been implementing the action plans, including enhanced controls, and improving systems and processes. To date, the supervisory review of the mortgage servicers' action plans has shown that the banking organizations under the enforcement actions have implemented significant corrective actions with regard to their mortgage servicing and foreclosure processes, but that some additional actions need to be taken. Federal Reserve supervisory teams will continue to monitor and evaluate the servicers' progress on implementing the action plans to address unsafe and unsound mortgage servicing and foreclosure practices as required by the enforcement actions.

In July 2014, the Federal Reserve Board published a report regarding the IFR and the Payment Agreement that replaced the IFR. The report, which focused primarily on servicers regulated by the Federal Reserve, provides information on the process for the review of the foreclosure files during the IFR and file-review results—including servicer error rates during the IFR—up to the time the IFR was replaced.[6] In addition, the report contains information on direct borrower payments and other assistance from the Payment Agreement and discusses the Federal Reserve's ongoing supervision of corrective actions the mortgage servicers are required to implement. After the Payment Agreement has been fully implemented, the Federal Reserve expects to publish data on the final status of the cash payments and the foreclosure prevention assistance as well as the status of corrective actions implemented by the mortgage servicers.

Supervisory Matters

Risk-Focused Supervision

On January 1, 2014, the Board implemented a new Community Bank Risk-Focused Consumer Compliance Supervision Program for state member banks with consolidated assets of $10 billion or less and their subsidiaries. The new program is designed to promote strong compliance risk-management practices and consumer protection at state member community banks. Under the updated program, consumer compliance examiners base the examination intensity more explicitly on the individual financial institution's risk profile, including its consumer compliance culture and how effectively it identifies and manages consumer compliance risk. The new program is intended to enhance the efficacy of the Board's supervision program and reduce regulatory burden on many community banking organizations.[7]

To ensure effective implementation of the Community Bank Risk-Focused Consumer Compliance Supervision Program, the Board undertook several examiner training and banker outreach initiatives. Consumer compliance examiner training was delivered through two Rapid Response webinars (discussed further in this section under "Ongoing Training Opportunities") and a daylong case study exercise conducted at each Reserve Bank. Banker outreach was provided in a public Outlook Live[8] webinar in March 2014 and a *Consumer Compliance Outlook* newsletter[9] article in the second-quarter 2014 edition.

In addition, the Board issued an enhanced examination frequency policy to complement the new Community Bank Risk-Focused Supervision Program. The frequency policy promotes effective supervision through deployment of examiner resources commensurate with an institution's size, compliance rating, and CRA rating while reducing burden on many community banks. This new policy expands the number of financial institutions subject to a longer consumer compliance and CRA examination frequency cycle, as follows:

- 48 or 60 months for banks with assets less than $350 million and satisfactory or better compliance and CRA ratings (formerly the threshold was $250 million)
- 36 months for financial institutions with assets between $350 million and $1 billion and satisfactory or better compliance and CRA ratings (formerly 24 months)

The new examination policy does not affect financial institutions with assets less than $250 million and those with assets more than or equal to $1 billion. The exam frequency schedule remains the same for these financial institutions and institutions with less than satisfactory compliance and/or CRA ratings, as follows:

- 48 or 60 months for institutions with assets less than $250 million and satisfactory or better compliance and CRA ratings (48 months if the CRA rating is satisfactory; 60 months if the rating is outstanding)
- 24 months for institutions with assets greater than or equal to $1 billion and satisfactory or better compliance and CRA ratings
- 12 months for any institution with less than satisfactory ratings for either compliance or CRA

6 The report is available at www.federalreserve.gov/publications/other-reports/files/independent-foreclosure-review-2014.pdf.

7 For more information, see www.federalreserve.gov/boarddocs/supmanual/supervision_cch.htm.

8 Outlook Live is the Federal Reserve System's audio conference series on consumer compliance issues. For more information on this webinar, see https://consumercomplianceoutlook.org/outlook-live/2014/community-bank-risk-focused-consumer-compliance-supervision-program/.

9 *Consumer Compliance Outlook* is a Federal Reserve System publication dedicated to consumer compliance issues. For more information on this newsletter article, see https://consumercomplianceoutlook.org/2014/second-quarter/risk-focused-consumer-compliance-supervision-program-for-community-banks/.

Enforcement Activities

Fair Lending and UDAP Enforcement

With respect to fair lending, pursuant to provisions of the Dodd-Frank Act that took effect July 21, 2011, the Consumer Financial Protection Bureau (CFPB) supervises state member banks with assets of more than $10 billion for compliance with the Equal Credit Opportunity Act (ECOA). The Board also has supervisory authority for compliance with the Fair Housing Act. For the 829 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. With respect to the Federal Trade Commission Act, which prohibits UDAP, the Board has supervisory authority over state member banks, regardless of asset size.

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

With respect to fair lending, 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 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 ensure that the institution takes all appropriate corrective action. There were no referrals to the DOJ in 2014.

If there is a UDAP or fair lending violation that does not constitute a pattern or practice under ECOA, 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 and UDAP 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. When necessary, the Board can bring public enforcement actions.

Given the complexity of this area of supervision, the Federal Reserve seeks to provide clarity on its perspectives and processes to the industry and the public. DCCA staff participates in numerous meetings, conferences, and trainings sponsored by consumer advocates, industry representatives, and interagency groups. Fair Lending Enforcement staff meet 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. For example, in 2014, the Board sponsored a free interagency webinar on fair lending supervision through Compliance Outlook Live, which was attended by more than 5,000 registrants, most of which were community banks.[10]

In 2014, the Board issued a consent order to cease and desist and a civil money penalty assessment of $3.5 million against an institution and its non-bank agent for deceptive practices associated with an account that was in violation of the Federal Trade Commission Act.

The actions addressed in this order involved several practices that, at various points in the financial aid refund selection process, misled students about various aspects of the account, including terms and fees.[11]

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

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[10] For more information and to obtain the webcast, see https://consumercomplianceoutlook.org/outlook-live/2014/federal-interagency-fair-lending-hot-topics/.

[11] For more information, see www.federalreserve.gov/newsevents/press/enforcement/20140701b.htm.

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.

The enactment of two statutes, the Biggert-Waters Flood Insurance Reform Act of 2012 (Biggert-Waters Act) and the Homeowner Flood Insurance Affordability Act of 2014 (HFIAA), requires the federal financial institution supervisory agencies to update certain provisions of the federal flood insurance regulations. To that end, the Board and four other federal agencies have issued two joint notices of proposed rulemaking, one in October 2013 and a second in October 2014, to implement portions of the Biggert-Waters Act and HFIAA with respect to private flood insurance, the escrow of flood insurance payments, and the forced placement of flood insurance. The agencies continue work to finalize regulations to implement these statutes.

The Biggert-Waters Act also increased the maximum limits of building coverage available for non-condominium residential buildings designed for use for five or more families, classified as "Other Residential" buildings. FEMA announced the availability of insurance under the Standard Flood Insurance Policy, or SFIP, reflecting these increased maximum limits effective June 1, 2014. In response to the availability of SFIPs with the increased limits, the federal financial institution supervisory agencies issued the "Interagency Statement on Increased Maximum Flood Insurance Coverage for Other Residential Buildings" on May 30, 2014.[12] This statement conveys the agencies' expectations of supervised institutions with regard to any loans secured by other residential buildings located in a special flood hazard area that may be affected by the availability of increased maximum insurance for these types of properties.

In 2014, the Federal Reserve issued 14 formal consent orders and assessed $143,925 in civil money penalties against state member banks to address violations of the flood regulations. These statutorily mandated penalties were forwarded to the National Flood Mitigation Fund held by the Department of the Treasury for the benefit of FEMA.

Community Reinvestment Act

The CRA requires that the Federal Reserve and other federal banking and thrift regulatory 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;
- considers state member banks' and bank holding companies' CRA performance in context with other supervisory information when analyzing applications for mergers and acquisitions; and
- 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 2014 reporting period, the Reserve Banks completed 189 CRA examinations of state member banks. Of those banks examined, 18 were rated "Outstanding," 169 were rated "Satisfactory," two were rated "Needs to Improve," and none were rated "Substantial Non-Compliance."

In April, the Board, the OCC, and the Federal Deposit Insurance Corporation (FDIC) published revised large-institution CRA examination procedures, which explain how community development activities that benefit a broader statewide or regional area that includes an institution's assessment area(s) and investments in nationwide funds will be considered when evaluating an institution's CRA performance, assigning ratings, and developing public performance evaluations. The revised examination procedures reflect, and are consistent with, revisions to the Interagency Questions and Answers Regarding Community Reinvestment that were published in November 2013.[13]

In September, the Board, the OCC, and the FDIC proposed additional revisions to the Interagency

[12] The agencies issuing this statement are the Board of Governors, the Farm Credit Administration, the Federal Deposit Insurance Corporation (FDIC), the National Credit Union Administration (NCUA), and the Office of the Comptroller of the Currency (OCC). For more information, see www.federalreserve.gov/bankinforeg/caletters/caltr1403.htm.

[13] For more information, see www.ffiec.gov/cra/whatsnew.htm and www.federalreserve.gov/bankinforeg/caletters/caltr1402.htm. The Interagency Questions and Answers document provides additional guidance to financial institutions and the public on the agencies' CRA regulations.

Questions and Answers.[14] The proposed guidance addresses additional questions raised by bankers, community organizations, and others regarding the agencies' CRA regulations. In particular, the proposed revisions to the questions and answers would

- address alternative systems for delivering retail banking services;
- add examples of innovative or flexible lending practices;
- address community development-related issues by (1) clarifying guidance on economic development, (2) providing examples of community development loans and activities that are considered to revitalize or stabilize an underserved nonmetropolitan middle-income geography, and (3) clarifying how community development services are evaluated; and
- offer guidance on how examiners evaluate the responsiveness and innovativeness of an institution's loans, qualified investments, and community development services.

The agencies are currently reviewing comments received in response to the proposed revisions to the Interagency Questions and Answers.

Mergers and Acquisitions

The Federal Reserve analyzes expansionary applications by banks or BHCs, taking into account the likely effects of the acquisition on competition, the convenience and needs of the communities to be served, the financial and managerial resources and future prospects of the companies and banks involved, and the effectiveness of the company's policies to combat money laundering. As part of this process, DCCA evaluates whether the institutions are currently meeting the convenience and needs of their communities and existing managerial resources, as well as the institutions' ability to meet the convenience and needs of their communities and their managerial resources after the proposed transaction.

The CRA requires the Federal Reserve to consider a depository institution's record of helping to meet the credit needs of its local communities in evaluating applications for mergers, acquisitions, and branches. An institution's most recent CRA performance evaluation is a particularly important, and often controlling, consideration in the applications process because it represents a detailed on-site evaluation of the institution's performance under the CRA by its federal supervisor.

As part of the analysis of managerial resources, the Federal Reserve reviews the institution's record of compliance with consumer protection laws and regulations. The institution's most recent consumer compliance rating is central to this review because, like the CRA performance evaluation, it represents the detailed findings of the institution's supervisory agency.

Less than satisfactory CRA or consumer compliance ratings can pose an impediment to the processing and approval of the application. Federal Reserve staff gather additional information about CRA and consumer compliance performance when the financial institution(s) involved in an application have less than satisfactory CRA or compliance ratings or when the Federal Reserve receives comments from interested parties that raise CRA or consumer compliance issues. To further enhance transparency on this process, the Board issued guidance to the public in February 2014 describing the Federal Reserve's approach to applications and notices, indicating those that may not satisfy statutory requirements for approval of a proposal or otherwise raise supervisory or regulatory concerns.[15]

The Board provides information on its actions associated with these merger and acquisition transactions, issuing press releases and the Board Orders for each.[16] As part of the February 2014 guidance, the Federal Reserve also informed the industry and public that the Federal Reserve would start publishing a semiannual report that provides pertinent information on applications and notices filed with the Federal Reserve. The first of these reports was issued in November 2014, covering the first six months of 2014.[17] The report included statistics on the number of proposals that had been approved, denied, and withdrawn, as well as general information about the length of time taken to process proposals. Additionally, the report discussed common reasons that proposals had been withdrawn from consideration. Board staff also conducted educational webinars to

[14] For more information, see www.federalreserve.gov/newsevents/press/bcreg/20140908a.htm.

[15] For more information, see www.federalreserve.gov/bankinforeg/srletters/sr1402.htm.

[16] For access to the Board's Orders on Banking Applications, see www.federalreserve.gov/newsevents/press/orders/2014orders.htm.

[17] For the report, see www.federalreserve.gov/newsevents/press/other/20141124a.htm.

discuss this guidance and report with banking institutions and members of the public.[18] Because these applications are of interest to the public, they often generate comments that raise various issues for Board staff to consider in their analyses of the supervisory and lending records of the applicants. With respect to consumer compliance and community reinvestment, commenters often allege that various institutions fail to make credit available to certain minority groups and to low- and moderate-income (LMI) individuals, or when they do extend credit to those borrowers, it is at a higher cost. Commenters also often express their view that the institutions fail to meet the needs of small businesses in LMI geographies and/or to adequately fulfill their CRA obligation to meet the credit needs of all of the communities in their assessment area, particularly LMI areas.

In evaluating the applications and the merits of public comments, the Board considers information provided by applicants and analyzes supervisory information, including examination reports with evaluations of compliance with fair lending and other consumer protection laws and regulations, and confers with other regulators for their supervisory views. The Board conducts analyses to understand the lending activities of the applicant and target institutions.

During 2014, the Board considered over 100 applications—with a range of topics from change in control notices, to branching requests, to mergers and acquisitions—with outstanding issues involving compliance with consumer protection statutes and regulations, including fair lending laws and the CRA. DCCA staff analyzed the following 14 unrelated notices and applications for transactions involving bank mergers and branching that involved adverse public comments on CRA issues or consumer compliance issues, such as fair lending, which the Board considered and approved:[19]

- Community & Southern Holdings, Inc., Atlanta, Georgia, to acquire Verity Capital Group, Inc. and thereby indirectly acquire its subsidiary bank, Verity Bank, both of Winder, Georgia, was approved in March.
- PacWest Bancorp, Los Angeles, California, and its controlling shareholders, CapGen Capital Group II LP and CapGen Capital Group II LLC, both of New York, New York, to acquire CapitalSource Inc. and thereby indirectly acquire its subsidiary industrial bank, CapitalSource Bank, both of Los Angeles, was approved in April.
- Umpqua Holdings Corporation, Portland, Oregon, to merge with Sterling Financial Corporation and thereby acquire its subsidiary bank, Sterling Savings Bank, both of Spokane, Washington, was approved in April.
- Old National Bancorp, Evansville, Indiana, to merge with Tower Financial Corporation and thereby indirectly acquire its subsidiary bank, Tower Bank and Trust Company, both of Fort Wayne, Indiana, was approved in April.
- Mercantile Bank Corporation, Grand Rapids, to merge with Firstbank Corporation, Alma, and thereby indirectly acquire its subsidiary banks, Firstbank, Mount Pleasant, and Keystone Community Bank, Kalamazoo, all of Michigan, and an election by Mercantile Bank Corporation to become a financial holding company were approved in May.
- Cullen/Frost Bankers, Inc., San Antonio, Texas, (1) to merge with WNB Bancshares, Inc., and thereby acquire its subsidiary bank, Western National Bank, both of Odessa, Texas; (2) to have Cullen/Frost's subsidiary state member bank, Frost Bank, San Antonio, merge with Western National Bank, with Frost Bank as the surviving entity; and (3) to have Frost Bank establish and operate branches at the main office and the branches of Western National Bank were approved in May.
- MB Financial, Inc., Chicago, to merge with Taylor Capital Group, Inc., Rosemont, and thereby indirectly acquire its subsidiary bank, Cole Taylor Bank, Chicago, all of Illinois, was approved in July.
- Old National Bancorp, Evansville, Indiana, to merge with United Bancorp, Inc., and thereby indirectly acquire its subsidiary bank, United Bank & Trust, both of Ann Arbor, Michigan, was approved in July.
- Regions Bank, Birmingham, Alabama, to establish a branch in Kingwood, Texas, was approved in September.
- First American Bank Corporation, Elk Grove Village, Illinois, to acquire Bank of Coral Gables, Coral Gables, Florida, was approved in November.

[18] The webinars were part of the "Ask the Fed" and "Consumer Compliance Outlook Live" series. For access to "Ask the Fed," see https://bsr.stlouisfed.org/askthefed/public-users/login.aspx?ReturnUrl=%2faskthefed%2ffaq. For access to "Consumer Compliance Outlook Live," see https://consumercomplianceoutlook.org/outlook-live/.

[19] Related notices and applications for which a single Board Order was issued were counted as a single notice or application in this total.

- Veritex Community Bank, a state member bank subsidiary of Veritex Holdings, Inc., both of Dallas, Texas, to establish a branch at 2700 Oak Lawn Avenue, Dallas, Texas, was approved in December.
- ViewPoint Financial Group, Inc. to merge with LegacyTexas Group, Inc., and thereby acquire its subsidiary state member bank, LegacyTexas Bank, all of Plano, Texas; LegacyTexas Bank to merge with ViewPoint's subsidiary bank, ViewPoint Bank, N.A., Plano, Texas, with LegacyTexas Bank as the surviving entity; and LegacyTexas Bank to establish and operate branches at the locations of the main office and the branches of ViewPoint Bank were approved in December.
- Midland States Bancorp, Effingham, Illinois, to acquire by merger Love Savings Holding Company and its wholly owned subsidiary, Heartland Bank, FSB, both of St. Louis, Missouri; Midland States Bank, Midland's subsidiary state member bank, also of Effingham, Illinois, to merge with Heartland Bank, with Midland Bank as the surviving entity; and Midland States Bank to establish and operate branches at the locations of Heartland Bank's main office and branches were approved in December.[20]
- A notice by Southside Bancshares, Inc., Tyler, Texas, to acquire OmniAmerican Bancorp, Inc., and thereby indirectly acquire its subsidiary savings association, OmniAmerican Bank, both of Fort Worth, Texas, was approved in December.

Coordination with the Consumer Financial Protection Bureau

During 2014, staff continued to work through the implementation of the Interagency Memorandum of Understanding on Supervision Coordination with the CFPB. The agreement is intended to establish arrangements for coordination and cooperation among the CFPB and the OCC, the FDIC, the National Credit Union Association (NCUA), and the Board of Governors. The agreement strives to minimize unnecessary regulatory burden and to avoid unnecessary duplication of effort and conflicting supervisory directives amongst the prudential regulators. The regulators work cooperatively to share exam schedules for covered institutions and covered activities to plan simultaneous exams, provide final drafts of examination reports for comment, and share supervisory information.

Coordination with Other Federal Banking Agencies

The member agencies of the Federal Financial Institutions Examination Council (FFIEC) develop consistent examination principles, standards, procedures, and report formats.[21] In 2014, the FFIEC member organizations continued to work together on various initiatives, including developing examination procedures that incorporate amendments to Regulations X (Real Estate Settlement Procedures Act [RESPA]) and Z (Truth in Lending Act [TILA]) issued by the CFPB in 2013 that integrate certain mortgage loan disclosures currently required under TILA and RESPA. Those amendments will be effective on August 1, 2015.

Interagency Guidance on Home Equity Lines of Credit Nearing Their End-of-Draw Periods

In July, the Board—along with the Conference of State Bank Supervisors, the FDIC, the NCUA, and the OCC—issued guidance to reiterate principles of sound risk management for home equity lines of credit (HELOCs) that have reached or will be reaching their end-of-draw periods.[22] The guidance articulates the agencies' expectation that supervised financial institutions will have adequate risk-management practices to monitor, manage, and control the risks in their HELOC portfolios as lines near their end-of-draw periods as well as to promote compliance with applicable laws and regulations. In particular, this HELOC guidance describes risk-management practices that promote a clear understanding of potential exposures and help guide consistent, effective responses to HELOC borrowers who may be unable to meet contractual obligations at their end-of-draw periods. The guidance also highlights concepts related to financial reporting for HELOCs. Additionally, it reminds financial institutions that applicable consumer protection laws include, but are not limited to, the Equal Credit Opportunity Act, the Fair Hous-

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[20] An adverse comment was also received for a related notice under the Change in Bank Control Act of 1978, as amended, with respect to this transaction. The Board approved that notice in December. For access to notices under the Change in Bank Control Act, see www.federalreserve.gov/bankinforeg/LegalInterpretations/bhc_changeincontrol2014.htm.

[21] The FFIEC is a formal interagency body empowered to prescribe uniform principles, standards, and report forms for the federal examination of financial institutions by the Board of Governors, the FDIC, the NCUA, the OCC, and the CFPB and to make recommendations to promote uniformity in the supervision of financial institutions. In 2006, the State Liaison Committee (SLC) was added to the council as a voting member. The SLC includes representatives from the Conference of State Bank Supervisors, the American Council of State Savings Supervisors, and the National Association of State Credit Union Supervisors.

[22] For more information, see www.federalreserve.gov/bankinforeg/srletters/sr1405.htm.

ing Act, federal and state prohibitions against UDAP (such as section 5 of the Federal Trade Commission Act), RESPA, the Servicemembers Civil Relief Act, and TILA.

Interagency Guidance Regarding Unfair or Deceptive Credit Practices

In August, the Board—in conjunction with the CFPB, the FDIC, the NCUA, and the OCC—issued guidance regarding certain consumer credit practices.[23] The guidance notes that prior to the Dodd-Frank Act, several rules prohibited banks, savings associations, and federal credit unions from engaging in certain credit practices. The Dodd–Frank Act repealed the rulemaking authority for these credit practices rules and, consequently, the Board, the OCC, and the NCUA are repealing those former rules. This guidance states the agencies' view that the unfair or deceptive acts or practices described in these former credit practices rules, including those in the Board's former Regulation AA, could violate the prohibition against unfair or deceptive acts or practices in section 5 of the Federal Trade Commission Act and title X of the Dodd-Frank Act, even in the absence of a specific regulation governing the conduct.

Examiner Training

Ensuring that financial institutions comply with laws that protect consumers and encourage community reinvestment is a fundamental aspect of the bank examination and supervision process. As the complexity of both consumer financial transactions and the regulatory landscape has increased, training for consumer compliance examiners has become more important than ever before. The division's examiner training function is responsible for the ongoing development of the professional consumer compliance supervisory staff, from an initial introduction to the Federal Reserve System through the development of proficiency in consumer compliance topics sufficient to earn an examiner's commission. DCCA's role is to ensure that examiners 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 consumer protection laws, regulations, and examining concepts. In 2014, these courses were offered in 10 sessions, and training was delivered to a total of 175 System consumer compliance examiners and staff members and 12 state banking agency examiners.

When appropriate, courses are delivered via alternative methods, such as online or other distance-learning technologies. For instance, several courses use a combination of instructional methods, including both classroom instruction focused on case studies and 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 2014, staff began migrating introductory content from a classroom-based training model to more online delivery, dedicating classroom time for examiners to apply their learning using case studies and reviewing loan files.

Outreach and Training: Dodd-Frank Act

During 2014, the CFPB continued to promulgate new rules pursuant to the Dodd-Frank Act. Board and CFPB staff collaborated on examiner training and outreach to bankers. For instance, four Outlook Live webinars dedicated to the CFPB's TILA/RESPA Integrated Disclosures Rule, were broadcast beginning in June 2014 and continuing through November 2014. Other Outlook Live webinars covered issues ranging from general compliance management to specific fair lending and community reinvestment matters, for a total of nine compliance-related broadcasts in 2014.[24]

Ongoing Training Opportunities

In addition to providing core examiner training, the examiner staff development function emphasizes the importance of continuing lifelong 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 2014, the System continued to offer Rapid Response sessions. Introduced in 2008, this platform offers examiners one-hour teleconferences that

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[23] For more information, see www.federalreserve.gov/bankinforeg/caletters/caltr1405.htm.

[24] For more information, see https://consumercomplianceoutlook.org/outlook-live/2014/consumer-compliance-hot-topics/.

explore emerging issues; provide urgent training to address the implementation of new laws, regulations, or supervisory guidance; and highlight case studies. Seven consumer compliance Rapid Response sessions were designed, developed, and presented to System staff during 2014. The sessions covered a broad range of topics including social media, flood insurance violations, and vendor management considerations.

Responding to Consumer Complaints and Inquiries

The Federal Reserve investigates complaints against state member banks and selected nonbank subsidiaries of BHCs (Federal Reserve regulated entities), and forwards complaints against other creditors and businesses to the appropriate enforcement agency. Each Reserve Bank investigates complaints against Federal Reserve regulated entities 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 intake of consumer complaints and inquiries. In 2014, FRCH processed 32,339 cases. Of these cases, more than half (19,179) were inquiries and the remainder (13,160) were complaints, with most cases received directly from consumers. Of the 13,160 complaints, FRCH referred 76 percent to other federal and state banking agencies in 2014. Approximately 5 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, most FRCH consumer contacts occurred by telephone (59 percent). Thirty-seven percent (12,118) of complaint and inquiry submissions were made electronically (via e-mail, online submissions, and fax), and the online form page received approximately 59,174 visits during the year.

Complaint Referrals

In 2014, the Federal Reserve forwarded 9,992 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 Act.[25] The Federal Reserve's investigation of these complaints revealed one instance of illegal credit discrimination.

Table 1. Complaints against state member banks and selected nonbank subsidiaries of bank holding companies about regulated practices, by regulation/act, 2014

Regulation/act	Number
Regulation AA (Unfair or Deceptive Acts or Practices)	5
Regulation B (Equal Credit Opportunity)	25
Regulation BB (Community Reinvestment)	2
Regulation CC (Expedited Funds Availability)	71
Regulation D (Reserve Requirements)	4
Regulation DD (Truth in Savings)	50
Regulation E (Electronic Funds Transfers)	51
Regulation H (National Flood Insurance Act/Insurance Sales)	9
Regulation M (Consumer Leasing Act)	1
Regulation P (Privacy of Consumer Financial Information)	18
Regulation V (Fair and Accurate Credit Transactions)	18
Regulation Z (Truth in Lending)	86
Garnishment Rule	1
Fair Credit Reporting Act	158
Fair Debt Collection Practices Act	54
Fair Housing Act	18
Homeowners Protection Act	5
Real Estate Settlement Procedures Act	28
Servicemembers Civil Relief Act	6
Total	**610**

Consumer Inquiries

The Federal Reserve received over 19,000 consumer inquiries in 2014, 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 Complaints

Complaints against Federal Reserve regulated entities totaled 3,159 in 2014. Approximately 42 percent (1,334) of these complaints were received by telephone, with 94 percent (1,254) of those requiring additional information from consumers to be provided in writing to enable investigation. Approximately six percent of the total complaints received in 2014 were still under investigation as of December 2014. Of the remaining complaints (1,412), 67 percent (1,215) involved unregulated practices and 33 percent (610) involved regulated practices. (Table 1 shows the breakdown of complaints about regulated

[25] 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.

Table 2. Complaints against state member banks and selected nonbank subsidiaries of bank holding companies about regulated practices, by product type, 2014

Subject of complaint/product type	All complaints		Complaints involving violations	
	Number	Percent	Number	Percent
Total	**610**	**100**	**22**	**4**
Discrimination alleged				
Real estate loans	22	3.6	0	0
Credit cards	2	0.4	0	0
Other loans	2	0.4	0	0
Nondiscrimination complaints				
Checking accounts	128	20.9	7	1.3
Real estate loans	83	13.6	8	1.4
Credit cards	216	35.4	0	0
Other	157	25.7	7	1.3

practices by regulation or act; table 2 shows complaints by product type.)

Complaints about Regulated Practices

The majority of regulated practices complaints concerned checking accounts (21 percent), real estate (17 percent), and credit cards (36 percent).[26] The most common checking account complaints related to funds availability not as expected (34 percent), insufficient funds/overdraft charges and procedures (19 percent), and alleged forgery/fraud/embezzlement/theft (9 percent). The most common real estate complaints related to debt collection/foreclosure concerns (14 percent); escrow problems (12 percent); and disputed rates, terms, and fees (8 percent). The most common credit card complaints related to inaccurate credit reporting (38 percent), bank debt-collection tactics (18 percent), billing error resolutions (8 percent), and payment errors/delays (7 percent).

Twenty-six regulated practices complaints alleging discrimination on the basis of prohibited borrower traits or rights were received in 2014.[27] Nineteen discrimination complaints were related to the race, color, national origin, or ethnicity of the applicant or borrower. Seven discrimination complaints were related to either the age, handicap, familial status, or religion of the applicant or borrower. Of the complaints alleging discrimination based on a prohibited basis received in 2014, there were no violations.

In 86 percent of complaints against Federal Reserve regulated entities received in 2014, staff analysis revealed that institutions correctly handled the situation. Of the remaining 14 percent of investigated complaints, 4 percent were deemed violations of law; 4 percent were 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 2014, the Board received 1,215 complaints against Federal Reserve regulated entities that involved these unregulated practices.[28] The majority of the complaints were related to electronic transactions/prepaid products (30 percent), credit cards (20 percent), checking account activity (13 percent), real estate products (13 percent), and commercial loans/leases (6 percent).

Consumer Laws and Regulations

Throughout 2014, 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.

[26] 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.

[27] 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.

[28] Examples of unregulated practices include (but are not limited to) customer service issues; allegations of forgery, embezzlement, or theft; policy or procedure concerns; issues with account opening and closing; and contractual issues that are not covered under existing federal banking regulations.

This includes drafting regulations and issuing interpretations and compliance guidance for the industry and the Reserve Banks.

Proposed Flood Insurance Rule

In October, the Board, along with the Farm Credit Administration, the FDIC, the NCUA, and the OCC jointly issued a proposed rule to amend regulations pertaining to loans secured by residential improved real estate or mobile homes located in special flood hazard areas.[29] The proposed rule would implement provisions of the Homeowner Flood Insurance Affordability Act of 2014 (HFIAA) relating to escrowing flood insurance payments and the exemption of certain detached structures from the mandatory flood insurance purchase requirement. The HFIAA amends the escrow provisions of the Biggert-Waters Act.

In accordance with the HFIAA, the proposed rule would require regulated lending institutions to escrow flood insurance premiums and fees for loans made, increased, extended, or renewed on or after January 1, 2016, unless the regulated lending institution or a loan qualifies for a statutory exception. In addition, for outstanding residential loans made before that date, the proposed rule would require institutions to provide borrowers the option to escrow flood insurance premiums and fees. To facilitate compliance, the agencies' proposal includes new and revised sample notice forms and clauses concerning the escrow requirement and the option to escrow.

Consistent with the HFIAA, the proposed rule would eliminate the legal requirement to purchase flood insurance for a structure that is a part of a residential property located in a special flood hazard area if that structure is detached from the primary residential structure and does not also serve as a residence. Under the HFIAA, however, lenders may nevertheless require the purchase of flood insurance for such structures to protect the value of the collateral securing the loan.

In a separate rulemaking, the agencies will address other provisions of the Biggert-Waters Act for which the agencies have jurisdiction and that were not amended by the HFIAA.

[29] For more information, see www.federalreserve.gov/newsevents/press/bcreg/20141024a.htm.

Repealing Rules Pursuant to the Dodd-Frank Act

Under title X of the Dodd-Frank Act, rulemaking authority for a number of consumer financial protection laws was transferred from the Board to the CFPB, except with respect to certain motor vehicle dealers. In May 2014, the Board repealed its Regulation DD (Truth in Savings) and Regulation P (Privacy of Consumer Financial Information), which were superseded by substantially identical rules issued by the CFPB.[30] At the same time, the Board issued final amendments to the Identity Theft Red Flags rule in Regulation V (Fair Credit Reporting), which require financial institutions and creditors to implement identity theft prevention programs and clarify that these provisions apply only to creditors that regularly extend credit or obtain consumer reports in the ordinary course of their business.[31]

In August, the Board issued a proposal to repeal its Regulation AA (Unfair or Deceptive Acts or Practices), which includes the Board's "credit practices rule" that prohibits banks from using certain remedies to enforce consumer credit obligations and from including these remedies in their consumer credit contracts.[32] The Dodd-Frank Act repealed the provision in the Federal Trade Commission Act that authorized the Board to issue rules addressing unfair or deceptive acts or practices by banks. Notwithstanding the repeal of the Board's rulemaking authority, the Board continues to have enforcement authority under the Federal Trade Commission Act and the Dodd-Frank Act to prevent and remedy unfair or deceptive acts or practices by the institutions it supervises. Concurrent with the proposed repeal of Regulation AA, the Board, the CFPB, the FDIC, the NCUA, and the OCC issued interagency guidance clarifying that the unfair or deceptive practices described in the former credit practices rules, including those in Regulation AA, could violate the statutory prohibitions against unfair or deceptive practices, even in the absence of a specific regulation governing the conduct.

[30] For more information, see www.federalreserve.gov/newsevents/press/bcreg/20140522a.htm.

[31] The amendments to the Fair Credit Reporting Act were intended to narrow the scope of the law so that it would not be applied to professionals, such as doctors or lawyers, who sometimes allow consumers to delay payment.

[32] For more information, see www.federalreserve.gov/newsevents/press/bcreg/bcreg20140822a.htm.

Consumer Research and Emerging-Issues and Policy Analysis

Throughout 2014, DCCA analyzed emerging issues in consumer financial services policies and practices in order to understand their implications for the market risk surveillance and supervisory policies that are core to the Federal Reserve's functions, as well as to gain insight into consumer financial decisionmaking.

Researching Issues Affecting Consumers and Communities

In 2014, DCCA explored various issues related to consumers and communities through convening experts, conducting original research, and fielding new and ongoing surveys. The information gleaned from these undertakings provided insights into the factors affecting consumers and households.

Consumer Behavior Research Surveys

In order to better understand consumer decisionmaking in the rapidly evolving financial services sector, DCCA periodically conducts Internet panel surveys to gather data on consumers' experiences and perspectives on various issues of interest.

With respect to ongoing surveys, DCCA conducted its annual survey of consumers' use of, and opinions about, mobile financial services. Since 2011, the survey has polled more than 2,200 individuals each year to learn whether and how they use mobile devices for banking and payments. The survey was also 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 these surveys, conducted in the winter, are released each spring in the report *Consumers and Mobile Financial Services*. Results from the survey conducted in November 2013 were published in March 2014.[33] For the fourth survey, conducted in December 2014, results will be published in March 2015. Given the rapid pace of developments in the mobile financial services market, DCCA plans to conduct another survey of consumers' use of mobile financial services in the coming year and produce a corresponding report summarizing the survey results.

In addition, results from DCCA's newest survey in the financial services area—the Survey of Household Economics and Decisionmaking—were published in the *Report on the Economic Well-Being of U.S. Households in 2013*, released in August 2014. (See box 1 for details.) DCCA launched the survey to better understand consumer decisionmaking in the wake of the Great Recession.

Survey of Experiences and Perspectives of Young Workers

In 2013, the Community Development staff at the Federal Reserve Board began exploring the experiences and expectations of young Americans entering the labor market. Staff reviewed existing research and engaged external research and policy experts to identify the potential economic implications of these labor market trends on young workers. This initial exploration raised several questions about the experiences of young workers that were not fully explained by existing data. In response, the Federal Reserve conducted the Survey of Young Workers in December 2013 to develop a deeper understanding of the forces at play. The online survey was intended to be exploratory—ultimately confirming some insights and highlighting areas worthy of additional study. The survey was administered via an Internet panel. The 2,097 survey respondents ranged in age from 18 to 30.

In the Shadow of the Great Recession: Experiences and Perspectives of Young Workers was released in November 2014, with preliminary findings highlighted at a conference co-sponsored by the Federal Reserve Banks of Atlanta and Kansas City and Rutgers University's John J. Heldrich Center for Workforce Development.[34] The report summarizes insights from the Survey of Young Workers and frames policy and research issues for future consideration by the Federal Reserve Board. One of the major findings highlighted in the report is that many young adults remain optimistic about their job future and that respondents with higher levels of education and work experience are more likely to be optimistic than respondents who lack such skills and experiences. A second finding is that young workers are responding to the labor market's increasing demand for postsec-

[33] See Board of Governors of the Federal Reserve System (2014), *Consumers and Mobile Financial Services 2014* (Washington: Board of Governors, March), www.federalreserve.gov/econresdata/consumers-and-mobile-financial-services-report-201403.pdf.

[34] For more information on the event, see www.frbatlanta.org/news/conferences/2014/141015-workforce-development.aspx and www.kc.frb.org/events/eventdetail.cfm?event=7379EDCCC3274761D20CF8C1F7524B47.

Box 1. Shedding Light on Household Finances: Survey of Household Economics and Decisionmaking

DCCA has been exploring knowledge gaps about consumer financial behavior, decisionmaking, and experiences following the Great Recession. The Survey of Household Economics and Decisionmaking (SHED) focuses on issues not sufficiently understood through external data and research or not already explored through other Federal Reserve resources, such as the Survey of Consumer Finances. The SHED includes questions about housing and living arrangements, credit access and behavior, education and student debt, savings, retirement, and medical expenses.

The results of the September 2013 SHED survey are outlined in the *Report on the Economic Well-Being of U.S. Households in 2013*, released in July 2014.[1] A second round of the survey was conducted in the fall of 2014, and a report on its findings will be published in summer 2015.

Overall, the survey found that, as of September 2013, many households were faring well but that sizable fractions of the population were displaying some signs of financial stress:

Lingering effects of the recession: Thirty-four percent of individuals reported that they were worse off financially than they had been five years earlier in 2008, and 34 percent said that they were doing about the same. While over 60 percent of respondents indicated that their families were either "doing okay" or "living comfortably" financially, one-fourth said that they were "just getting by" and another 13 percent said they were struggling to do so.

Credit availability: While 31 percent of survey respondents had applied for some type of credit in the prior 12 months, one-third of those who applied for credit were turned down or given less credit than they applied for. Moreover, 15 percent of those who did not apply reported that they put off applying because they thought they would be turned down. Overall, 23 percent of respondents were either denied credit, offered less credit than they requested, or put off applying for fear of denial.

Housing and mortgages: Many renters expressed an implied interest in homeownership, as the most common reasons for renting rather than owning a home were an inability to afford the down payment (45 percent) and an inability to qualify for a mortgage (29 percent). Overall, confidence in mortgage approval was mixed, with 53 percent of all respondents—including homeowners—indicating they were confident that they would be approved for a mortgage if they were to apply at the time of the survey. In contrast, 29 percent said they were not confident and 17 percent did not know whether they could obtain approval.

Education debt: Twenty-four percent of the population held education debt for themselves or a family member, with 16 percent holding debt from their own education. Some individuals struggle to service this debt, with 18 percent of those with education debt indicating that they were behind on payments in some way, including 9 percent with loans in collections. The rate of being behind or in collections was far greater among those who failed to complete the program for which they borrowed money, and also varied by type of institution attended.

Emergency savings: Many respondents indicated a lack of preparedness for financial emergencies. When asked how they would pay for a theoretical emergency expense of $400, less than half of respondents said that they would completely pay it using cash or a credit card that they pay in full, while 19 percent indicated they could not pay the expense and 33 percent would pay the expense by borrowing or selling something. Over two-fifths of respondents are ill-prepared for a loss of their main source of income and could not cover expenses for three months even by borrowing money, using savings, selling assets, or borrowing from friends or family.

Retirement planning: The survey results suggest that many individuals are not adequately prepared for retirement. Thirty-one percent of non-retired respondents reported having no retirement savings or pension, including 19 percent of those ages 55 to 64. Retirement plans for many individuals at or near retirement were also altered by the Great Recession. Two-fifths of those over age 45 who had not yet retired said that they pushed back the planned date of retirement because of the recession, and 15 percent of those who had retired since 2008 reported that they retired earlier than planned due to the recession.

[1] For the press release and publication, see www.federalreserve.gov/newsevents/press/other/20140807a.htm.

ondary credentials and degrees. A third finding is that intangibles still play an important role and that finding a job is still heavily based on personal connections. Lastly, the survey found that young workers value job stability, and when given the choice, respondents generally preferred steady employment (67 percent) to higher pay (30 percent).

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, analyze, and anticipate trends; lead Division-wide issues working groups; and organize expert roundtables to identify emerging risks and inform policy recommendations.

In 2014, the Policy Analysis team contributed analyses on a broad range of policy issues—from recent trends in auto lending, to the impact on consumers of student loan debt, to the implications of mobile banking, to existing and emerging credit products for small businesses, and to challenges facing certain segments of consumers. New mortgage rules took effect at the beginning of the year and Policy staff, together with colleagues at the Board and in the Federal Reserve Banks, continued to closely monitor the availability of mortgage credit and the impact on local housing markets, neighborhoods, and potential homebuyers.

Impact of Resets on Home Equity Lines of Credit and Mortgage Interest Rates

In 2014, the first wave of interest-rate resets occurred on HELOCs, interest-only (I-O) loans, and loans in the Home Affordable Modification Program (HAMP) program. These resets could result in payment shock for millions of homeowners, depending on their FICO scores and other debts.

About one-quarter, or 2.5 million, of the more than 10 million HELOCs outstanding are expected to reach their end-of-draw periods and convert to amortizing loans by the end of 2017, with the average payment estimated to rise by $250 per month. In response, some large banks have implemented HELOC-assistance programs to borrowers in need of flexible payment arrangements.

Also, many of the I-O mortgages, which were in wide use during the height of the lending bubble in 2007 and put borrowers into homes with artificially low mortgage payments for an initial period, are beginning to reset to payments that reflect full amortization. Payment increases, in some cases, may be significant.

Meanwhile, the first loan modifications made under the government's HAMP program are reaching their five-year mark, after which interest rates will increase up to 1 percent per year until they adjust to the market rate at the time of their modification. HAMP modifications will continue to enter this multiyear reset process with completion expected by 2021.

The Policy Analysis team participated in an interagency regulatory conference on mortgage resets with researchers and examiners working on the topic. Assistance also was provided for interagency guidance on mortgage resets to ensure that, in addition to bank safety and soundness considerations, consumers will be provided with adequate notice to prepare for the increases and that concerns on the part of affected borrowers will be addressed.[35]

Trends in Auto Lending

The Policy team continued to monitor developments in auto lending. While Federal Reserve research shows a solid recovery of the auto market post-crisis and growth in auto loan originations, concerns have been raised that increased lending to below-prime borrowers, high-cost loans, and longer loan terms could result in financial hardship for households struggling with living expenses. In August, Policy Analysis staff held a forum for Federal Reserve System staff to discuss their research to assess current auto market conditions and loan performance data, with a particular focus on the subprime sector, and explore any potential risk areas and consumer harms. Staff also engaged with industry representatives and consumer groups who also attended to share their perspectives about certain auto lending practices and the implications for consumers. The dialogue provided an opportunity for staff and external experts to exchange views about the future state of auto financing and to identify areas where additional data and analysis would be useful to better monitor market and lending conditions affecting the availability of and access to affordable auto loan products.

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[35] For more information, see www.federalreserve.gov/bankinforeg/srletters/sr1405.htm.

The Evolving Small Business–Bank Relationship

The Federal Reserve System has typically concentrated its small business–related activities around the study of credit conditions and the impact of a strong business climate on community and economic development. Less understood is the overall impact of a changing financial landscape on the small business customer and existing banking business models.

In the past, small business banking has been considered largely "relationship banking." Recent trends, however, suggest that small businesses engage in a more complex web of relationships among competing financial service providers. A vast array of nonbank service providers has cropped up to help small businesses manage various aspects of their banking and payments processes, including deposits, debit and credit card payments, Treasury services, remote deposit, payroll, automated clearinghouse (ACH), and wire services. Likewise, online alternative lenders have developed innovative technologies to underwrite and originate loans and now offer short-term loan products aimed at filling small businesses' small-dollar needs. Among these new players are peer-to-peer lenders, direct loan providers, and payment processing firms making forays into cash-advance lending. Consequently, competition and new technologies are altering the conventional concept of small business relationship banking.

The Policy team convened a working session for staff from throughout the Federal Reserve System—including the community development, research, regional economics, consumer compliance, and operations functions—who are concerned with small business issues. Internal and external experts presented research on current trends in traditional and online small business banking. The session was aimed at exploring how small business–bank relationships are developed and maintained in an environment of technological change, the growth of nonbank service providers, and the resulting impact on traditional bank business models and small businesses.

To supplement small business research being conducted throughout the Federal Reserve System, the Policy team commissioned two research studies from outside organizations. One, a survey of 60 community bank CEOs, found that banks recognize that their small business customers are savvier today than in the past when it comes to assessing their banking needs and options. The survey also found that banks appear to have the desire and liquidity to lend, but are becoming more conservative in their underwriting for small business borrowers. The second study, an online focus group of 22 small business borrowers, examined small businesses' awareness, perceptions, and understanding of short-term, small-dollar online loan products. The study revealed that small businesses find it difficult to compare and evaluate the costs and benefits of various online small-dollar products. Potential borrowers also expressed concerns about safeguards to protect their personal and business information were they to borrow funds from these online sources.

Community Development

The Federal Reserve System's Community Development function promotes economic growth and financial stability for LMI communities and individuals through a range of activities: convening stakeholders, conducting and sharing research, and identifying emerging issues (see box 2 for more information). 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 to promote and coordinate Systemwide priorities.

Exploring New Sources of Community Development Finance

One of the responsibilities of the Federal Reserve's Community Development function is to research the sources of community development finance for underserved communities and work with stakeholders to improve the supply and delivery of these funds. Historically, the Federal Reserve's interest in these funding sources has mainly included the more traditional sources, such as government funding, foundations, Community Development Financial Institutions, and CRA-motivated bank investments. All of these remain critical sources of funding, but many of these have also been shrinking in recent years. Therefore, the Board's Community Development team has begun to investigate how new and innovative sources of funding could be used to finance community development and small business. A key part of this expansion is technology, which is changing fundraising and investment and has the potential to streamline and scale community development transactions.

In March 2014, the Board's Community Development team hosted a small group of community devel-

Box 2. How Does the Fed Promote Effective Community Development?

The Federal Reserve understands that stable communities promote stable regions and a more robust economy overall. Staff in the Community Development function at the Board and all 12 Reserve Banks engage in applied research, public programs, outreach, and technical assistance in order to help promote economic growth and financial stability in communities across the country, especially low- and moderate-income areas.

The System's commitment to community development is captured in the *Community Development Perspectives* report, which represents its various points of engagement in this work around the country. Released in conjunction with the FedCommunities.org site launch, this report includes brief summaries of Community Development's work in its strategic focal points of people, place, the policy and practice of community development, and small business. Within each of these focus areas, the report includes background information that helps to provide context for this work; a sampling of key research, outreach programs, and other initiatives; and some ideas on future challenges, needs, and opportunities. Read the interactive report at www.fedcommunities.org.

opment and technology thought leaders for a discussion on the challenges and opportunities presented by crowdfunding investment as a significant new source of capital for the community development industry. The event was also live-streamed on the Board's website and set the groundwork for these two otherwise divergent fields to facilitate a functional, fair, and prosperous crowdfunding market for community development.

In September 2014, the Board hosted a meeting entitled "Family Philanthropy and Impact Investing," and brought together staff and trustees from family foundations, family offices, advisors, and other thought leaders to discuss the increasing demand for family foundations to engage in impact investing.

In October 2014, the Board hosted a targeted meeting for online community development platforms. The meeting brought together practitioners that were either currently operating, or seriously investing in the development of, online platforms that facilitate community development transactions. The meeting was structured as a peer-to-peer interaction and focused on identifying the current landscape of community development online platforms, common barriers and challenges, best practices, and opportunities for collaboration.

These three meetings, in addition to dozens of other conversations and meetings, have greatly expanded the Board's knowledge of potential new sources of community development finance, and helped to connect the various stakeholders in this field.

Expanding Access to Information on System Community Development Activities

In 2012, the Federal Reserve's Community Development function conducted an environmental scan to assess community development needs around the country. One of the key findings from this process was that Community Development staff could improve their efforts to share the wide array of resources with the public and System colleagues alike in a more systematic and user-friendly way. As a result, the FedCommunities.org web portal was created to improve the awareness of, and access to, Federal Reserve community development resources by providing users with a single, web-based entry point. Resources are organized according to the System's strategic focus areas supporting people, place, the policy and practice of community development, and small business.[36]

Launched in June 2014, FedCommunities.org functions as a referral site, in that it aggregates information on relevant, timely community development resources from all 12 Reserve Banks and the Board of Governors in a centralized spot. Users are then redirected to specific Reserve Bank websites for access to the materials themselves, and for additional content. In its first quarter of operation, FedCommunities.org drew 12,840 page views for the approximately 350 resources it hosted from across the Federal Reserve System. The site offers four key features:

[36] To access the site, see www.fedcommunities.org.

- Resources are easy to locate and are organized by two key pieces of information: topic/community development content and type of resource (e.g., national and local data, speeches, publications, etc.).
- A robust search feature helps users locate resources, either by specific criteria or general interest categories.
- Users can sign up to be notified of new content according to preference criteria that they select.
- Content is populated regularly to keep the site fresh and current.

6 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 sections 2 through 4 of this annual report).

Federal Reserve Priced Services

Reserve Banks provide a range of payment and related services to depository and certain other institutions; these "priced services" include collecting checks, operating an automated clearinghouse (ACH) service, transferring funds and securities, and providing a multilateral settlement service.[1]

The Reserve Banks, working with the financial services 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; the Reserve Banks offer a bundle of all-electronic payment services and offer 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.

In 2014, the Reserve Banks continued efforts to migrate the FedACH, Fedwire Funds, and Fedwire Securities services from a mainframe system to a distributed computing environment. A significant milestone was reached by successfully migrating the Fedwire Funds Settlement application and the Reserve Banks' accounting system to a distributed environment. The Reserve Banks continued to make progress on the migration of the Fedwire Securities applications. However, after conducting an assessment of the viability and cost-effectiveness of the FedACH program, the Reserve Banks suspended the initiative and began to investigate the use of other technology solutions.

In October 2014, the Federal Reserve Board announced final revisions to part I of the Federal Reserve Policy on Payment System Risk (PSR policy) that are based on and generally consistent with the international risk-management standards in the April 2012 *Principles for Financial Market Infrastructures* developed jointly by the Committee on Payment and Settlement Systems and the International Organization of Securities Commissions.[2] The revised policy retains the expectation that the Fedwire Funds Service and the Fedwire Securities Service will meet or exceed the applicable risk-management standards in the policy. The final policy became effective on December 31, 2014.

In December 2014, the Federal Reserve Board adopted changes to part II of the PSR policy and companion amendments to Regulation J (Collection of Checks and Other Items by Federal Reserve Banks and Funds Transfers through Fedwire) that were designed to enhance the efficiency of the payment system. The changes are largely related to the posting rules for ACH and commercial check transactions.[3]

Under the current posting rules for commercial and government ACH transactions, ACH debit transactions post at 11:00 a.m., and ACH credit transactions

1 The ACH enables depository institutions and their customers to process large volumes of payments effectively through electronic batch processes.

2 Effective September 1, 2014, the Committee on Payment and Settlement Systems changed its name to Committee on Payments and Market Infrastructures.

3 12 CFR part 210.

Table 1. Priced services cost recovery, 2005–14
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]
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
2013	441.3	409.3	4.2	413.5	106.7
2014	433.1	418.7	5.5	424.1	102.1
2005–14	6,962.4	6,378.3	390.3	6,768.6	102.9

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

1 For the 10-year period, includes revenue from services of $6,491.6 million and other income and expense (net) of $470.8 million.

2 For the 10-year period, includes operating expenses of $6,079.4 million, imputed costs of $34.5 million, and imputed income taxes of $264.5 million.

3 From 2009 to 2012, the PSAF was adjusted to reflect the actual clearing balance levels maintained; previously, the PSAF had been calculated based on a projection of clearing balance levels.

4 Revenue from services divided by total costs. For the 10-year period, cost recovery is 95.1 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 3 to the "Pro Forma Financial Statements for Federal Reserve Priced Services" at the end of this section.

post at 8:30 a.m.[4] The Board changed the posting of ACH debit transactions to 8:30 a.m. to align with the posting time of ACH credit transactions.

In addition, the Board's current posting rules for commercial check transactions reflect a presumption that banks generally handle checks in paper form and do not reflect banks' widespread use of electronic check-processing methods. To reflect the current electronic check-processing environment, the Board changed the posting time for receiving most credits for deposits and debits for presentments to 8:30 a.m. and established two other posting times at 1:00 p.m. and 5:30 p.m.

The amendments to Regulation J permit the Reserve Banks to obtain settlement from paying banks as early as 8:30 a.m. for checks that the Reserve Banks present. The amendments also permit the Reserve Banks to require paying banks that receive presentment of checks from the Reserve Banks to make the proceeds of settlement for those checks available to the Reserve Banks as soon as 30 minutes after receipt of the checks. These changes to the PSR policy and Regulation J become effective July 23, 2015.

4 All times are eastern time unless otherwise specified.

Recovery of Direct and Indirect Costs

The Monetary Control Act of 1980 requires that the Federal Reserve establish fees for priced services 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.[5] The imputed costs and imputed profit are collectively referred to as the private-sector adjustment factor (PSAF). From 2005 through 2014, the Reserve Banks recovered 102.9 percent of the total priced services costs, including the PSAF (see table 1).[6]

5 Pub. Law No. 96-221, March 31, 1980. Financial data reported throughout this section—including revenue, other income, costs, income before taxes, and net income—will reference the "Pro Forma Financial Statements for Federal Reserve Priced Services" at the end of this section.

6 According to the Accounting Standards Codification (ASC) Topic 715 (ASC 715), Compensation–Retirement Benefits, the Reserve Banks recognized a $549.7 million reduction in equity related to the priced services' benefit plans through 2014. Including this reduction in equity, which represents a decline in economic value, results in cost recovery of 95.1 percent for the 10-year period. For details on how implementing ASC 715 affected the pro forma financial statements, refer to note 3 to the pro forma financial statements at the end of this section.

Table 2. Activity in Federal Reserve priced services, 2012–14
Thousands of items

Service	2014	2013	2012	Percent change	
				2013 to 2014	2012 to 2013
Commercial check	5,741,527	5,988,302	6,622,265	-4.1	-9.6
Commercial ACH	11,620,376	11,142,821	10,664,613	4.3	4.5
Fedwire funds transfer	138,133	137,219	134,409	0.7	2.1
National settlement	597	661	663	-9.7	-0.3
Fedwire securities	4578	6,535	6,441	-30.0	1.5

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.

In 2014, Reserve Banks recovered 102.1 percent of the total priced services costs, including the PSAF.[7] The Reserve Banks' operating expenses and imputed costs totaled $418.7 million. Revenue from operations totaled $433.1 million, resulting in net income from priced services of $14.5 million. Although the check service, the Fedwire Funds and National Settlement Services, and the Fedwire Securities Service achieved full cost recovery, the FedACH Service recovered 86.7 percent of its costs because of a $31.6 million charge associated with the decision to suspend its investment in a multiyear technology initiative to modernize its processing platform. Greater-than-expected check volume processed by the Reserve Banks was the single most significant factor influencing priced services cost recovery.

Commercial Check-Collection Service

In 2014, Reserve Banks recovered 115.6 percent of the total costs of their commercial check-collection service, including the related PSAF. Revenue from operations totaled $174.7 million, resulting in net income of $25.4 million. This revenue decreased $24.1 million from 2013. The Reserve Banks' operating expenses and imputed costs totaled $149.3 million. Reserve Banks handled 5.7 billion checks in 2014, a decrease of 4.1 percent from 2013 (see table 2). The decline in Reserve Bank check volume, attributable to the decline in the number of checks written generally, was not as great as anticipated and led to the resulting net income. The average daily value of checks collected by the Reserve Banks in 2014 was approximately $32.3 billion, an increase of 1.9 percent from the previous year.

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

Commercial Automated Clearinghouse Service

The Reserve Banks' long-run cost recovery average from 2005 to 2014 for FedACH was 100.0 percent. In 2014, the Reserve Banks recovered 86.7 percent of the total costs of their commercial ACH services, including the related PSAF. Revenue from ACH operations totaled $124.4 million, an increase of $5.5 million from 2013. Reserve Bank operating expenses and imputed costs totaled $141.4 million, resulting in a net loss of $17.0 million. In 2014, the Reserve Banks processed 11.6 billion commercial ACH transactions, an increase of 4.3 percent from 2013. The average daily value of FedACH transfers in 2014 was approximately $79.2 billion, an increase of 1.0 percent from the previous year.

Fedwire Funds and National Settlement Services

In 2014, Reserve Banks recovered 103.2 percent of the costs of their Fedwire Funds and National Settlement Services, including the PSAF. Reserve Bank operating expenses and imputed costs for these operations totaled $105.2 million in 2014. Revenue from these services totaled $110.1 million, resulting in a net income of $4.8 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 2014, the number of Fedwire funds transfers originated by depository institutions increased 0.7 percent from 2013, to approximately 138 million. The average daily value of Fedwire funds transfers in 2014 was $3.5 trillion, an increase of 24 percent from the previous year.

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 2014, the service processed settlement files for 17 local and national private-sector arrangements. The Reserve Banks processed 9,896 files that contained 569,502 settlement entries for these arrangements in 2014. Activity in 2014 represents a decrease from the 661,466 settlement entries processed in 2013.

Fedwire Securities Service

The Fedwire Securities Service allows its participants to transfer electronically to other service participants certain securities issued by the U.S. Treasury Department, federal government agencies, government-sponsored enterprises (GSEs), and certain international organizations.[8] In 2014, the number of non-Treasury securities transfers processed via the service decreased 30.0 percent from 2013, to approximately 9.4 million. The average daily value of Fedwire Securities transfers in 2014 was $1.1 trillion, a decrease of 3 percent from the previous year.

The Reserve Banks recovered 104.1 percent of the total costs of the priced-service component of their Fedwire Securities Service, including the PSAF. The Reserve Banks' operating expenses and imputed costs for providing this service totaled $22.7 million in 2014. Revenue from the service totaled $24.0 million, resulting in a net income of $1.2 million.

Float

In 2014, the Reserve Banks had daily average credit float of $590.8 million, compared with daily average credit float of $630.2 million in 2013.[9]

[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" later in this section.

[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).

Currency and Coin

The Board is the issuing authority for the nation's currency (in the form of Federal Reserve notes). In 2014, the Board paid the U.S. Treasury Department's Bureau of Engraving and Printing (BEP) $656.8 million for costs associated with the production of 6.9 billion Federal Reserve notes. The Reserve Banks distribute and receive currency and coin through depository institutions in response to public demand. Together, the Board and Reserve Banks work to maintain the integrity of and confidence in Federal Reserve notes.

In 2014, the Reserve Banks distributed 37.6 billion Federal Reserve notes into circulation, a 0.6 percent increase from 2013, and received 35.7 billion Federal Reserve notes from circulation, a 0.2 percent decrease from 2013. The value of Federal Reserve notes in circulation increased nearly 8.4 percent in 2014, to $1,298.7 billion at year-end, largely because of international demand for $100 notes. In 2014, the Reserve Banks also distributed 69.4 billion coins into circulation, a 1.7 percent increase from 2013, and received 55.4 billion coins from circulation, a 2.5 percent decrease from 2013.

Redesigned $100 Note

The Federal Reserve began supplying financial institutions with a redesigned $100 note on October 8, 2013. The Federal Reserve, U.S. Department of the Treasury, the BEP, and the U.S. Secret Service partner to redesign Federal Reserve notes to stay ahead of counterfeiting threats. During 2014, the Federal Reserve Banks distributed 3.6 billion redesigned $100 notes and replaced nearly 30 percent of all $100 notes in circulation with the redesigned $100 note.

Improvements to Efficiency and Risk Management

Advances in currency-processing equipment and sensor technology 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. In 2014, Reserve Banks installed a new type of fitness sensor and began installing a new type of authentication sensor. Additionally, the Reserve Banks continue working with equipment manufacturers to explore the next generation of equipment to process the high volume of notes received annually for authentication and fitness sorting.

During 2014, some Reserve Banks began implementing new processes designed to increase productivity and enhance risk management, which all Reserve Banks will implement in 2015.

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 more cost effectively. The new platform will also facilitate business continuity and contingency planning and enhance the support provided to Reserve Bank customers. In 2014, the Reserve Banks continued application development and testing efforts for the new automation platform, which is scheduled to be deployed to all cash offices by year-end 2017.

The Board and the BEP continued implementing components of a new quality system for the BEP throughout 2014. The BEP installed and began using sorting equipment that culls good notes from rejected half sheets. This process, known as "single note inspection," should reduce spoilage rates and printing costs.

Fiscal Agency and Government Depository Services

As fiscal agents and depositories for the federal government, the 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 reimburse the Reserve Banks for the expense of providing fiscal agency and depository services.

In 2014, fiscal agency expenses amounted to $569.6 million, a 7.5 percent increase from 2013 (see table 3). Expenses increased as a result of requests from Treasury's Bureau of the Fiscal Service (Fiscal Service). Support for Treasury programs accounted for 93.9 percent of expenses, and support for other entities accounted for 6.1 percent.

Table 3. Expenses of the Federal Reserve Banks for fiscal agency and depository services, 2012–14
Thousands of dollars

Agency and service	2014	2013	2012
Department of the Treasury			
Treasury securities services			
Treasury retail securities	54,966	55,334	60,208
Treasury securities safekeeping and transfer	16,568	14,397	14,131
Treasury auction	29,499	26,673	30,648
Computer infrastructure development and support	5,792	5,801	4,990
Other services	853	2,971	3,340
Total	107,678	105,176	113,317
Payment, collection, and cash-management services			
Payment services	161,629	151,715	141,534
Collection services	54,355	44,788	41,456
Cash-management services	75,878	66,519	58,975
Computer infrastructure development and support	79,289	75,565	70,075
Other services	11,465	9,360	9,075
Total	382,615	347,947	321,115
Other Treasury			
Total	44,756	42,826	37,011
Total, Treasury	535,049	495,949	471,443
Other federal agencies			
Total, other agencies	34,588	34,077	34,569
Total reimbursable expenses	569,638	530,026	506,012

Note: The decrease in "Treasury Securities Services: Other Services" is due to the reclassification of programs into "Treasury Securities Services: Treasury Retail Securities."

In April 2014, as part of the federal government's effort to increase operational efficiency and effectiveness, Treasury announced the consolidation of the fiscal agency services provided by the Reserve Banks. Although Treasury expects long-term savings by reducing the number of Reserve Banks that provide fiscal agency services, an increase in expenses is projected during the consolidation process. Select Reserve Bank business lines began transitioning in 2014 and the consolidation is expected to conclude in 2018. Total consolidation expenses for 2014 amounted to $27.3 million. Consolidation expenses are included in the line items for Payment, Collection, and Cash-management services in table 3. Of the consolidation expenses, $6.7 million is attributable to pension costs incurred by exiting Reserve Banks.

Treasury Securities Services

The Reserve Banks work closely with Treasury's Fiscal Service in support of the borrowing needs of the federal government. The Reserve 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.

Retail Securities Programs

Reserve Bank operating expenses for the retail securities programs were $55.0 million in 2014, a 0.7 percent decrease compared with $55.3 million in 2013. Increased operational efficiencies in retail securities resulted in lower staffing levels and led to an overall decrease in expenses. Throughout the year, Reserve Banks and Treasury continued work on Treasury's Retail E-Services initiative to create a new customer service and support environment. Reserve Banks also engaged in an ongoing effort to decommission the Legacy Treasury Direct system—established in 1986 as an application for investors to hold Treasury marketable securities (bills, notes, bonds, and Treasury Inflation-Protected Securities)—in order to eliminate aging technology platforms.

Wholesale Securities Programs

The Reserve Banks support wholesale securities programs through the sale, issuance, safekeeping, and transfer of marketable Treasury securities for institutional investors. The Reserve Banks conducted 270 Treasury securities auctions in 2014. Of the 270 auctions, 12 auctions were for Floating Rate Notes—a new marketable Treasury security with a floating rate interest payment. Floating Rate Notes are the first new Treasury security issued since the introduction of Treasury Inflation-Protected Securities almost two decades ago.

In 2014, Reserve Bank operating expenses in support of Treasury securities auctions were $29.5 million, compared with $26.7 million in 2013. This increase was driven by upgrades to the auction system, which receives and processes bids submitted primarily by wholesale security auction participants.

Operating expenses associated with Treasury securities safekeeping and transfer activities were $16.6 million in 2014, compared with $14.4 million in 2013. The increase is attributable to the Reserve Banks' ongoing technological effort to migrate securities services from a mainframe system to a distributed computing environment.

Payment Services

The Reserve Banks work closely with the Treasury's Fiscal Service and other government agencies to process payments to individuals and companies. The Reserve 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 $161.6 million in 2014, compared with $151.7 million in 2013. Total payments-related operating expenses in 2014 included $17.0 million in consolidation expenses. The increase in 2014 expenses was due to a combination of consolidation costs and increased programmatic expenses associated with the Invoice Processing Platform (IPP), the Post Payment System (PPS) initiative, Do Not Pay (DNP), and International Treasury Services (ITS). These expense increases were partly offset by lower expenses for the U.S. Treasury Electronic Payment Solution Center (formerly known as the Go Direct Contact Center).

The IPP is part of Treasury's all-electronic initiative—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 a payment transaction, including the purchase order, invoice, and other payment information. In 2014, the Reserve Banks' IPP expenses increased 42.0 percent, to $24.6 million. This increase was primarily attributable to $5.3 million in consolidation expenses. Additional program expenses were incurred to increase staffing levels in support of a Department of Defense mandate to implement IPP for intragovernmental transactions, as well as to provide support for broader agency participation and greater invoice volumes.

Reserve Banks continued work on the PPS initiative, a multiyear effort to modernize several of Treasury's legacy post-payment processing systems into a single application to provide a centralized and standardized set of payment data, enhance operations, reduce expenses, and improve data analytics capabilities. In 2014, program expenses for PPS increased 248.4 percent, from $4.9 million to $17.0 million, as the result of greater system development expenses and $3.9 million in consolidation expenses.

In support of Treasury's DNP initiative, the Reserve Banks continued to enhance the DNP Portal, which is a single point of access through which federal agencies can query multiple data sources before making federal payments. In 2014, expenses for DNP increased 10.8 percent to $15.4 million, largely because of additional staffing necessary to support application development, advanced analytics, and new data source purchases.

The Reserve Banks operate the ITS application, which provides cross-border payment and collection services as well as cash-management functions on behalf of the Treasury. U.S. government agencies use ITS to issue international benefit, payroll, and vendor payments in 100 currencies to recipients in established and emerging markets. ITS expenses increased 24.3 percent, to $17.9 million, in 2014 primarily because of $3.7 million in consolidation costs.

The Treasury's 2014 payments-related expenses were offset by lower spending for the U.S. Treasury Electronic Payment Solution Center, which helps convert individuals' federal benefit payments from paper check to electronic delivery. As of December 2014, 97.8 percent of all federal benefit payments were made electronically. In 2014, expenses for the U.S. Treasury Electronic Payment Solution Center decreased 31.3 percent, to $16.4 million, primarily because of a reduction in enrollment calls that followed the end of the Go Direct Campaign.

Collection Services

The Reserve Banks also work closely with the Fiscal Service to collect funds owed to the federal government, including various taxes, fees for goods and services, and delinquent debts. In 2014, Reserve Bank operating expenses related to collection services increased 21.4 percent to $54.4 million, largely because of $3.7 million in consolidation expenses and increased operating expenses for Pay.gov and eCommerce.

The Reserve Banks operate Pay.gov, an application 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 100 new agency programs and processed more than 123 million online payments totaling $144 billion, a 9 percent and a 20 percent increase, respectively, from 2013. Increased operational support and expanded functionality resulted in expenses increasing 18.2 percent, to $18.3 million.

The Reserve Banks also continued supporting the Treasury's electronic commerce initiative (eCommerce) to expand ways for agencies and the public to do business with the Treasury through online banking solutions, mobile technologies, and other payment methods. Program expenses for eCommerce increased from $156,000 in 2013 to $1.6 million in 2014, largely because of expenses associated with developing a new mobile payment platform that will facilitate more-efficient federal revenue collections.

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 2014, Reserve Bank operating expenses related to Treasury cash-management services totaled $75.9 million, compared with $66.5 million in 2013. Total cash-management-related operating expenses for 2014 included $6.0 million in consolidation expenses.

During 2014, the Reserve Banks continued to support Treasury's efforts to improve centralized government accounting and reporting functions. In particular, the Reserve Banks, in collaboration with the Fiscal Service, completed software development efforts for the Central Accounting Reporting System (CARS). CARS will provide Treasury with a modernized system for the collection and dissemination of financial management and accounting information transmitted by and to federal program agencies. In 2014, expenses for CARS decreased to $18.6 million, from $26.6 million in 2013, primarily because of decreased application development expenses.

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.

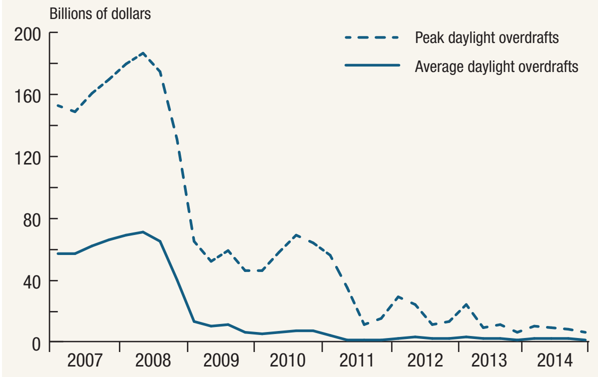
Reserve Bank operating expenses for services provided to other entities were $34.6 million in 2014, compared with $34.1 million in 2013. Book-entry securities issuance and maintenance activities account for a significant amount of the work performed for other entities, with the majority performed for the Federal Home Loan Mortgage Association (Freddie Mac), the Federal National Mortgage Association (Fannie Mae), and the Government National Mortgage Association (Ginnie Mae).

Use of Federal Reserve Intraday Credit

The Board's 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 the 2007–09 financial crisis, overnight balances were much lower and daylight overdrafts significantly higher than levels observed since late 2008. In 2007, for example, institutions held, on average,

Figure 1. Aggregate daylight overdrafts, 2007–14



less than $20 billion in overnight balances, and total average daylight overdrafts were around $60 billion. In contrast, institutions held historically high levels of overnight balances—on average more than $2.7 trillion—at the Reserve Banks in 2014, while daylight overdrafts remained historically low. Average daylight overdrafts across the Federal Reserve System declined to $1.62 billion in 2014 from $1.9 billion in 2013, a decrease of about 17 percent (see figure 1). The average level of peak daylight overdrafts fell to $8.44 billion in 2014 from $12 billion in 2013; the average level of peak daylight overdrafts in 2014 was just a fraction of its level in 2008 (about 5 percent).

Daylight overdraft fees are also at historically low levels. In 2014, institutions paid about $31,000 in daylight overdraft fees; in contrast, fees totaled more than $50 million in 2008. The decrease in fees is largely attributable to the elevated level of reserve balances that began to accumulate in late 2008 and to the March 2011 policy revision that eliminated fees for collateralized daylight overdrafts.

FedLine Access to Reserve Bank Services

The Reserve Banks' FedLine access solutions provide depository institutions with a variety of alternatives for electronically accessing the Banks' payment and information services. The Reserve Banks charge fees for these electronic connections and allocate the associated costs and revenue to the various priced services. There are currently five FedLine channels through which customers can access the Reserve Banks' priced services: FedMail, FedLine Web, FedLine Advantage, FedLine Command, and FedLine

Direct. These FedLine channels are designed to meet the individual connectivity, security, and contingency requirements of depository institution customers.

Between 2007 and 2014, the number of depository institutions in the United States declined 22.2 percent, and Reserve Bank FedLine connections decreased 11.7 percent. During this same period, the number of employees within depository institutions who have FedLine credentials increased 11.6 percent, reflecting in part the expansion of value-added services provided. Additionally, the FedLine network was broadened to nonfinancial services. Between 2012 and 2014, more than 10,000 credentials were issued to individuals accessing central bank applications via FedLine.

The Reserve Banks continue to maintain their focus on security and resiliency by upgrading critical elements of the FedLine solutions. The next-generation virtual private network solution is a key component of the security model for the FedLine Advantage and FedLine Command access solutions used by approximately 5,000 financial institutions.[10] The solution was certified for general availability in July 2013, and the overall migration is nearing completion.

Information Technology

The Federal Reserve Banks continued to improve the efficiency, effectiveness, and security of information technology (IT) services and operations in 2014.

National IT continued its restructuring to streamline the organization to maintain strong operational performance; streamline layers of management to achieve a flatter, more efficient structure; and strengthen skills and proficiency in critical areas.[11] Major multiyear programs to consolidate the Federal Reserve's IT operations and networking services were completed and improved the overall efficiency and quality of business operations. Additional efforts helped System leaders articulate business needs through IT roadmaps and to identify more opportunities to employ common technology services and solutions.

National IT also led an effort to institute common IT principles throughout the System to motivate strategic decisions and behaviors throughout System IT.[12] These principles provide a common foundation for delivering IT services as effectively, securely, efficiently, and innovatively as possible, and support the System's IT objective to deliver highly effective and efficient IT services and solutions that support business objectives and enhance productivity while safeguarding Federal Reserve data and assets.

Finally, under the direction of the chief information security officer, management of the Federal Reserve's information systems (IS) risk continues to mature, with priority given to cybersecurity and IS strategy. The Federal Reserve remains vigilant about its cybersecurity posture, making thoughtful investments in key risk-mitigation initiatives and programs and continuously monitoring and assessing cybersecurity risks to its operations. In 2014, the Federal Reserve completed its implementation of a new IS framework for key systems. The framework, known as System Assurance for the Federal Reserve, is based on guidance from the National Institute of Standards and Technology and adapted to the Federal Reserve's environment.

Examinations of the Federal Reserve Banks

The Reserve Banks and several consolidated variable interest entities (VIEs) operated by the Federal Reserve System in response to the 2007–09 financial crisis are subject to several levels of audit and review.[13] The combined financial statements of the Reserve Banks—as well as the financial statements of each of the 12 Reserve Banks and Maiden Lane LLC—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 2013 framework established by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) to assess their internal controls over financial reporting,

[10] Virtual private network or VPN technology supports remote, secure, and private network access over a public network connection, such as the Internet.

[11] National IT supplies national infrastructure and business line technology services to the Federal Reserve Banks and provides guidance on the System's information technology architecture and business use of technology.

[12] System IT is technology provisioned for and by Reserve Banks, business lines, and National IT.

[13] The New York Reserve Bank is considered to be the controlling financial interest holder of each of the consolidated VIEs.

[14] See "Federal Reserve Banks Combined Financial Statements" in section 12 of this report.

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.

The Federal Reserve Board engaged Deloitte & Touche LLP (D&T) to audit the 2014 combined and individual financial statements of the Reserve Banks and Maiden Lane LLC.[15]

In 2014, D&T also conducted audits of the internal controls associated with financial reporting for each of the Reserve Banks. Fees for D&T's services totaled $6.9 million, of which $0.4 million was for the audit of Maiden Lane LLC. 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 2014, the Reserve Banks did not engage D&T for any non-audit services.[16]

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, National IT, and the System's Office of Employee Benefits (OEB). They conduct a comprehensive on-site review of each Reserve Bank, and OEB at least once every three years and review National IT, the System Open Market Account (SOMA), and Fedwire annually.

The comprehensive on-site reviews include an assessment of the internal audit function's effectiveness and its conformance to the Institute of Internal Auditors' (IIA) *International Standards for the Professional Practice of Internal Auditing*, applicable policies and guidance, the IIA's code of ethics, and the definition of internal auditing.

[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, the OEB, and the Consumer Financial Protection Bureau.

[16] One Bank leases office space to D&T.

The Board also reviews 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
- 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 Board review.

Income and Expenses

Table 4 summarizes the income, expenses, and distributions of net earnings of the Reserve Banks for 2014 and 2013. Income in 2014 was $116,562 million, compared with $91,150 million in 2013.

Expenses totaled $12,579 million:

- $6,862 million in interest paid to depository institutions on reserve balances and term deposits;
- $3,926 million in Reserve Bank operating expenses;
- $383 million in net periodic pension expense;
- $112 million in interest expense on securities sold under agreements to repurchase;
- $590 million in assessments for Board of Governors expenditure;
- $711 million for new currency costs;
- $563 million for Consumer Financial Protection Bureau costs; and
- $2 million in other costs.

The expenses were reduced by $570 million in reimbursements for services provided to government agencies. Net deductions from current net income totaled $2,718 million, which includes $2,907 million in unrealized losses on foreign currency denominated investments revalued to reflect current market exchange rates, $110 million in net income associated with consolidated VIEs, and $81 million in realized gains on federal agency and GSE mortgage-backed securities (GSE MBS). Dividends paid to member banks, set at 6 percent of paid-in capital by sec-

Table 4. Income, expenses, and distribution of net earnings of the Federal Reserve Banks, 2014 and 2013
Millions of dollars

Item	2014	2013[1]
Current income	116,562	91,150
Loan interest income	2	6
SOMA interest income	115,933	90,503
Other current income[2]	627	641
Net expenses	10,715	9,135
Operating expenses	3,926	3,765
Reimbursements	-570	-530
Net periodic pension expense	383	617
Interest paid on depository institutions deposits and term deposits	6,862	5,223
Interest expense on securities sold under agreements to repurchase	112	60
Other expenses	2	0
Current net income	105,847	82,015
Net additions to (deductions from) current net income	-2,718	-1,029
Federal agency and government-sponsored enterprise mortgage-backed securities	81	51
Foreign currency translation losses	-2,907	-1,257
Net income (loss) from consolidated VIEs	110	181
Other deductions	-2	-4
Assessments by the Board of Governors	1,864	1,845
For Board expenditures	590	580
For currency costs	711	702
For Consumer Financial Protection Bureau costs[3]	563	563
Net income before providing for remittances to the Treasury	101,265	79,141
Earnings remittances to the Treasury	96,902	79,633
Net income (loss)	4,363	-492
Other comprehensive (loss) gain	-1,612	2,289
Comprehensive income	2,751	1,797
Total distribution of net income	99,653	81,430
Dividends on capital stock	1,686	1,650
Transfer to surplus and change in accumulated other comprehensive income	1,065	147
Earnings remittances to the Treasury	96,902	79,633

1 Certain amounts relating to 2013 have been reclassified to conform to the current-year presentation.
2 Includes income from priced services, compensation received for services provided, and securities lending fees.
3 The Board of Governors assesses the Reserve Banks to fund the operations of the Consumer Financial Protection Bureau.

tion 7(1) of the Federal Reserve Act, totaled $1,686 million.

Comprehensive net income before interest on Federal Reserve notes expense remitted to Treasury totaled $99,653 million in 2014 (net income of $101,265 million, decreased by other comprehensive loss of $1,612 million). Earnings remittances to Treasury totaled $96,902 million in 2014. The remittances equal comprehensive income after the deduction of dividends paid and the amount necessary to equate the Reserve Banks' surplus to paid-in capital.

Section 11 of this report, "Statistical Tables," 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 2014; table 11 shows a condensed statement for each Reserve Bank for the years 1914 through 2014; 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 section 12, "Federal Reserve System Audits").

SOMA Holdings and Loans

The Reserve Banks' average net daily holdings of securities and loans during 2014 amounted to $4,055,301 million, an increase of $717,603 million from 2013 (see table 5).

Table 5. System Open Market Account (SOMA) holdings and loans of the Federal Reserve Banks, 2014 and 2013
Millions of dollars, except as noted

Item	Average daily assets (+)/liabilities (–)		Current income (+)/expense (–)		Average interest rate (percent)	
	2014	2013	2014	2013	2014	2013
U.S. Treasury securities[1]	2,520,120	2,092,769	63,011	51,591	2.50	2.47
Government-sponsored enterprise debt (GSE) securities[1]	46,122	69,872	1,579	2,166	3.42	3.10
Federal agency and GSE mortgage-backed securities[2]	1,700,521	1,249,810	51,264	36,628	3.01	2.93
Foreign currency denominated investments[3]	23,296	23,941	78	96	0.33	0.40
Central bank liquidity swaps[4]	192	3,361	1	22	0.52	0.65
Other SOMA assets[5]	28	63	*	*	0.01	0.03
Total SOMA assets	4,290,279	3,439,816	115,933	90,503	2.70	2.63
Securities sold under agreements to repurchase	-233,249	-99,680[r]	-112	-60	0.05	0.06
Other SOMA liabilities[6]	-1,899	-2,781	n/a	n/a	n/a	n/a
Total SOMA liabilities	-235,148	-102,461[r]	-112	-60	0.05	0.06
Total SOMA holdings	**4,055,131**	**3,337,355[r]**	**115,821**	**90,443**	**2.86**	**2.55[r]**
Primary, secondary, and seasonal credit	118	79	*	*	0.21	0.25
Total loans to depository institutions	118	79	*	*	0.21	0.25
Term Asset-Backed Securities Loan Facility (TALF)[7]	52	264	2	6	3.85	2.27
Total loans to others	52	264	2	6	3.85	2.27
Total loans	**170**	**343**	**2**	**6**	**1.18**	**1.75**
Total SOMA holdings and loans	**4,055,301**	**3,337,698[r]**	**115,823**	**90,449**	**2.86**	**2.55[r]**

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 (GSE MBS) 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 Represents the remaining principal balance. During the year ended December 31, 2014, all remaining TALF loans were repaid in full, including accrued interest.
r Revised.
n/a Not applicable.
* Less than $500 thousand.

SOMA Securities Holdings

The average daily holdings of Treasury securities increased by $427,351 million, to an average daily amount of $2,520,120 million. The average daily holdings of GSE debt securities decreased by $23,750 million, to an average daily amount of $46,122 million. The average daily holdings of federal agency and GSE MBS increased by $450,711 million, to an average daily amount of $1,700,521 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 maturities.

There were no significant holdings of securities purchased under agreements to resell in 2014 or 2013. Average daily holdings of foreign currency denominated investments in 2014 were $23,296 million, compared with $23,941 million in 2013. The average daily balance of central bank liquidity swap drawings was $192 million in 2014 and $3,361 million in 2013. The average daily balance of securities sold under agreements to repurchase was $233,249 million, an increase of $133,569 million from 2013.

The average rates of interest earned on the Reserve Banks' holdings of Treasury securities increased to 2.50 percent and the average rates on GSE debt securities increased to 3.42 percent in 2014. The average rate of interest earned on federal agency and GSE MBS increased to 3.01 percent in 2014. The average interest rates for securities sold under agreements to repurchase decreased to 0.05 percent in 2014. The

Table 6. Key financial data for consolidated variable interest entities (VIEs), 2014 and 2013
Millions of dollars

Item	TALF LLC		Maiden Lane LLC		Maiden Lane II LLC		Maiden Lane III LLC		Total VIEs	
	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013
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]	0	109	1,811	1,732	0	63	0	22	1,811	1,926
Liabilities of consolidated VIEs	0	0	-127	-157	0	0	0	0	-127	-157
Net portfolio assets available[2]	0	109	1,684	1,575	0	63	0	22	1,684	1,769
Loans extended to the consolidated VIEs by the FRBNY[3]	0	0	0	0	0	0	0	0	0	0
Other beneficial interests[3]	0	0	0	0	0	0	0	0	0	0
Total loans extended to the consolidated VIEs by the FRBNY and other beneficial interests	0	0	0	0	0	0	0	0	0	0
Cumulative change in net assets since the inception of the program[4]										
Allocated to FRBNY	0	11	1,684	1,575	0	53	0	15	1,684	1,654
Allocated to other beneficial interests	0	98	0	0	0	10	0	7	0	115
Cumulative change in net assets	0	109	1,684	1,575	0	63	0	22	1,684	1,769
Summary of consolidated VIE net income, including a reconciliation of total consolidated VIE net income to the consolidated VIE net income										
Portfolio interest income[5]	*	0	77	2	*	4	*	*	77	6
Portfolio holdings gains (losses)	*	-573	37	183	0	0	*	0	37	-390
Professional fees	*	-1	-4	-6	*	-1	*	*	-4	-8
Net income (loss) of consolidated VIEs	*	-574	110	179	*	3	*	*	110	-392
Less: Net income (loss) allocated to other beneficial interests	*	574	0	0	*	-1	*	*	0	573
Net income (loss) allocated to and recorded by FRBNY[6]	*	0	110	179	*	2	*	0	110	181

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. During the year ended December 31, 2014, all remaining assets of TALF LLC, Maiden Lane II, and Maiden Lane III, were distributed to the FRBNY and other beneficial interest holders and these entities were dissolved.

3 The remaining balances of the loans extended to the consolidated VIEs by the FRBNY and by amounts provided to the VIEs by other beneficial interest holders were repaid in full, including accrued interest, during the years ended December 31, 2012, and December 31, 2013.

4 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.

5 Interest income is recorded when earned and includes amortization of premiums, accretion of discounts, and paydown gains and losses.

6 In addition to the net income attributable to TALF LLC, FRBNY earned $3 million on TALF loans during the year ended December 31, 2013 (interest income of $6 million and a loss on the valuation of loans of $3 million).

* Less than $500 thousand.

average rate of interest earned on foreign currency denominated investments decreased to 0.33 percent while the average rate of interest earned on central bank liquidity swaps decreased to 0.52 percent in 2014.

Lending

In 2014, the average daily primary, secondary, and seasonal credit extended by the Reserve Banks to depository institutions increased by $39 million, to $118 million. The average rate of interest earned on primary, secondary, and seasonal credit decreased to 0.21 percent in 2014, from 0.25 percent in 2013. The average daily balance of Term Asset-Backed Securities Loan Facility (TALF) loans in 2014 was $52 million, a decrease of $212 million from 2013. The average rate of interest earned on TALF loans in 2014 was 3.85 percent.

Investments of the Consolidated VIEs

Certain 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 (GAAP), 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.

Net portfolio assets of the consolidated VIEs decreased from $1,926 million in 2013 to $1,811 million in 2014. In 2013, the loan extended to TALF LLC by the Treasury was repaid in full, including outstanding principal and accrued interest. During 2014, final distributions of assets were made by Maiden Lane II LLC, Maiden Lane III LLC, and TALF LLC, and the entities were dissolved.

Federal Reserve Bank Premises

Several Reserve Banks took action in 2014 to maintain and renovate their facilities. The multiyear renovation programs at the Boston, New York, Richmond, St. Louis, and San Francisco Reserve Banks' headquarters buildings continued. All Reserve Banks continued to implement projects to maintain building systems to ensure efficient and reliable operations. The New York Reserve Bank continued repairs and renovations to the 33 Maiden Lane building, and the Chicago Federal Reserve Bank continued construction of security enhancements to its building. In 2014, the Dallas Reserve Bank moved to leased office space for its San Antonio Branch and sold the building that previously housed the Branch's operations.

For more information on the acquisition costs and net book value of the 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, 2014 and 2013
Millions of dollars

Item	2014		2013	
Short-term assets (Note 1)				
Imputed investments	556.7		913.3	
Receivables	36.9		36.2	
Materials and supplies	0.7		0.9	
Prepaid expenses	11.1		6.6	
Items in process of collection	85.7		165.3	
Total short-term assets		691.2		1,122.5
Long-term assets (Note 2)				
Premises	131.2		144.2	
Furniture and equipment	35.9		32.5	
Leases, leasehold improvements, and long-term prepayments	101.7		95.0	
Prepaid pension costs	0.0		59.2	
Deferred tax asset	325.6		291.8	
Total long-term assets		594.4		622.8
Total assets		1,285.6		1,745.3
Short-term liabilities				
Deferred-availability items	642.4		1,078.6	
Short-term debt	24.8		20.4	
Short-term payables	24.0		23.4	
Total short-term liabilities		691.2		1,122.5
Long-term liabilities				
Long-term debt	60.9		129.4	
Accrued benefit costs	459.3		406.1	
Total long-term liabilities		520.2		535.5
Total liabilities		1,211.4		1,658.0
Equity (including accumulated other comprehensive loss of $549.7 million and $466.2 million at December 31, 2014 and 2013, respectively)		74.2		87.3
Total liabilities and equity (Note 3)		1,285.6		1,745.3

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.

Table 8. Pro forma income statement for Federal Reserve priced services, 2014 and 2013
Millions of dollars

Item	2014		2013	
Revenue from services provided to depository institutions (Note 4)		433.1		441.2
Operating expenses (Note 5)		399.0		385.5
Income from operations		34.1		55.7
Imputed costs (Note 6)				
Interest on debt	7.1		0.1	
Interest on float	-0.5		-0.7	
Sales taxes	4.5	11.0	4.4	3.8
Income from operations after imputed costs		23.0		51.9
Other income and expenses (Note 7)				
Investment income		0.0	0.1	0.1
Income before income taxes		23.0		52.0
Imputed income taxes (Note 6)		8.6		20.0
Net income		14.5		32.0
Memo: Targeted return on equity (Note 6)		5.5		4.2

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, 2014
Millions of dollars

Item	Total	Commercial check collection	Commercial ACH	Fedwire funds	Fedwire securities
Revenue from services (Note 4)	433.1	174.7	124.4	110.1	24.0
Operating expenses (Note 5)[1]	399.0	130.9	147.2	99.5	21.4
Income from operations	34.1	43.8	-22.9	10.5	2.6
Imputed costs (Note 6)	11.0	3.4	4.2	2.9	0.6
Income from operations after imputed costs	23.0	40.4	-27.0	7.7	2.0
Other income and expenses, net (Note 7)	0.0	0.0	0.0	0.0	0.0
Income before income taxes	23.0	40.4	-27.0	7.7	2.0
Imputed income taxes (Note 6)	8.6	15.0	-10.1	2.9	0.7
Net income	14.5	25.4	-17.0	4.8	1.2
Memo: Targeted return on equity (Note 6)	5.5	1.8	2.0	1.4	0.3
Cost recovery (percent) (Note 8)	102.1	115.6	86.7	103.2	104.1

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.

1 Operating expenses include pension costs, Board expenses, and reimbursements for certain nonpriced services.

Notes to Pro Forma Financial Statements for Priced Services

(1) Short-Term Assets

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. Investments of excess financing derived from credit float are assumed to be invested in federal funds.

(2) 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 a deferred tax asset related to the priced services pension and postretirement benefits obligation. The tax rate associated with the deferred tax asset was 37.2 percent and 38.5 percent for 2014 and 2013, respectively.

Long-term assets also consist of an estimate of the assets of the Board of Governors used in the development of priced services.

(3) Liabilities and Equity

Under the matched-book capital structure for assets, short-term assets are financed with short-term payables and imputed short-term debt, if needed. Long-term assets are financed with long-term liabilities, imputed long-term debt, and imputed equity, if needed. To meet the Federal Deposit Insurance Corporation (FDIC) requirements for a well-capitalized institution, in 2014 equity is imputed at 5.8 percent of total assets and 10 percent of risk-weighted assets, and in 2013 equity is imputed at 5.0 percent of total assets and 10.2 percent of risk-weighted assets. In accordance with Accounting Standards Codification (ASC) Topic 715 (ASC 715), Compensation–Retirement Benefits, the Reserve Banks recorded the funded status of pension and other benefit plans on their balance sheets. To reflect the funded status of their 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 plan liabilities 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, which is a component of accrued benefit costs, of $42.0 million and a pension asset of $59.2 million in 2014 and 2013, 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 $83.5 million in 2014.

(4) Revenue

Revenue represents fees charged to depository institutions for priced services and is realized from each institution through direct charges to an institution's account.

(5) Operating Expenses

Operating expenses consist of the direct, indirect, and other general administrative expenses of the Reserve Banks for priced services and the expenses of the Board related to the development of priced services. Board expenses were $4.1 million in 2014 and $4.0 million in 2013.

In accordance with ASC 715, the Reserve Bank priced services recognized qualified pension-plan operating expenses of $22.7 million in 2014 and $45.4 million in 2013. Operating expenses also include the nonqualified net pension expense of $4.7 million in 2014 and net pension credit of $0.7 million in 2013. The implementation of ASC 715 does not change the systematic approach required by GAAP 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.

The income statement by service reflects revenue, operating expenses, imputed costs, other income and expenses, and cost recovery.

(6) Imputed Costs

Imputed costs consist of income taxes, return on equity, interest on debt, sales taxes, and interest on float. Many imputed costs are derived from the PSAF model. The 2014 cost of short-term debt imputed in the PSAF model is based on nonfinancial commercial paper rates; the cost of imputed long-term debt is based on Merrill Lynch Corporate and High Yield Index returns; and the effective tax rate is derived from U.S. publicly traded firm data, which serve as the proxy for the financial data of a representative private-sector firm. The after-tax rate of return on equity is based on the returns of the equity market as a whole.[17]

Interest is imputed on the debt assumed necessary to finance priced-service assets. These 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.

Interest on float is derived from the value of float to be recovered for the check and ACH services, Fedwire Funds Service, and Fedwire Securities Services through per-item fees during the period. Float income or cost is based on the actual float incurred for each priced service.

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[17] Details regarding the PSAF methodology change can be found at www.gpo.gov/fdsys/pkg/FR-2012-11-08/pdf/2012-26918.pdf.

The following shows the daily average recovery of actual float by the Reserve Banks for 2014, in millions of dollars:

Total float	-590.8
Unrecovered float	4.7
Float subject to recovery through per item fees	-595.5

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 ACH funding requirements and check products generate credit float; this float has been subtracted from the cost base subject to recovery in 2014 and 2013.

(7) Other Income and Expenses

Other income consists of income on imputed investments. Excess financing resulting from additional equity imputed to meet the FDIC well-capitalized requirements is assumed to be invested and earning interest at the 3-month Treasury bill rate.

(8) 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 after-tax targeted return on equity.

7 Other Federal Reserve Operations

Regulatory Developments: Dodd-Frank Act Implementation

Throughout 2014, the Federal Reserve continued to implement the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) (Pub. L. No. 111-203), which 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. The Board also continued to implement other regulatory reforms to increase the resiliency of banking organizations and help to ensure that they are operating in a safe and sound manner.

The following is a summary of the key regulatory initiatives that were completed during 2014.

Enhanced Prudential Standards for U.S. and Foreign Banking Organizations

Section 165 of the Dodd-Frank Act requires the Board to establish enhanced prudential standards for bank holding companies (BHCs) and foreign banking organizations with total consolidated assets of $50 billion or more and nonbank financial companies that have been designated by the Financial Stability Oversight Council (FSOC) for supervision by the Board. The standards must include enhanced risk-based and leverage capital; liquidity, risk-management, and risk-committee requirements; a requirement to submit a resolution plan; single-counterparty credit limits; stress tests requirements; and, for companies that the FSOC has determined pose a grave threat to financial stability, a debt-to-equity limit. Section 165 also permits the Board to establish additional prudential standards, including three enumerated standards—a contingent capital requirement, enhanced public disclosures, and short-term debt limits—and other prudential standards that the Board determines are appropriate.

In February 2014, the Board adopted a final rule to implement enhanced prudential standards under the Dodd-Frank Act for BHCs and foreign banking organizations with $50 billion or more in total consolidated assets. For a BHC with total consolidated assets of $50 billion or more, the final rule adopts enhanced risk-management and liquidity requirements. The 165 final rule also incorporates the Board's capital, capital planning, and stress testing requirements as enhanced prudential standards.

For a foreign banking organization with total consolidated assets of $50 billion or more, the final rule implements enhanced risk-based and leverage capital, liquidity, risk-management, and stress testing requirements. In addition, the final rule requires foreign banking organizations with U.S. non-branch assets of $50 billion or more to form a U.S. intermediate holding company and imposes enhanced prudential standards on that intermediate holding company. Generally, as the size, complexity, and risk to U.S. financial stability of a U.S. BHC or foreign banking organization increases, the standards imposed on the organization become more stringent, mitigating risks to the financial stability of the United States posed by the material financial distress or failure of the institution.

Finally, the final rule also establishes a risk-committee requirement for publicly traded U.S. and foreign banking organizations with total consolidated assets of $10 billion or more, implements stress testing requirements for foreign banking organizations and foreign savings and loan holding companies with total consolidated assets of more than $10 billion, and requires companies that the FSOC has determined pose a grave threat to the financial stability of the United States achieve and maintain a debt-to-equity ratio of no more than 15 to 1.

Continued Implementation of the Regulatory Capital Framework

In July 2013, the Board issued a final rule to comprehensively revise the capital regulations applicable to banking organizations (revised capital framework).[1] The revised capital framework strengthens the definition of regulatory capital, generally increases the minimum risk-based capital requirements, modifies the methodologies for calculating risk-weighted assets, and imposes a minimum generally applicable leverage ratio of 4 percent (measured as the ratio of tier 1 capital to on-balance-sheet assets). In addition, internationally active banking organizations must meet a minimum supplementary leverage ratio of 3 percent (measured as the ratio of tier 1 capital to on- and off-balance-sheet exposures). The rule was published jointly with the Office of the Comptroller of the Currency (OCC), and the Federal Deposit Insurance Corporation (FDIC) published a substantively identical rule.

The Board continued to develop and enhance the regulatory capital framework in 2014. In April 2014, the Board, the FDIC, and the OCC adopted a final rule that enhances the supplementary leverage ratio requirement described above for the largest, most interconnected U.S. banking organizations. A BHC with at least $700 billion in total consolidated assets or at least $10 trillion in assets under custody must maintain a supplementary leverage ratio of 5 percent or more in order to avoid limitations on distributions and certain discretionary bonus payments, and their insured depository institution subsidiaries must maintain a supplementary leverage ratio of 6 percent or more to be “well capitalized.” These enhanced supplementary leverage ratio standards are designed to help reduce the probability of failure of systemically important banking organizations, thereby mitigating the risks to the financial stability of the United States posed by these organizations.

In 2014, the agencies issued three other final rules to adjust aspects of the regulatory capital framework. In July 2015, the agencies adopted a final rule to correct the definition of “eligible guarantee.” In September 2014, the agencies adopted a final rule to revise the definition of total leverage exposure used in the calculation of the supplementary leverage ratio. Specifically, the final rule modifies the methodology for including off-balance-sheet items, such as credit derivatives, repo-style transactions, and lines of credit, in the denominator of the supplementary leverage ratio to more appropriately capture a banking organization’s on- and off-balance-sheet exposures. In December 2014, the Board and the OCC adopted an interim final rule to adjust the definition of “qualifying master netting agreement” and related definitions in the regulatory capital and the liquidity coverage ratio rules. The changes were intended to ensure that the regulatory capital and liquidity treatment of certain financial transactions is not affected by the implementation of special resolution regimes in foreign jurisdictions or by contractual provisions that incorporate stays of special resolution regimes.

Capital Planning and Stress Testing Requirements

On an annual basis, the Federal Reserve assesses whether BHCs with total consolidated assets of $50 billion or more have effective capital planning processes and sufficient capital to absorb losses during stressful conditions, while meeting obligations to creditors and counterparties and continuing to serve as credit intermediaries. This annual assessment includes two related programs: the Comprehensive Capital Analysis and Review (CCAR), which evaluates a BHC’s capital adequacy, capital adequacy process, and planned capital distributions in accordance with the Board’s capital plan rule, and the Dodd-Frank Act supervisory stress tests. Pursuant to the Dodd-Frank Act, BHCs and state member banks with more than $10 billion in total consolidated assets are required to conduct company-run stress tests.

On October 16, 2014, the Board revised its capital plan and stress testing rules to adjust the time frame for annual submissions of capital plans and the company-run and supervisory stress tests. Beginning in 2016, participating BHCs must submit their capital plans and stress testing results to the Federal Reserve on or before April 5.

Liquidity Requirements for Large Financial Institutions

In October 2014, the Board, the OCC, and the FDIC issued a final rule implementing the liquidity coverage ratio (LCR), a quantitative liquidity requirement for large and internationally active banking organizations. The LCR is the first broadly applicable quanti-

[1] See 78 *Federal Register* 62018 (October 11, 2013).

tative liquidity requirement for U.S. banking firms and establishes an enhanced prudential liquidity standard consistent with the Dodd-Frank Act. Under the final rule, covered banking firms will be required to maintain a minimum amount of high-quality liquid assets sufficient to cover their net cash outflows over a 30-calendar-day period in a standardized supervisory stress scenario. The most stringent LCR requirements apply to banking organizations with consolidated total assets of $250 billion or more or consolidated total on-balance-sheet foreign exposure of $10 billion or more and their subsidiary insured depository institutions with $10 billion or more of consolidated total assets. The rule applies a simpler, less stringent LCR requirement to certain smaller depository institution holding companies with $50 billion or more that are not otherwise covered by the rule.

Credit-Risk Retention

In December 2014, the Board—jointly with other federal banking agencies, the Department of Housing and Urban Development, the Federal Housing Finance Agency, and the Securities and Exchange Commission (SEC)—approved a final rule to implement the credit-risk retention requirements in the Dodd-Frank Act. The final rule generally requires the sponsors of securitization transactions to retain not less than 5 percent of the credit risk of the assets they securitize and includes prohibitions on transferring or hedging the retained credit risk. The final rule provides exemptions for asset-backed securities that are collateralized exclusively by residential mortgages that qualify as qualified residential mortgages (QRMs). In addition, the final rule does not require risk retention for securitizations of commercial loans, commercial mortgages, or automobile loans, provided that the transactions meet specific standards for high-quality underwriting. The implementing agencies have agreed to review the QRM definition and its effect on the residential mortgage market no later than four years after the rule's effective date and periodically thereafter.

The Volcker Rule: Prohibitions against Proprietary Trading and Other Activities

Section 619 of the Dodd-Frank Act generally prohibits insured depository institutions (IDIs) and their affiliates (collectively, banking entities) from engaging in proprietary trading or from investing in, sponsoring, or having certain relationships with a hedge fund or private equity fund. These prohibitions and other provisions of section 619 are commonly known as the "Volcker rule."

In January 2014, the Board, the FDIC, the OCC, the SEC, and the Commodity Futures Trading Commission approved an interim final rule permitting banking entities to retain interests in, and act as sponsors to, certain collateralized debt obligations backed primarily by trust preferred securities that meet the definition of covered funds, as permitted under the grandfathering provisions for certain trust preferred securities in the Dodd-Frank Act. The interim final rule, a companion rule to the Volcker rule approved in December 2013, establishes specific qualifications for the type of covered funds that may be retained.

Financial Sector Concentration Limits

In November 2014, the Board issued a final rule to implement section 622 of the Dodd-Frank Act, which generally prohibits a financial company from merging or consolidating with, or from acquiring, another company if the resulting company's liabilities would exceed 10 percent of the aggregate liabilities of all financial companies. Financial companies subject to the limit include insured depository institutions, BHCs, savings and loan holding companies, foreign banking organizations, companies that control insured depository institutions, and nonbank financial companies designated by the FSOC for Board supervision. In addition, the final rule establishes reporting requirements for financial companies that do not otherwise report consolidated financial information to the Board or another federal banking agency, in accordance with the Bank Holding Company Act.

Risk-Management Standards for Financial Market Utilities

Title VIII of the Dodd-Frank Act establishes a supervisory framework for financial market utilities (FMUs) that are designated as systemically important by the FSOC. FMUs are multilateral systems that provide the essential infrastructure for transferring, clearing, and settling payments, securities, and other financial transactions among financial institutions or between financial institutions and the system.

In October 2014, the Board approved final amendments to Regulation HH regarding the risk-management standards for FMUs that have been designated as systemically important by the FSOC and for which the Board has standard-setting authority under the Dodd-Frank Act. The Board also approved revisions to the Federal Reserve Policy on Payment System Risk, which applies to financial market infrastructures more generally, including those operated by the Federal Reserve Banks.[2] The final rule adopts standards to address credit risk and liquidity risk, new requirements on recovery and orderly wind-down planning, a new standard on general business risk, a new standard on tiered participation arrangements, and heightened requirements on transparency and disclosure.

Key Regulatory Initiatives Proposed in 2014

A number of important regulatory developments are in the proposal stage. The following is a summary of additional regulatory initiatives that the Board proposed in 2014.

Capital Surcharge for Global Systemically Important Banking Organizations

In December 2014, the Board invited comment on a proposed rule that would establish a methodology to identify whether a U.S. BHC is a global systemically important banking organization (GSIB). As such, a GSIB would be subject to a risk-based capital surcharge that is calibrated based on its systemic risk profile. The proposal builds on a GSIB capital surcharge framework designed by the Basel Committee on Banking Supervision and augments that framework to address the risk arising from reliance on short-term wholesale funding. Failure to maintain the capital surcharge would subject the GSIB to restrictions on capital distributions and certain discretionary bonus payments.

Enhanced Prudential Standards for the Regulation and Supervision of General Electric Capital Corporation

In December 2014, the Board invited public comment on enhanced prudential standards for the regulation and supervision of General Electric Capital Corporation (GECC), a nonbank financial company that the FSOC designated for supervision by the Board. In light of the substantial similarity of GECC's activities and risk profile to that of a similarly sized BHC, the proposal would apply enhanced prudential standards to GECC that are generally similar to those that apply to large BHCs, including standards for risk-based and leverage capital, capital planning, stress testing, liquidity, and risk management.

Clarifications to Regulatory Capital Rules

The Board continues to implement the regulatory capital rules. In December 2014, the federal banking agencies issued a proposed rule to make technical corrections and clarify certain aspects of the advanced approaches rule. Also in December 2014, the Board issued a proposed rule to provide additional information regarding the application of the Board's regulatory capital framework to depository institution holding companies that have nontraditional capital structures.

[2] For more information on the Federal Reserve Policy on Payment System Risk, see www.federalreserve.gov/paymentsystems/psr_about.htm.

The Board of Governors and the Government Performance and Results Act

Overview

The Government Performance and Results Act (GPRA) of 1993 requires federal agencies, in consultation with Congress and outside stakeholders, to prepare a strategic plan covering a multiyear period. GPRA also requires each agency to submit an annual performance plan and an annual performance report. The GPRA Modernization Act of 2010 further 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 other federal agencies, prepares an annual performance plan and an annual performance report.

Strategic Framework, Performance Plan, and Performance Report

The Board's 2012–15 *Strategic Framework* (framework) articulates the Board's mission within the context of resources required to meet Dodd-Frank Act mandates, close cross-disciplinary knowledge gaps, develop appropriate policy, and continue addressing the recovery of a fragile global economy. The framework sets forth major goals, outlines strategies for achieving those goals, and identifies key measures of performance toward achieving the strategic objectives.

The annual performance plan outlines the planned projects, initiatives, and activities that support the framework's long-term objectives and resources necessary to achieve those objectives. The annual performance report summarizes the Board's accomplishments that contributed toward achieving the strategic goals and objectives identified in the framework.

The framework, performance plan, and performance report are available on the Board's website at www.federalreserve.gov/publications/gpra/files/2012-2015-strategic-framework.pdf, www.federalreserve.gov/publications/gpra/files/2014-gpra-performance-plan.pdf, and www.federalreserve.gov/publications/gpra/files/2013-gpra-performance-report.pdf.

8 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 2014, as implemented through (1) rules and regulations, (2) policy statements and other actions, and (3) discount rates for depository institutions. Policy actions were approved by all Board members in office, unless indicated otherwise.[1] More information on the actions is available from the relevant *Federal Register* notices or other documents (see links in footnotes) or on request from the Board's Freedom of Information Office.

For information on the Federal Open Market Committee's policy actions relating to open market operations, see section 9, "Minutes of Federal Open Market Committee Meetings."

Rules and Regulations

Regulation H (Membership of State Banking Institutions in the Federal Reserve System) and Regulation Q (Capital Adequacy of Bank Holding Companies, Savings and Loan Holding Companies, and State Member Banks)

On April 8, 2014, the Board approved a final rule (Docket No. R-1460) to strengthen the supplementary leverage ratio standards for large, interconnected U.S. banking organizations. The rule was published jointly with the Federal Deposit Insurance Corporation and Office of the Comptroller of the Currency.[2] The final rule applies to any U.S. top-tier bank holding company with more than $700 billion in total consolidated assets or more than $10 trillion in assets under custody (covered bank holding companies) and to its insured depository institution subsidiaries. Currently, eight large U.S. banking organizations meet the asset threshold to be considered covered bank holding companies. Under the rule, covered bank holding companies must maintain a leverage buffer greater than 2 percentage points above the minimum supplementary leverage ratio requirement of 3 percent, for a total of more than 5 percent, to avoid restrictions on capital distributions and discretionary bonus payments. Insured depository institution subsidiaries of covered bank holding companies must maintain at least a 6 percent supplementary leverage ratio to be considered "well capitalized" under the agencies' prompt corrective action framework. The final rule is effective January 1, 2018.

Voting for this action: Chair Yellen and Governors Tarullo, Stein, and Powell.

Regulation Q (Capital Adequacy of Bank Holding Companies, Savings and Loan Holding Companies, and State Member Banks)

On July 14, 2014, the Board approved a final rule (Docket No. R-1488) to revise the definition of "eligible guarantee" to remove the requirement that this type of guarantee be made by an eligible guarantor for purposes of calculating a banking organization's regulatory capital under the advanced approaches risk-based capital rule.[3] Banking organizations use eligible guarantees to reduce the credit risk of certain exposures. The final rule, published jointly with the Federal Deposit Insurance Corporation and Office of

[1] Chairman Bernanke's term expired on January 31, and Vice Chair Yellen took office as Chair on February 3, 2014. Governor Raskin resigned on March 13, and Governor Stein resigned on May 28, 2014. Governor Fischer joined the Board on May 28 and took office as Vice Chairman on June 16, 2014. Governor Brainard joined the Board on June 16, 2014.

[2] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2014-05-01/html/2014-09367.htm.

[3] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2014-07-30/html/2014-17858.htm.

the Comptroller of the Currency, is effective October 1, 2014.

Voting for this action: Chair Yellen, Vice Chairman Fischer, and Governors Tarullo, Powell, and Brainard.

On September 3, 2014, the Board approved a final rule (Docket No. R-1487) to revise the definition of total leverage exposure used in the calculation of the supplementary leverage ratio in the agencies' 2013 revised capital rule.[4] The final rule modifies the methodology for including off-balance-sheet items, such as credit derivatives, repo-style transactions, and lines of credit, in the denominator of the supplementary leverage ratio to more appropriately capture a banking organization's on- and off-balance-sheet exposures. The revised supplementary leverage ratio applies to all banking organizations subject to the advanced approaches risk-based capital rule. The final rule, published jointly with the Federal Deposit Insurance Corporation and Office of the Comptroller of the Currency, is effective January 1, 2015.

Voting for this action: Chair Yellen, Vice Chairman Fischer, and Governors Tarullo, Powell, and Brainard.

Regulation Q (Capital Adequacy of Bank Holding Companies, Savings and Loan Holding Companies, and State Member Banks) and Regulation WW (Liquidity Risk Measurement Standards)

On December 15, 2014, the Board approved an interim final rule (Docket No. R-1507) revising the definition of "qualifying master netting agreement" and related definitions in the regulatory capital and the liquidity coverage ratio rules.[5] The changes are designed to ensure that the regulatory capital and liquidity treatment of certain financial transactions is not affected by the implementation of special resolution regimes in foreign jurisdictions or by contractual provisions that incorporate stays of special resolution regimes. The interim final rule, published jointly with the Office of the Comptroller of the Currency, is effective January 1, 2015. (Note: The Federal Deposit Insurance Corporation issued a separately published notice of proposed rulemaking with the same modifications.)

Voting for this action: Chair Yellen, Vice Chairman Fischer, and Governors Tarullo, Powell, and Brainard.

Regulation Y (Bank Holding Companies and Change in Bank Control) and Regulation YY (Enhanced Prudential Standards)

On February 20, 2014, the Board approved a final rule (Docket Nos. R-1463 and R-1464) revising the capital plan and stress testing rules to defer until October 1, 2015, use of the advanced approaches framework in the Board's capital plan and stress testing rules.[6] In addition, the Board and Office of the Comptroller of the Currency permitted eight banking organizations to begin using the advanced approaches framework to determine their risk-based capital requirements. Except for the advanced approaches deferral, the final rule also maintains all the changes to the Board's capital plan rule and stress testing rules contained in two interim final rules issued in September 2013. The final rule is effective April 15, 2014.

Voting for this action: Chair Yellen and Governors Tarullo, Raskin, Stein, and Powell.

On October 16, 2014, the Board approved a final rule (Docket No. R-1492) revising the capital plan and stress testing rules to adjust the timeframe for annual submissions of capital plans and for the conduct of company-run and supervisory stress tests.[7] For the 2015 capital plan cycle, bank holding companies with total consolidated assets of $50 billion or more are required to submit capital plans on or before January 5, 2015, which is unchanged from prior years. For subsequent cycles, beginning in 2016, participating bank holding companies will be required to submit their capital plans and stress testing results to the Federal Reserve on or before April 5. The final rule also includes other modifications to the capital plan and stress testing rules, including a limitation on the ability of a bank holding company with $50 billion or more in total consolidated assets to make capital distributions under the capital plan rule if the bank

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[4] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2014-09-26/html/2014-22083.htm.

[5] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2014-12-30/html/2014-30218.htm.

[6] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2014-03-11/html/2014-05053.htm.

[7] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2014-10-27/html/2014-25170.htm.

holding company's net capital issuances are less than the amount indicated in its capital plan. The final rule is effective November 26, 2014, except for the limit on net capital distributions, which is effective on April 1, 2015.

Voting for this action: Chair Yellen, Vice Chairman Fischer, and Governors Tarullo, Powell, and Brainard.

Regulation DD (Truth in Savings), Regulation P (Privacy of Consumer Information), and Regulation V (Fair Credit Reporting)

On May 20, 2014, the Board approved final rules (Docket Nos. R-1482 and R-1483) to repeal Regulations DD and P, in accordance with the transfer of rulemaking authority for a number of consumer protection laws to the Consumer Financial Protection Bureau (CFPB) under the Dodd-Frank Act.[8] The CFPB has issued interim final rules that are substantially identical to those regulations. While the Board retains authority to issue rules for certain motor vehicle dealers, there is no evidence that any motor vehicle dealers subject to the Board's jurisdiction engage in activities covered by the Truth in Savings Act. Furthermore, pursuant to the Dodd-Frank Act, entities supervised by the Board that were previously covered by the Board's Regulation P are now subject to the privacy rules issued by the CFPB. In addition, the Board amended (Docket No. R-1484) Regulation V to reflect changes to the Fair Credit Reporting Act that limit the application of the Identity Theft Red Flags rule to only certain creditors.[9] The final rules are effective June 30, 2014.

Voting for this action: Chair Yellen and Governors Tarullo, Stein, and Powell.

Regulation HH (Designated Financial Market Utilities) and Federal Reserve Policy on Payment System Risk

On October 24, 2014, the Board approved final amendments to Regulation HH (Docket No. R-1477) regarding the risk-management standards for financial market utilities that have been designated as systemically important by the Financial Stability Oversight Council and for which the Board has standard-setting authority under the Dodd-Frank Act.[10] The Board also approved revisions to part I of the Federal Reserve Policy on Payment System Risk (Docket No. OP-1478), which applies to financial market infrastructures more generally, including those operated by the Federal Reserve Banks.[11] The amendments and revisions are based on 2012 international risk-management standards for financial market infrastructures. Key amendments and revisions include separate standards to address credit risk and liquidity risk, new requirements on recovery and orderly wind-down planning, a new standard on general business risk, a new standard on tiered participation arrangements, and heightened requirements on transparency and disclosure. The amendments and revisions are effective on December 31, 2014, except several of the new requirements have a later compliance date, as described in the *Federal Register* notices.

Voting for this action: Chair Yellen, Vice Chairman Fischer, and Governors Tarullo, Powell, and Brainard.

Regulation RR (Credit Risk Retention)

On October 22, 2014, the Board approved a final rule (Docket No. R-1411) to implement the credit risk retention requirements in the Dodd-Frank Act.[12] The final rule generally requires the sponsors of securitization transactions to retain not less than 5 percent of the credit risk of the assets they securitize. The rule also includes prohibitions on transferring or hedging the retained credit risk. The final rule provides exemptions for asset-backed securities that are collateralized exclusively by residential mortgages that qualify as qualified residential mortgages (QRMs). Under the rule, the QRM definition is aligned with that of a "qualified mortgage," as adopted by the Consumer Financial Protection Bureau. Exemptions are also available for certain other types of residential mortgage securitizations, including those guaranteed or insured by agencies of the U.S. government and those originated by state housing finance agencies. In addition, the final rule does not require risk retention for securitizations of commercial loans, commercial mortgages, or auto-

[8] See *Federal Register* notices at www.gpo.gov/fdsys/pkg/FR-2014-05-29/html/2014-12356.htm and www.gpo.gov/fdsys/pkg/FR-2014-05-29/html/2014-12357.htm.

[9] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2014-05-29/html/2014-12358.htm.

[10] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2014-11-05/html/2014-26090.htm.

[11] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2014-11-13/html/2014-26791.htm.

[12] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2014-12-24/html/2014-29256.htm.

mobile loans, provided that the transactions meet specific standards for high-quality underwriting. The final rule was also approved by the Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, Federal Housing Finance Agency, Securities and Exchange Commission, and Department of Housing and Urban Development. The implementing agencies have agreed to review the QRM definition and its effect on the residential mortgage market no later than four years after the rule's effective date and periodically thereafter. The final rule is effective February 23, 2015, with compliance dates of December 24, 2015, for asset-backed securities collateralized by residential mortgages and December 24, 2016, for other types of asset-backed securities.

Voting for this action: Chair Yellen, Vice Chairman Fischer, and Governors Tarullo, Powell, and Brainard.

Regulation VV (Proprietary Trading and Certain Interests in and Relationships with Covered Funds)

On January 14, 2014, the Board approved an interim final rule (Docket No. R-1480) permitting banking entities to retain interests in, and act as sponsors to, certain collateralized debt obligations backed primarily by trust preferred securities that meet the definition of covered funds, as permitted under the grandfathering provisions for certain trust preferred securities in the Dodd-Frank Act.[13] The interim final rule, a companion rule to the so-called Volcker rule approved in December 2013, establishes specific qualifications for the type of covered funds that may be retained. The interim final rule was published jointly with the Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, Commodity Futures Trading Commission, and Securities and Exchange Commission, and is effective April 1, 2014.

Voting for this action: Chairman Bernanke, Vice Chair Yellen, and Governors Tarullo, Raskin, Stein, and Powell.

Note: On April 3, 2014, the Board approved a statement that it stands ready to grant banking entities covered by the Volcker rule two additional one-year extensions (which together would be until July 21, 2017) to conform their investments in and sponsorship of certain collateralized loan obligations that were in place before December 31, 2013, and are considered to be covered funds under section 13 of the Bank Holding Company Act.[14] On December 17, 2014, the Board approved an extension, until July 21, 2016, for banking entities to conform their investments in and relationships with covered funds and foreign funds that were in place before December 31, 2013 (legacy covered funds) with the requirements of the Volcker rule.[15] The Board also announced its intention to act next year to extend the conformance period for legacy covered funds for one additional year, until July 21, 2017.

Regulation WW (Liquidity Risk Measurement Standards)

On September 3, 2014, the Board approved a final rule (Docket No. R-1466) implementing the liquidity coverage ratio (LCR), a quantitative liquidity requirement for large and internationally active banking organizations.[16] The LCR is based on liquidity standards promulgated under the Basel III reform measures and also establishes an enhanced prudential liquidity standard consistent with the Dodd-Frank Act. Under the final rule, covered banking firms will be required to maintain a minimum amount of high-quality liquid assets sufficient to cover their net cash outflows over a 30-calendar-day stress period. The rule applies a less stringent LCR requirement to certain smaller depository institution holding companies. In addition, the final rule does not allow municipal securities to be designated as high-quality liquid assets. The rule does not apply to bank holding companies and savings and loan holding companies with less than $50 billion in total consolidated assets or to nonbank financial companies designated as systemically important by the Financial Stability Oversight Council (companies so designated will have their liquidity requirements established through a separate rule or order). The final rule, published jointly with the Federal Deposit Insurance Corporation and Office of the Comptroller of the Currency, is effective January 1, 2015.

[13] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2014-01-31/html/2014-02019.htm.

[14] See press release at www.federalreserve.gov/newsevents/press/bcreg/20140407a.htm.

[15] See press release at www.federalreserve.gov/newsevents/press/bcreg/20141218a.htm.

[16] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2014-10-10/html/2014-22520.htm.

Voting for this action: Chair Yellen, Vice Chairman Fischer, and Governors Tarullo, Powell, and Brainard.

Regulation XX (Concentration Limit)

On November 3, 2014, the Board approved a final rule (Docket No. R-1489) to implement the Dodd-Frank Act financial-sector concentration limit that generally prohibits a financial company from merging or consolidating with, or from acquiring, another company if the resulting company's liabilities would exceed 10 percent of the aggregate liabilities of all financial companies.[17] In addition, the final rule establishes reporting requirements for financial companies that do not otherwise report consolidated financial information to the Board or another federal banking agency, in accordance with the Bank Holding Company Act. The final rule is effective January 1, 2015.

Voting for this action: Chair Yellen, Vice Chairman Fischer, and Governors Tarullo, Powell, and Brainard.

Regulation YY (Enhanced Prudential Standards)

On February 18, 2014, the Board approved a final rule (Docket No. R-1438) to implement enhanced prudential standards under the Dodd-Frank Act for bank holding companies and foreign banking organizations with $50 billion or more in total consolidated assets.[18] The enhanced prudential standards include risk-based and leverage capital requirements, liquidity standards, risk-management requirements, stress testing requirements, and a debt-to-equity limit for companies that the Financial Stability Oversight Council has determined pose a grave threat to financial stability. Foreign banking organizations with U.S. nonbranch assets of $50 billion or more are also required to form a U.S. intermediate holding company that will generally be subject to the same prudential standards as U.S. bank holding companies, including capital planning and stress testing requirements. The final rule is effective June 1, 2014.

Voting for this action: Chair Yellen and Governors Tarullo, Raskin, Stein, and Powell.

Policy Statements and Other Actions

Supervisory Guidance on Implementing Dodd-Frank Act Company-Run Stress Tests for Medium-Sized Institutions

On February 25, 2014, the Board approved final guidance (Docket No. OP-1485), published jointly with the Federal Deposit Insurance Corporation (FDIC) and Office of the Comptroller of the Currency (OCC), describing supervisory expectations and providing examples of sound practices for stress tests conducted by financial institutions with between $10 billion and $50 billion in total consolidated assets.[19] These medium-sized companies are required to conduct annual, company-run stress tests under the agencies' rules and the Dodd-Frank Act. Consistent with the flexibility of these rules, the guidance takes into account the different risk profiles, sizes, business mixes, and levels of complexity in medium-sized institutions. Further, the final guidance confirms that companies in the $10 billion to $50 billion asset range are not subject to the Federal Reserve's capital plan rule, comprehensive capital analysis and review, stress tests conducted by the supervisory agencies, or related data collection requirements applicable to bank holding companies with assets of at least $50 billion. The Board's guidance is effective April 1, 2014, and final guidance from the FDIC and OCC is effective March 31, 2014.

Voting for this action: Chair Yellen and Governors Tarullo, Raskin, Stein, and Powell.

Term Deposit Facility Testing

On May 1, 2014, the Board approved a series of eight consecutive offerings through its Term Deposit Facility (TDF), with a gradually increasing individual award cap for each auction of up to $10 billion and an increase in offering rates of up to 5 basis points over the interest rate on excess reserves.[20] The offerings are part of the Board's ongoing TDF test operations and are also intended to familiarize eligible institutions with TDF procedures.

Voting for this action: Chair Yellen and Governors Tarullo, Stein, and Powell.

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[17] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2014-11-14/html/2014-26747.htm.

[18] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2014-03-27/html/2014-05699.htm.

[19] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2014-03-13/html/2014-05518.htm.

[20] See press release at www.federalreserve.gov/newsevents/press/monetary/20140509a.htm.

On August 18, 2014, the Board approved additional changes to the terms of its TDF testing to authorize (1) offerings of term deposits with an early withdrawal feature that allows depository institutions to obtain a return of funds before maturity, subject to forfeiture of all interest on the withdrawn term deposit plus an early withdrawal penalty, and (2) an increase of up to $20 billion in the individual award cap for TDF test operations.[21]

Voting for this action: Chair Yellen, Vice Chairman Fischer, and Governors Tarullo, Powell, and Brainard.

Addendum to the Interagency Policy Statement on Income Tax Allocation in a Holding Company Structure

On June 10, 2014, the Board approved a final addendum (Docket No. OP-1474) to the Interagency Policy Statement on Income Tax Allocation in a Holding Company Structure to ensure that insured depository institutions in a consolidated group maintain an appropriate relationship regarding the payment of taxes and treatment of tax refunds.[22] The addendum, published jointly with the Federal Deposit Insurance Corporation and Office of the Comptroller of the Currency, supplements a 1998 policy statement on income tax allocation by instructing insured depository institutions and their holding companies to review their tax allocation agreements in order to confirm that the agreements expressly acknowledge the holding company receives any tax refunds as an agent for the insured depository institutions, consistent with sections 23A and 23B of the Federal Reserve Act. In addition, the addendum includes specific language that banking organizations could include in their tax allocation agreements to facilitate the agencies' instructions. Institutions and holding companies are expected to implement the addendum not later than October 31, 2014.

Voting for this action: Chair Yellen, and Governors Tarullo, Powell, and Fischer.

Federal Reserve Policy on Payment System Risk and Regulation J (Collection of Checks and Other Items by Federal Reserve Banks and Funds Transfers through Fedwire)

On November 26, 2014, the Board approved revisions to part II of the Federal Reserve Policy on Payment System Risk (PSR policy) (Docket No. OP-1472) related to the procedures for posting debit and credit entries to institutions' accounts at Federal Reserve Banks for automated clearinghouse (ACH) debit and commercial check transactions.[23] The PSR policy revisions also set principles for establishing future posting rules for Reserve Banks' same-day ACH service, clarified the Reserve Banks' administration of the policy for U.S. branches and agencies of foreign banking organizations, and made other technical corrections. In addition, the Board approved related amendments to Regulation J (Docket No. R-1473) regarding the timing of when paying banks must settle for the check transactions presented to them by the Reserve Banks.[24] The revisions are effective December 5, 2014, except for the policy changes to the Board's posting procedures for ACH debit and commercial check transactions and the related amendments to Regulation J, all of which are effective July 23, 2015.[25]

Voting for this action: Chair Yellen, Vice Chairman Fischer, and Governors Tarullo, Powell, and Brainard.

Discount Rates for Depository Institutions in 2014

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.

[21] See press release at www.federalreserve.gov/newsevents/press/monetary/20140904a.htm.

[22] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2014-06-19/html/2014-14325.htm.

[23] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2014-12-05/html/2014-28664.htm.

[24] See *Federal Register* notice at www.gpo.gov/fdsys/pkg/FR-2014-12-05/html/2014-28516.htm.

[25] A technical amendment to section 210.2(c) of Regulation J is effective December 5, 2014.

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 depository institutions that, in the judgment of the lending Federal Reserve Bank, are in generally sound financial condition. Throughout 2014, 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 2014, the spread was set at 50 basis points resulting in a secondary credit rate of 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 0.15 percent.[26]

Votes on Changes to Discount Rates for Depository Institutions

About every two weeks during 2014, the Board approved proposals by the 12 Reserve Banks to maintain the formulas for computing the secondary and seasonal credit rates. In 2014, the Board did not approve any changes in the primary credit rate.

[26] For current and historical discount rates, see www.frbdiscountwindow.org/.

9 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 is published as an addendum to the minutes. 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.[1]

1 As of January 1, 2014, the Federal Reserve Bank of New York was operating under the Domestic Policy Directive approved at the December 17–18, 2013, 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, 2014, were approved at the January 29–30, 2013, meeting.

Meeting Held on January 28–29, 2014

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, January 28, 2014, at 2:00 p.m. and continued on Wednesday, January 29, 2014, at 9:00 a.m.

Present

Ben Bernanke
Chairman

William C. Dudley
Vice Chairman

Richard W. Fisher

Narayana Kocherlakota

Sandra Pianalto

Charles I. Plosser

Jerome H. Powell

Jeremy C. Stein

Daniel K. Tarullo

Janet L. Yellen

Christine Cumming, Charles L. Evans, Jeffrey M. Lacker, Dennis P. Lockhart, and John C. Williams
Alternate Members of the Federal Open Market Committee

James Bullard, Esther L. George, and Eric Rosengren
Presidents of the Federal Reserve Banks of St. Louis, Kansas City, and Boston, respectively

William B. English
Secretary and Economist

Matthew M. Luecke
Deputy 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

James A. Clouse, Thomas A. Connors, Evan F. Koenig, Thomas Laubach, Michael P. Leahy, Loretta J. Mester, Paolo A. Pesenti, Samuel Schulhofer-Wohl, Mark E. Schweitzer, and William Wascher
Associate Economists

Simon Potter
Manager, System Open Market Account

Lorie K. Logan
Deputy 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

Stephen A. Meyer and William Nelson
Deputy Directors, Division of Monetary Affairs, Board of Governors

Jon W. Faust
Special Adviser to the Board, Office of Board Members, Board of Governors

Linda Robertson and David W. Skidmore
Assistants to the Board, Office of Board Members, Board of Governors

Trevor A. Reeve
Senior Associate Director, Division of International Finance, Board of Governors

Joyce K. Zickler
Senior Adviser, Division of Monetary Affairs, Board of Governors

Daniel M. Covitz and Michael T. Kiley
Associate Directors, Division of Research and Statistics, Board of Governors

Jane E. Ihrig
Deputy Associate Director, Division of Monetary Affairs, Board of Governors

Edward Nelson
Assistant Director, Division of Monetary Affairs, Board of Governors

John J. Stevens
Assistant Director, Division of Research and Statistics, Board of Governors

Jeremy B. Rudd
Adviser, Division of Research and Statistics, Board of Governors

Dana L. Burnett
Section Chief, Division of Monetary Affairs, Board of Governors

Burcu Duygan-Bump
Senior Project Manager, Division of Monetary Affairs, Board of Governors

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

Andrew Figura
Group Manager, Division of Research and Statistics, Board of Governors

Michele Cavallo
Senior Economist, Division of International Finance, Board of Governors

Yuriy Kitsul
Economist, Division of Monetary Affairs, Board of Governors

Randall A. Williams
Records Project Manager, Division of Monetary Affairs, Board of Governors

Kenneth C. Montgomery
First Vice President, Federal Reserve Bank of Boston

David Altig, Glenn D. Rudebusch, and Daniel G. Sullivan
Executive Vice Presidents, Federal Reserve Banks of Atlanta, San Francisco, and Chicago, respectively

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

Robert L. Hetzel
Senior Economist, Federal Reserve Bank of Richmond

Annual Organizational Matters[1]

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 (the "Committee") for a term beginning January 28, 2014, 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.

Charles I. Plosser
President of the Federal Reserve Bank of Philadelphia, with

Jeffrey M. Lacker
President of the Federal Reserve Bank of Richmond, 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.

Richard W. Fisher
President of the Federal Reserve Bank of Dallas, with

Dennis P. Lockhart
President of the Federal Reserve Bank of Atlanta, as alternate.

Narayana Kocherlakota
President of the Federal Reserve Bank of Minneapolis, with

John C. Williams
President of the Federal Reserve Bank of San Francisco, as alternate.

By unanimous vote, the Committee selected Ben Bernanke to serve as Chairman through January 31, 2014, and Janet L. Yellen to serve as Chairman, effective February 1, 2014, until the selection of her successor at the first regularly scheduled meeting of the Committee in 2015.

By unanimous vote, the following officers of the Committee were selected to serve until the selection of their successors at the first regularly scheduled meeting of the Committee in 2015:

William C. Dudley
Vice Chairman

William B. English
Secretary and Economist

Matthew M. Luecke
Deputy Secretary

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1 Versions of the current Committee documents are available at www.federalreserve.gov/monetarypolicy/rules_authorizations.htm.

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

James A. Clouse

Thomas A. Connors

Evan F. Koenig

Thomas Laubach

Michael P. Leahy

Loretta J. Mester

Paolo A. Pesenti

Samuel Schulhofer-Wohl

Mark E. Schweitzer

William Wascher
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, the Authorization for Domestic Open Market Operations was approved with an amendment that makes the structure of paragraphs 1.A and 1.B more similar. The Guidelines for the Conduct of System Open Market Operations in Federal-Agency Issues remained suspended.

Authorization for Domestic Open Market Operations (As Amended Effective January 28, 2014)

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 in the open market 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, 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; and

   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. The Federal Open Market Committee authorizes the Federal Reserve Bank of New York to undertake transactions of the type described in paragraphs 1.A and 1.B from time to time for the purpose of testing operational readiness. The aggregate par value of such transactions of the type described in paragraph 1.A shall not exceed $5 billion per calendar year. The outstanding amount of such transactions of the type described in paragraph 1.B shall not exceed $5 billion at any given time. These transactions shall be conducted with prior notice to the Committee.

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 use agents in agency MBS-related transactions.

4. 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 that 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.

5. In order to ensure the effective conduct of open market operations, while assisting in the provision of short-term investments or other authorized services 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 the 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;

   B. For the 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 Federal Reserve Bank; and

   C. For the New York Bank account, when appropriate, to buy U.S. government securities and obligations that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States from such foreign and international accounts maintained at the Federal Reserve Bank under agreements providing for the repurchase by such accounts of those securities on the same business day.

   Transactions undertaken with such accounts under the provisions of this paragraph may provide for a service fee when appropriate.

6. 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 (i) 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 or (ii) undertake transactions of the type described in paragraphs 1.A and 1.B in order to appropriately address temporary disruptions of an operational or highly unusual nature in U.S. dollar funding markets. Any such adjustment as described in clause (i) 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 to foster maximum employment and price stability, 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 instruction under this paragraph.

The Committee voted unanimously to amend the Authorization for Foreign Currency Operations, the Foreign Currency Directive, and the Procedural Instructions with Respect to Foreign Currency Operations in the form shown below. The approval of these documents included approval of the System's warehousing agreement with the U.S. Treasury. These documents were modified to incorporate the dollar and foreign currency liquidity swap arrangements authorized by a resolution on October 29, 2013. Changes were made to the Authorization for Foreign Currency Operations and the Procedural Instructions with Respect to Foreign Currency Operations to align the treatment of the liquidity swap arrangements and that of the reciprocal currency arrangements that have been in place with the central banks of Mexico and Canada since 1994 as part of the North American Framework Agreement. The Authorization for Foreign Currency Operations was amended to remove language regarding the transmission of pertinent information on System foreign currency operations to appropriate officials of the Treasury Department because this language duplicated language in the Program for Security of FOMC Information.

Authorization for Foreign Currency Operations (As Amended Effective January 28, 2014)

1. The Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York, for the 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 arrangements listed in paragraph 2 below, in accordance with the Procedural Instructions with Respect to Foreign Currency Operations.

   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 for the System Open Market Account (subject to the requirements of section 214.5 of Regulation N, Relations with Foreign Banks and Bankers):

   A. Reciprocal currency arrangements with the following foreign banks:

Foreign bank	Amount of arrangement (millions of dollars equivalent)
Bank of Canada	2,000
Bank of Mexico	3,000

   B. Standing dollar liquidity swap arrangements with the following foreign banks:

   Bank of Canada
   Bank of England
   Bank of Japan
   European Central Bank
   Swiss National Bank

C. Standing foreign currency liquidity swap arrangements with the following foreign banks:

Bank of Canada
Bank of England
Bank of Japan
European Central Bank
Swiss National Bank

Dollar and foreign currency liquidity swap arrangements have no pre-set size limits. Any new swap arrangements shall be referred for review and approval to the Committee. All swap arrangements are subject to annual review and approval by 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 member, 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. 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.

9. The Federal Open Market Committee authorizes the Federal Reserve Bank of New York to undertake transactions of the type described in paragraphs 1, 2, and 5, and foreign exchange and investment transactions that it may be otherwise authorized to undertake from time to time for the purpose of testing operational readiness. The aggregate amount of such transactions shall not exceed $2.5 billion per calendar year. These transactions shall be conducted with prior notice to the Committee.

Foreign Currency Directive (As Amended Effective January 28, 2014)

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 arrangements with foreign central banks in accordance with the Authorization for Foreign Currency Operations.

    C. Maintain standing dollar liquidity swap arrangements with foreign banks in accordance with the Authorization for Foreign Currency Operations.

    D. Maintain standing foreign currency liquidity swap arrangements with foreign banks in accordance with the Authorization for Foreign Currency Operations.

    E. 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 (As Amended Effective January 28, 2014)

In conducting operations pursuant to the authorization and direction of the Federal Open Market Committee (the "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 (the "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. For the reciprocal currency arrangements authorized in paragraphs 2.A of the Authorization for Foreign Currency Operations:

    A. Drawings must be approved by the Subcommittee (or by the Chairman, if the Chairman believes that consultation with the Subcommittee is not feasible in the time available) if the swap drawing proposed by a foreign bank does not exceed the larger of (i) $200 million or (ii) 15 percent of the size of the swap arrangement.

B. Drawings must be approved by the Committee (or by the Subcommittee, if the Subcommittee believes that consultation with the full Committee is not feasible in the time available, or by the Chairman, if the Chairman believes that consultation with the Subcommittee is not feasible in the time available) if the swap drawing proposed by a foreign bank exceeds the larger of (i) $200 million or (ii) 15 percent of the size of the swap arrangement.

C. The manager shall also consult with the Subcommittee or the Chairman about proposed swap drawings by the System.

D. Any changes in the terms of existing swap arrangements shall be referred for review and approval to the Chairman. The Chairman shall keep the Committee informed of any changes in terms, and the terms shall be consistent with principles discussed with and guidance provided by the Committee.

2. For the dollar and foreign currency liquidity swap arrangements authorized in paragraphs 2.B and 2.C of the Authorization for Foreign Currency Operations:

   A. Drawings must be approved by the Chairman in consultation with the Subcommittee. The Chairman or the Subcommittee will consult with the Committee prior to the initial drawing on the dollar or foreign currency liquidity swap lines if possible under the circumstances then prevailing; authority to approve subsequent drawings for either the dollar or foreign currency liquidity swap lines may be delegated to the manager by the Chairman.

   B. Any changes in the terms of existing swap arrangements shall be referred for review and approval to the Chairman. The Chairman shall keep the Committee informed of any changes in terms, and the terms shall be consistent with principles discussed with and guidance provided by the Committee.

3. Any operation must be approved by:

   A. The Subcommittee (or by the Chairman, if the Chairman believes that consultation with the Subcommittee is not feasible in the time available) if it:

      i. 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.

      ii. 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.

      iii. 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 (as defined in paragraph 1.D of the Authorization for Foreign Currency Operations) might be less than the limits specified in 3.A.ii.

   B. The Committee (or by the Subcommittee, if the Subcommittee believes that consultation with the full Committee is not feasible in the time available, or by the Chairman, if the Chairman believes that consultation with the Subcommittee is not feasible in the time available) if it 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.

4. The Committee authorizes the Federal Reserve Bank of New York to undertake transactions of the type described in paragraphs 1, 2, and 5 of the Authorization for Foreign Currency Operations and foreign exchange and investment transactions that it may be otherwise authorized to undertake from time to time for the purpose of testing operational readiness. The aggregate amount of such transactions shall not exceed $2.5 billion per calendar year. These transactions shall be conducted with prior notice to the Committee.

In its annual reconsideration of the Statement on Longer-Run Goals and Monetary Policy Strategy, participants generally agreed that only minor updates were required at this meeting. It was noted, however, that because this was the third year in which the statement was being issued, the coming year would be an appropriate time to consider whether the statement could be enhanced in any way. For example, some participants advocated an explicit indication that inflation persistently below the Committee's 2 percent longer-run objective and inflation persistently above that objective would be equally undesirable. Some others suggested that the statement could more clearly describe how the mandated goals of maximum employment and price stability are linked with the objective of financial stability. Following the discussion, the Committee voted to approve minor wording changes to the statement and to update the statement's reference to participants' estimates of the longer-run normal unemployment rate. Mr. Tarullo abstained from the vote because he continued to think that the statement had not advanced the cause of communicating or achieving greater consensus in the policy views of the Committee.

Statement on Longer-Run Goals and Monetary Policy Strategy (As Amended Effective January 28, 2014)

"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 reaffirms its judgment 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 5.8 percent.

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."

By unanimous vote, the Committee amended its Rules of Organization to add the position of deputy manager of the System Open Market Account.

By unanimous vote, the Committee amended its Program for Security of FOMC Information with minor changes to the review and reporting process for breaches in the information security rules and with several other minor updates and clarifications.

By unanimous vote, the Committee selected Simon Potter and Lorie K. Logan to serve at the pleasure of the Committee as manager and deputy manager of the System Open Market Account, respectively, on the understanding that their selection was subject to their being satisfactory to the Federal Reserve Bank of New York.

Secretary's note: Advice subsequently was received that the manager and deputy manager selections indicated above were satisfactory to the 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 as well as System open market operations during the period since the Federal Open Market Committee met on December 17–18, 2013. The manager also presented an update on the ongoing overnight reverse repurchase agreement (ON RRP) exercise. All operations to date had proceeded smoothly. The number of participating counterparties and total allotment in the daily operations increased in late December, in part reflecting the fact that overnight secured rates were low compared with the fixed rate offered in the operations as well as the increase in the cap on individual counterparty bids to $3 billion from $1 billion that was implemented on December 23, 2013. Counterparties' year-end balance sheet adjustments also boosted participation for a time; the ON RRP operations reportedly helped limit downward pressure on money market rates around year-end.

Following the manager's report, meeting participants discussed a proposal to extend the Desk's authority to conduct the ON RRP exercise for 12 months and to lift the per-counterparty bid limit. Under the terms of the proposal, the interest rate on ON RRPs would remain between 0 and 5 basis points. The Chair of the FOMC would authorize any changes in the offered rate or per-counterparty bid limit. Adjustments to the bid limit would be made in gradual steps, and the Committee would be consulted before the exercise would move to full allotment. The proposed changes were intended to allow the Committee to obtain additional information about the potential usefulness of ON RRP operations for affecting market interest rates when that step becomes appropriate. Most meeting participants supported the proposal, with a couple emphasizing that the period for which the exercise would be extended was likely sufficiently long that counterparties would be willing to adjust their current money market practices, thereby providing better information on the possible market effects of such operations. It was remarked that the additional insights obtained from the exercise could be useful in the context of the Committee's future discussions about monetary policy implementation over the medium and longer term. A number of participants, however, indicated a preference for retaining a cap on the per-counterparty bid limit until the Committee has discussed possible approaches to medium-term policy implementation, and a few of these participants preferred to extend the exercise for a shorter period.

Following the discussion, the Committee approved the following resolution:

"The Federal Open Market Committee (FOMC) authorizes the Federal Reserve Bank of New York to conduct a series of fixed-rate, overnight reverse repurchase operations involving 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 purpose of further assessing the potential role for such operations in supporting the implementation of monetary policy. The reverse repurchase operations authorized by this resolution shall be offered at a fixed rate that may vary from zero to five basis points, and for an overnight term, or such longer term as is warranted to accommodate weekend, holiday, and similar trading conventions. Any change to the offered rate within the range specified above or the per-counterparty bid limits will require approval of the Chairman. The System Open Market Account manager will notify the FOMC in advance about any changes to the terms of operations. These operations shall be authorized through January 30, 2015."

Messrs. Fisher and Plosser dissented because of their preference for retaining a cap on the maximum size of counterparties' offers during the extension; Mr. Plosser also preferred a shorter extension of the exercise.

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.

Staff Review of the Economic Situation

The information reviewed for the January 28–29 meeting indicated that the rate of economic growth picked up in the second half of 2013. Total payroll employment increased in December, but at a slower pace than in previous months, and the unemployment rate declined but was still elevated. Consumer price inflation continued to run below the Committee's longer-run objective, while measures of longer-term inflation expectations remained stable.

Overall, labor market indicators appeared consistent with a gradual ongoing improvement in labor market conditions. Total nonfarm payroll employment expanded by less in December than in the previous two months, perhaps partly because of unusually bad weather. The unemployment rate declined to 6.7 percent in December. The labor force participation rate also decreased, and the employment-to-population ratio was little changed. The rate of long-duration unemployment declined, but the share of workers employed part time for economic reasons was little changed, and both measures remained elevated. Among other indicators of labor market conditions, the rate of job openings edged up in recent months, and the share of small businesses reporting that they had hard-to-fill positions trended up. Measures of firms' hiring plans were higher than a year earlier, but the rate of gross private-sector hiring was still low. Initial claims for unemployment insurance moved down, on balance, over the intermeeting period, and household expectations of the labor market situation improved, on net, in December and early January.

Manufacturing production increased at a robust pace in the fourth quarter, with broad-based gains across industries. Indicators of manufacturing production, such as the readings on new orders from national and regional manufacturing surveys, were consistent with a further expansion in factory output early this year, but automakers' production schedules indicated that the pace of light motor vehicle assemblies would decline in the first quarter.

Real personal consumption expenditures (PCE) rose at a faster pace in October and November than in the third quarter. In December, the components of the nominal retail sales data used by the Bureau of Economic Analysis to construct its estimate of PCE increased strongly, although sales of light motor vehicles declined after posting a large gain in November. Recent information on several important factors that influence household spending was somewhat mixed. Households' real disposable income was little changed in October and November, and the expiration of the emergency unemployment compensation program at the end of 2013 was expected to reduce aggregate income growth early this year. However, households' net worth likely continued to expand in recent months as a result of rising equity prices and home values. Consumer sentiment in the Thomson Reuters/University of Michigan Surveys of Consumers improved, on balance, in December and early January after a decline in the fall of 2013.

The pace of activity in the housing sector showed some tentative signs of stabilizing, as the effects of the past year's rise in mortgage rates appeared to wane. Single-family housing starts increased in November and only partly reversed that gain in December, while permits for new construction rose a little, on balance, in the fourth quarter. New home sales declined in November and December but were nonetheless higher than in the third quarter, and existing home sales flattened out in December after decreasing for several months.

Real private expenditures for business equipment and intellectual property products appeared to strengthen in the fourth quarter, as nominal shipments of nondefense capital goods rose at a solid pace. Although nominal new orders for these capital goods declined in December and November's increase was revised down, the level of orders remained above that of shipments, pointing to further increases in shipments in subsequent months. Other forward-looking indicators, such as surveys of business conditions and capital spending plans, were also generally consistent with near-term gains in business equipment spending. Nominal expenditures for nonresidential construction, which had been flat in October, moved higher in

November. Data on book-value inventories suggested little change in the pace of nonfarm inventory investment in the fourth quarter, and the available information did not point to significant inventory imbalances in most industries.

Real federal government purchases likely fell sharply in the fourth quarter because of continued declines in defense spending and the temporary partial shutdown of the federal government in October. Increases in real state and local government purchases appeared to have moderated in the fourth quarter. The payrolls of these governments were about unchanged during the fourth quarter, and nominal state and local construction expenditures for October and November increased at a slower pace, on net, than in the third quarter.

The U.S. international trade deficit narrowed substantially in November, as exports increased and imports fell. The higher value of exports stemmed in large part from an increase in sales of petroleum products, while the fall in imports was primarily due to a decline in purchases of crude oil.

Total U.S. consumer price inflation, as measured by the PCE price index, was a little under 1 percent over the 12 months ending in November, well below the Committee's 2 percent longer-term objective. Over that period, consumer energy prices declined, consumer food prices rose modestly, and core PCE prices—which exclude consumer food and energy prices—increased slightly more than 1 percent. In December, the consumer price index (CPI) rose somewhat faster than in recent months, primarily reflecting an upturn in consumer energy prices; core CPI inflation remained low. Both near-term and longer-term inflation expectations from the Michigan survey were little changed, on net, in December and early January. Over the 12 months ending in December, nominal average hourly earnings for all employees increased slightly faster than consumer price inflation.

Foreign economic activity continued to improve, with economic growth in the third quarter of 2013 higher than in the first half of the year and more recent indicators suggesting further gains. The pickup was widespread, as the euro area registered a second consecutive quarter of positive economic growth, the Mexican economy bounced back from a second-quarter contraction, and stronger external demand boosted growth in emerging market economies more generally. At the same time, inflation continued to run below central bank targets in several advanced economies, and monetary policy remained expansionary in these economies. Inflation in emerging market economies remained moderate on average, although Brazil, India, and Turkey again tightened monetary policy during the intermeeting period in response to concerns about inflation and currency depreciation. The policy tightening in Turkey was particularly sharp and followed several days of heightened financial market pressures toward the end of the intermeeting period. Similar pressures were evident in some other emerging market economies as well.

Staff Review of the Financial Situation

Financial market conditions over the intermeeting period were importantly influenced by Federal Reserve communications, somewhat better-than-expected economic data releases, and developments in emerging market economies. On net, financial conditions in the United States remained supportive of growth in economic activity and employment: Equity prices increased a bit, longer-term interest rates declined, and the dollar appreciated against most other currencies.

While investors were somewhat surprised by the FOMC's decision at its December meeting to reduce the pace of its asset purchases, the policy action and associated communications appeared to have only a limited effect on market participants' outlook for the Federal Reserve's balance sheet. Indeed, the Committee's decision to cut the pace of purchases and its rationale for doing so seemed to increase investors' confidence in the economic outlook, a shift that was further supported by subsequent U.S. economic data releases. However, those effects were reversed late in the period when investors appeared to pull back from riskier assets in reaction to rising concern about developments in some emerging market economies and their possible implications for global economic growth.

Results from the Desk's survey of primary dealers conducted prior to the January meeting indicated that dealers anticipated only minor changes to the Committee's postmeeting statement. In addition, the median dealer expected a $10 billion reduction in the monthly pace of asset purchases to be announced at each meeting in the first three quarters of 2014, with the purchase program ending with a final $15 billion reduction at the October 2014 meeting.

On balance, 10-and 30-year nominal Treasury yields declined about 10 basis points and 20 basis points, respectively, over the intermeeting period, in part because of an increase in safe-haven demands toward the end of the period. The December policy action and subsequent muted market reaction led to decreased uncertainty about future longer-term interest rates, perhaps contributing to the decline in longer-term rates. The measure of 5-year inflation compensation based on Treasury inflation-protected securities increased a little, while inflation compensation 5 to 10 years ahead decreased somewhat.

Conditions in short-term dollar funding markets generally remained stable. Year-end funding pressures were modest, and overnight money market rates declined about in line with their typical behavior in past years. Repo rates were quite low at the end of the year and remained low through most of January, leading to increased participation in the Federal Reserve's ON RRP operations, with a substantial temporary increase in take-up at year-end. Primarily reflecting the increased participation in the exercise, reserve balances expanded more slowly and the rate of increase in the monetary base slowed in December. M2 continued to expand moderately.

Reflecting the improved outlook for economic activity and despite mixed fourth-quarter earnings results, the stock prices of bank holding companies rose notably and spreads on credit default swaps for the largest bank holding companies narrowed somewhat. According to the January Senior Loan Officer Opinion Survey on Bank Lending Practices, domestic banks continued to ease their lending standards and some loan terms on balance; they also experienced an increase in demand, on net, in most major loan categories in the fourth quarter.

Broad U.S. equity price indexes edged higher, on net, over the intermeeting period, and equity issuance by nonfinancial corporations increased. Credit remained widely available to large nonfinancial corporations. Corporate bond spreads continued to narrow over the intermeeting period, with investment-grade bond spreads reaching their lowest levels in several years and those on speculative-grade corporate bonds approaching pre-crisis levels. Bond issuance by domestic corporations generally stayed strong, commercial and industrial loans on banks' books increased by a notable amount late in the fourth quarter, and issuance of leveraged loans and collateralized loan obligations generally continued apace.

Conditions in the commercial real estate sector recovered further in the fourth quarter, with rising property prices and fewer distressed sales. In the market for commercial mortgage-backed securities, investor demand remained strong and spreads continued to be tight despite high issuance near year-end. Commercial real estate loans on banks' books expanded moderately.

Credit conditions in municipal bond markets generally remained stable, although a few issuers continued to experience substantial strain. Available data suggest that, for the first time in several years, the ratings agency Moody's Investors Service made more upgrades than downgrades to municipal debt in the fourth quarter. However, Moody's put Puerto Rico on watch for a downgrade.

Households continued to face mixed credit conditions in the fourth quarter. Consumer credit expanded again in November, boosted by further gains in auto and student loans, and bank credit data indicate that this expansion likely continued through December. In contrast, credit card balances were little changed, on net, through November, as underwriting appeared to remain quite tight. The volume of mortgage applications for home purchases held about steady since the previous FOMC meeting while refinance applications remained at very low levels. Mortgage rates declined slightly, in line with modestly lower yields on agency mortgage-backed securities. Despite tight mortgage availability and subdued borrowing, house prices continued to increase in November, although not as quickly as earlier in 2013.

Financial market conditions in the advanced foreign economies over the intermeeting period generally became more supportive of growth. Long-term government bond yields declined and headline equity indexes increased, on net, in most of these countries, with bank stock prices in the euro area rising more than broader indexes. In addition, debt issuance by both governments and banks in the European periphery picked up, and sovereign yield spreads in those countries were flat to down, on balance, over the period. In contrast, amid a ratcheting-up of financial market strains in some emerging market economies, headline stock price indexes in most emerging market economies declined, outflows from emerging market mutual funds continued, and yield spreads on dollar-denominated emerging market bonds increased. Local-currency yields rose in some emerging market economies, such as Brazil, South

Africa, and Turkey, and short-term interbank rates in China were volatile and trended higher over the period. The foreign exchange value of the dollar appreciated against most other currencies over the period, with particularly large increases against the Argentine peso and the Turkish lira.

Staff Economic Outlook

In the economic projection prepared by the staff for the January FOMC meeting, growth of real gross domestic product (GDP) in the second half of 2013 was estimated to have been stronger than the staff had expected, though some of the strength in inventory investment and net exports was possibly transitory. The staff's medium-term forecast for real GDP growth was little revised, on balance, as the momentum implied by faster GDP growth in the second half of 2013 was largely offset by a higher projected path for the foreign exchange value of the dollar. In addition, the staff revised downward its view of the pace at which potential output had increased over recent years and would increase this year and next. The staff continued to project that real GDP would expand more quickly over the next few years than in 2013 and that real GDP would rise faster than potential output. This acceleration in economic activity was expected to be supported by still-accommodative monetary policy and an easing in the effects of fiscal policy restraint on economic growth, as well as by increases in consumer and business confidence, further improvements in credit availability and financial conditions, and continued gains in foreign economic growth. The expansion in economic activity was anticipated to lead to a slow reduction in resource slack over the projection period, and the unemployment rate was expected to decline gradually, reaching the staff's estimate of its longer-run natural rate in 2016.

The staff's forecast for inflation was little changed from the projection prepared for the previous FOMC meeting, although the near-term forecast was revised down a little to reflect recent declines in energy prices. The staff continued to forecast that inflation would run well below the Committee's 2 percent objective early this year but above the low level observed over much of 2013. Over the medium term, with longer-run inflation expectations assumed to remain stable, changes in commodity and import prices expected to be muted, and slack in labor and product markets receding gradually, inflation was projected to move back slowly toward the Committee's objective.

In considering recent events in emerging market economies, the staff judged that the effects of recent financial market volatility had not been large enough to have a material effect on the overall outlook for those economies and, similarly, that the spillover effects on the United States of developments to date were likely to be modest. Because conditions were in flux, however, these markets would require careful monitoring.

The staff continued to see a number of risks around its outlook. The downside risks to the forecast for real GDP growth were thought to have diminished, but the risks were still seen as tilted a little to the downside because, with the target federal funds rate at its effective lower bound, the economy was not well positioned to withstand future adverse shocks. At the same time, the staff viewed the risks around its outlook for the unemployment rate and for inflation as roughly balanced.

Participants' Views on Current Conditions and the Economic Outlook

In their discussion of the economic situation and the outlook, participants generally noted that economic activity had strengthened more in the second half of 2013 than they had expected at the time of the December meeting. In particular, consumer spending had strengthened, and business investment appeared to be on a more solid uptrend. Although the government shutdown likely damped economic growth somewhat, the extent of restraint on growth from fiscal policy diminished late in the year. However, several participants observed that temporary factors had helped boost real GDP during the second half, pointing specifically to the substantial contributions from net exports and increased inventory investment. As a result, participants generally did not expect the recent pace of economic growth to be sustained, but they nonetheless anticipated that the economy would expand at a moderate pace in coming quarters. That expansion was expected to be supported by highly accommodative monetary policy, a further easing of fiscal restraint, and a modest additional pickup in global economic growth, as well as continued improvement in credit conditions and the ongoing strengthening in household balance sheets. A number of participants noted that recent economic news had reinforced their confidence in their projection of moderate economic growth over the medium run. It was also noted that recent developments in several emerging market economies, if they continued, could pose downside risks to the outlook. Overall, most participants still viewed the risks to the outlook for the economy and the labor market as having become more nearly balanced in recent months.

Consumer spending had advanced strongly in late 2013, contributing importantly to the pickup in growth of economic activity. This picture was reinforced by survey data that suggested that consumers had become more optimistic about future income gains. While noting that households remained cautious, participants cited a number of factors that were likely to continue to underpin gains in household spending, including rising house prices, growing confidence in the sustainability of the economic expansion, increasing payrolls, and the high ratio of household wealth to disposable income.

Although the recovery in the housing sector had slowed somewhat in recent months, a number of participants reported solid activity in their Districts. Moreover, various factors were seen as likely to support stronger growth in the sector going forward, including favorable housing affordability, which was in turn partly due to still-low mortgage rates, and demographic trends. However, there were also reasons for being cautious about the prospects for housing construction, such as recent disappointing news on permits for new construction and the possibility that investors' interest in purchasing properties for the rental market would recede.

Business contacts in many parts of the country reported that they were guardedly optimistic about prospects for 2014. While inventory investment would likely come down from its recent unusually high level, participants heard more reports that the business sector was willing to increase spending on capital projects. A number of factors were cited as likely to support such an increase, including the high level of profits, the low level of interest rates, a reduction in policy uncertainty, the easing of lending standards, and large holdings of liquid assets by corporations.

In discussing financial developments over the intermeeting period, several participants noted that the Committee's December decision to make a modest reduction in the monthly pace of asset purchases had not resulted in an adverse market reaction. Several participants observed that current market expectations for asset purchases and the future course of the federal funds rate were reasonably well aligned with participants' own expectations of the path for policy. However, one participant expressed concern that longer-term interest rates could rise sharply if market participants' expectations of future monetary policy came to deviate from those of policymakers, as appeared to have happened last summer, while a couple of others argued that the current highly accommodative stance of monetary policy could lead investors to take on excessive risk and so undermine longer-term financial stability. Recent volatility in emerging markets appeared to have had only a limited effect to date on U.S. financial markets. Nevertheless, participants agreed that a number of developments in financial markets needed to be watched carefully, including the financing situation of the Puerto Rican government and particularly the unfolding events in emerging markets.

In their discussion of recent labor market developments, many participants commented on the relatively small increase in payrolls in December and the further decline in the unemployment rate. A number of participants indicated that the December payrolls figure may have been an anomaly, perhaps importantly reflecting bad weather, and it was noted that the initial readings on payrolls in recent years had subsequently tended to be revised up. In addition, some participants reported that their business contacts had become more positive about hiring in the year ahead. Participants continued to debate the reliability of the unemployment rate as an indicator of overall labor market conditions, taking into account the further decline in labor force participation in recent quarters, still-elevated levels of underemployment and long-term unemployment, and the apparent absence of wage pressures. Much of the downward trend in the labor force participation rate since the start of the recession was seen as the result of shifts in the demographic composition of the workforce and the retirement of older workers; the extent of the cyclical portion of the decline was viewed by some as difficult to gauge at present. A few participants judged that the decline in participation for younger and prime-age workers likely reflected the slow recovery in jobs and wages and so might be reversed as labor market conditions strengthened. In addition, several others pointed out that broader concepts of the unemployment rate, such as those that include nonparticipants who report that they want a job and those working part time who want full-time work, remained well above the official unemployment rate, suggesting that considerable labor market slack remained despite the reduction in the unemployment rate. A few participants noted worker shortages in specific regions and occupations, with one District reporting widespread shortages of skilled labor leading to emerging labor cost pressures. However, a number of participants saw the low rates of increase in most measures of wages as consistent with continued labor market slack.

Inflation remained below the Committee's longer-run objective over the intermeeting period. Participants still anticipated that, with longer-run inflation expectations stable, transitory factors that had been damping inflation likely to recede, and economic activity picking up, inflation would move back toward the Committee's 2 percent objective over the medium run. However, several factors that cast doubt on this outcome were also mentioned, including slow growth in labor costs, the lack of pricing power reported by business contacts in various parts of the country, the low level of inflation in other advanced economies, and the danger that inflation expectations at short and medium horizons might not be as well anchored as longer-run inflation expectations. Participants noted that inflation persistently below the Committee's objective would pose risks to economic performance and that inflation developments would need to be monitored carefully.

In their discussion of the path for monetary policy, most participants judged that the incoming information about the economy was broadly in line with their expectations and that a further modest step down in the pace of purchases was appropriate. A couple of participants observed that continued low readings on inflation and considerable slack in the labor market raised questions about the desirability of reducing the pace of purchases; these participants judged, however, that a pause in the reduction of purchases was not justified at this stage, especially in light of the strength of the economy in the second half of 2013. Several participants argued that, in the absence of an appreciable change in the economic outlook, there should be a clear presumption in favor of continuing to reduce the pace of purchases by a total of $10 billion at each FOMC meeting. That said, a number of participants noted that if the economy deviated substantially from its expected path, the Committee should be prepared to respond with an appropriate adjustment to the trajectory of its purchases.

Participants agreed that, with the unemployment rate approaching 6½ percent, it would soon be appropriate for the Committee to change its forward guidance in order to provide information about its decisions regarding the federal funds rate after that threshold was crossed. A range of views was expressed about the form that such forward guidance might take. Some participants favored quantitative guidance along the lines of the existing thresholds, while others preferred a qualitative approach that would provide additional information regarding the factors that would guide the Committee's policy decisions. Several participants suggested that risks to financial stability should appear more explicitly in the list of factors that would guide decisions about the federal funds rate once the unemployment rate threshold is crossed, and several participants argued that the forward guidance should give greater emphasis to the Committee's willingness to keep rates low if inflation were to remain persistently below the Committee's 2 percent longer-run objective. Additional proposals included relying to a greater extent on the Summary of Economic Projections as a communications device and including in the guidance an indication of the Committee's willingness to adjust policy to lean against undesired changes in financial conditions.

A few participants raised the possibility that it might be appropriate to increase the federal funds rate relatively soon. One participant cited evidence that the equilibrium real interest rate had moved higher, and a couple of them noted that some standard policy rules tended to suggest that the federal funds rate should be raised above its effective lower bound before the middle of this year. Other participants, however, suggested that prescriptions from standard policy rules were not appropriate in current circumstances, either because the target federal funds rate had been constrained by the lower bound for some time or because the equilibrium real rate of interest was likely still being held down by various factors, including the lingering effects of the financial crisis, and was significantly below the value of the longer-run rate built into standard policy rules.

Committee Policy Action

Committee members saw the information received over the intermeeting period as indicating that growth in economic activity had picked up in recent quarters. Labor market indicators were mixed but on balance showed further improvement. The unemployment rate had declined but remained elevated when judged against members' estimates of the longer-run normal rate of unemployment. Household spending and business fixed investment had advanced more quickly in recent months than earlier in 2013, while the recovery in the housing sector had slowed somewhat. Fiscal policy was restraining economic growth, although the extent of the restraint had diminished. The Committee expected that, with appropriate policy accommodation, the economy would expand at a moderate pace and the unemployment rate would gradually decline toward levels consistent with the dual mandate. Moreover, members continued to judge that the risks to the outlook for the economy and the labor market had become more nearly balanced. Inflation was running below the Committee's longer-run objective, and this was seen as posing possible risks to economic performance, but members anticipated that stable inflation expectations and strengthening economic activity would, over time, return inflation to the Committee's 2 percent objective. However, in light of their concerns about the persistence of low inflation, many members saw a need for the Committee to monitor inflation developments carefully for evidence that inflation was moving back toward its longer-run objective.

In their discussion of monetary policy in the period ahead, all members agreed that the cumulative improvement in labor market conditions and the likelihood of continuing improvement indicated that it would be appropriate to make a further measured reduction in the pace of its asset purchases at this meeting. Members again judged that, if the economy continued to develop as anticipated, further reductions would be undertaken in measured steps. Members also underscored that the pace of asset purchases was not on a preset course and would remain contingent on the Committee's outlook for the labor market and inflation as well as its assessment of the efficacy and costs of purchases. Accordingly, the Committee agreed that, beginning in February, it would add to its holdings of agency mortgage-backed securities at a pace of $30 billion per month rather than $35 billion per month, and would add to its holdings of longer-term Treasury securities at a pace of $35 billion per month rather than $40 billion per month. While making a further measured reduction in its pace of purchases, the Committee emphasized that its holdings of longer-term securities were sizable and would still be increasing, which would promote a stronger economic recovery by maintaining downward pressure on longer-term interest rates, supporting mortgage markets, and helping to make broader financial conditions more accommodative. The Committee also reiterated that it would continue its asset purchases, and employ its other policy tools as appropriate, until the outlook for the labor market has improved substantially in a context of price stability.

In considering forward guidance about the target federal funds rate, all members agreed to retain the thresholds-based language employed in recent statements. In addition, the Committee decided to repeat the qualitative guidance, introduced in December, clarifying that a range of labor market indicators would be used when assessing the appropriate stance of policy once the unemployment rate threshold had been crossed. Members also agreed to reiterate language indicating the Committee's anticipation, based on its current assessment of additional measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments, that it would be appropriate to maintain the current target range for the federal funds rate well past the time that the unemployment rate declines below 6½ percent, especially if projected inflation continues to run below the Committee's longer-run objective.

Members also discussed other elements of the policy statement to be issued following the meeting. Members agreed on updating the description of the state of the economy to reflect the recent strength of household and business spending and to note that, although the labor market showed further improvement on balance, the recent indicators were mixed. Members did not see an appreciable change in the balance of risks and so left the statement's description of risks unchanged.

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 SOMA in accordance with the following domestic policy directive:

> "Consistent with its statutory mandate, the Federal Open Market Committee seeks monetary and financial conditions that will foster maximum employment and price stability. In particular, 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 undertake open market operations as necessary to maintain such conditions. Beginning in February, the Desk is directed to purchase longer-term Treasury securities at a pace of about $35 billion per month and to purchase agency mortgage-backed securities at a pace of about $30 billion per month. The Committee also directs the Desk to engage in dollar roll and coupon swap transactions as

necessary to facilitate settlement of the Federal Reserve's agency mortgage-backed securities transactions. The Committee directs the Desk to maintain its policy of rolling over maturing Treasury securities into new issues and its policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in agency mortgage-backed securities. 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 2:00 p.m.:

"Information received since the Federal Open Market Committee met in December indicates that growth in economic activity picked up in recent quarters. Labor market indicators were mixed but on balance showed further improvement. The unemployment rate declined but remains elevated. Household spending and business fixed investment advanced more quickly in recent months, while the recovery in the housing sector slowed somewhat. Fiscal policy is restraining economic growth, although the extent of restraint is diminishing. Inflation has been running below the Committee's longer-run objective, but 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 that, with appropriate policy accommodation, economic activity will expand at a moderate pace and the unemployment rate will gradually decline toward levels the Committee judges consistent with its dual mandate. The Committee sees the risks to the outlook for the economy and the labor market as having become more nearly balanced. The Committee recognizes that inflation persistently below its 2 percent objective could pose risks to economic performance, and it is monitoring inflation developments carefully for evidence that inflation will move back toward its objective over the medium term.

Taking into account the extent of federal fiscal retrenchment since the inception of its current asset purchase program, the Committee continues to see the improvement in economic activity and labor market conditions over that period as consistent with growing underlying strength in the broader economy. In light of the cumulative progress toward maximum employment and the improvement in the outlook for labor market conditions, the Committee decided to make a further measured reduction in the pace of its asset purchases. Beginning in February, the Committee will add to its holdings of agency mortgage-backed securities at a pace of $30 billion per month rather than $35 billion per month, and will add to its holdings of longer-term Treasury securities at a pace of $35 billion per month rather than $40 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 of rolling over maturing Treasury securities at auction. The Committee's sizable and still-increasing holdings of longer-term securities should maintain downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative, which in turn should promote a stronger economic recovery and help to ensure that inflation, over time, is at the rate most consistent with the Committee's dual mandate.

The Committee will closely monitor incoming information on economic and financial developments in coming months and will continue its purchases of Treasury and agency mortgage-backed securities, and employ its other policy tools as appropriate, until the outlook for the labor market has improved substantially in a context of price stability. If incoming information broadly supports the Committee's expectation of ongoing improvement in labor market conditions and inflation moving back toward its longer-run objective, the Committee will likely reduce the pace of asset purchases in further measured steps at future meetings. However, asset purchases are not on a preset course, and the Committee's decisions about their pace will remain contingent on the Committee's outlook for the labor market and inflation as well as its assessment of the likely efficacy and costs of such purchases.

To support continued progress toward maximum employment and price stability, the Committee today reaffirmed its view 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. The Committee also reaffirmed its expectation that the current exceptionally low target range for the federal funds rate of 0 to ¼ percent 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. 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. The Committee continues to anticipate, based on its assessment of these factors, that it likely will be appropriate to maintain the current target range for the federal funds rate well past the time that the unemployment rate declines below 6½ percent, especially if projected inflation continues to run below the Committee's 2 percent longer-run goal. 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, Richard W. Fisher, Narayana Kocherlakota, Sandra Pianalto, Charles I. Plosser, Jerome H. Powell, Jeremy C. Stein, Daniel K. Tarullo, and Janet L. Yellen.

Voting against this action: None.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, March 18–19, 2014. The meeting adjourned at 10:55 a.m. on January 29, 2014.

Notation Vote

By notation vote completed on January 7, 2014, the Committee unanimously approved the minutes of the Committee meeting held on December 17–18, 2013.

William B. English
Secretary

Meeting Held on March 18–19, 2014

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 18, 2014, at 2:00 p.m. and continued on Wednesday, March 19, 2014, at 8:30 a.m.

Present

Janet L. Yellen
Chair

William C. Dudley
Vice Chairman

Richard W. Fisher

Narayana Kocherlakota

Sandra Pianalto

Charles I. Plosser

Jerome H. Powell

Jeremy C. Stein

Daniel K. Tarullo

Christine Cumming, Charles L. Evans, Jeffrey M. Lacker, Dennis P. Lockhart, and John C. Williams
Alternate Members of the Federal Open Market Committee

James Bullard, Esther L. George, and Eric Rosengren
Presidents of the Federal Reserve Banks of St. Louis, Kansas City, and Boston, respectively

William B. English
Secretary and Economist

Matthew M. Luecke
Deputy 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

James A. Clouse, Thomas A. Connors, Evan F. Koenig, Thomas Laubach, Michael P. Leahy, Loretta J. Mester, Samuel Schulhofer-Wohl, Mark E. Schweitzer, and William Wascher
Associate Economists

Simon Potter
Manager, System Open Market Account

Lorie K. Logan
Deputy Manager, System Open Market Account

Michael S. Gibson
Director, Division of Banking Supervision and Regulation, Board of Governors

Louise L. Roseman
Director, Division of Reserve Bank Operations and Payment Systems, Board of Governors

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

Stephen A. Meyer and William Nelson
Deputy Directors, Division of Monetary Affairs, Board of Governors

Jon W. Faust
Special Adviser to the Board, Office of Board Members, Board of Governors

Trevor A. Reeve
Special Adviser to the Chair, Office of Board Members, Board of Governors

Ellen E. Meade
Senior Adviser, Division of Monetary Affairs, Board of Governors

Eric M. Engen, Michael G. Palumbo, and Wayne Passmore
Associate Directors, Division of Research and Statistics, Board of Governors

Brian J. Gross
Special Assistant to the Board, Office of Board Members, Board of Governors

Edward Nelson
Assistant Director, Division of Monetary Affairs, Board of Governors

Jeremy B. Rudd
Adviser, Division of Research and Statistics, Board of Governors

Stephanie Aaronson
Section Chief, Division of Research and Statistics, Board of Governors

Laura Lipscomb
Section Chief, Division of Monetary Affairs, Board of Governors

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

Peter M. Garavuso
Records Management Analyst, Division of Monetary Affairs, Board of Governors

David Altig, Jeff Fuhrer, Glenn D. Rudebusch, and Daniel G. Sullivan
Executive Vice Presidents, Federal Reserve Banks of Atlanta, Boston, San Francisco, and Chicago, respectively

Troy Davig, Christopher J. Waller, and John A. Weinberg
Senior Vice Presidents, Federal Reserve Banks of Kansas City, St. Louis, and Richmond, respectively

Jonathan P. McCarthy, Keith Sill, and Douglas Tillett
Vice Presidents, Federal Reserve Banks of New York, Philadelphia, and Chicago, respectively

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 as well as the System open market operations during the period since the Federal Open Market Committee (FOMC) met on January 28–29, 2014. 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.

Staff Review of the Economic Situation

The information reviewed for the March 18–19 meeting indicated that economic growth slowed early this year, likely only in part because of the temporary effects of the unusually cold and snowy winter weather. Total payroll employment expanded further, while the unemployment rate held steady, on balance, and was still elevated. Consumer price inflation continued to run below the Committee's longer-run objective, but measures of longer-run inflation expectations remained stable.

Total nonfarm payroll employment rose in January and February at a slower pace than in the fourth quarter of last year. The unemployment rate was 6.7 percent in February, the same as in December of last year. The labor force participation rate, along with the employment-to-population ratio, increased, on net, in recent months. Both the share of workers employed part time for economic reasons and the rate of long-duration unemployment were lower in February than they were late last year, although both measures were still high. Initial claims for unemployment insurance were little changed over the intermeeting period. The rate of job openings stepped down, while the rate of hiring was unchanged in December and January.

Manufacturing production was roughly flat, on balance, in January and February, in part because of the effects of the severe winter weather, which held down both motor vehicle output and production outside the motor vehicle sector. Automakers' production schedules indicated that the pace of light motor vehicle assemblies would increase in the second quarter, and broader indicators of manufacturing production, such as the readings on new orders from national manufacturing surveys, were consistent with an expectation of moderate expansion in factory output in the coming months.

Real personal consumption expenditures (PCE) increased a little, on net, in December and January. However, the components of the nominal retail sales data used by the Bureau of Economic Analysis to construct its estimate of PCE rose at a faster rate in February than in the previous couple of months, and light motor vehicle sales also moved up. Recent information on key factors that influence household spending, along with the expectation that the weather would return to seasonal norms, generally pointed toward additional gains in PCE in the coming months. Households' net worth probably continued to expand as equity prices and home values increased further, and consumer sentiment in the Thomson Reuters/University of Michigan Surveys of Consumers during February and early March remained above its average last fall; however, real disposable incomes only edged up, on balance, in December and January.

The pace of activity in the housing sector appeared to soften. Starts for both new single-family homes and multifamily units were lower in January and February than at the end of last year. Permits for single-family homes—which are typically less sensitive to fluctuations in the weather and a better indicator of the underlying pace of construction—also moved down in those months and had not shown a sustained improvement since last spring when mortgage rates began to rise. Sales of existing homes decreased in January and pending home sales were little changed, although new home sales expanded.

Growth in real private expenditures for business equipment and intellectual property products stepped up in the fourth quarter to a faster rate than in the third quarter. In January, nominal shipments of non-defense capital goods excluding aircraft decreased slightly. However, new orders for these capital goods increased and remained above the level of shipments in January, pointing to increases in shipments in subsequent months. Other forward-looking indicators, such as surveys of business conditions, also were generally consistent with modest increases in business equipment spending in the near term. Real business spending for nonresidential structures was essentially unchanged in the fourth quarter, and nominal expenditures for such structures were flat in January. Real nonfarm inventory investment increased at a significantly slower pace in the fourth quarter than in the preceding quarter, and recent data on the book value of inventories, along with readings on inventories from national and regional manufacturing surveys, did not point to significant inventory imbalances in most industries; however, days' supply of light motor vehicles in January and February exceeded the automakers' targets.

Federal spending data in January and February pointed toward real federal government purchases being roughly flat in the first quarter, as the general downtrend in purchases seemed likely to be about offset by a reversal of the effects of the partial government shutdown during the fourth quarter. Total real state and local government purchases also appeared to be about flat going into the first quarter. The payrolls of these governments expanded somewhat, on balance, in January and February, but nominal state and local construction expenditures declined a little in January.

The U.S. international trade deficit, after widening in December, remained about unchanged in January. Exports increased in January, but the gains were modest as decreases in sales of cars, petroleum products, and agricultural goods were just offset by gains in other major categories. Imports also rose in January as the increase in the volume of oil imports more than offset declines in imports of non-oil goods and services.

Total U.S. consumer price inflation, as measured by the PCE price index, was about 1¼ percent over the 12 months ending in January, continuing to run below the Committee's longer-run objective of 2 percent. Over the same 12-month period, consumer energy prices rose faster than total consumer prices while consumer food prices only edged up, and core PCE prices—which exclude food and energy prices—increased just a bit more than 1 percent. In February, the consumer price index (CPI) rose at a pace similar to that seen in recent months, as food prices rose more quickly, energy prices declined, and the increase in the core CPI remained slow. Both near- and longer-term inflation expectations from the Michigan survey were little changed in February and early March.

Measures of labor compensation indicated that increases in nominal wages remained subdued. Compensation per hour in the nonfarm business sector increased slightly over the year ending in the fourth quarter, and, with some gains in labor productivity, unit labor costs declined a little. Over the same year-long period, the employment cost index and average hourly earnings for all employees rose only a little faster than consumer price inflation.

Foreign real gross domestic product (GDP) expanded at a moderate pace in the fourth quarter of 2013, with weak economic growth in Japan and Mexico offsetting stronger gains in many other economies. Recent indicators suggested that total foreign real GDP was expanding at a similar pace in the first quarter of 2014. The economic recovery in the euro area appeared to be continuing, and the pace of Japanese economic growth looked to have picked up. In Canada, however, severe winter weather appeared to have held down economic activity in early 2014. Among the emerging market economies (EMEs), recent data suggested that economic growth in China was slowing in the first quarter, and that the rate of growth in the other Asian economies was also declining from a very robust fourth-quarter pace. Mexican real GDP growth slowed sharply in the fourth quarter, led by a contraction in the manufacturing sector, but recent indicators, such as auto production, suggested some rebound in the pace of economic activity in the current quarter. Inflation increased slightly in some advanced economies but remained well below central banks' targets. At the same time, inflation declined in some emerging Asian economies. Monetary policy remained highly accommodative in the advanced foreign economies. Across the EMEs, monetary policy adjustments varied according to economic and financial developments, with some central banks tightening policy and others loosening it.

Staff Review of the Financial Situation

Financial market conditions in the United States over the intermeeting period appeared to have been influenced by an easing of concerns about developments in the EMEs but relatively little affected by the generally weaker-than-expected economic data, which market participants appeared to attribute in large part to the temporary effects of unusually severe winter weather. On balance, U.S. financial conditions remained supportive of growth in economic activity and employment: The expected path of the federal funds rate was little changed, longer-term yields on Treasury securities edged down, equity prices rose, speculative-grade corporate bond spreads narrowed, and the foreign exchange value of the dollar depreciated slightly.

FOMC communications over the intermeeting period were about in line with market expectations. The FOMC decision and statement in January were largely anticipated by market participants. The *Monetary Policy Report* and Chair Yellen's accompanying congressional testimony in February were viewed as emphasizing continuity in the approach to monetary policy, solidifying expectations that the pace of the Committee's asset purchases would be reduced by a further $10 billion at each upcoming meeting absent a material change in the economic outlook.

Results from the Desk's Survey of Primary Dealers for March indicated that the dealers' expectations about both the likely future path of the federal funds rate and Federal Reserve asset purchases were largely unchanged since January. The survey results showed that most dealers expected the Committee to modify its forward rate guidance at the March meeting, with many anticipating a shift toward qualitative guidance.

Yields on short- and intermediate-term Treasury securities were little changed, on balance, over the intermeeting period, as the effects of a waning of flight-to-quality demands early in the period roughly offset those of generally weaker-than-expected economic data. Yields on longer-term Treasury securities edged down. Measures of longer-horizon inflation compensation based on Treasury inflation-protected securities also declined somewhat.

The Federal Reserve continued its fixed-rate overnight reverse repurchase agreement (ON RRP) exercise. Early in the intermeeting period, market rates on repurchase agreements were close to the fixed rate offered in the exercise, prompting high take-up in the ON RRP operations. The increases in the interest rate offered by the Federal Reserve in its ON RRP exercise, along with the increases in caps for individual bids, also may have contributed to higher levels of activity at daily operations. Later in the period, market rates on repurchase agreements moved higher, apparently in response to a rise in Treasury bill issuance, and ON RRP volumes moderated. Reflecting the larger size of the ON RRP exercises and the reduced pace of asset purchases, the rate of increase in the monetary base slowed over January and February.

Conditions in unsecured short-term dollar funding markets remained stable over the intermeeting period. Responses to the March 2014 Senior Credit Officer Opinion Survey on Dealer Financing Terms suggested little change over the past three months in conditions in securities financing and over-the-counter derivatives markets and in credit terms applicable to most classes of counterparties.

Broad stock price indexes rose over the intermeeting period, apparently boosted by a solid finish to the corporate earnings season. Equity prices were also supported by a broad increase in investors' willingness to take riskier positions, in part likely reflecting an easing of concerns about EMEs early in the period.

Credit flows to nonfinancial corporations remained robust. Following a slowdown in January, nonfinancial corporate bond issuance rebounded in February, with the majority of proceeds going to investment-grade firms. The growth of commercial and industrial loans on banks' balance sheets increased over the period. Institutional issuance of leveraged loans continued at a brisk pace.

Financing conditions in the commercial real estate (CRE) sector continued to improve gradually. In the fourth quarter, banks' CRE loans increased across all major loan categories, and CRE loans on banks' books advanced at a solid pace in the first two months of the year. Issuance of commercial mortgage-backed securities was robust in February after a slow start in January.

Conditions in the municipal bond market remained favorable over the intermeeting period with the spread of municipal yields over yields on comparable-maturity Treasury securities little changed. Although Puerto Rico's general obligation (GO) bonds were downgraded from investment grade to speculative grade, prices of these bonds held steady, albeit at depressed levels. Puerto Rico successfully brought to market a GO bond issue in early March, substantially easing its near-term liquidity pressures.

House prices registered a further notable rise in January. Mortgage interest rates and their spreads over Treasury yields were little changed over the intermeeting period. Both mortgage applications for home purchases and refinancing applications remained at low levels through early March. Financing conditions in residential mortgage markets stayed tight, even as further incremental signs of easing emerged.

Conditions in consumer credit markets were still mixed. Auto loans continued to be broadly available, while credit card limits for borrowers with subprime and prime credit scores remained at low levels in the fourth quarter. Partly reflecting these conditions, credit card balances stayed about flat through January, while auto and student loans continued to expand briskly. Issuance of auto and credit card asset-backed securities was robust again in January and February.

Financial market sentiment abroad appeared to improve over the period, particularly with respect to the stresses that had developed in some EMEs just prior to the January FOMC meeting. Although global equity price indexes fell abruptly on March 3 amid the deepening of the political crisis in Ukraine, most markets quickly retraced those losses. Consistent with the general improvement in financial market sentiment, most foreign currencies appreciated against the dollar as flight-to-safety flows reversed. One notable exception was the Chinese renminbi, which depreciated against the dollar. The performance of foreign equity price indexes was mixed, on net: Stock prices rose in the EMEs, but they were flat in Europe and declined substantially in Japan. Longer-term sovereign bond yields in the advanced economies fell modestly over the period.

Staff Economic Outlook

In the economic forecast prepared by the staff for the March FOMC meeting, real GDP growth in the first half of this year was somewhat lower than in the projection for the January meeting. The available readings on consumer spending, residential construction, and business investment pointed to less spending growth in the first quarter than the staff had previously expected. The staff's assessment was that the unusually severe winter weather could account for some, but not all, of the recent unanticipated weakness in economic activity, and the staff lowered its projection for near-term output growth. Largely because of the combination of recent downward surprises in the unemployment rate and weaker-than-expected real GDP growth, the staff lowered slightly the assumed pace of potential output growth in recent years and over the projection period. As a result, the staff's medium-term forecast for real GDP growth also was revised down slightly. Nevertheless, the staff continued to project that real GDP would expand at a faster pace over the next few years than it did last year, and that real GDP growth would exceed the growth rate of potential output. The faster pace of real GDP growth was expected to be supported by an easing in the restraint from changes in fiscal policy, increases in consumer and business confidence, further improvements in credit availability and financial conditions, and a pickup in the rate of foreign economic growth. The expansion in economic activity was anticipated to lead to a slow reduction in resource slack over the projection period, and the unemployment rate was expected to decline gradually to the staff's estimate of its longer-run natural rate.

The staff's forecast for inflation was basically unchanged from the projection prepared for the previous FOMC meeting. The staff continued to forecast that inflation would stay below the Committee's longer-run objective of 2 percent over the next few years. Inflation was projected to rise gradually toward the Committee's objective, as longer-run inflation expectations were assumed to remain stable, changes in commodity and import prices were expected to be subdued, and slack in labor and product markets was anticipated to diminish slowly.

The staff's economic projections for the March meeting were quite similar to its forecasts presented at the December meeting when the FOMC last prepared a Summary of Economic Projections (SEP). The staff's March projections for both real GDP growth and the unemployment rate over the next few years were just slightly lower than in its December forecasts, while the inflation projection was essentially unchanged.

The staff viewed the extent of uncertainty around its March projections for real GDP growth and the unemployment rate as roughly in line with the average of the past 20 years. Nonetheless, the risks to the forecast for real GDP growth were viewed as tilted a little to the downside, especially because the economy was not well positioned to withstand adverse shocks while the target for the federal funds rate was at its effective lower bound. At the same time, the staff viewed the risks around its outlook for the unemployment rate and for inflation as roughly balanced.

Participants' Views on Current Conditions and the Economic Outlook

In conjunction with this FOMC meeting, the meeting participants—the 4 members of the Board of Governors and the presidents of the 12 Federal Reserve Banks, all of whom participated in the deliberations—submitted their assessments of real output growth, the unemployment rate, inflation, and the target federal funds rate for each year from 2014 through 2016 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 SEP, which is attached as an addendum to these minutes.

In their discussion of the economic situation and the outlook, participants generally noted that data released since their January meeting had indicated somewhat slower-than-expected growth in economic activity during the winter months, in part reflecting adverse weather conditions. Labor market indicators were mixed. Inflation had continued to run below the Committee's longer-run objective, but longer-term inflation expectations had remained stable. Several participants indicated that recent economic news, although leading them to mark down somewhat their estimates of economic growth in late 2013 as well as their assessments of likely growth in the first quarter of 2014, had not prompted a significant revision of their projections of moderate economic growth over coming quarters.

Most participants noted that unusually severe winter weather had held down economic activity during the early months of the year. Business contacts in various parts of the country reported a number of weather-induced disruptions, including reduced manufacturing activity due to lost workdays, interruptions to supply chains of inputs and delivery of final products, and lower-than-expected retail sales. Participants expected economic activity to pick up as the weather-related disruptions to spending and production dissipated. A few participants, however, highlighted factors other than weather that had likely contributed to the slowdown during the first quarter, including slower growth in net exports following its unusually large positive contribution to growth in the fourth quarter of 2013. Moreover, it was noted that some of the pickup in economic growth that had appeared to have been indicated by the data available at the January meeting had been reversed by subsequent data revisions. For many participants, the outlook for economic activity over coming quarters had changed little, on balance, since the time of the December meeting.

Housing activity remained slow over the intermeeting period. Although unfavorable weather had contributed to the recent disappointing performance of housing, a few participants suggested that last year's rise in mortgage interest rates might have produced a larger-than-expected reduction in home sales. In addition, it was noted that the return of house prices to more-normal levels could be damping the pace of the housing recovery, and that home affordability has been reduced for some prospective buyers. Slackening demand from institutional investors was cited as another factor behind the decline in home sales. Nonetheless, the underlying fundamentals, including population growth and household formation, were viewed as pointing to a continuing recovery of the housing market.

In their discussion of labor market developments, participants noted further improvement, on balance, in labor market conditions. The unemployment rate had moved down in recent months, as had broader measures of unemployment and underemployment. Other labor market indicators, such as payrolls and hiring and quit rates, while not all showing the same extent of improvement, also pointed to ongoing gains in labor markets. Going forward, participants continued to expect a gradual decline in the unemployment rate over the medium term, with judgments differing somewhat across participants about the likely pace of the decline. It was also noted that uncertainty about the trend rate of productivity growth was making it difficult to ascertain the rate of real GDP growth that would be associated with progress in reducing the unemployment rate.

While there was general agreement that slack remains in the labor market, participants expressed a range of views regarding the amount of slack and how well the unemployment rate performs as a summary indicator of labor market conditions. Several participants pointed to a number of factors—including the low labor force participation rate and the still-high rates of longer-duration unemployment and of workers employed part time for economic reasons—as suggesting that there might be considerably more labor market slack than indicated by the unemployment rate alone. A couple of other participants, however, saw reasons to believe that slack was more limited, viewing the decline in the participation rate as primarily reflecting demographic trends with little role for cyclical factors and observing that broader measures of unemployment had registered declines in the past year that were comparable with the decline in the standard measure. Several participants cited low nominal wage growth as pointing to the existence of continued labor market slack. Participants also noted the debate in the research literature and elsewhere concerning whether long-term unemployment differs materially from short-term unemployment in its implications for wage and price pressures.

Inflation continued to run below the Committee's 2 percent longer-run objective over the intermeeting period. A couple of participants expressed concern that inflation might not return to 2 percent in the next few years and suggested that a protracted period of inflation below 2 percent raised questions about whether the Committee was providing an appropriate degree of monetary accommodation. One of these participants suggested that persistently low inflation was a clear reflection of a sizable shortfall of employment from its maximum level. A number of participants noted that a pickup in nominal wage growth would be consistent with labor market conditions moving closer to normal and would support the return of consumer price inflation to the Committee's 2 percent longer-run goal. However, a couple of other participants suggested that factors other than economic slack had played a notable role in holding down inflation of late, including unusually slow growth in prices of medical services. Most participants expected inflation to return to 2 percent over the next few years, supported by stable inflation expectations and the continued gradual recovery in economic activity.

Several participants pointed to international developments that bear watching. It was suggested that slower growth in China had likely already put some downward pressure on world commodity prices, and a couple of participants observed that a larger-than-expected slowdown in economic growth in China could have adverse implications for global economic growth. In addition, it was noted that events in Ukraine were likely to have little direct effect on the U.S. economic outlook but might have negative implications for global growth if they escalated and led to a protracted period of geopolitical tensions in that region.

In their discussion of recent financial developments, participants saw financial conditions as generally consistent with the Committee's policy intentions. However, several participants mentioned trends that, if continued, could become a concern from the perspective of financial stability. A couple of participants pointed to the decline in credit spreads to relatively low levels by historical standards; one of these participants noted the risk of either a sharp rise in spreads, which could have negative repercussions for aggregate demand, or a continuation of the decline in spreads, which could undermine financial stability over time. One participant voiced concern about high levels of margin debt and of equity market valuations as well as a notable shift into commodity investments. Another participant stressed the growth in consumer credit to less credit-worthy households.

In their discussion of monetary policy going forward, participants focused primarily on possible changes to the Committee's forward guidance for the federal funds rate. Almost all participants agreed that it was appropriate at this meeting to update the forward guidance, in part because the unemployment rate was seen as likely to fall below its 6½ percent threshold value before long. Most participants preferred replacing the numerical thresholds with a qualitative description of the factors that would influence the Committee's decision to begin raising the federal funds rate. One participant, however, favored retaining the existing threshold language on the grounds that removing it before the unemployment rate reached 6½ percent could be misinterpreted as a signal that the path of policy going forward would be less accommodative. Another participant favored introducing new quantitative thresholds of 5½ percent for the unemployment rate and 2¼ percent for projected inflation. A few participants proposed adding new language in which the Committee would indicate its willingness to keep rates low if projected inflation remained persistently below the Committee's 2 percent longer-run objective; these participants suggested that the inclusion of this quantitative element in the forward guidance would demonstrate the Committee's commitment to defend its inflation objective from below as well as from above. Other participants, however, judged that it was already well understood that the Committee recognizes that inflation persistently below its 2 percent objective could pose risks to economic performance. Most participants therefore did not favor adding new quantitative language, preferring to shift to qualitative language that would describe the Committee's likely reaction to the state of the economy.

Most participants also believed that, as part of the process of clarifying the Committee's future policy intentions, it would be appropriate at this time for the Committee to provide additional guidance in its post-meeting statement regarding the likely behavior of the federal funds rate after its first increase. For example, the statement could indicate that the Committee currently anticipates that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run. Participants observed that a number of factors were likely to have contributed to a persistent decline in the level of interest rates consistent with attaining and maintaining the Committee's objectives. In particular, participants cited higher precautionary savings by U.S. households following the financial crisis, higher global levels of savings, demographic changes, slower growth in potential output, and continued restraint on the availability of credit. A few participants suggested that new language along these lines could instead be introduced when the first increase in the federal funds rate had drawn closer or after the Committee had further discussed the reasons for anticipating a relatively low federal funds rate during the period of policy firming. A number of participants noted the overall upward shift since December in participants' projections of the federal funds rate included in the March SEP, with some expressing concern that this component of the SEP could be misconstrued as indicating a move by the Committee to a less accommodative reaction function. However, several participants noted that the increase in the median projection overstated the shift in the projections. In addition, a number of participants observed that an upward shift was arguably warranted by the improvement in participants' outlooks for the labor market since December and therefore need not be viewed as signifying a less accommodative reaction function. Most participants favored providing an explicit indication in the statement that the new forward guidance, taken as a whole, did not imply a change in the Committee's policy intentions, on the grounds that such an indication could help forestall misinterpretation of the new forward guidance.

Committee Policy Action

Committee members saw the information received over the intermeeting period as indicating that growth in economic activity slowed during the winter months, in part reflecting adverse weather conditions. Labor market indicators were mixed but on balance showed further improvement. The unemployment rate, however, remained elevated when judged against members' estimates of the longer-run normal rate of unemployment. Household spending and business fixed investment continued to advance, while the recovery in the housing sector remained slow. Fiscal policy was restraining economic growth, although the extent of restraint had diminished. The Committee expected that, with appropriate policy accommodation, the economy would expand at a moderate pace and labor market conditions would continue to improve gradually, moving toward those the Committee judges consistent with the dual mandate. Moreover, members judged that the risks to the outlook for the economy and the labor market were nearly balanced. Inflation was running below the Committee's longer-run objective, and this was seen as posing possible risks to economic performance, but members anticipated that stable inflation expectations and strengthening economic activity would, over time, return inflation to the Committee's 2 percent objective. However, in light of their concerns about the possible persistence of low inflation, members agreed that inflation developments should be monitored carefully for evidence that inflation was moving back toward the Committee's longer-run objective.

In their discussion of monetary policy in the period ahead, members agreed that there was sufficient underlying strength in the broader economy to support ongoing improvement in labor market conditions. In light of the cumulative progress toward maximum employment and the improvement in the outlook for labor market conditions since the inception of the current asset purchase program, members decided that it would be appropriate to make a further measured reduction in the pace of its asset purchases at this meeting. Members again judged that, if the economy continued to develop as anticipated, the Committee would likely reduce the pace of asset purchases in further measured steps at future meetings. Members also underscored that the pace of asset purchases was not on a preset course and would remain contingent on the Committee's outlook for the labor market and inflation as well as its assessment of the likely efficacy and costs of purchases. Accordingly, the Committee agreed that, beginning in April, it would add to its holdings of agency mortgage-backed securities at a pace of $25 billion per month rather than $30 billion per month, and would add to its holdings of longer-term Treasury securities at a pace of $30 billion per month rather than $35 billion per month. While making a further measured reduction in its pace of purchases, the Committee emphasized that its holdings of longer-term securities were sizable and would still be increasing, which would promote a stronger economic recovery by maintaining downward pressure on longer-term interest rates, supporting mortgage markets, and helping to make broader financial conditions more accommodative. The Committee also reiterated that it would continue its asset purchases, and employ its other policy tools as appropriate, until the outlook for the labor market has improved substantially in a context of price stability. One member, while concurring with this policy action, suggested that in future statements the Committee might provide further information about the trajectory of the Federal Reserve's balance sheet, including information about when the Committee might discontinue its policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in agency mortgage-backed securities.

With respect to forward guidance about the federal funds rate, all members judged that, as the unemployment rate was likely to fall below 6½ percent before long, it was appropriate to replace the existing quantitative thresholds at this meeting. Almost all members judged that the new language should be qualitative in nature and should indicate that, in determining how long to maintain the current 0 to ¼ percent target range for the federal funds rate, the Committee would assess progress, both realized and expected, toward its objectives of maximum employment and 2 percent inflation. However, a couple of members preferred to include language in the statement indicating that the Committee would keep rates low if projected inflation remained persistently below the Committee's 2 percent longer-run objective. One of these members argued that the Committee should continue to provide quantitative thresholds for both the unemployment rate and inflation.

Members also considered statement language that would provide information about the anticipated behavior of the federal funds rate once it is raised above its effective lower bound. The Committee decided that it was appropriate to add language indicating that the Committee currently anticipates that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run. In discussing this addition, a couple of members suggested that language along these lines might better be introduced at a later meeting. However, another member indicated that adding the new language at this stage could be beneficial for the effectiveness of policy because financial conditions depend on both the length of time that the federal funds rate is at the effective lower bound and on the expected path that the federal funds rate will follow once policy firming begins. It was also noted that the postmeeting statements, rather than the SEP, provide the public with information on the Committee's monetary policy decisions and that it was therefore appropriate for the postmeeting statement to convey the Committee's position on the likely future behavior of the 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 SOMA in accordance with the following domestic policy directive:

> "Consistent with its statutory mandate, the Federal Open Market Committee seeks monetary and financial conditions that will foster maximum employment and price stability. In particular, 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 undertake open market operations as necessary to maintain such conditions. Beginning in April, the Desk is directed to purchase longer-term Treasury securities at a pace of about $30 billion per month and to purchase agency mortgage-backed securities at a pace of about $25 billion per month. The Committee also directs the Desk to engage in dollar

roll and coupon swap transactions as necessary to facilitate settlement of the Federal Reserve's agency mortgage-backed securities transactions. The Committee directs the Desk to maintain its policy of rolling over maturing Treasury securities into new issues and its policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in agency mortgage-backed securities. 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 2:00 p.m.:

"Information received since the Federal Open Market Committee met in January indicates that growth in economic activity slowed during the winter months, in part reflecting adverse weather conditions. Labor market indicators were mixed but on balance showed further improvement. The unemployment rate, however, remains elevated. Household spending and business fixed investment continued to advance, while the recovery in the housing sector remained slow. Fiscal policy is restraining economic growth, although the extent of restraint is diminishing. Inflation has been running below the Committee's longer-run objective, but 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 that, with appropriate policy accommodation, economic activity will expand at a moderate pace and labor market conditions will continue to improve gradually, moving toward those the Committee judges consistent with its dual mandate. The Committee sees the risks to the outlook for the economy and the labor market as nearly balanced. The Committee recognizes that inflation persistently below its 2 percent objective could pose risks to economic performance, and it is monitoring inflation developments carefully for evidence that inflation will move back toward its objective over the medium term.

The Committee currently judges that there is sufficient underlying strength in the broader economy to support ongoing improvement in labor market conditions. In light of the cumulative progress toward maximum employment and the improvement in the outlook for labor market conditions since the inception of the current asset purchase program, the Committee decided to make a further measured reduction in the pace of its asset purchases. Beginning in April, the Committee will add to its holdings of agency mortgage-backed securities at a pace of $25 billion per month rather than $30 billion per month, and will add to its holdings of longer-term Treasury securities at a pace of $30 billion per month rather than $35 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 of rolling over maturing Treasury securities at auction. The Committee's sizable and still-increasing holdings of longer-term securities should maintain downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative, which in turn should promote a stronger economic recovery and help to ensure that inflation, over time, is at the rate most consistent with the Committee's dual mandate.

The Committee will closely monitor incoming information on economic and financial developments in coming months and will continue its purchases of Treasury and agency mortgage-backed securities, and employ its other policy tools as appropriate, until the outlook for the labor market has improved substantially in a context of price stability. If incoming information broadly supports the Committee's expectation of ongoing improvement in labor market conditions and inflation moving back toward its longer-run objective, the Committee will likely reduce the pace of asset purchases in further measured steps at future meetings. However, asset purchases are not on a preset course, and the Committee's decisions about their pace will remain contingent on the Committee's outlook for the labor market and inflation as well as its assessment of the likely efficacy and costs of such purchases.

To support continued progress toward maximum employment and price stability, the Committee today reaffirmed its view that a highly accommodative stance of monetary policy remains appropriate. In determining how long to maintain the current 0 to ¼ percent target range for the federal funds rate, the Committee will assess progress—both realized and expected—toward its objectives of maximum employment and 2 percent inflation. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. The Committee continues to anticipate, based on its assessment of these factors, that it likely will be appropriate to maintain the current target range for the federal funds rate for a considerable time after the asset purchase program ends, especially if projected inflation continues to run below the Committee's 2 percent longer-run goal, and provided that longer-term inflation expectations remain well anchored.

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. The Committee currently anticipates that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run.

With the unemployment rate nearing 6½ percent, the Committee has updated its forward guidance. The change in the Committee's guidance does not indicate any change in the Committee's policy intentions as set forth in its recent statements."

Voting for this action: Janet L. Yellen, William C. Dudley, Richard W. Fisher, Sandra Pianalto, Charles I. Plosser, Jerome H. Powell, Jeremy C. Stein, and Daniel K. Tarullo.

Voting against this action: Narayana Kocherlakota.

Mr. Kocherlakota dissented because, in his view, the new forward guidance in the fifth paragraph of the statement would weaken the credibility of the Committee's commitment to its inflation goal by failing to communicate purposeful steps to more rapidly increase inflation to the 2 percent target and by suggesting that the Committee views inflation persistently below 2 percent as an acceptable outcome. Moreover, he judged that the new guidance would act as a drag on economic activity because it provided little information about the desired rate of progress toward maximum employment and no quantitative measure of what constitutes maximum employment, and thus would generate uncertainty about the extent to which the Committee is willing to use monetary stimulus to foster faster growth. Mr. Kocherlakota strongly endorsed the sixth paragraph of the statement because providing information about the Committee's intentions for the federal funds rate once employment and inflation are near mandate-consistent levels should help stimulate economic activity by reducing uncertainty.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, April 29–30, 2014. The meeting adjourned at 10:05 a.m. on March 19, 2014.

Notation Vote

By notation vote completed on February 18, 2014, the Committee unanimously approved the minutes of the Committee meeting held on January 28–29, 2014.

Videoconference meeting of March 4

The Committee met by videoconference on March 4, 2014, to discuss issues associated with its forward guidance for the federal funds rate. The Committee discussed possible changes to its forward guidance that could provide additional information about the factors likely to enter its decisions regarding the federal funds rate target as the unemployment rate approached its 6½ percent threshold and once that threshold was crossed. The agenda did not contemplate any policy decisions, and none were taken.

Many participants noted that market expectations of the future course of the federal funds rate were currently reasonably well aligned with those of policymakers, and that a sizable change to the forward guidance could disturb this alignment. Nonetheless, participants generally saw the Committee's upcoming meeting as an opportune occasion for a reformulation of the guidance language; one of these participants suggested that the reformulation could be accompanied by a statement that the new language was intended to be consistent with current market expectations. A few participants stressed that the

Committee had several other vehicles, including the Chair's postmeeting press conference, through which it could clarify its future policy intentions.

Participants agreed that the existing forward guidance, with its reference to a 6½ percent threshold for the unemployment rate, was becoming outdated as the unemployment rate continued its expected gradual decline. Most participants felt that the quantitative thresholds had been very useful in communicating policy intentions when employment was far from mandate-consistent levels, but, with the economy having moved appreciably closer to maximum employment, the forward guidance should emphasize that the Committee is focusing more on a broader set of economic indicators. Thus, most participants felt that quantitative thresholds, triggers, or floors should not be a part of future statement language, with a number of participants noting the uncertainty associated with defining and measuring the unemployment rate and the level of employment that would be most consistent with the Committee's maximum employment objective, or other similar concepts. These participants generally favored qualitative language describing the economic factors that would influence the Committee's decision regarding the first increase in the federal funds rate target. Participants put forward a number of suggestions for such qualitative language. One participant favored linking the length of time that the federal funds rate would remain at the lower bound to the period over which complete recovery of the labor market was projected to occur, while another advocated qualitative forward guidance expressed in terms of the Committee's projections of real output growth, arguing that such an approach would avoid the uncertainties associated with estimates of potential output or maximum employment. Yet another participant argued that it would be desirable for the statement to describe the Committee's reasons for keeping the federal funds rate at the lower bound when standard policy rules were prescribing that the rate should be increased and noted that one possible reason for doing so is that the effective lower bound on the federal funds rate limits the Committee's scope to provide accommodation in response to adverse shocks. In contrast, some participants expressed a preference for quantitative guidance. A few participants saw merit in stating explicitly that the Committee would provide accommodation to the extent necessary to prevent inflation from running persistently below its 2 percent longer-run goal. One of these participants argued that such forward guidance would strengthen the credibility of the Committee's inflation objective as well as encourage employment outcomes that were most consistent with the Committee's other objective of maximum employment. Another participant suggested that the Committee state that it would adjust policy to keep projected inflation near 2 percent over the medium term, and that it would balance deviations from its objectives in the near term. Still another participant expressed a preference for stating explicit quantitative criteria for some labor market variable or variables.

Most participants favored providing information about the likely behavior of the federal funds rate after its first increase. A few participants, however, viewed the period of policy firming as likely to be far enough in the future that the Committee did not need to provide such information at this stage.

Committee participants also considered whether revised forward guidance should include a more prominent mention of financial developments or of potential risks to financial stability. Most participants felt that the Committee's monitoring of financial conditions and of risks to financial stability was already well understood by markets and that, while some reference to financial developments might usefully be included in the statement, a lengthy addition did not seem necessary. One participant favored including a reference in the statement to "financial conditions," rather than "financial stability," emphasizing that, when factors other than monetary policy induce a change in financial conditions, the Committee may need to take that change in financial conditions into account when making its monetary policy decisions.

William B. English
Secretary

Addendum: Summary of Economic Projections

In conjunction with the March 18–19, 2014, Federal Open Market Committee (FOMC) meeting, meeting participants—the 4 members of the Board of Governors and the 12 presidents of the Federal Reserve Banks, all of whom participated in the deliberations—submitted their assessments of real output growth, the unemployment rate, inflation, and the target federal funds rate for each year from 2014 through 2016 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, FOMC participants expected that, under appropriate monetary policy, economic growth would pick up this year and next, before moving down a bit but remaining above its longer-run rate in 2016, and that the unemployment rate would decline gradually toward its longer-run normal level over the projection period (table 1 and figure 1). Almost all of the participants projected that inflation, as measured by the annual change in the price index for personal consumption expenditures (PCE), would rise steadily to a level at or slightly below the Committee's 2 percent objective in 2016.

Most participants expected that highly accommodative monetary policy would remain warranted over the next few years to foster progress toward the Federal Reserve's longer-run objectives. As shown in figure 2, all but one of the participants projected that it would be appropriate to wait until 2015 or later before beginning to increase the federal funds rate, and a large majority projected that it would then be appropriate to raise the target federal funds rate fairly gradually. Almost all participants viewed appropriate policy as broadly consistent with continued gradual slowing in the pace of the Committee's purchases of longer-term securities and the completion of the program in the second half of this year.

Most participants saw the uncertainty associated with their outlooks for economic growth and the unemployment rate as similar to that of the past 20 years, and a majority saw the uncertainty associated with their projections for inflation as similar to that of the past 20 years. In addition, most participants considered the risks to the outlook for real

Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, March 2014
Percent

Variable	Central tendency[1]				Range[2]			
	2014	2015	2016	Longer run	2014	2015	2016	Longer run
Change in real GDP	2.8 to 3.0	3.0 to 3.2	2.5 to 3.0	2.2 to 2.3	2.1 to 3.0	2.2 to 3.5	2.2 to 3.4	1.8 to 2.4
December projection	2.8 to 3.2	3.0 to 3.4	2.5 to 3.2	2.2 to 2.4	2.2 to 3.3	2.2 to 3.6	2.1 to 3.5	1.8 to 2.5
Unemployment rate	6.1 to 6.3	5.6 to 5.9	5.2 to 5.6	5.2 to 5.6	6.0 to 6.5	5.4 to 5.9	5.1 to 5.8	5.2 to 6.0
December projection	6.3 to 6.6	5.8 to 6.1	5.3 to 5.8	5.2 to 5.8	6.2 to 6.7	5.5 to 6.2	5.0 to 6.0	5.2 to 6.0
PCE inflation	1.5 to 1.6	1.5 to 2.0	1.7 to 2.0	2.0	1.3 to 1.8	1.5 to 2.4	1.6 to 2.0	2.0
December projection	1.4 to 1.6	1.5 to 2.0	1.7 to 2.0	2.0	1.3 to 1.8	1.4 to 2.3	1.6 to 2.2	2.0
Core PCE inflation[3]	1.4 to 1.6	1.7 to 2.0	1.8 to 2.0		1.3 to 1.8	1.5 to 2.4	1.6 to 2.0	
December projection	1.4 to 1.6	1.6 to 2.0	1.8 to 2.0		1.3 to 1.8	1.5 to 2.3	1.6 to 2.2	

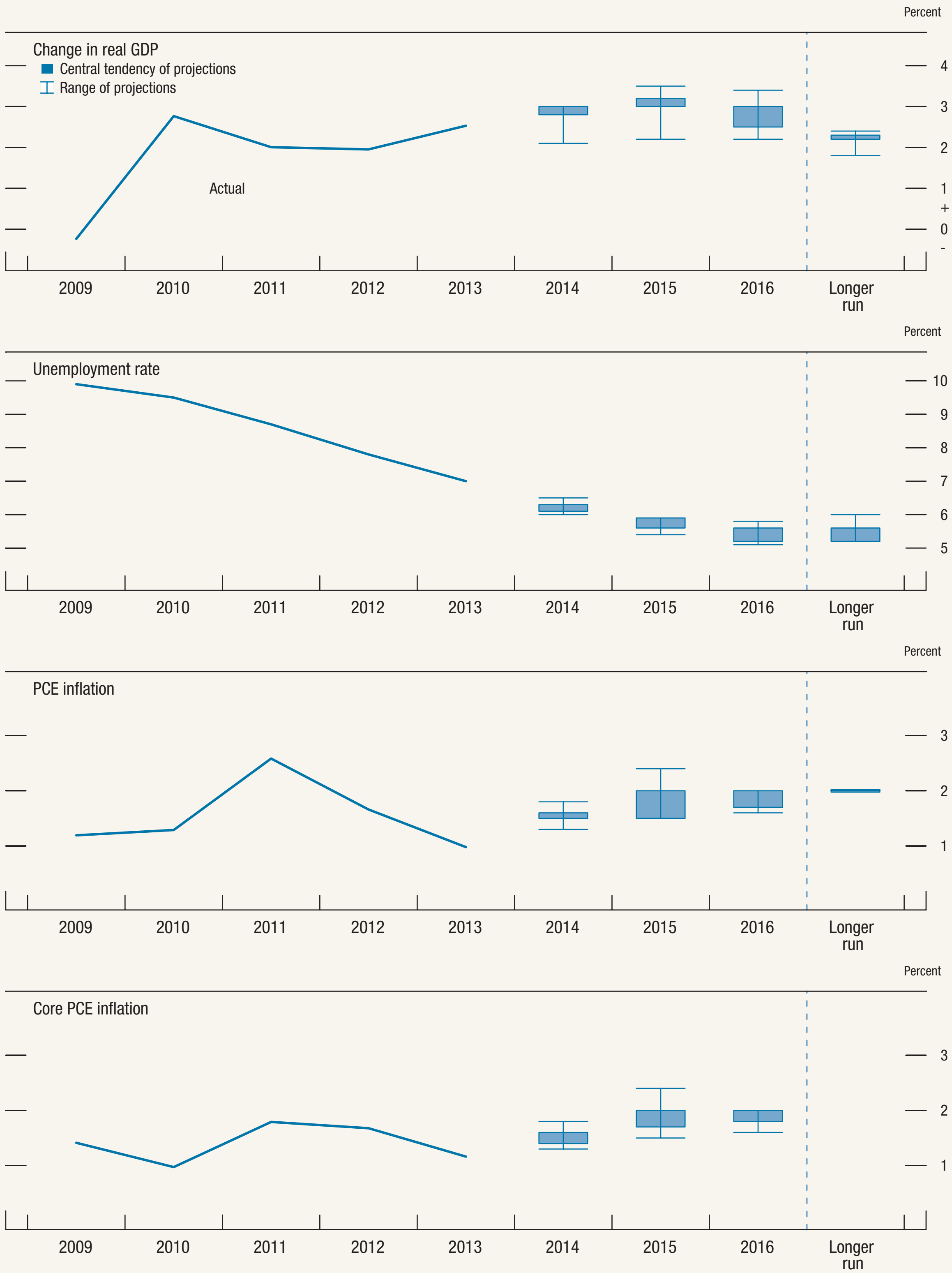
Note: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price 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 December projections were made in conjunction with the meeting of the Federal Open Market Committee on December 17–18, 2013.

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, 2014–16 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

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 December 2013, the numbers of FOMC participants who judged that the first increase in the target federal funds rate would occur in 2014, 2015, and 2016 were, respectively, 2, 12, and 3. 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.

gross domestic product (GDP), the unemployment rate, and inflation to be broadly balanced, although some saw the risks to their inflation forecasts as tilted to the downside.

The Outlook for Economic Activity

Participants generally projected that, conditional on their individual assumptions about appropriate monetary policy, real GDP growth would pick up gradually this year and next to a pace somewhat exceeding their estimates of the longer-run normal rate of output growth. Subsequently, in 2016, real GDP growth was projected to begin to move back toward its longer-run rate. Most participants revised down a bit their projections of real GDP growth for 2014, compared with their projections in December 2013, and the top end of the central tendencies for output growth in each year and over the longer run moved down slightly. Nonetheless, participants pointed to a number of factors that they expected would contribute to a pickup in economic growth this year, such as an easing of the headwinds that have been weighing on growth, including diminished restraint from fiscal policy; rising household net worth and highly accommodative monetary policy also were expected to contribute. In addition, many attributed some of the softness in recent economic data to the transitory effects of unusually severe winter weather. The central tendencies of participants' projections for real GDP growth were 2.8 to 3.0 percent in 2014, 3.0 to 3.2 percent in 2015, and 2.5 to 3.0 percent in 2016. The central tendency for the longer-run normal rate of growth of real GDP was 2.2 to 2.3 percent.

Participants anticipated a gradual decline in the unemployment rate over the projection period. The central tendencies of participants' forecasts for the unemployment rate in the fourth quarter of each year were 6.1 to 6.3 percent in 2014, 5.6 to 5.9 percent in 2015, and 5.2 to 5.6 percent in 2016. Nearly all participants revised down their projected paths for the unemployment rate relative to their December projections, with some pointing to the decline in the unemployment rate in recent months. 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 also moved lower, to 5.2 to 5.6 percent. A majority of participants projected that the unemployment rate would be close to their individual estimates of its longer-run level at the end of 2016.

Figures 3.A and 3.B show that participants continued to hold a range of views regarding the likely outcomes for real GDP growth and the unemployment rate over the next two years. The diversity of views reflected their individual assessments of the rate at which the headwinds that have been holding back the pace of the economic recovery would abate, the anticipated path for foreign economic activity, the trajectory for growth in household net worth, and the appropriate path of monetary policy. Relative to December, the dispersions of participants' projections for real GDP growth and the unemployment rate over the period from 2014 to 2016 narrowed slightly.

The Outlook for Inflation

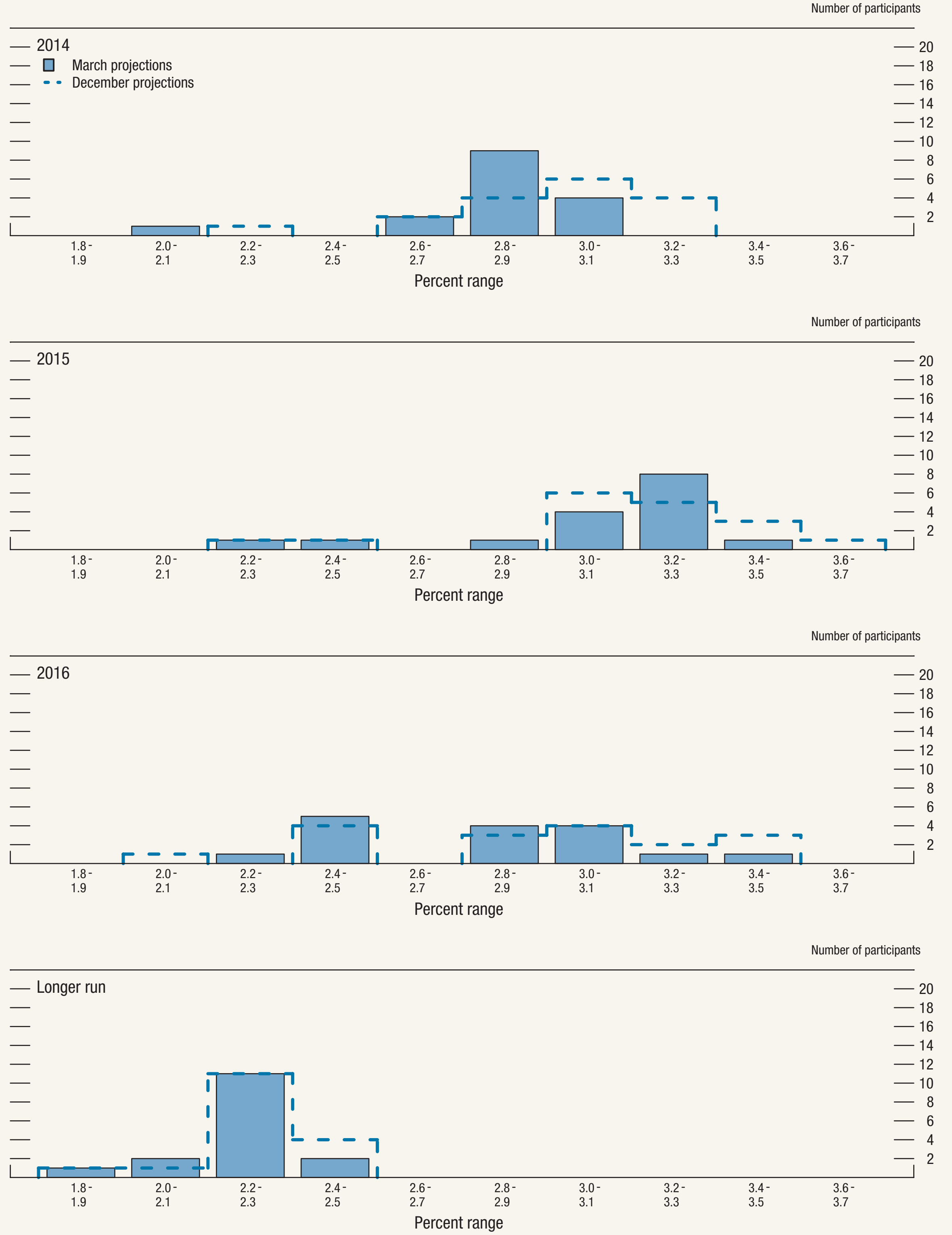
Participants' views on the broad outlook for inflation under the assumption of appropriate monetary policy were nearly unchanged, on balance, from those in their December projections. All participants anticipated that, on average, both headline and core inflation would rise gradually over the next few years, and a large majority of participants expected headline inflation to be at or slightly below the Committee's 2 percent objective in 2016. Specifically, the central tendencies for PCE inflation were 1.5 to 1.6 percent in 2014, 1.5 to 2.0 percent in 2015, and 1.7 to 2.0 percent in 2016. The central tendencies of the forecasts for core inflation were broadly similar to those for the headline measure. A number of participants viewed the combination of stable inflation expectations and steadily diminishing resource slack as likely to contribute to a gradual rise of inflation back toward the Committee's longer-run objective.

Figures 3.C and 3.D provide information on the diversity of participants' views about the outlook for inflation. The ranges of participants' projections for overall inflation were little changed relative to December. The forecasts for PCE inflation in 2016 were at or below the Committee's longer-run objective. Similar to the projections for headline inflation, the projections for core inflation in 2016 were also concentrated near 2 percent.

Appropriate Monetary Policy

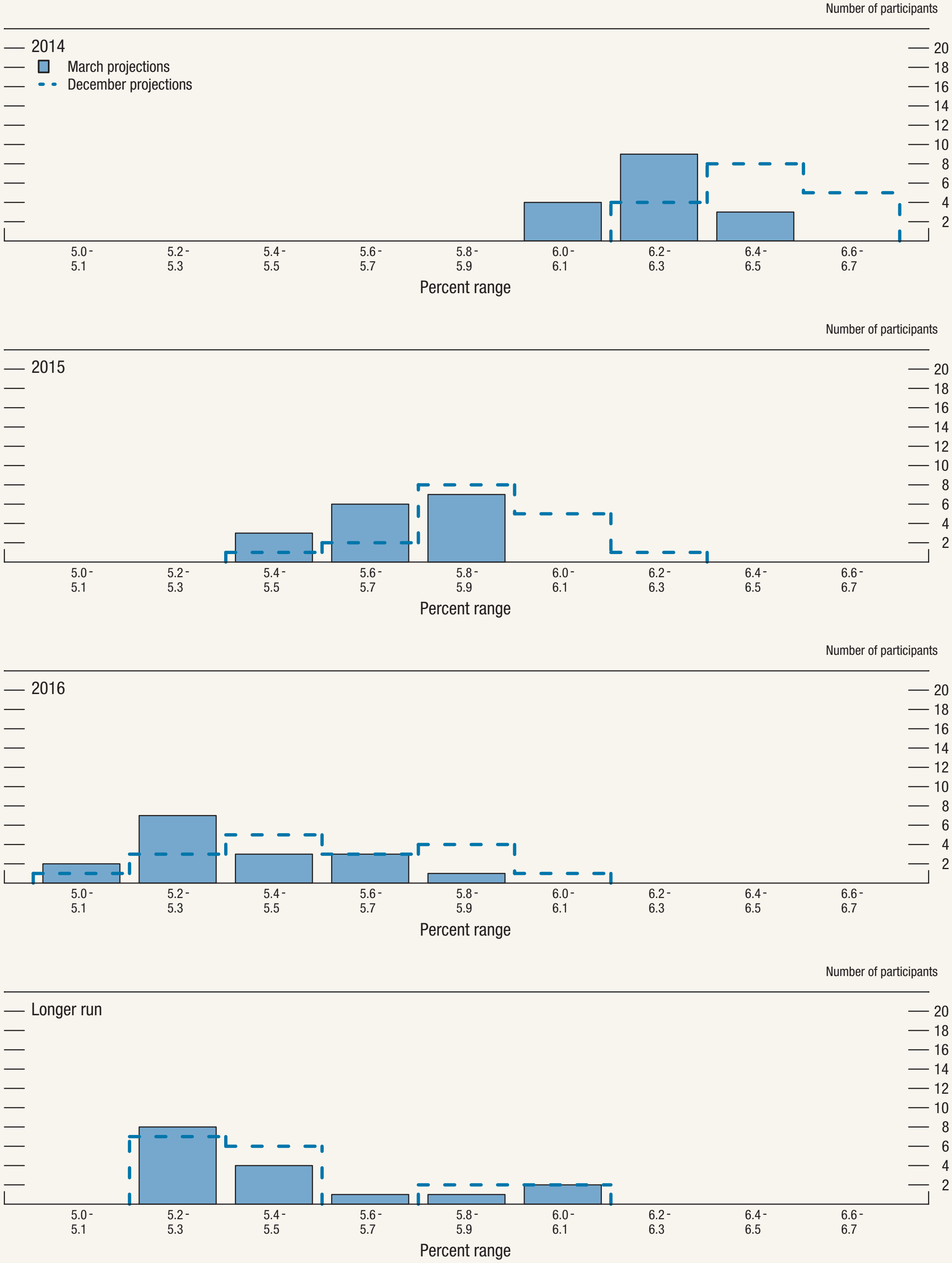
As indicated in figure 2, most participants judged that very low levels of the federal funds rate would remain appropriate for the next few years. In particular, 13 participants thought that the first increase in the target federal funds rate would not be warranted until sometime in 2015, and two judged that policy

Figure 3.A. Distribution of participants' projections for the change in real GDP, 2014–16 and over the longer run



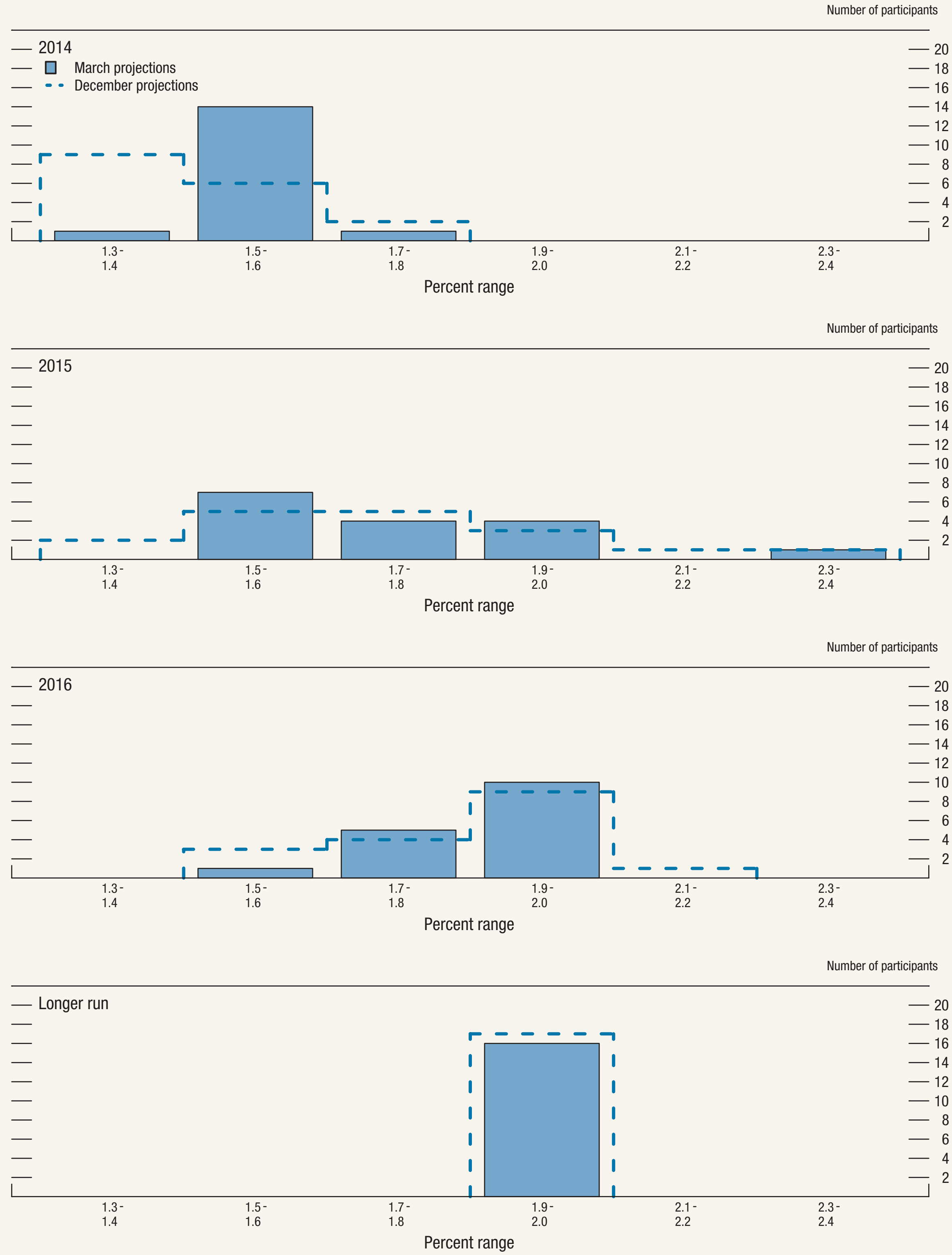
Note: Definitions of variables are in the general note to table 1.

Figure 3.B. Distribution of participants' projections for the unemployment rate, 2014–16 and over the longer run



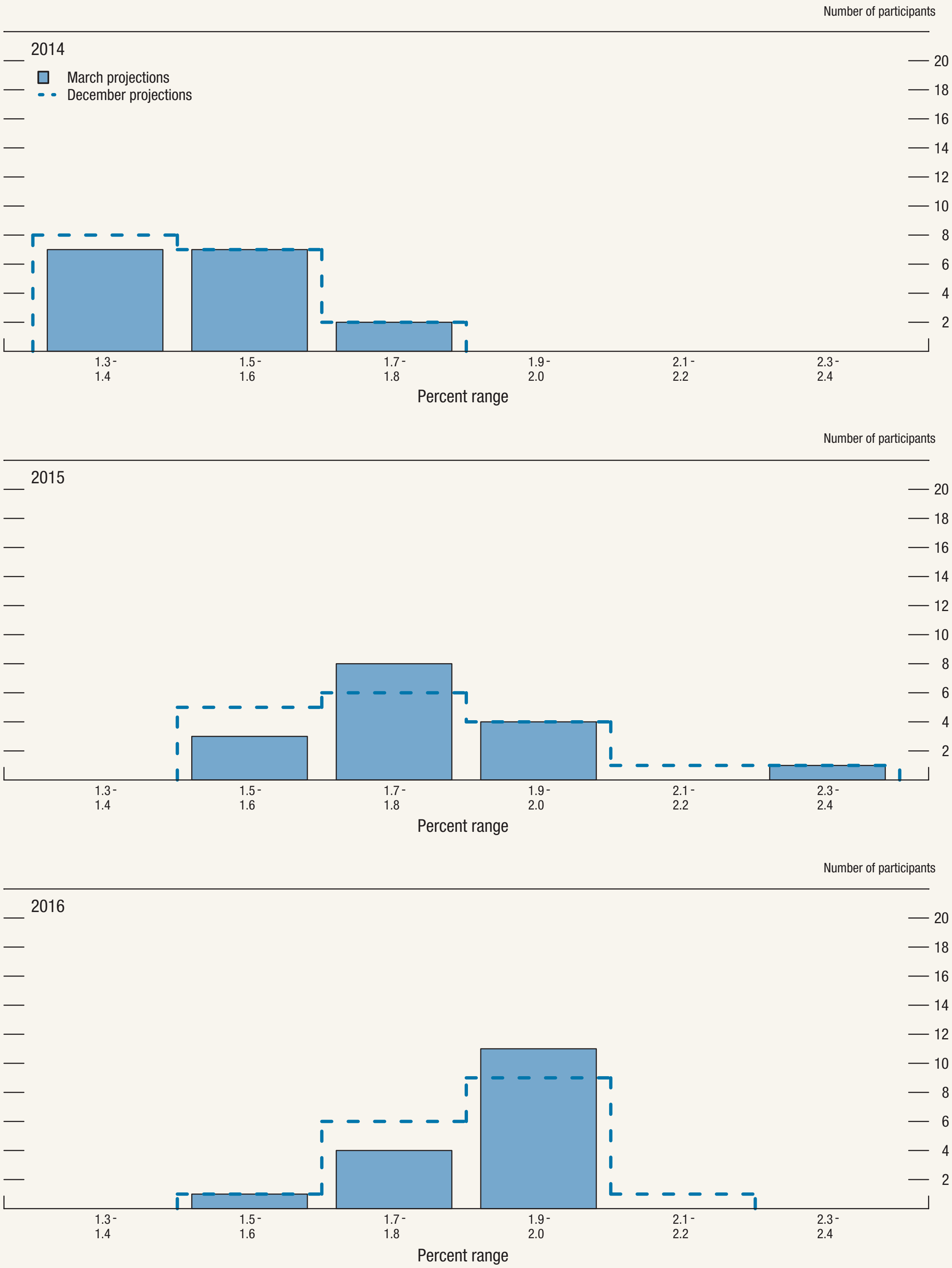
Note: Definitions of variables are in the general note to table 1.

Figure 3.C. Distribution of participants' projections for PCE inflation, 2014–16 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, 2014–16



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

Table 2. Average historical projection error ranges
Percentage points

Variable	2014	2015	2016
Change in real GDP[1]	±1.6	±2.1	±2.0
Unemployment rate[1]	±0.6	±1.2	±1.7
Total consumer prices[2]	±0.9	±1.0	±1.1

Note: Error ranges shown are measured as plus or minus the root mean squared error of projections for 1994 through 2013 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. For more information, see 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), available at www.federalreserve.gov/pubs/feds/2007/200760/200760abs.html; and Board of Governors of the Federal Reserve System, Division of Research and Statistics (2014), "Updated Historical Forecast Errors," memorandum, April 9, http://www.federalreserve.gov/foia/files/20140409-historical-forecast-errors.pdf.

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.

firming would likely not be appropriate until 2016. Only one participant thought that an increase in the federal funds rate would be appropriate in 2014.

All participants but one projected that the unemployment rate would be below 6 percent at the end of the year in which they currently anticipate that it will become appropriate to raise the federal funds rate above its effective lower bound. Moreover, all but one projected that inflation would be at or below the Committee's longer-run objective at that time. Most participants projected that the unemployment rate would remain above their estimates of its longer-run normal level at the end of the year in which they saw the federal funds rate increasing from its effective lower bound.

Figure 3.E provides the distribution of participants' judgments regarding the appropriate level of the target federal funds rate at the end of each calendar year from 2014 to 2016 and over the longer run. As noted earlier, almost all participants judged that economic conditions would warrant maintaining the current exceptionally low level of the federal funds rate until 2015. The median value of the rate at the end of 2015 and 2016 increased 25 and 50 basis points, respectively, since December, while the mean values increased 7 and 25 basis points, respectively. The dispersion of projections for the value of the federal funds rate in each year narrowed slightly. Almost all participants expected that the federal funds rate at the end of 2016 would still be below their individual assessments of its longer-run level, with many pointing to subdued inflation pressures, below-mandate inflation, the still-noticeable effects of headwinds, or the need to maintain low rates to support the recovery as reasons to keep the federal funds rate low at that time. Estimates of the longer-run target for the federal funds rate ranged from 3½ to about 4¼ percent, reflecting the Committee's inflation objective of 2 percent and participants' individual judgments about the appropriate longer-run level of the real federal funds rate in the absence of further shocks to the economy.

Participants also described their views regarding the appropriate path of the Federal Reserve's balance sheet. Conditional on their respective economic outlooks, almost all participants judged that it would be appropriate to continue to reduce the pace of the Committee's purchases of longer-term securities in measured steps and to conclude purchases in the second half of this year. Two participants projected a more rapid reduction in the pace of purchases and an earlier end to the asset purchase program.

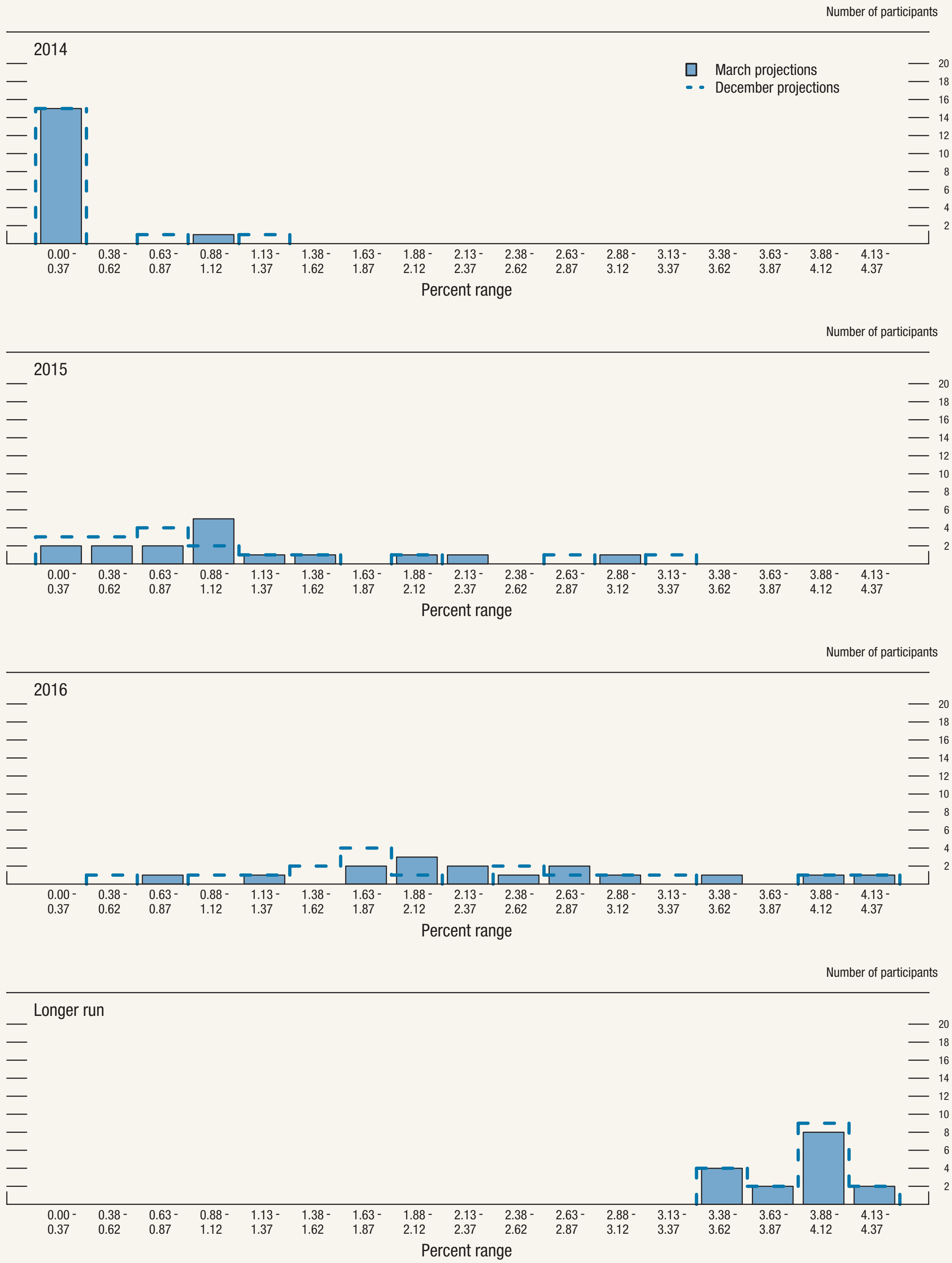
Participants' views of the appropriate path for monetary policy were informed by their judgments about the state of the economy, including the values of the unemployment rate and other labor market indicators that would be consistent with maximum employment, the extent to which the economy was currently falling short of maximum employment, the prospects for inflation to reach the Committee's longer-term objective of 2 percent, and the balance of risks around the outlook. A couple of participants also mentioned using various monetary policy rules to guide their thinking on the appropriate path for the federal funds rate.

Uncertainty and Risks

Nearly all participants continued to judge the levels of uncertainty about their projections for real GDP growth and the unemployment rate as broadly similar to the norm during the previous 20 years (figure 4).[1] As in December, most participants continued to judge the risks to real GDP growth and the unemployment rate to be broadly balanced. Two partici-

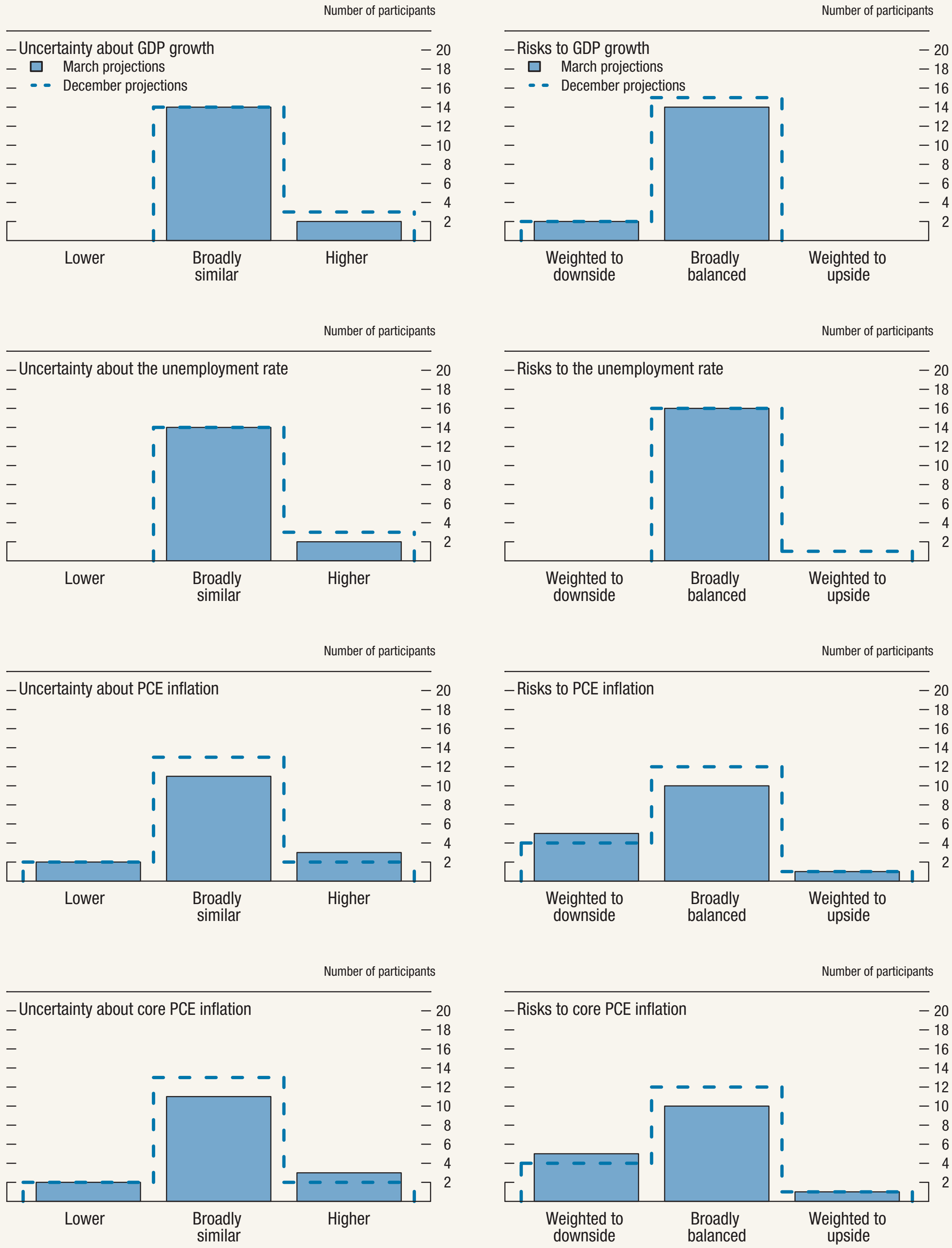
1 Table 2 provides estimates of the forecast uncertainty for the change in real GDP, the unemployment rate, and total consumer price inflation over the period from 1994 through 2013. At the end of this summary, the box "Forecast Uncertainty" discusses the sources and interpretation of uncertainty in 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, 2014–16 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.

pants viewed risks to output growth as weighted to the downside, reflecting their concerns about possible geopolitical developments and the strength of external demand.

Almost all participants saw the level of uncertainty and the balance of risks around their forecasts for overall PCE inflation and core inflation as little changed from December. The majority of participants continued to judge the levels of uncertainty associated with their forecasts for the two inflation measures to be broadly similar to historical norms and the risks to those projections to be broadly balanced. Five participants, however, saw the risks to their inflation forecasts as tilted to the downside, reflecting, for example, the possibility that the current low levels of inflation could prove more persistent than anticipated as well as elevated global risks to the outlook. Conversely, one participant cited upside risks to inflation stemming from uncertainty about the timing and efficacy of the Committee's withdrawal of accommodation.

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 1.4 to 4.6 percent in the current year, 0.9 to 5.1 percent in the second year, and 1.0 to 5.0 percent 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, 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 April 29–30, 2014

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 29, 2014, at 10:30 a.m. and continued on Wednesday, April 30, 2014, at 9:00 a.m.

Present

Janet L. Yellen
Chair

William C. Dudley
Vice Chairman

Richard W. Fisher

Narayana Kocherlakota

Sandra Pianalto

Charles I. Plosser

Jerome H. Powell

Jeremy C. Stein

Daniel K. Tarullo

Charles L. Evans, Jeffrey M. Lacker, Dennis P. Lockhart, and John C. Williams
Alternate Members of the Federal Open Market Committee

James Bullard, Esther L. George, and Eric Rosengren
Presidents of the Federal Reserve Banks of St. Louis, Kansas City, and Boston, respectively

William B. English
Secretary and Economist

Matthew M. Luecke
Deputy Secretary

Michelle A. Smith
Assistant Secretary

Scott G. Alvarez
General Counsel

Steven B. Kamin
Economist

David W. Wilcox
Economist

James A. Clouse, Thomas A. Connors,[1] Evan F. Koenig, Thomas Laubach, Michael P. Leahy, Loretta J. Mester, Samuel Schulhofer-Wohl, Mark E. Schweitzer, and William Wascher
Associate Economists

Simon Potter
Manager, System Open Market Account

Lorie K. Logan
Deputy Manager, System Open Market Account

Robert deV. Frierson[2]
Secretary of the Board, Office of the Secretary, Board of Governors

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

Matthew J. Eichner
Deputy Director, Division of Research and Statistics, Board of Governors

Stephen A. Meyer and William Nelson
Deputy Directors, Division of Monetary Affairs, Board of Governors

Jon W. Faust
Special Adviser to the Board, Office of Board Members, Board of Governors

Trevor A. Reeve
Special Adviser to the Chair, Office of Board Members, Board of Governors

Linda Robertson[3]
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

David Bowman[4] and Beth Anne Wilson
Associate Directors, Division of International Finance, Board of Governors

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1 Attended Wednesday's session only.

2 Attended the discussion of monetary policy normalization.

3 Attended Tuesday's session only.

4 Attended Tuesday's session following the discussion of monetary policy normalization.

Daniel M. Covitz, David E. Lebow, and Michael G. Palumbo
Associate Directors, Division of Research and Statistics, Board of Governors

Fabio M. Natalucci[2] and Gretchen C. Weinbach[2]
Associate Directors, Division of Monetary Affairs, Board of Governors

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Adviser, Division of Monetary Affairs, Board of Governors

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Patrick McCabe[2]
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Randall A. Williams
Records Project Manager, Division of Monetary Affairs, Board of Governors

James M. Lyon
First Vice President, Federal Reserve Bank of Minneapolis

David Altig, James J. McAndrews, and Alberto G. Musalem
Executive Vice Presidents, Federal Reserve Banks of Atlanta, New York, and New York, respectively

Joshua L. Frost and Spencer Krane
Senior Vice Presidents, Federal Reserve Banks of New York and Chicago, respectively

George A. Kahn, Antoine Martin, Joe Peek, Keith Sill, Daniel L. Thornton, and Douglas Tillett
Vice Presidents, Federal Reserve Banks of Kansas City, New York, Boston, Philadelphia, St. Louis, and Chicago, respectively

Andreas L. Hornstein
Senior Advisor, Federal Reserve Bank of Richmond

John Fernald
Senior Research Adviser, Federal Reserve Bank of San Francisco

Sean Savage
Senior Associate, Federal Reserve Bank of New York

Monetary Policy Normalization

In a joint session of the Federal Open Market Committee (FOMC) and the Board of Governors of the Federal Reserve System, meeting participants discussed issues associated with the eventual normalization of the stance and conduct of monetary policy. The Committee's discussion of this topic was undertaken as part of prudent planning and did not imply that normalization would necessarily begin sometime soon. A staff presentation outlined several approaches to raising short-term interest rates when it becomes appropriate to do so, and to controlling the level of short-term interest rates once they are above the effective lower bound, during a period when the Federal Reserve will have a very large balance sheet. The approaches differed in terms of the combination of policy tools that might be used to accomplish those objectives. In addition to the rate of interest paid on excess reserve balances, the tools considered included fixed-rate overnight reverse repurchase (ON RRP) operations, term reverse repurchase agreements, and the Term Deposit Facility (TDF). The staff presentation discussed the potential implications of each approach for financial intermediation and financial markets, including the federal funds market, and the possible implications for financial stability. In addition, the staff outlined options for additional operational testing of the policy tools.

Following the staff presentation, meeting participants discussed a wide range of topics related to policy normalization. Participants generally agreed that starting to consider the options for normalization at this meeting was prudent, as it would help the Committee to make decisions about approaches to policy normalization and to communicate its plans to the public well before the first steps in normalizing policy become appropriate. Early communication, in turn, would enhance the clarity and credibility of monetary policy and help promote the achievement of the Committee's statutory objectives. It was emphasized that the tools available to the Committee will allow it to reduce policy accommodation when doing so becomes appropriate. Participants considered how various combinations of tools could have different implications for the degree of control over short-term interest rates, for the Federal Reserve's balance sheet and remittances to the Treasury, for the functioning of the federal funds market, and for financial stability in both normal times and in periods of stress. Because the Federal Reserve has not previously tightened the stance of policy while holding a large balance sheet, most participants judged that the Committee should consider a range of options and be prepared to adjust the mix of its policy tools as warranted. Participants generally favored the further testing of various tools, including the TDF, to better assess their operational readiness and effectiveness. No decisions regarding policy normalization were taken; participants requested additional analysis from the staff and agreed that it would be helpful to continue to review these issues at upcoming meetings. The Board meeting concluded at the end of the discussion.

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 as well as the System open market operations during the period since the Committee met on March 18–19, 2014. 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.

By unanimous vote, the Committee agreed to renew the reciprocal currency arrangements with the Bank of Canada and the Bank of Mexico; these arrangements are associated with the Federal Reserve's participation in the North American Framework Agreement of 1994. In addition, by unanimous vote, the Committee agreed to renew the dollar and 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. The votes to renew the Federal Reserve's participation in these arrangements were taken at this meeting because provisions in the arrangements specify that the Federal Reserve provide six months' prior notice of an intention to terminate its participation.

Staff Review of the Economic Situation

The information reviewed for the April 29–30 meeting indicated that growth in economic activity paused in the first quarter as a whole, but that activity stepped up late in the quarter; this pattern reflected, in part, the temporary effects of the unusually cold and snowy weather earlier in the quarter and the unwinding of those effects later in the quarter. In March, payroll employment increased further, although the unemployment rate held steady and was still elevated. Consumer price inflation continued to run below the Committee's longer-run objective, but measures of longer-run inflation expectations remained stable.

The unemployment rate stayed at 6.7 percent in March, but both the labor force participation rate and the employment-to-population ratio increased slightly. The rate of long-duration unemployment declined somewhat, but the share of workers employed part time for economic reasons moved up; both of these measures were still well above their prerecession levels. Initial claims for unemployment insurance remained low over the intermeeting period. Although the rate of job openings moved up in February, the hiring rate was flat and continued to be subdued.

Following a rebound in February that was partly weather related, manufacturing production rose further in March and the rate of manufacturing capacity utilization increased. The production of motor vehicles and parts declined in March, but factory output outside of the motor vehicle sector expanded. Automakers' schedules indicated that the pace of motor vehicle assemblies in the coming months would be similar to the level in March. However, broad indicators of manufacturing production, such as the new orders indexes from the national and regional manufacturing surveys, were at levels consistent with moderate increases in factory output in the near term.

Real personal consumption expenditures (PCE) expanded slightly less rapidly in the first quarter than in the fourth quarter. After moving roughly sideways, on net, in January and February, the component of nominal retail sales used by the Bureau of Economic Analysis (BEA) to construct its monthly estimate of PCE rose briskly in March, in part because the weather returned to more seasonal norms. Recent information on several important factors that influence household spending was positive. Real disposable income continued to increase in the first quarter, further gains in house prices likely bolstered household net worth, and consumer sentiment in the Thomson Reuters/University of Michigan Surveys of Consumers improved, on balance, in March and April.

The pace of activity in the housing sector remained soft, as real expenditures for residential investment decreased again in the first quarter. Starts of new single-family homes increased in March. However, permits for single-family homes—which are typically less sensitive to fluctuations in the weather and a better indicator of the underlying pace of construction—remained below their fourth-quarter level and had not shown a sustained improvement since last spring, when mortgage rates began to rise. Sales of both new and existing homes decreased in March of this year, but pending home sales rose.

Real private expenditures on business equipment and intellectual property products declined in the first quarter. However, nominal shipments of nondefense capital goods excluding aircraft rose in February and in March, and new orders were somewhat above the level of shipments, pointing to modest gains in shipments in the near term. Other forward-looking indicators, such as surveys of business conditions and capital spending plans, were also consistent with increased outlays for business equipment in the coming months. Real spending for nonresidential construction was about flat in the first quarter after declining in the fourth quarter, while real inventory investment moved lower. Business inventories in most industries appeared to be broadly aligned with sales in recent months.

Real federal government purchases rose slightly in the first quarter, as the increase from the reversal of the government shutdown in the fourth quarter was mostly offset by the ongoing downtrend in purchases. Real state and local government purchases decreased somewhat in the first quarter, as state and local construction expenditures declined.

The U.S. international trade deficit widened in February as exports fell and imports rose. The export declines were concentrated in aircraft and petroleum products, while exports of consumer goods rose. Rising imports of services and automotive products offset declines in imports of oil and capital goods. In the advance release of the national income and product accounts, the BEA estimated that net exports subtracted substantially from real gross domestic product (GDP) growth in the first quarter.

U.S. consumer prices, as measured by the PCE price index, rose at a slow rate in the first quarter, though somewhat faster than the pace posted in the fourth quarter, and were about 1 percent higher than a year earlier. After falling in the fourth quarter, consumer energy prices increased markedly in the first quarter as natural gas prices moved higher on a sharp decline in inventories during the unusually cold winter months. The PCE price index for items excluding food and energy rose at the same rate in the first quarter as in the previous one and was around 1¼ percent higher than four quarters earlier. Both near- and longer-term inflation expectations from the Michigan survey were unchanged in March and April. Over the 12 months ending in March, both the employment cost index for private-sector workers and average hourly earnings for all employees increased only a little more than consumer price inflation.

Indicators of foreign economic activity suggested continued expansion in the first quarter but at a rate somewhat below that in the fourth quarter. The deceleration was concentrated in emerging market economies (EMEs). Real GDP growth slowed markedly in China, largely reflecting lower investment growth and exports. Weaker exports also restrained economic activity in other emerging Asian economies. In Mexico, indicators of activity suggested some improvement from a lackluster fourth quarter. By contrast, economic growth remained near its solid fourth-quarter pace in the advanced foreign economies (AFEs). In the euro area, the United Kingdom, and Canada, average industrial production in the first two months of the year was up moderately from the fourth quarter; in Japan, industrial production rose robustly, and consumer demand was boosted by anticipation of the April increase in the consumption tax. Inflation developments were mixed. Inflation rebounded in Canada but remained very low in the euro area. In China and India, inflation fell in the first quarter, largely because of lower food prices. Monetary policy remained highly accommodative during the intermeeting period in the AFEs and also in many EMEs, although monetary policy in Brazil was tightened to contain inflation pressures.

Staff Review of the Financial Situation

Despite some volatility in certain asset prices, financial conditions did not change appreciably, on net, over the intermeeting period. Asset prices moved in response to economic data releases that were, on balance, a little stronger than expected and to Federal Reserve communications. The anticipated path of the federal funds rate moved up somewhat, as did intermediate-dated Treasury yields, while corporate bond spreads narrowed and the S&P 500 increased slightly. The foreign exchange value of the dollar was little changed.

Federal Reserve communications garnered significant attention from market participants over the period but appeared to have only a modest net effect on their expectations for monetary policy. The communications following the conclusion of the March FOMC meeting were interpreted as somewhat less accommodative than expected. However, subsequent communications—including the release of the minutes of the March FOMC meeting—appeared to mostly reverse the earlier change in expectations.

Yields on short- and medium-term nominal Treasury securities rose, on balance, over the intermeeting period. In contrast, yields at the long end of the curve declined, continuing a downward trend evident over much of this year. Market participants cited a number of factors as contributing to the drop in long-term yields so far this year, including portfolio reallocation by large institutional investors, the trading strategies pursued by some investors, and safe-haven flows. Some market participants reportedly also revised down their estimate of the average real federal funds rate over the longer term, reflecting in part changes in their assessments of long-run economic conditions. Measures of longer-horizon inflation compensation based on Treasury Inflation-Protected Securities were little changed.

Conditions in short-term funding markets remained fairly stable over the intermeeting period. Take-up in the Federal Reserve's fixed-rate ON RRP exercise continued to be sensitive to the spread between market rates and the rate offered in the exercise, with higher take-up occurring on days when the market rate on repurchase agreements was close to or below the ON RRP rate. As has been the case since the ON RRP exercise began, money market funds increased their usage at quarter-end; take-up reached a record level of about $240 billion at the end of March. Part of the increase in ON RRP usage at the end of March relative to the end of December likely reflected higher counterparty allotment limits, which were raised from $3 billion to $7 billion during the first quarter. The allotment limit was subsequently increased to $10 billion per counterparty in early April. The seasonal paydown of short-term Treasury debt following the April tax date was accompanied by a notable pickup in participation at ON RRP operations, but Treasury repo rates generally remained very close to the ON RRP rate of 5 basis points.

The S&P 500 increased a bit, on net, over the intermeeting period, but broader stock market indexes edged down. The prices of social media and biotechnology stocks, which had risen substantially faster than the broader market over the previous year, fell sharply over the intermeeting period, leaving the gains on these shares about in line with those on broader indexes over the past 12 months. Some initial public offerings were reportedly put on hold as prices of small-capitalization stocks declined. By contrast, stocks that generally have more stable dividends, such as those of utility and telecommunications companies, advanced. First-quarter earnings reports for large banking organizations were mixed, and the stock prices of such firms generally underperformed broad equity indexes.

Credit flows to nonfinancial corporations remained robust, on balance, notwithstanding subdued bond issuance in April that was attributed to typical constraints on issuance during the period when many firms are reporting their earnings. The growth in commercial and industrial loans on banks' balance sheets remained robust, consistent with the increase in loan demand by large and middle-market firms reported in the April Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS). Institutional issuance of leveraged loans continued at a brisk pace amid reports of an ongoing gradual easing of credit terms and deal structures.

Financing conditions in the commercial real estate (CRE) sector improved further. In the first quarter, commercial mortgage loans held on banks' books continued to grow solidly. According to the April SLOOS, banks again eased standards on CRE loans during the first quarter; they also reported an increase in loan demand, especially for construction and land development loans. In contrast, issuance of commercial mortgage-backed securities in 2014 has been a bit slower than last year's pace.

Mortgage credit conditions generally remained tight over the intermeeting period, though signs of easing continued to emerge amid further gains in house prices. In particular, the April SLOOS indicated a net easing of banks' credit standards for home-purchase loans to prime customers in the first quarter. Mortgage interest rates and their spreads over Treasury yields were little changed over the intermeeting period, and applications for refinancing and purchase mortgages remained tepid.

Conditions in consumer credit markets continued to be mixed. Student and auto loans expanded at a robust pace, while credit card debt outstanding stayed flat, as it had been in recent months. Financing conditions in the consumer asset-backed securities market remained favorable, and issuance continued to be solid.

Most foreign equity indexes rose over the period despite a global selloff of technology-related stocks, and 10-year sovereign bond yields in Canada, Germany, and the United Kingdom were nearly unchanged on net. Yield spreads on peripheral euro-area debt over German bonds of similar maturity continued to narrow. The broad nominal exchange rate index for the dollar was about unchanged, as the dollar appreciated against the euro, yen, and renminbi but depreciated against most other currencies. Investor sentiment toward EMEs continued to improve over the period despite incoming data that were somewhat weaker than expected. Increasing tensions between Ukraine and Russia, as well as the lowering of Russia's sovereign debt rating by Standard & Poor's, contributed to a rise in Russia's 10-year sovereign bond yield and a sharp decline in its main equity index. Outside of that region, however, these building tensions left little imprint on global financial markets.

The staff's periodic report on potential risks to financial stability concluded that the vulnerability of the financial system to adverse shocks remained at moderate levels overall. Relatively strong capital profiles of large domestic banking firms, low levels of aggregate leverage in the nonfinancial sector, and moderate use of short-term wholesale funding across the financial sector were seen as the primary factors supporting overall financial stability. However, the staff report also highlighted valuation pressures in some segments of the equity market, continued strong demand for corporate debt instruments and associated pressures on underwriting standards, and liquidity risks associated with fixed-income mutual funds.

Staff Economic Outlook

In the economic forecast prepared by the staff for the April FOMC meeting, real GDP growth in the first half of this year was somewhat slower than in the projection for the March meeting. The available readings on net exports and, to a lesser extent, residential investment pointed to less spending growth in the first quarter than the staff previously expected. However, the staff's assessment was that the unanticipated weakness in economic activity in the first quarter would be largely transitory and implied little revision to its projection for second-quarter output growth. In addition, the medium-term forecast for real GDP growth was essentially unrevised. The staff continued to project that real GDP would expand at a faster pace over the next few years than it did last year, and that it would rise more quickly than the growth rate of potential output. The faster pace of real GDP growth was expected to be supported by an easing in the restraint from changes in fiscal policy, increases in consumer and business confidence, further improvements in credit availability and financial conditions, and a pickup in the rate of foreign economic growth. The expansion in economic activity was anticipated to slowly reduce resource slack over the projection period, and the unemployment rate was expected to decline gradually to the staff's estimate of its longer-run natural rate.

The staff's forecast for inflation was basically unchanged from the projection prepared for the previous FOMC meeting. The staff continued to forecast that inflation would remain below the Committee's longer-run objective of 2 percent over the next few years. With longer-run inflation expectations assumed to remain stable, changes in commodity and import prices expected to be subdued, and slack in labor and product markets anticipated to diminish slowly, inflation was projected to rise gradually toward the Committee's objective.

The staff viewed the extent of uncertainty around its April projections for real GDP growth, inflation, and the unemployment rate as roughly in line with the average over the past 20 years. Nonetheless, the risks to the forecast for real GDP growth were viewed as tilted a little to the downside, especially because the economy was not well positioned to withstand adverse shocks while the target for the federal funds rate was at its effective lower bound. At the same time, the staff viewed the risks around its outlook for the unemployment rate and for inflation as roughly balanced.

Participants' Views on Current Conditions and the Economic Outlook

In their discussion of the economic situation and the outlook, meeting participants generally indicated that their assessment of the economic outlook had not changed materially since the March meeting. Severe winter weather had contributed to a sharp slowing in activity during the first quarter, but recent indicators pointed to a rebound and suggested that the economy had returned to a trajectory of moderate growth. However, some participants remarked that it was too early to confirm that the bounceback in economic activity would put the economy on a path of sustained above-trend economic growth. In general, participants continued to view the risks to the outlook for the economy and the labor market as nearly balanced. However, a number of participants pointed to possible sources of downside risk to growth, including a persistent slowdown in the housing sector or potential international developments, such as a further slowing of growth in China or an increase in geopolitical tensions regarding Russia and Ukraine.

Participants noted that business contacts in many parts of the country were generally optimistic about economic prospects, with reports of increased sales of automobiles, higher production in the aerospace industry, and increased usage of industrial power; in addition, a couple of firms with a global presence reported a notable increase in demand from customers in Europe. Contacts in several Districts pointed to plans for increasing capital expenditures or to stronger demand for commercial and industrial loans. In the agricultural sector, the planting season was under way, but there were concerns about the effects of drought on production in some areas.

Most participants commented on the continuing weakness in housing activity. They saw a range of factors affecting the housing market, including higher home prices, construction bottlenecks stemming from a scarcity of labor and harsh winter weather, input cost pressures, or a shortage in the supply of available lots. Views varied regarding the outlook for the multifamily sector, with the large increase in multifamily units coming to market potentially putting downward pressure on prices and rents, but the demand for this type of housing expected to rise as the population ages. A couple of participants noted that mortgage credit availability remained constrained and lending standards were tight compared with historical norms, especially for purchase mortgages. However, reports from some Districts indicated that real estate and housing-related business activity had strengthened recently, consistent with the solid gains in consumer spending registered in March.

Conditions in the labor market continued to improve over the intermeeting period and participants generally expected further gradual improvement. Participants discussed a range of research and analysis bearing on the amount of available slack remaining in the labor market. A number of them argued that several indicators of labor underutilization—including the low labor force participation rate and the still-elevated rates of longer-duration unemployment and of workers employed part time for economic reasons—suggested that there is more slack in the labor market than is captured by the unemployment rate alone. Low nominal wage inflation was also viewed as consistent with slack in labor markets. However, some participants reported that labor markets were tight in their Districts or that contacts indicated some sectors or occupations were experiencing shortages of workers. Another participant observed that labor underutilization, as measured by an index that takes employment transition rates into account, was consistent with past periods in which the official unemployment rate had reached its current level, and had declined about as much relative to the official unemployment rate as it had in previous economic recoveries.

In discussing the effect of labor market conditions on inflation, a number of participants expressed skepticism about recent studies suggesting that long-term unemployment provides less downward pressure on wage and price inflation than short-term unemployment does. A couple of participants cited other research findings that both short- and long-term unemployment rates exert pressure on wages, with the effects of long-term unemployment increasing as the level of short-term unemployment declines. Moreover, a few participants pointed out that because of downward nominal wage rigidity during the recession, wage increases are likely to remain relatively modest for some time during the recovery, even as the labor market strengthens. It was also noted that because inflation was expected to remain well below the Committee's 2 percent objective and the unemployment rate was still above participants' estimates of its longer-run normal level, the Committee did not, at present, face a tradeoff between its employment and inflation objectives, and an expansion of aggregate demand would result in further progress relative to both objectives.

Inflation continued to run below the Committee's 2 percent longer-run objective over the intermeeting period. Many participants saw the recent behavior of the prices of food, energy, shelter, and imports as consistent with a stabilization in inflation and judged that the transitory factors that had reduced inflation, such as declines in administered prices for medical services, were fading. Most participants expected inflation to return to 2 percent within the next few years, supported by highly accommodative monetary policy, stable inflation expectations, and a continued gradual recovery in economic activity. However, a few others expressed the concern that the return to 2 percent inflation could be even more gradual.

In their discussion of financial stability, participants generally did not see imbalances that posed significant near-term risks to the financial system and the broader economy, but they nevertheless reviewed some financial developments that pointed to potential future risks. A couple of participants noted that conditions in the leveraged loan market had become stretched, although equity cushions on new deals remained above levels seen prior to the financial crisis. Two others saw declining credit spreads, particularly on speculative-grade corporate bonds, as consistent with an increase in investors' appetite for risk. In addition, several participants noted that the low level of expected volatility implied by some financial market prices might also signal an increase in risk appetite. Some stated that it would be helpful to continue to explore the appropriate regulatory, supervisory, and monetary policy responses to potential risks to financial stability.

It was noted that the changes to the Committee's forward guidance at the March FOMC meeting had been well understood by investors. However, a number of participants emphasized the importance of communicating still more clearly about the Committee's policy intentions as the time of the first increase in the federal funds rate moves closer. Some thought it would be helpful to clarify the reasoning underlying the language in the FOMC's postmeeting statement indicating that even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run. In addition, a few participants judged that additional clarity about the Committee's reaction function could be particularly important in the event that future economic conditions necessitate a more rapid rise in the target federal funds rate than the Committee currently anticipates. A number of participants suggested that it would be useful to provide additional information regarding how long the Committee would continue its policy of rolling over maturing Treasury securities at auction and reinvesting principal payments on all agency debt and agency mortgage-backed securities in agency mortgage-backed securities.

Committee Policy Action

Members viewed the information received over the intermeeting period as indicating that economic growth had picked up recently, following a sharp slowdown during the winter due in part to unusually severe weather conditions. Although labor market indicators were mixed, on balance they showed further improvement. The unemployment rate, however, remained elevated. While household spending appeared to be rising more rapidly, business fixed investment had edged down and the recovery in the housing sector remained slow. Fiscal policy was restraining economic growth, but the extent of that restraint had diminished. The Committee expected that, with appropriate policy accommodation, economic activity would expand at a moderate pace and labor market conditions would continue to improve gradually, moving toward those the Committee judges to be consistent with its dual mandate. Moreover, members continued to see risks to the outlook for the economy and the labor market as nearly balanced. Inflation was running below the Committee's longer-run objective and was seen as posing possible risks to economic performance, but members anticipated that stable inflation expectations and strengthening economic activity would, over time, return inflation to the Committee's 2 percent target. However, in light of their concerns about the possible persistence of low inflation, members agreed that inflation developments should be monitored carefully for evidence that inflation was moving back toward the Committee's longer-run objective.

In their discussion of monetary policy in the period ahead, members noted that there had been little change in the economic outlook since the March meeting and decided that it would be appropriate to make a further measured reduction in the pace of asset purchases at this meeting. Accordingly, the Committee agreed that, beginning in May, it would add to its holdings of agency mortgage-backed securities at a pace of $20 billion per month rather than $25 billion per month, and would add to its holdings of longer-term Treasury securities at a pace of $25 billion per month rather than $30 billion per month. Members again judged that, if the economy continued to develop as anticipated, the Committee would likely reduce the pace of asset purchases in further measured steps at future meetings. However, members underscored that the pace of asset purchases was not on a preset course and would remain contingent on the Committee's outlook for the labor market and inflation as well as its assessment of the likely efficacy and costs of purchases.

The Committee agreed that no changes to its target range for the federal funds rate or its forward guidance were warranted at this meeting, aside from removing a short paragraph that was added when the forward guidance was updated at the March meeting and which noted that the change in the Committee's guidance did not signal a change in the Committee's policy intentions; members deemed this language no longer necessary.

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 SOMA in accordance with the following domestic policy directive:

> "Consistent with its statutory mandate, the Federal Open Market Committee seeks monetary and financial conditions that will foster maximum employment and price stability. In particular, 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 undertake open market operations as necessary to maintain such conditions. Beginning in May, the Desk is directed to purchase longer-term Treasury securities at a pace of about $25 billion per month and to purchase agency mortgage-backed securities at a pace of about $20 billion per month. The Committee also directs the Desk to engage in dollar roll and coupon swap transactions as necessary to facilitate settlement of the Federal Reserve's agency mortgage-backed securities transactions. The Committee directs the Desk to maintain its policy of rolling over maturing Treasury securities into new issues and its policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in agency mortgage-backed securities. 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 2:00 p.m.:

> "Information received since the Federal Open Market Committee met in March indicates that growth in economic activity has picked up recently, after having slowed sharply during the winter in part because of adverse weather conditions. Labor market indicators were mixed but on balance showed further improvement. The unemployment rate, however, remains elevated. Household spending appears to be rising more quickly. Business fixed investment edged down, while the recovery in the housing sector remained slow. Fiscal policy is restraining economic growth, although the extent of restraint is diminishing. Inflation has been running below the Committee's longer-run objective, but 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 that, with appropriate policy accommodation, economic activity will expand at a moderate pace and labor market conditions will continue to improve gradually, moving toward those the Committee judges consistent with its dual mandate. The Committee sees the risks to the outlook for the economy and the labor market as nearly balanced. The Committee recognizes that inflation persistently below its 2 percent objective could pose risks to economic performance, and it is monitoring inflation developments carefully for evidence that inflation will move back toward its objective over the medium term.
>
> The Committee currently judges that there is sufficient underlying strength in the broader economy to support ongoing improvement in labor market conditions. In light of the cumula-

tive progress toward maximum employment and the improvement in the outlook for labor market conditions since the inception of the current asset purchase program, the Committee decided to make a further measured reduction in the pace of its asset purchases. Beginning in May, the Committee will add to its holdings of agency mortgage-backed securities at a pace of $20 billion per month rather than $25 billion per month, and will add to its holdings of longer-term Treasury securities at a pace of $25 billion per month rather than $30 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 of rolling over maturing Treasury securities at auction. The Committee's sizable and still-increasing holdings of longer-term securities should maintain downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative, which in turn should promote a stronger economic recovery and help to ensure that inflation, over time, is at the rate most consistent with the Committee's dual mandate.

The Committee will closely monitor incoming information on economic and financial developments in coming months and will continue its purchases of Treasury and agency mortgage-backed securities, and employ its other policy tools as appropriate, until the outlook for the labor market has improved substantially in a context of price stability. If incoming information broadly supports the Committee's expectation of ongoing improvement in labor market conditions and inflation moving back toward its longer-run objective, the Committee will likely reduce the pace of asset purchases in further measured steps at future meetings. However, asset purchases are not on a preset course, and the Committee's decisions about their pace will remain contingent on the Committee's outlook for the labor market and inflation as well as its assessment of the likely efficacy and costs of such purchases.

To support continued progress toward maximum employment and price stability, the Committee today reaffirmed its view that a highly accommodative stance of monetary policy remains appropriate. In determining how long to maintain the current 0 to ¼ percent target range for the federal funds rate, the Committee will assess progress—both realized and expected—toward its objectives of maximum employment and 2 percent inflation. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. The Committee continues to anticipate, based on its assessment of these factors, that it likely will be appropriate to maintain the current target range for the federal funds rate for a considerable time after the asset purchase program ends, especially if projected inflation continues to run below the Committee's 2 percent longer-run goal, and provided that longer-term inflation expectations remain well anchored.

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. The Committee currently anticipates that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run."

Voting for this action: Janet L. Yellen, William C. Dudley, Richard W. Fisher, Narayana Kocherlakota, Sandra Pianalto, Charles I. Plosser, Jerome H. Powell, Jeremy C. Stein, and Daniel K. Tarullo.

Voting against this action: None.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, June 17–18, 2014. The meeting adjourned at 10:55 a.m. on April 30, 2014.

Notation Vote

By notation vote completed on April 8, 2014, the Committee unanimously approved the minutes of the Committee meeting held on March 18–19, 2014.

William B. English
Secretary

Meeting Held on June 17–18, 2014

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 17, 2014, at 10:00 a.m. and continued on Wednesday, June 18, 2014, at 9:00 a.m.

Present

Janet L. Yellen
Chair

William C. Dudley
Vice Chairman

Lael Brainard

Stanley Fischer

Richard W. Fisher

Narayana Kocherlakota

Loretta J. Mester

Charles I. Plosser

Jerome H. Powell

Daniel K. Tarullo

Christine Cumming, Charles L. Evans, Jeffrey M. Lacker, Dennis P. Lockhart, and John C. Williams
Alternate Members of the Federal Open Market Committee

James Bullard, Esther L. George, and Eric Rosengren
Presidents of the Federal Reserve Banks of St. Louis, Kansas City, and Boston, respectively

William B. English
Secretary and Economist

Matthew M. Luecke
Deputy Secretary

Michelle A. Smith
Assistant Secretary

Scott G. Alvarez
General Counsel

Steven B. Kamin
Economist

David W. Wilcox
Economist

James A. Clouse, Thomas A. Connors, Evan F. Koenig, Thomas Laubach, Michael P. Leahy, Samuel Schulhofer-Wohl, Mark E. Schweitzer, and William Wascher
Associate Economists

Simon Potter
Manager, System Open Market Account

Lorie K. Logan
Deputy Manager, System Open Market Account

Robert deV. Frierson[1]
Secretary of the Board, Office of the Secretary, Board of Governors

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

Stephen A. Meyer and William R. Nelson
Deputy Directors, Division of Monetary Affairs, Board of Governors

Mark E. Van Der Weide
Deputy Director, Division of Banking Supervision and Regulation, Board of Governors

Jon W. Faust and Stacey Tevlin
Special Advisers to the Board, Office of Board Members, Board of Governors

Trevor A. Reeve
Special Adviser to the Chair, Office of Board Members, Board of Governors

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

Brian M. Doyle
Senior Adviser, Division of International Finance, Board of Governors

Ellen E. Meade and Joyce K. Zickler
Senior Advisers, Division of Monetary Affairs, Board of Governors

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

Fabio M. Natalucci[1] **and Gretchen C. Weinbach**[1]
Associate Directors, Division of Monetary Affairs, Board of Governors

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1 Attended the joint session of the Federal Open Market Committee and the Board of Governors.

Beth Anne Wilson
Associate Director, Division of International Finance, Board of Governors

William F. Bassett and Jane E. Ihrig[1]
Deputy Associate Directors, Division of Monetary Affairs, Board of Governors

Joshua Gallin
Deputy Associate Director, Division of Research and Statistics, Board of Governors

Min Wei[2]
Assistant Director, Division of Monetary Affairs, Board of Governors

Jeremy B. Rudd
Adviser, Division of Research and Statistics, Board of Governors

Penelope A. Beattie[1]
Assistant to the Secretary, Office of the Secretary, Board of Governors

Laura Lipscomb[1]
Section Chief, Division of Monetary Affairs, Board of Governors

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

Katie Ross[1]
Manager, Office of the Secretary, Board of Governors

Wendy Dunn and Patrick McCabe[1]
Senior Economists, Division of Research and Statistics, Board of Governors

Etienne Gagnon
Senior Economist, Division of Monetary Affairs, Board of Governors

Jonathan Rose
Economist, Division of Monetary Affairs, Board of Governors

Achilles Sangster II
Records Management Analyst, Division of Monetary Affairs, Board of Governors

Mark L. Mullinix
First Vice President, Federal Reserve Bank of Richmond

David Altig and Daniel G. Sullivan
Executive Vice Presidents, Federal Reserve Banks of Atlanta and Chicago, respectively

Cletus C. Coughlin, Mary Daly, Troy Davig, Michael Dotsey, Joshua L. Frost, and John A. Weinberg
Senior Vice Presidents, Federal Reserve Banks of St. Louis, San Francisco, Kansas City, Philadelphia, New York, and Richmond, respectively

Deborah L. Leonard,[1] **Giovanni Olivei, and Douglas Tillett**
Vice Presidents, Federal Reserve Banks of New York, Boston, and Chicago, respectively

Marc Giannoni
Research Officer, Federal Reserve Bank of New York

In the agenda for this meeting, it was reported that Loretta J. Mester had been elected a member of the Federal Open Market Committee and that she had executed her oath of office.

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

In a joint session of the Federal Open Market Committee (FOMC) and the Board of Governors of the Federal Reserve System, the deputy manager of the System Open Market Account (SOMA) reported on developments in domestic and foreign financial markets. The SOMA manager reported on the System open market operations during the period since the Committee met on April 29–30, 2014, outlined the testing of the Term Deposit Facility, described the results from the fixed-rate overnight reverse repurchase agreement (ON RRP) operational exercise, and provided some possible options for adjusting the list of counterparties eligible to participate in ON RRP operations. The manager also noted the effects of recent foreign central bank policy actions on the yields on the international portion of the SOMA portfolio and discussed ongoing staff work on improving data collections regarding bank funding markets. 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.

Monetary Policy Normalization

Meeting participants continued their discussion of issues associated with the eventual normalization of the stance and conduct of monetary policy. The Committee's consideration of this topic was undertaken as part of prudent planning and did not imply that normalization would necessarily begin sometime

[2] Attended Tuesday's session only.

soon. A staff presentation included some possible strategies for implementing and communicating monetary policy during a period when the Federal Reserve will have a very large balance sheet. In addition, the presentation outlined design features of a potential ON RRP facility and discussed options for the Committee's policy of rolling over maturing Treasury securities at auction and reinvesting principal payments on all agency debt and agency mortgage-backed securities (MBS) in agency MBS.

Most participants agreed that adjustments in the rate of interest on excess reserves (IOER) should play a central role during the normalization process. It was generally agreed that an ON RRP facility with an interest rate set below the IOER rate could play a useful supporting role by helping to firm the floor under money market interest rates. One participant thought that the ON RRP rate would be the more effective policy tool during normalization in light of the wider variety of counterparties eligible to participate in ON RRP operations. The appropriate size of the spread between the IOER and ON RRP rates was discussed, with many participants judging that a relatively wide spread—perhaps near or above the current level of 20 basis points—would support trading in the federal funds market and provide adequate control over market interest rates. Several participants noted that the spread might be adjusted during the normalization process. A couple of participants suggested that adequate control of short-term rates might be accomplished with a very wide spread or even without an ON RRP facility. A few participants commented that the Committee should also be prepared to use its other policy tools, including term deposits and term reverse repurchase agreements, if necessary. Most participants thought that the federal funds rate should continue to play a role in the Committee's operating framework and communications during normalization, with many of them indicating a preference for continuing to announce a target range. However, a few participants thought that, given the degree of uncertainty about the effects of the Committee's tools on market rates, it might be preferable to focus on an administered rate in communicating the stance of policy during the normalization period. In addition, participants examined possibilities for changing the calculation of the effective federal funds rate in order to obtain a more robust measure of overnight bank funding rates and to apply lessons from international efforts to develop improved standards for benchmark interest rates.

While generally agreeing that an ON RRP facility could play an important role in the policy normalization process, participants discussed several potential unintended consequences of using such a facility and design features that could help to mitigate these consequences. Most participants expressed concerns that in times of financial stress, the facility's counterparties could shift investments toward the facility and away from financial and nonfinancial corporations, possibly causing disruptions in funding that could magnify the stress. In addition, a number of participants noted that a relatively large ON RRP facility had the potential to expand the Federal Reserve's role in financial intermediation and reshape the financial industry in ways that were difficult to anticipate. Participants discussed design features that could address these concerns, including constraints on usage either in the aggregate or by counterparty and a relatively wide spread between the ON RRP rate and the IOER rate that would help limit the facility's size. Several participants emphasized that, although the ON RRP rate would be useful in controlling short-term interest rates during normalization, they did not anticipate that such a facility would be a permanent part of the Committee's longer-run operating framework. Finally, a number of participants expressed concern about conducting monetary policy operations with nontraditional counterparties.

Participants also discussed the appropriate time for making a change to the Committee's policy of rolling over maturing Treasury securities at auction and reinvesting principal payments on all agency debt and agency MBS in agency MBS. It was noted that, in the staff's models, making a change to the Committee's reinvestment policy prior to the liftoff of the federal funds rate, at the time of liftoff, or sometime thereafter would be expected to have only limited implications for macroeconomic outcomes, the Committee's statutory objectives, or remittances to the Treasury. Many participants agreed that ending reinvestments at or after the time of liftoff would be best, with most of these participants preferring to end them after liftoff. These participants thought that an earlier change to the reinvestment policy would involve risks to the economic outlook if it was seen as suggesting that the Committee was likely to tighten policy more rapidly than currently anticipated or if it had unexpectedly large effects in MBS markets; moreover, an early change could add complexity to the Committee's communications at a time when it would be clearer to signal changes in policy through interest rates alone. However, some participants favored ending reinvestments prior to the first firming in policy interest rates, as stated in the Committee's exit strategy principles announced in June 2011. Those participants thought that such an approach would avoid weakening the credibility of the Committee's communications regarding normalization, would act to modestly reduce the size of the Federal Reserve's balance sheet, or would help prepare the public for the eventual rise in short-term interest rates. Regardless of whether they preferred to introduce a change to the Committee's reinvestment policy before or after the initial tightening in short-term interest rates, a number of participants thought that it might be best to follow a graduated approach with respect to winding down reinvestments or to manage reinvestments in a manner that would smooth the decline in the balance sheet. Some stressed that the details should depend on financial and economic conditions.

Overall, participants generally expressed a preference for a simple and clear approach to normalization that would facilitate communication to the public and enhance the credibility of monetary policy. It was observed that it would be useful for the Committee to develop and communicate its plans to the public later this year, well before the first steps in normalizing policy become appropriate. Most participants indicated that they expected to learn more about the effects of the Committee's various policy tools as normalization proceeds, and many favored maintaining flexibility about the evolution of the normalization process as well as the Committee's longer-run operating framework. Participants requested additional analysis from the staff on issues related to normalization and agreed that it would be helpful to continue to review these issues at upcoming meetings. The Board meeting concluded at the end of the discussion.

Staff Review of the Economic Situation

The information reviewed for the June 17–18 meeting indicated that real gross domestic product (GDP) had dropped significantly early in the year but that economic growth had bounced back in recent months. The average pace of employment gains stepped up, and the unemployment rate declined markedly in April and held steady in May, although it was still elevated. Consumer price inflation picked up in recent months, while measures of longer-run inflation expectations remained stable.

Most measures of labor market conditions improved in recent months. Total nonfarm payroll employment expanded in April and May at a faster rate than the average monthly pace during the previous two quarters. The unemployment rate dropped to 6.3 percent in April and remained at that level in May. However, the labor force participation rate also declined in April and then held steady in May, while the employment-to-population ratio remained flat. Both the share of workers employed part time for economic reasons and the rate of long-duration unemployment edged down in recent months, although both measures were still high. Initial claims for unemployment insurance decreased slightly, on net, over the intermeeting period, and the rate of job openings stepped up in April; nevertheless, the rate of hiring was unchanged and remained at a modest level.

Industrial production increased, on balance, in April and May, as manufacturing output and production in the mining sector expanded and more than offset a further decline in the output of utilities from the elevated levels recorded during the unusually cold winter months. As a result, the rate of industrial capacity utilization rose in recent months. Automakers' schedules indicated that the pace of light motor vehicle assemblies would step up in the coming months, and broader indicators of manufacturing production, such as the readings on new orders from national manufacturing surveys, were consistent with moderate increases in factory output in the near term.

Real personal consumption expenditures (PCE) declined a little in April following strong gains in February and March. The component of the nominal retail sales data used by the Bureau of Economic Analysis to construct its estimate of PCE edged down in May, but light motor vehicle sales moved up briskly. Recent information about key factors that influence household spending mostly pointed to gains in PCE in the coming months. Real disposable income continued to rise in April, and households' net worth likely increased as equity prices and home values advanced further; however, consumer sentiment in the Thomson Reuters/University of Michigan Surveys of Consumers moved down somewhat in May and early June.

The pace of activity in the housing sector remained subdued. Starts of new single-family homes declined slightly, on net, in April and May, although starts of multifamily units increased. Permits for single-family homes, which are usually a better indicator of the underlying pace of residential construction, increased only a little on balance. Sales of new homes rose in April but remained near their average monthly level last year. Existing home sales only edged up in April and were still below last year's average level, while pending home sales were little changed.

Real private expenditures for business equipment and intellectual property products were estimated to have increased slowly in the first quarter as a whole. In April, nominal orders and shipments of nondefense capital goods excluding aircraft decreased a little after rising briskly in March. However, the level of new orders for these capital goods remained above the level of shipments in April, pointing to increases in shipments in subsequent months. Other forward-looking indicators, such as surveys of business conditions, were also generally consistent with modest increases in business equipment spending in the near term. Nominal business spending for nonresidential structures was essentially unchanged in April. Recent data on the book value of inventories, along with readings on inventories from national and regional manufacturing surveys, did not point to significant inventory imbalances in most industries except in the energy sector, where inventories appeared unusually low after having been drawn down during the winter.

Federal spending data for April and May pointed toward only a small decline in real federal government purchases in the second quarter, as the pace of decreases in defense expenditures seemed to ease. Real state and local government purchases appeared to edge up going into the second quarter. The payrolls of these governments expanded in April and May, and nominal state and local construction expenditures increased a little in April.

The U.S. international trade deficit widened in March and in April. Both imports and exports recovered from weak readings in February, with imports of consumer goods, automotive products, and capital goods rising significantly and exports of capital goods and industrial supplies showing particular strength.

U.S. consumer price inflation, as measured by the PCE price index, was about 1½ percent over the 12 months ending in April, below the Committee's longer-run objective of 2 percent. Over the same 12-month period, consumer energy prices rose faster than total consumer prices, while consumer food prices climbed more slowly than overall prices; core PCE inflation—which excludes food and energy prices—was also around 1½ percent. In May, the consumer price index (CPI) increased at a faster pace than in the preceding few months; both food and energy prices rose more briskly, and core CPI inflation also stepped up. Over the 12 months ending in May, both total and core CPI inflation were about 2 percent. Near-term inflation expectations from the Michigan survey declined slightly, on balance, in May and early June, while longer-term inflation expectations from the survey were little changed.

Increases in measures of labor compensation remained modest. Compensation per hour in the nonfarm business sector rose about 2¼ percent over the year ending in the first quarter; with small gains in labor productivity, unit labor costs advanced more slowly than compensation per hour. Over the year ending in May, average hourly earnings for all employees increased around 2 percent.

Foreign real GDP growth slowed in the first quarter, especially in China and some other emerging market economies. Real GDP also increased more slowly in Canada, in part because of severe winter weather, and the pace of economic activity remained weak in the euro area. Economic growth continued to be strong in the United Kingdom, and economic activity jumped in Japan as household spending surged in advance of April's consumption tax hike. Indicators for the second quarter generally suggested that foreign economic growth picked up from the first quarter. In some advanced foreign economies, inflation moved up recently from earlier low readings. Inflation continued to be low, however, in the euro area, and the European Central Bank (ECB) announced additional stimulus measures.

Staff Review of the Financial Situation

On balance, financial conditions in the United States remained supportive of growth in economic activity and employment: The expected path of the federal funds rate was slightly lower in the long run, yields on longer-term Treasury securities moved down modestly, equity prices rose, corporate bond spreads narrowed, and the foreign exchange value of the dollar was little changed.

Federal Reserve communications over the intermeeting period had limited effects in financial markets. The April FOMC statement and minutes appeared to be generally in line with expectations, while the Chair's congressional testimony before the Joint Economic Committee in early May and the subsequent question-and-answer session were viewed by market participants as suggesting marginally more accommodative policy than expected.

Results from the Desk's June Survey of Primary Dealers indicated no change in the dealers' consensus expectation about the most likely timing of the first increase in the federal funds rate target but showed a lower median longer-run level of the federal funds rate relative to the April survey. Expectations for Federal Reserve asset purchases were largely unchanged. In addition, although there was significant dispersion among dealer responses, the median dealer expected the FOMC to end its reinvestment of principal payments on Treasury securities, agency debt, and agency MBS sometime after the first increase in the federal funds rate target; in the April survey, the median dealer had expected reinvestments to end before liftoff.

Yields on short- and medium-term nominal Treasury securities increased slightly, on balance, over the intermeeting period. In contrast, yields at the long end of the curve edged lower, continuing a downward trend evident over much of this year. Market participants continued to discuss the decreases in long forward rates since the beginning of the year and pointed to a variety of domestic and global factors possibly contributing to this trend, including lower expectations for potential growth and policy rates in the longer run, a decline in inflation risk premiums, purchases of longer-term securities by price-insensitive investors, unwinding of short Treasury positions, and falling interest rate uncertainty. Measures of longer-horizon inflation compensation based on Treasury Inflation-Protected Securities remained about steady.

Conditions in unsecured short-term dollar funding markets remained stable over the intermeeting period. The Federal Reserve continued its ON RRP exercise. Total take-up in the ON RRP exercise rose in April and May before falling back in June. Much of the transitory increase in take-up occurred in response to a large seasonal reduction in outstanding Treasury debt and an associated drop in the rates on Treasury repurchase agreements during the first half of the second quarter that were reversed during the second half. In May, the Federal Reserve began an eight-week series of test auctions of seven-day term deposits. The number of participants and the total amount awarded increased over the course of the first five operations.

Broad stock price indexes rose over the intermeeting period, apparently boosted by a more optimistic assessment of near-term economic prospects and likely supported by continued low interest rates. Despite generally lackluster results for first-quarter earnings, corporate guidance for profits in coming quarters led to upward revisions in analysts' forecasts of year-ahead earnings per share for S&P 500 firms. The VIX, an index of option-implied volatility for one-month returns on the S&P 500 index, continued to decline and ended the period near its historical lows. Measures of uncertainty in other financial markets also declined; results from the Desk's primary dealer survey suggested this development might have reflected low realized volatilities, generally favorable economic news, less uncertainty for the path of monetary policy, and complacency on the part of market participants about potential risks.

Credit flows to nonfinancial corporations remained strong. Amid low yields and reduced market volatility, gross issuance of investment- and speculative-grade bonds rebounded in May. Commercial and industrial (C&I) loans on banks' balance sheets increased and issuance of leveraged loans remained strong. Responses to the June Senior Credit Officer Opinion Survey on Dealer Financing Terms indicated that investor demand for financing to fund purchases of collateralized loan obligations rose somewhat since the beginning of the year.

Commercial real estate loans continued to increase amid some further easing of underwriting standards for commercial mortgages. While issuance of commercial mortgage-backed securities started the year a bit slow relative to 2013, it has picked up recently. Bank and insurance company originations of commercial mortgages expanded in the first quarter.

Mortgage credit conditions generally remained tight, though further incremental signs of easing emerged amid continued gains in house prices. Mortgage interest rates declined somewhat more than long-term Treasury yields over the intermeeting period, while option-adjusted spreads on production-coupon MBS narrowed. Both mortgage applications for home purchases and refinancing applications remained at very low levels.

Conditions in consumer credit markets were solid in recent months. Credit card loan balances increased. Growth in student loans moderated further but remained solid, and outstanding auto loans continued to pick up. Issuance of auto and credit card asset-backed securities was again robust.

The expected path of ECB policy rates implied by market quotes for short-term interest rates fell over the intermeeting period, as investors anticipated the easing of policy announced by the ECB at its June meeting. By contrast, late in the period, market participants interpreted statements by Bank of England Governor Carney as signaling an earlier tightening of policy than had been anticipated, and near-term policy rate expectations moved higher in response. Benchmark sovereign bond yields declined modestly in most countries, but U.K. gilt yields rose. The foreign exchange value of the dollar was little changed, on balance, over the period, as the dollar appreciated against the euro but declined against the Canadian dollar and many emerging market currencies. Consistent with some improvement in investor sentiment toward risky assets, foreign equity prices generally rose over the intermeeting period, and foreign sovereign and corporate bond spreads narrowed. In addition, both bond and equity emerging market mutual funds saw net inflows over the period.

Staff Economic Outlook

In the economic forecast prepared by the staff for the June FOMC meeting, real GDP growth in the first half of this year as a whole was lower, on net, than in the projection for the April meeting. In particular, the available readings on exports, inventory investment, outlays for health-care services, and construction pointed to much weaker real GDP in the first quarter than the staff had expected. However, the staff still anticipated that real GDP growth would rebound briskly in the second quarter, consistent with recent indicators for consumer spending and business investment, along with the expectation that exports and inventory investment would return to more normal levels and that economic activity that had been restrained by the severe winter weather would bounce back. Primarily because of the combination of recent downward surprises in the unemployment rate and weaker-than-expected real GDP, the staff slightly lowered its assumed pace of potential output growth this year and next and slightly decreased its assumption for the natural rate of unemployment over this same period. As a result, the staff's medium-term forecast for real GDP growth was revised down a little on balance. Nevertheless, the staff continued to project that real GDP would expand at a faster pace in the second half of this year and over the next two years than it did last year and that it would rise more quickly than potential output. The faster pace of real GDP growth was expected to be supported by diminishing drag on spending from changes in fiscal policy, increases in consumer and business confidence, further improvements in credit availability, and a pickup in the rate of foreign economic growth. The expansion in economic activity was anticipated to slowly reduce resource slack over the projection period, and the unemployment rate was expected to decline gradually to the staff's estimate of its longer-run natural rate in the medium term. In the longer-run outlook, the staff slightly lowered its assumptions for real GDP growth and the level of equilibrium real interest rates.

The staff's forecast for inflation in the near term was revised up a little as recent data showed somewhat faster increases in consumer prices than anticipated. However, the medium-term projection for inflation was revised down slightly, reflecting a reassessment by the staff of the underlying trend in inflation. The staff continued to forecast that inflation would remain below the Committee's longer-run objective of 2 percent over the next few years. With longer-run inflation expectations assumed to remain stable, changes in commodity and import prices expected to be subdued, and slack in labor and product markets anticipated to diminish slowly, inflation was projected to rise gradually toward the Committee's objective. The staff continued to project that inflation would reach the Committee's objective in the longer run.

The staff's economic projections for the June meeting were somewhat different from the forecasts presented at the March meeting, when the FOMC last prepared a Summary of Economic Projections (SEP). The staff's June projections for the unemployment rate, real GDP growth, and inflation over the next few years were all a little lower, on balance, than those in its March forecast.

The staff viewed the extent of uncertainty around its June projections for real GDP growth and the unemployment rate as roughly in line with the average over the past 20 years. Nonetheless, the risks to the forecast for real GDP growth were viewed as tilted a little to the downside, as neither monetary policy nor fiscal policy was seen as being well positioned to help the economy withstand adverse shocks. At the same time, the staff viewed the risks around its outlook for the unemployment rate and for inflation as roughly balanced.

Participants' Views on Current Conditions and the Economic Outlook

In conjunction with this FOMC meeting, the meeting participants submitted their assessments of real output growth, the unemployment rate, inflation, and the target federal funds rate for each year from 2014 through 2016 and over the longer run, under each participant's judgment of appropriate monetary policy.[3] 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 SEP, which is attached as an addendum to these minutes.

In their discussion of the economic situation and the outlook, meeting participants viewed the information received over the intermeeting period as suggesting that economic activity was rebounding in the second quarter following a surprisingly large decline in real GDP in the first quarter of the year. Labor market conditions generally improved further. Although participants marked down their expectations for average growth of real GDP over the first half of 2014, their projections beginning in the second half of 2014 changed little. Over the next two and a half years, they continued to expect economic activity to expand at a rate sufficient to lead to a further decline in the unemployment rate to levels close to their current assessments of its longer-run normal value. Among the factors anticipated to support the sustained economic expansion were accommodative monetary policy, diminished drag from fiscal restraint, further gains in household net worth, improving credit conditions for households and businesses, and rising employment and wages. While inflation was still seen as running below the Committee's longer-run objective, longer-run inflation expectations remained stable and the Committee anticipated that inflation would move back toward its 2 percent objective over the forecast period. Most participants viewed the risks to the outlook for the economy, the labor market, and inflation as broadly balanced.

Household spending appeared to have risen moderately, on balance, in recent months, with sales of motor vehicles, in particular, rising strongly. However, several participants read the recent soft information on retail sales and health-care spending as raising some concern about the underlying strength in consumer spending. A couple of participants noted that, to date, consumer spending had been supported importantly by gains in household net worth while income gains had been held back by only modest increases in wages. In their view, an important element in the economic outlook was a pickup in income, from higher wages as well as ongoing employment gains, that would be expected to support a sustained rise in consumer spending.

The recovery in the housing sector was reported to have remained slow in all but a few areas of the country. Many participants expressed concern about the still-soft indicators of residential construction, and they discussed a range of factors that might be contributing to either a temporary delay in the housing recovery or a persistently lower level of homebuilding than previously anticipated. Despite attractive mortgage rates, housing demand was seen as being damped by such factors as restrictive credit conditions, particularly for households with low credit scores; high down payments; or low demand among younger homebuyers, due in part to the burden of student loan debt. Others noted supply constraints, pointing to shortages of lots, low inventories of desirable homes for sale, an overhang of homes associated with foreclosures or seriously delinquent mortgages, or rising construction costs. Several other participants suggested the possibility that more persistent structural changes in housing demand associated with an aging population and evolving lifestyle preferences were boosting demand for multifamily units at the expense of single-family homes.

Information from participants' business contacts suggested capital spending was likely to increase going forward. Contacts in a number of Districts reported that they were generally optimistic about the business outlook, although in a couple of regions respondents remained cautious about prospects for stronger economic growth or worried about a renewal of federal fiscal restraint after the current congressional budget agreement expires. Among the industries cited as relatively strong in recent months were transportation, energy, telecommunications, and manufacturing, particularly motor vehicles. Some participants commented that their contacts in small and medium-sized businesses reported an improved outlook for sales, and several heard businesses more generally discuss plans to increase capital expenditures. One par-

[3] Four members of the Board of Governors and the presidents of the 12 Federal Reserve Banks submitted projections. Governor Brainard took office on June 16, 2014, and participated in the June 17–18, 2014, meeting; she was not able to submit economic projections.

ticipant noted that District businesses were investing largely to meet replacement needs, while another suggested that the backlog of such needs would likely provide some impetus to business investment.

Favorable financial conditions appeared be supporting economic activity. While information about mortgage lending was mixed, a number of participants reported increases in C&I lending by banks in their Districts, a pickup in loan demand at banks, or better credit quality for borrowers. In addition, small businesses reported improvements in credit availability. However, participants also discussed whether some recent trends in financial markets might suggest that investors were not appropriately taking account of risks in their investment decisions. In particular, low implied volatility in equity, currency, and fixed-income markets as well as signs of increased risk-taking were viewed by some participants as an indication that market participants were not factoring in sufficient uncertainty about the path of the economy and monetary policy. They agreed that the Committee should continue to carefully monitor financial conditions and to emphasize in its communications the dependence of its policy decisions on the evolution of the economic outlook; it was also pointed out that, where appropriate, supervisory measures should be applied to address excessive risk-taking and associated financial imbalances. At the same time, it was noted that monetary policy needed to continue to promote the favorable financial conditions required to support the economic expansion.

In discussing economic developments abroad, a couple of participants noted that recent monetary policy actions by the ECB and the Bank of Japan had improved the outlook for economic activity in those areas and could help return inflation to target. Several others, however, remained concerned that persistent low inflation in Europe and Japan could eventually erode inflation expectations more broadly. And a couple of participants expressed uncertainty about the outlook for economic growth in Japan and China. In addition, several saw developments in Iraq and Ukraine as posing possible downside risks to global economic activity or potential upside risks to world oil prices.

Labor market conditions generally continued to improve over the intermeeting period. That improvement was evidenced by the decline in the unemployment rate as well as by changes in other indicators, such as solid gains in nonfarm payrolls, a low level of new claims for unemployment insurance, uptrends in quits and job openings, and more positive views of job availability by households. In assessing labor market conditions, participants again offered a range of views on how far conditions in the labor market were from those associated with maximum employment. Many judged that slack remained elevated, and a number of them thought it was greater than measured by the official unemployment rate, citing, in particular, the still-high level of workers employed part time for economic reasons or the depressed labor force participation rate. Even so, several participants pointed out that both long- and short-term unemployment and measures that include marginally attached workers had declined. Most participants projected the improvement in labor market conditions to continue, with the unemployment rate moving down gradually over the medium term. However, a couple of participants anticipated that the decline in unemployment would be damped as part-time workers shift to full-time jobs and as nonparticipants rejoin the labor force, while a few others commented that they expected no lasting reversal of the decline in labor force participation.

Aggregate wage measures continued to rise at only a modest rate, and reports on wages from business contacts and surveys in a number of Districts were mixed. Several of those reports pointed to an absence of wage pressures, while some others indicated that tight labor markets or shortages of skilled workers were leading to upward pressure on wages in some areas or occupations and that an increasing proportion of small businesses were planning to raise wages. Participants discussed the prospects for wage increases to pick up as slack in the labor market diminishes. Several noted that a return to growth in real wages in line with productivity growth would provide welcome support for household spending.

Readings on a range of price measures—including the PCE price index, the CPI, and a number of the analytical measures developed at the Reserve Banks—appeared to provide evidence that inflation had moved up recently from low levels earlier in the year, consistent with the Committee’s forecast of a gradual increase in inflation over the medium term. Reports from business contacts were mixed, spanning an absence of price pressures in some Districts and rising input costs in others. Some participants expressed concern about the persistence of below-trend inflation, and a couple of them suggested that the Committee may need to allow the unemployment rate to move below its longer-run normal level for a time in order keep inflation expectations anchored and return inflation to its 2 percent target, though one participant emphasized the risks of doing so. In contrast, some others expected a faster pickup in inflation or saw upside risks to inflation and inflation expectations because they anticipated a more rapid decline in economic slack.

During their consideration of issues related to monetary policy over the medium term, participants generally supported the Committee's current guidance about the likely path of its asset purchases and about its approach to determining the timing of the first increase in the federal funds rate and the path of the policy rate thereafter. Participants offered views on a range of issues related to policy communications. Some participants suggested that the Committee's communications about its forward guidance should emphasize more strongly that its policy decisions would depend on its ongoing assessment across a range of indicators of economic activity, labor market conditions, inflation and inflation expectations, and financial market developments. In that regard, circumstances that might entail either a slower or a more rapid removal of policy accommodation were cited. For example, a number of participants noted their concern that a more gradual approach might be appropriate if forecasts of above-trend economic growth later this year were not realized. And a couple suggested that the Committee might need to strengthen its commitment to maintain sufficient policy accommodation to return inflation to its target over the medium term in order to prevent an undesirable decline in inflation expectations. Alternatively, some other participants expressed concern that economic growth over the medium run might be faster than currently expected or that the rate of growth of potential output might be lower than currently expected, calling for a more rapid move to begin raising the federal funds rate in order to avoid significantly overshooting the Committee's unemployment and inflation objectives.

While the current asset purchase program is not on a preset course, participants generally agreed that if the economy evolved as they anticipated, the program would likely be completed later this year. Some committee members had been asked by members of the public whether, if tapering in the pace of purchases continues as expected, the final reduction would come in a single $15 billion per month reduction or in a $10 billion reduction followed by a $5 billion reduction. Most participants viewed this as a technical issue with no substantive macroeconomic consequences and no consequences for the eventual decision about the timing of the first increase in the federal funds rate—a decision that will depend on the Committee's evolving assessments of actual and expected progress toward its objectives. In light of these considerations, participants generally agreed that if incoming information continued to support its expectation of improvement in labor market conditions and a return of inflation toward its longer-run objective, it would be appropriate to complete asset purchases with a $15 billion reduction in the pace of purchases in order to avoid having the small, remaining level of purchases receive undue focus among investors. If the economy progresses about as the Committee expects, warranting reductions in the pace of purchases at each upcoming meeting, this final reduction would occur following the October meeting.

Committee Policy Action

In their discussion of monetary policy in the period ahead, members judged that information received since the Federal Open Market Committee met in April indicated that economic activity was rebounding from the decline in the first quarter of the year. Labor market indicators generally showed further improvement. The unemployment rate, though lower, remained elevated. Household spending appeared to be rising moderately and business fixed investment resumed its advance, while the recovery in the housing sector remained slow. Fiscal policy was restraining economic growth, although the extent of restraint was diminishing. The Committee expected that, with appropriate policy accommodation, economic activity would expand at a moderate pace and labor market conditions would continue to improve gradually, moving toward those the Committee judges consistent with its dual mandate. Members saw the risks to the outlook for the economy and the labor market as nearly balanced. Inflation was running below the Committee's longer-run objective, but the Committee anticipated that with stable inflation expectations and strengthening economic activity, inflation would, over time, return to the Committee's 2 percent objective. However, members continued to recognize that inflation persistently below its longer-run objective could pose risks to economic performance and agreed to monitor inflation developments closely for evidence that inflation was moving back toward its objective over the medium term.

Members judged that the economy had sufficient underlying strength to support ongoing improvement in labor market conditions and a return of inflation toward the Committee's longer-run 2 percent objective, and thus agreed that a further measured reduction in the pace of the Committee's asset purchases was appropriate at this meeting. Accordingly, the Committee agreed that beginning in July, it would add to its holdings of agency MBS at a pace of $15 billion per month rather than $20 billion per month, and it would add to its holdings of Treasury securities at a pace of $20 billion per month rather than $25 billion per month. Members again judged that, if incoming information broadly supported the Committee's expectations for ongoing progress toward meeting its dual objectives of maximum employment and inflation of 2 percent, the Committee would likely reduce the pace of asset purchases in further measured steps at future meetings. The Committee reiterated, however, that purchases were not on a preset course, and that its decisions about the pace of purchases would remain contingent on its outlook for the labor market and inflation as well as its assessment of the likely efficacy and costs of such purchases.

The Committee agreed to maintain its target range for the federal funds rate and to reiterate its forward guidance about how it would assess the appropriate timing of the first increase in the target rate and the anticipated behavior of the federal funds rate after it is raised. The guidance continued to emphasize that the Committee's decisions about how long to maintain the current target range for the federal funds rate would depend on its assessment of actual and expected progress toward its objectives of maximum employment and 2 percent inflation. The Committee again stated that it currently anticipated that it likely would be appropriate to maintain the current target range for the federal funds rate for a considerable time after the asset purchase program ends, especially if projected inflation continued to run below the Committee's 2 percent longer-run goal, and provided that longer-term inflation expectations remained well anchored. The forward guidance also reiterated the Committee's expectation that even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer 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 SOMA in accordance with the following domestic policy directive:

> "Consistent with its statutory mandate, the Federal Open Market Committee seeks monetary and financial conditions that will foster maximum employment and price stability. In particular, 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 undertake open market operations as necessary to maintain such conditions. Beginning in July, the Desk is directed to purchase longer-term Treasury securities at a pace of about $20 billion per month and to purchase agency mortgage-backed securities at a pace of about $15 billion per month. The Committee also directs the Desk to engage in dollar roll and coupon swap transactions as necessary to facilitate settlement of the Federal Reserve's agency mortgage-backed securities transactions. The Committee directs the Desk to maintain its policy of rolling over maturing Treasury securities into new issues and its policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in agency mortgage-backed securities. 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 2:00 p.m.:

> "Information received since the Federal Open Market Committee met in April indicates that growth in economic activity has rebounded in recent months. Labor market indicators generally showed further improvement. The unemployment rate, though lower, remains elevated. Household spending appears to be rising moderately and business fixed investment resumed its advance, while the recovery in the housing sector remained slow. Fiscal policy is restraining economic growth, although the extent of restraint is diminishing. Inflation has been running below the Committee's longer-run objective, but 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 that,

with appropriate policy accommodation, economic activity will expand at a moderate pace and labor market conditions will continue to improve gradually, moving toward those the Committee judges consistent with its dual mandate. The Committee sees the risks to the outlook for the economy and the labor market as nearly balanced. The Committee recognizes that inflation persistently below its 2 percent objective could pose risks to economic performance, and it is monitoring inflation developments carefully for evidence that inflation will move back toward its objective over the medium term.

The Committee currently judges that there is sufficient underlying strength in the broader economy to support ongoing improvement in labor market conditions. In light of the cumulative progress toward maximum employment and the improvement in the outlook for labor market conditions since the inception of the current asset purchase program, the Committee decided to make a further measured reduction in the pace of its asset purchases. Beginning in July, the Committee will add to its holdings of agency mortgage-backed securities at a pace of $15 billion per month rather than $20 billion per month, and will add to its holdings of longer-term Treasury securities at a pace of $20 billion per month rather than $25 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 of rolling over maturing Treasury securities at auction. The Committee's sizable and still-increasing holdings of longer-term securities should maintain downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative, which in turn should promote a stronger economic recovery and help to ensure that inflation, over time, is at the rate most consistent with the Committee's dual mandate.

The Committee will closely monitor incoming information on economic and financial developments in coming months and will continue its purchases of Treasury and agency mortgage-backed securities, and employ its other policy tools as appropriate, until the outlook for the labor market has improved substantially in a context of price stability. If incoming information broadly supports the Committee's expectation of ongoing improvement in labor market conditions and inflation moving back toward its longer-run objective, the Committee will likely reduce the pace of asset purchases in further measured steps at future meetings. However, asset purchases are not on a preset course, and the Committee's decisions about their pace will remain contingent on the Committee's outlook for the labor market and inflation as well as its assessment of the likely efficacy and costs of such purchases.

To support continued progress toward maximum employment and price stability, the Committee today reaffirmed its view that a highly accommodative stance of monetary policy remains appropriate. In determining how long to maintain the current 0 to ¼ percent target range for the federal funds rate, the Committee will assess progress—both realized and expected—toward its objectives of maximum employment and 2 percent inflation. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. The Committee continues to anticipate, based on its assessment of these factors, that it likely will be appropriate to maintain the current target range for the federal funds rate for a considerable time after the asset purchase program ends, especially if projected inflation continues to run below the Committee's 2 percent longer-run goal, and provided that longer-term inflation expectations remain well anchored.

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. The Committee currently anticipates that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run."

Voting for this action: Janet L. Yellen, William C. Dudley, Lael Brainard, Stanley Fischer, Richard W.

Fisher, Narayana Kocherlakota, Loretta J. Mester, Charles I. Plosser, Jerome H. Powell, and Daniel K. Tarullo.

Voting against this action: None.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, July 29–30. The meeting adjourned at 11:10 a.m. on June 18, 2014.

Notation Vote

By notation vote completed on May 19, 2014, the Committee unanimously approved the minutes of the Committee meeting held on April 29–30, 2014.

William B. English
Secretary

Addendum: Summary of Economic Projections

In conjunction with the June 17–18, 2014, Federal Open Market Committee (FOMC) meeting, meeting participants submitted their assessments of real output growth, the unemployment rate, inflation, and the target federal funds rate for each year from 2014 through 2016 and over the longer run.[4] 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.

[4] Four members of the Board of Governors and the presidents of the 12 Federal Reserve Banks submitted projections. Governor Brainard took office on June 16, 2014, and participated in the June 17–18, 2014, FOMC meeting; she was not able to submit economic projections.

Overall, FOMC participants expected that, under appropriate monetary policy, economic growth would pick up notably in the second half of 2014 and remain in 2015 and 2016 above their estimates of the longer-run normal rate of economic growth. Consistent with that outlook, the unemployment rate was projected to continue to decline toward its longer-run normal level over the projection period (table 1 and figure 1). The majority of participants projected that inflation, as measured by the annual change in the price index for personal consumption expenditures (PCE), would rise to a level at or slightly below the Committee's 2 percent objective in 2016.

The majority of participants expected that highly accommodative monetary policy would remain appropriate over the next few years to foster progress toward the Federal Reserve's longer-run objectives. As shown in figure 2, all but one of the participants anticipated that it would be appropriate to wait at least until 2015 before beginning to increase the federal funds rate, and most projected that it would then be appropriate to raise the target federal funds rate fairly gradually. Given their economic outlooks, most participants judged that it would be appropriate to continue gradually slowing the pace of the Committee's purchases of longer-term securities and complete the asset purchase program later this year.

Most participants saw the uncertainty associated with their outlooks for economic growth, the unem-

Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, June 2014
Percent

Variable	Central tendency[1]				Range[2]			
	2014	2015	2016	Longer run	2014	2015	2016	Longer run
Change in real GDP	2.1 to 2.3	3.0 to 3.2	2.5 to 3.0	2.1 to 2.3	1.9 to 2.4	2.2 to 3.6	2.2 to 3.2	1.8 to 2.5
March projection	2.8 to 3.0	3.0 to 3.2	2.5 to 3.0	2.2 to 2.3	2.1 to 3.0	2.2 to 3.5	2.2 to 3.4	1.8 to 2.4
Unemployment rate	6.0 to 6.1	5.4 to 5.7	5.1 to 5.5	5.2 to 5.5	5.8 to 6.2	5.2 to 5.9	5.0 to 5.6	5.0 to 6.0
March projection	6.1 to 6.3	5.6 to 5.9	5.2 to 5.6	5.2 to 5.6	6.0 to 6.5	5.4 to 5.9	5.1 to 5.8	5.2 to 6.0
PCE inflation	1.5 to 1.7	1.5 to 2.0	1.6 to 2.0	2.0	1.4 to 2.0	1.4 to 2.4	1.5 to 2.0	2.0
March projection	1.5 to 1.6	1.5 to 2.0	1.7 to 2.0	2.0	1.3 to 1.8	1.5 to 2.4	1.6 to 2.0	2.0
Core PCE inflation[3]	1.5 to 1.6	1.6 to 2.0	1.7 to 2.0		1.4 to 1.8	1.5 to 2.4	1.6 to 2.0	
March projection	1.4 to 1.6	1.7 to 2.0	1.8 to 2.0		1.3 to 1.8	1.5 to 2.4	1.6 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 March projections were made in conjunction with the meeting of the Federal Open Market Committee on March 18–19, 2014.

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, 2014–16 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

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 March 2014, the numbers of FOMC participants who judged that the first increase in the target federal funds rate would occur in 2014, 2015, and 2016 were, respectively, 1, 13, and 2. 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.

ployment rate, and inflation as similar to that of the past 20 years. In addition, most participants considered the risks to the outlook for real GDP growth and the unemployment rate to be broadly balanced, and a majority saw the risks to inflation as broadly balanced. However, some saw the risks to their forecasts for economic growth or inflation as tilted to the downside, and a couple saw the risks to their forecasts for inflation as tilted to the upside.

The Outlook for Economic Activity

Participants generally projected that, conditional on their individual assumptions about appropriate monetary policy, real GDP growth would pick up notably in the second half of this year and remain in 2015 and 2016 above their estimates of the longer-run normal rate of output growth. All participants revised down their projections of real GDP growth for the first half of 2014 compared with their projections in March, but most left their forecasts for the remainder of the projection period largely unchanged. Participants generally judged that real GDP growth in the first half of this year was held down by transitory factors depressing output early in the year, and they pointed to a number of factors that they expected would continue to contribute to a pickup in economic growth later this year and next, including rising household net worth, diminished restraint from fiscal policy, improving labor market conditions, and highly accommodative monetary policy. The central tendencies of participants' projections for real GDP growth were 2.1 to 2.3 percent in 2014, 3.0 to 3.2 percent in 2015, and 2.5 to 3.0 percent in 2016. The central tendency for the longer-run normal rate of growth of real GDP was 2.1 to 2.3 percent, only slightly lower than in March.

Participants continued to anticipate a gradual decline in the unemployment rate over the projection period. The central tendencies of participants' forecasts for the unemployment rate in the fourth quarter of each year were 6.0 to 6.1 percent in 2014, 5.4 to 5.7 percent in 2015, and 5.1 to 5.5 percent in 2016. Nearly all participants revised down their projected paths for the unemployment rate this year and next relative to their March projections, with the majority pointing to the decline in the unemployment rate in recent months as a reason for the downward revision. 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 also edged down, to 5.2 to 5.5 percent. Most participants projected that the unemployment rate would be close to their individual estimates of its longer-run level at the end of 2016.

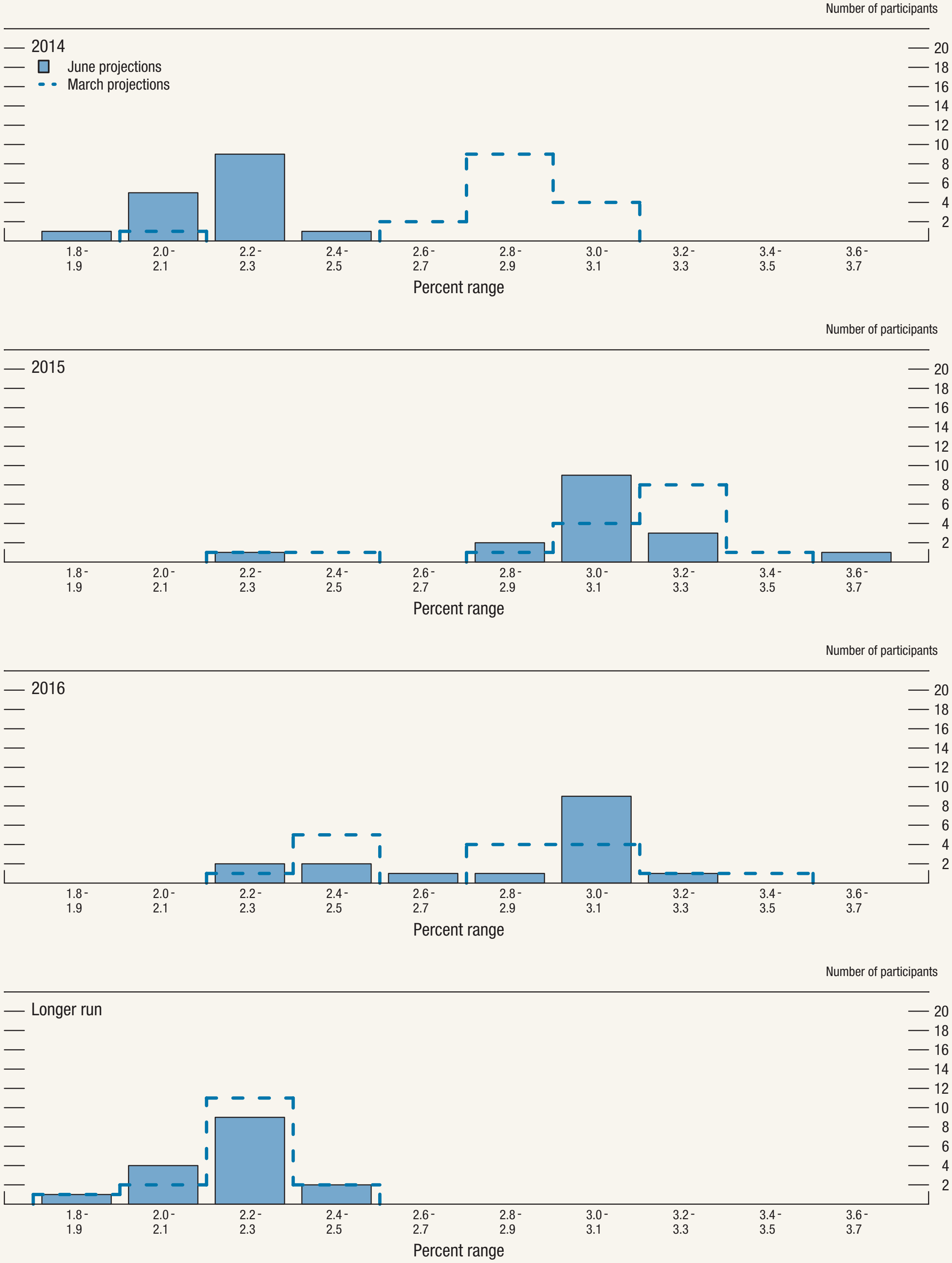
Figures 3.A and 3.B show that participants continued to hold a range of views regarding the likely outcomes for real GDP growth and the unemployment rate over the next two years. The diversity of views reflected their individual assessments of the rate at which the headwinds that have been holding back the pace of the economic recovery would abate and of the anticipated path for foreign economic activity, the trajectory for growth in household net worth, and the appropriate path of monetary policy. Relative to March, the dispersion of participants' projections for real GDP growth narrowed a bit in 2014 but was largely unchanged over the next two years, and the dispersion of projections for the unemployment rate over the entire projection period was little changed.

The Outlook for Inflation

Compared with March, the central tendencies of participants' projections for inflation were largely unchanged for all years in the projection period, although many participants marked up a bit their projections for inflation in 2014. The vast majority of participants anticipated that, on average, both headline and core inflation would rise gradually over the next few years, and the majority of participants expected headline inflation to be at or slightly below the Committee's 2 percent objective in 2016. Specifically, the central tendencies for PCE inflation were 1.5 to 1.7 percent in 2014, 1.5 to 2.0 percent in 2015, and 1.6 to 2.0 percent in 2016. The central tendencies of the forecasts for core inflation were broadly similar to those for the headline measure. It was noted that some combination of stable inflation expectations and steadily diminishing resource slack was likely to contribute to a gradual rise of inflation back toward the Committee's longer-run objective of 2 percent.

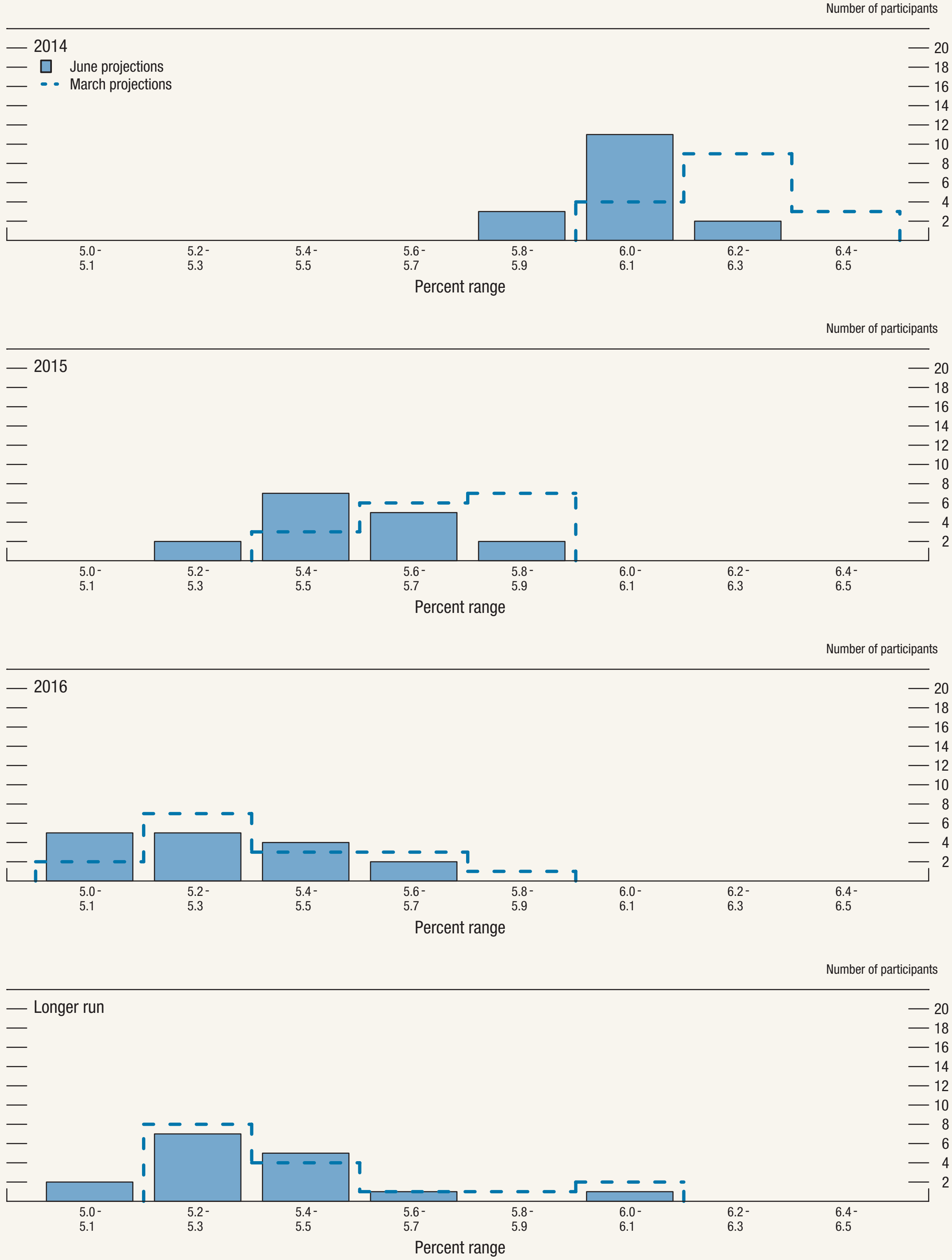
Figures 3.C and 3.D provide information on the diversity of participants' views about the outlook for inflation. The ranges of participants' projections for overall inflation were little changed relative to March. The forecasts for PCE inflation in 2016 were at or below the Committee's longer-run objective. Similar to the projections for headline inflation, the projections for core inflation in 2016 were concentrated at or below 2 percent.

Figure 3.A. Distribution of participants' projections for the change in real GDP, 2014–16 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, 2014–16 and over the longer run

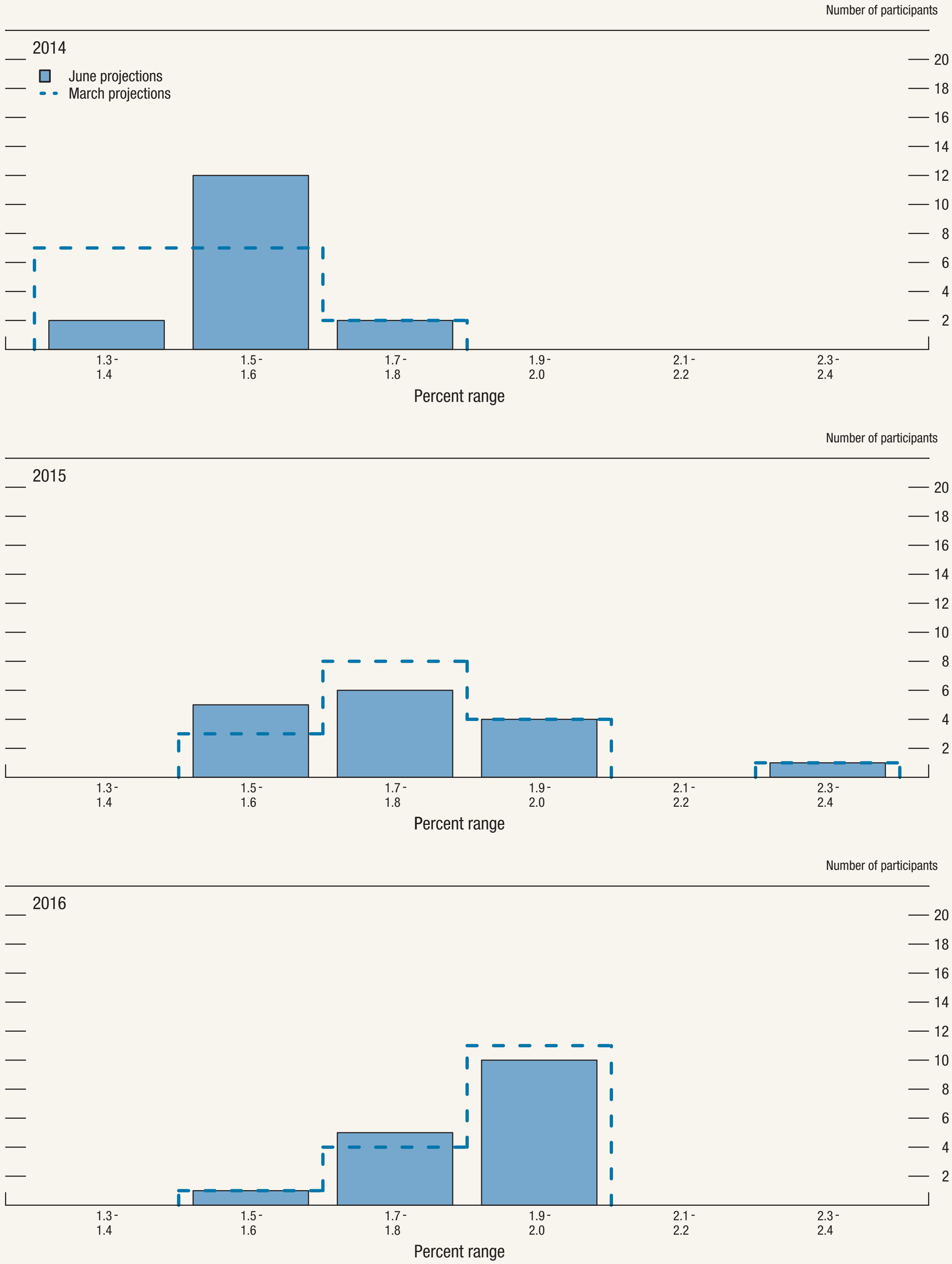


Note: Definitions of variables are in the general note to table 1.

Figure 3.C. Distribution of participants' projections for PCE inflation, 2014–16 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, 2014–16



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

Appropriate Monetary Policy

As indicated in figure 2, nearly all participants judged that low levels of the federal funds rate would remain appropriate for the next few years. In particular, 12 participants thought that the first increase in the target federal funds rate would not be warranted until sometime in 2015, and 3 judged that policy firming would likely not be appropriate until 2016. Only 1 participant thought that an increase in the federal funds rate would be warranted in 2014.

All participants projected that the unemployment rate would be below 6 percent at the end of the year in which they judged the initial increase in the federal funds rate to be warranted, and all but one anticipated that inflation would be at or below the Committee's longer-run objective at that time. Most participants projected that the unemployment rate would remain above their estimates of its longer-run normal level at the end of the year in which they saw the federal funds rate increasing from its effective lower bound.

Figure 3.E provides the distribution of participants' judgments regarding the appropriate level of the target federal funds rate at the end of each calendar year from 2014 to 2016 and over the longer run. As noted earlier, nearly all participants judged that economic conditions would warrant maintaining the current exceptionally low level of the federal funds rate at least until 2015. Relative to their projections in March, the median values of the federal funds rate at the end of 2015 and 2016 increased 13 basis points and 25 basis points to 1.13 percent and 2.50 percent, respectively, while the mean values rose 7 basis points and 11 basis points to 1.18 percent and 2.53 percent, respectively. The dispersion of projections for the value of the federal funds rate was little changed in 2015 but widened slightly in 2016. Most participants expected that the federal funds rate at the end of 2016 would still be significantly below their individual assessments of its longer-run level. For about half of these participants, the low level of the federal funds rate at that time was associated with inflation well below the Committee's 2 percent objective. In contrast, the rest of these participants saw the federal funds rate at the end of 2016 as still significantly low despite their projections that the unemployment rate would be close to or below their individual longer-run projections and inflation would be at or close to 2 percent at that time. These participants cited some combination of a lower equilibrium real interest rate, continuing headwinds from the financial crisis and subsequent recession, and a desire to raise the federal funds rate at a gradual pace after liftoff as explanations for the still-low level of the projected federal funds rate at the end of 2016. A couple of participants also mentioned broader measures of labor market slack that may take longer to return to their normal levels than the unemployment rate. Estimates of the longer-run level of the federal funds rate ranged from 3¼ to about 4¼ percent, reflecting the Committee's inflation objective of 2 percent and participants' individual judgments regarding the appropriate longer-run level of the real federal funds rate in the absence of further shocks to the economy. Compared with March, some participants revised down their estimates of the longer-run federal funds rate, with a lower assessment of the longer-run level of potential output growth cited as a contributing factor for the majority of those revisions. As a result, the median estimate of the longer-run federal funds rate shifted down to 3.75 percent from 4 percent in March, while its mean value declined 11 basis points to 3.78 percent.

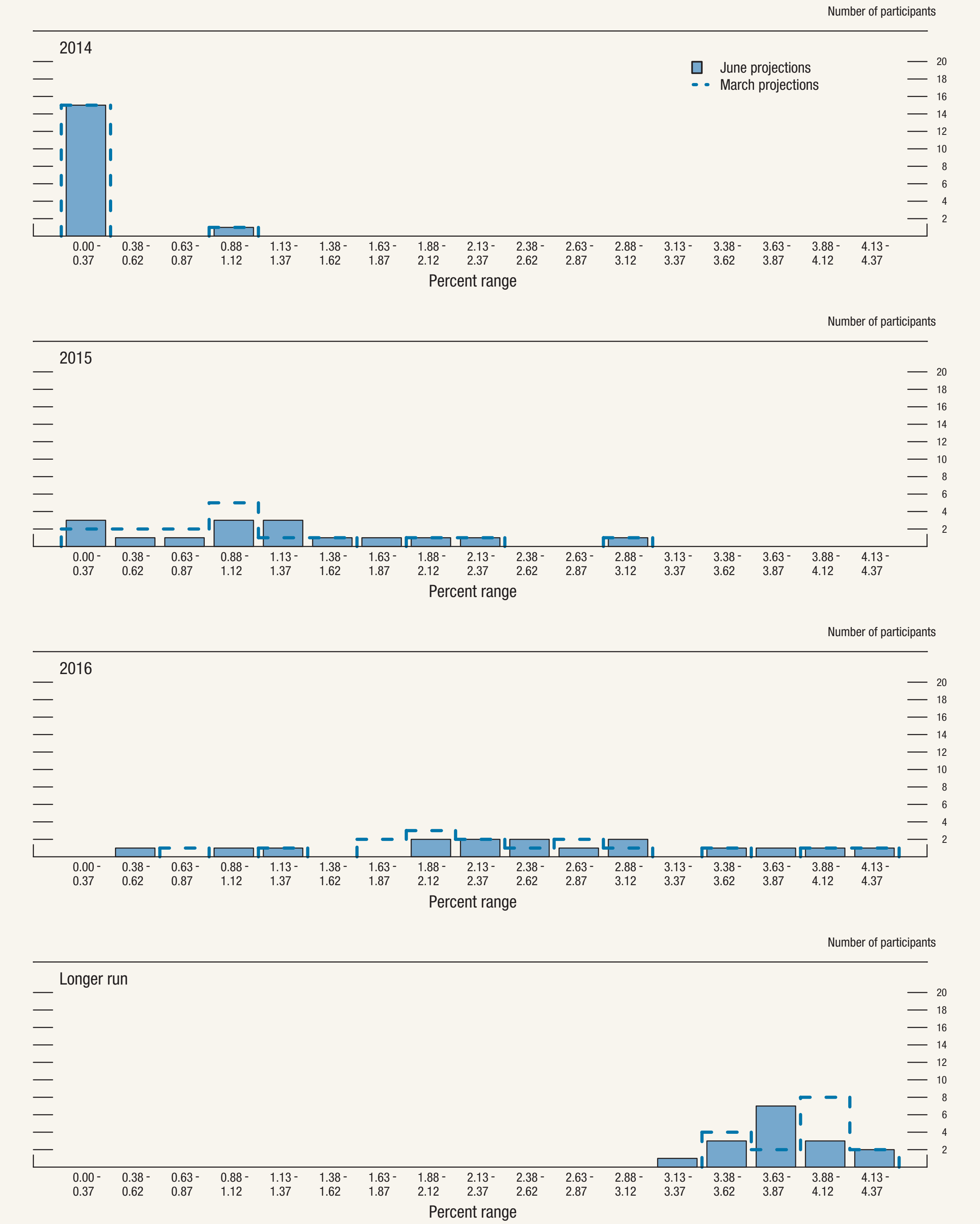
Participants also described their views regarding the appropriate path of the Federal Reserve's balance sheet. Conditional on their respective economic outlooks, most participants judged that it would be appropriate to continue to reduce the pace of the Committee's purchases of longer-term securities in measured steps and to conclude the purchases later this year. A couple of participants judged that a more rapid reduction in the pace of purchases and an earlier end to the asset purchase program would be appropriate.

Participants' views of the appropriate path for monetary policy were informed by their judgments about the state of the economy, including the values of the unemployment rate and other labor market indicators that would be consistent with maximum employment, the extent to which the economy was currently falling short of maximum employment, the prospects for inflation to return to the Committee's longer-term objective of 2 percent, and the balance of risks around the outlook. Many participants also mentioned the prescriptions of various monetary policy rules as factors they considered in judging the appropriate path for the federal funds rate.

Uncertainty and Risks

The vast majority of participants continued to judge the levels of uncertainty about their projections for real GDP growth and the unemployment rate as

Figure 3.E. Distribution of participants' projections for the target federal funds rate, 2014–16 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.

Table 2. Average historical projection error ranges
Percentage points

Variable	2014	2015	2016
Change in real GDP[1]	±1.4	±2.0	±2.1
Unemployment rate[1]	±0.4	±1.2	±1.8
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 1994 through 2013 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. For more information, see 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), available at http://www.federalreserve.gov/pubs/feds/2007/200760/200760abs.html; and Board of Governors of the Federal Reserve System, Division of Research and Statistics (2014), "Updated Historical Forecast Errors," memorandum, April 9, http://www.federalreserve.gov/foia/files/20140409-historical-forecast-errors.pdf.

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.

broadly similar to the norms during the previous 20 years (figure 4).[5] Most participants continued to judge the risks to real GDP growth and the unemployment rate to be broadly balanced, although a few participants viewed the risks as weighted to the downside, reflecting, for example, their concerns about the limited ability of monetary policy at the zero lower bound to respond to negative shocks to the economy as well as external economic and geopolitical risks. Similar to March, nearly all participants continued to judge the risks to the unemployment rate to be broadly balanced.

Almost all participants saw the level of uncertainty and the balance of risks around their forecasts for overall PCE inflation and core inflation as little changed from March. Most participants continued to judge the levels of uncertainty associated with their forecasts for the two inflation measures to be broadly similar to historical norms, and a majority continued to see the risks to those projections as broadly balanced. A few participants, however, viewed the risks to their inflation forecasts as tilted to the downside, reflecting, for example, the possibilities that the recent low levels of inflation could prove more persistent than anticipated, and that the upward pull on prices from inflation expectations might be weaker than assumed. Conversely, two participants saw upside risks to inflation, with one citing uncertainty about the timing and efficacy of the Committee's withdrawal of accommodation.

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 1994 through 2013. 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 1.6 to 4.4 percent in the current year, 1.0 to 5.0 percent in the second year, and 0.9 to 5.1 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 July 29–30, 2014

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 29, 2014, at 10:00 a.m. and continued on Wednesday, July 30, 2014, at 9:00 a.m.

Present

Janet L. Yellen
Chair

William C. Dudley
Vice Chairman

Lael Brainard

Stanley Fischer

Richard W. Fisher

Narayana Kocherlakota

Loretta J. Mester

Charles I. Plosser

Jerome H. Powell

Daniel K. Tarullo

Charles L. Evans, Jeffrey M. Lacker, Dennis P. Lockhart, and John C. Williams
Alternate Members of the Federal Open Market Committee

James Bullard, Esther L. George, and Eric Rosengren
Presidents of the Federal Reserve Banks of St. Louis, Kansas City, and Boston, respectively

William B. English
Secretary and Economist

Matthew M. Luecke
Deputy 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

James A. Clouse, Thomas A. Connors, Evan F. Koenig, Thomas Laubach, Michael P. Leahy, Paolo A. Pesenti, Mark E. Schweitzer, and William Wascher
Associate Economists

Simon Potter
Manager, System Open Market Account

Lorie K. Logan
Deputy Manager, System Open Market Account

Robert deV. Frierson[1]
Secretary of the Board, Office of the Secretary, Board of Governors

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

Matthew J. Eichner[1]
Deputy Director, Division of Research and Statistics, Board of Governors

Maryann F. Hunter
Deputy Director, Division of Banking Supervision and Regulation, Board of Governors

Stephen A. Meyer and William R. Nelson
Deputy Directors, Division of Monetary Affairs, Board of Governors

Jon W. Faust and Stacey Tevlin
Special Advisers to the Board, Office of Board Members, Board of Governors

Trevor A. Reeve
Special Adviser to the Chair, Office of Board Members, 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

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

David E. Lebow[2] **and Michael G. Palumbo**
Associate Directors, Division of Research and Statistics, Board of Governors

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1 Attended the joint session of the Federal Open Market Committee and the Board of Governors.

2 Attended the portion of the meeting following the joint session of the Federal Open Market Committee and the Board of Governors.

Fabio M. Natalucci[1] and Gretchen C. Weinbach[1]
Associate Directors, Division of Monetary Affairs, Board of Governors

Jane E. Ihrig
Deputy Associate Director, Division of Monetary Affairs, Board of Governors

Eric C. Engstrom, Patrick E. McCabe,[1] and Karen M. Pence
Advisers, Division of Research and Statistics, Board of Governors

Penelope A. Beattie[1]
Assistant to the Secretary, Office of the Secretary, Board of Governors

Francisco Covas and Elizabeth Klee[1]
Section Chiefs, Division of Monetary Affairs, Board of Governors

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

Katie Ross[1]
Manager, Office of the Secretary, Board of Governors

Elmar Mertens
Senior Economist, Division of Monetary Affairs, Board of Governors

Peter M. Garavuso
Records Project Manager, Division of Monetary Affairs, Board of Governors

Gregory L. Stefani
First Vice President, Federal Reserve Bank of Cleveland

David Altig, Ron Feldman, Jeff Fuhrer, and Daniel G. Sullivan
Executive Vice Presidents, Federal Reserve Banks of Atlanta, Minneapolis, Boston, and Chicago, respectively

Michael Dotsey and Meg McConnell
Senior Vice Presidents, Federal Reserve Banks of Philadelphia and New York, respectively

Fred Furlong
Group Vice President, Federal Reserve Bank of San Francisco

Antoine Martin,[1] Douglas Tillett, David C. Wheelock, Jonathan L. Willis, and Patricia Zoebel[1]
Vice Presidents, Federal Reserve Banks of New York, Chicago, St. Louis, Kansas City, and New York, respectively

Robert L. Hetzel
Senior Economist, Federal Reserve Bank of Richmond

During the interval between the June and July meetings, Chair Yellen appointed a subcommittee on communications issues chaired by Governor Fischer and including President Mester, Governor Powell, and President Williams. Governor Fischer indicated that the subcommittee would continue the work of previous subcommittees in helping the Committee frame and organize the discussion of a broad range of communications issues.

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

In a joint session of the Federal Open Market Committee (FOMC) and the Board of Governors of the Federal Reserve System, the manager of the System Open Market Account (SOMA) reported on developments in domestic and foreign financial markets. The manager also reported on the System open market operations conducted during the period since the Committee met on June 17–18, 2014, summarized the outcomes of recent test operations of the Term Deposit Facility (TDF), described the results from the fixed-rate overnight reverse repurchase agreement (ON RRP) operational exercise, and reviewed the ongoing effects of recent foreign central bank policy actions on yields on the international portion of the SOMA portfolio. In addition, the manager noted plans for a pilot program for increasing the number of the Open Market Desk's counterparties for agency mortgage-backed securities (MBS) operations to include a few firms that are too small to qualify as primary dealers. 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.

Monetary Policy Normalization

Meeting participants continued their discussion of issues associated with the eventual normalization of the stance and conduct of monetary policy, consistent with the Committee's intention to provide additional information to the public later this year, well before most participants anticipate the first steps in reducing policy accommodation to become appropriate. The staff detailed a possible approach for implementing and communicating monetary policy once the Committee begins to tighten the stance of policy.

The approach reflected the Committee's discussion of normalization strategies and policy tools during the previous two meetings.

Participants expressed general support for the normalization approach outlined by the staff, though some noted reservations about one or more of its features. Almost all participants agreed that it would be appropriate to retain the federal funds rate as the key policy rate, and they supported continuing to target a range of 25 basis points for this rate at the time of liftoff and for some time thereafter. However, one participant preferred to use the range for the federal funds rate as a communication tool rather than as a hard target, and another preferred that policy communications during the normalization period focus on the rate of interest on excess reserves (IOER) and the ON RRP rate in addition to the federal funds rate. Participants agreed that adjustments in the IOER rate would be the primary tool used to move the federal funds rate into its target range and influence other money market rates. In addition, most thought that temporary use of a limited-scale ON RRP facility would help set a firmer floor under money market interest rates during normalization. Most participants anticipated that, at least initially, the IOER rate would be set at the top of the target range for the federal funds rate, and the ON RRP rate would be set at the bottom of the federal funds target range. Alternatively, some participants suggested the ON RRP rate could be set below the bottom of the federal funds target range, judging that it might be possible to begin the normalization process with minimal or no reliance on an ON RRP facility and increase its role only if necessary. However, many other participants thought that such a strategy might result in insufficient control of money market rates at liftoff, which could cause confusion about the likely path of monetary policy or raise questions about the Committee's ability to implement policy effectively.

Participants generally agreed that the ON RRP facility should be only as large as needed for effective monetary policy implementation and should be phased out when it is no longer needed for that purpose. Participants expressed their desire to include features in the facility's design that would limit the Federal Reserve's role in financial intermediation and mitigate the risk that the facility might magnify strains in short-term funding markets during periods of financial stress. They discussed options to address these concerns, including methods for limiting the program's size. Many participants noted that further testing would provide additional information that could help determine the appropriate features to temper the risks that might be associated with an ON RRP facility.

Participants also discussed approaches to normalizing the size and composition of the Federal Reserve's balance sheet. In general, they agreed that the size of the balance sheet should be reduced gradually and predictably. In addition, they believed that, in the long run, the balance sheet should be reduced to the smallest level consistent with efficient implementation of monetary policy and should consist primarily of Treasury securities in order to minimize the effect of the SOMA portfolio on the allocation of credit across sectors of the economy. A few participants noted that the appropriate size of the balance sheet would depend on the Committee's future decisions regarding its framework for monetary policy. Most participants supported reducing or ending reinvestment sometime after the first increase in the target range for the federal funds rate. A few, however, believed that ceasing reinvestment before liftoff was a better approach because it would lead to an earlier reduction in the size of the portfolio. Most participants continued to anticipate that the Committee would not sell MBS, except perhaps to eliminate residual holdings. However, a couple of participants preferred to sell MBS in order to unwind the effect of the Federal Reserve's holdings on mortgage rates relative to other interest rates more rapidly than would occur as a result of repayments of principal alone. Some others noted that, given the uncertainties attending the normalization process and the outlook for the economy and financial markets, it could be helpful to retain the option to sell some assets.

Participants agreed that the Committee should provide additional information to the public regarding the details of normalization well before most participants anticipate the first steps in reducing policy accommodation to become appropriate. They stressed the importance of communicating a clear plan while at the same time noting the importance of maintaining flexibility so that adjustments to the normalization approach could be made as the situation changed and in light of experience. Participants requested additional analysis from the staff on issues related to normalization as background for further discussion at their next meeting. A few participants also suggested that the Committee should solicit additional information from the public regarding the possible effects of an ON RRP facility, but some others pointed out that the Committee would continue to receive such feedback informally in response to its ongoing communications regarding normalization. The Board meeting concluded at the end of the discussion of approaches to policy normalization.

Staff Review of the Economic Situation

The information reviewed for the July 29–30 meeting indicated that real gross domestic product (GDP) rebounded in the second quarter following its first-quarter decline, but it expanded at only a modest pace, on balance, over the first half of the year. Consumer price inflation rose somewhat in the second quarter, but futures prices for energy and agricultural commodities generally were trending down over the next couple of years and longer-run measures of inflation expectations remained stable. The Bureau of Economic Analysis (BEA) released its advance estimate for second-quarter real GDP, along with revised data for earlier periods, on the second day of the FOMC meeting. The staff's assessment of economic activity and inflation in the first half of 2014, based on information available before the meeting began, was broadly consistent with the new information from the BEA.

Measures of labor market conditions generally continued to improve during the intermeeting period. Total nonfarm payroll employment increased strongly in June, and the average monthly gain for the second quarter was the largest since the first quarter of 2012. The unemployment rate declined to 6.1 percent in June, the labor force participation rate was unchanged, and the employment-to-population ratio edged up. The rate of long-duration unemployment moved down, and the share of workers employed part time for economic reasons edged up; both measures remained elevated by historical standards. Initial claims for unemployment insurance declined further in recent weeks. The rate of job openings rose further in May, but the rate of hiring was unchanged and remained at a modest level.

Industrial production increased in the second quarter, as higher output from manufacturers and mines more than offset a decline in the output of electric and natural gas utilities. Capacity utilization also moved higher in the second quarter. Automakers' production schedules indicated that light motor vehicle assemblies would increase in the third quarter, and readings on new orders from national and regional manufacturing surveys were consistent with moderate gains in factory output in the near term.

Real personal consumption expenditures (PCE) rose more quickly in the second quarter than in the first, partly reflecting higher purchases of light motor vehicles. Key factors that tend to influence household spending remained positive in recent months. In particular, gains in equity values and home prices boosted household net worth, and real disposable personal income continued to rise in the second quarter. Consumer sentiment in the Thomson Reuters/University of Michigan Surveys of Consumers edged down in early July but was only slightly below its average over the first half of the year.

Real expenditures for residential investment turned up in the second quarter after declining for two consecutive quarters. Starts of new single-family houses declined in June, but they rose for the quarter as a whole, and the level of permit issuance was consistent with increases in starts in subsequent months. In the multifamily sector, starts and permits also increased, on net, in the second quarter. Existing home sales moved up during the second quarter but remained below year-earlier levels, while new home sales declined. Home prices continued to rise through May, though the rate of increase was less rapid than earlier in the year.

Real private expenditures for business equipment and intellectual property products increased in the second quarter. Nominal new orders for nondefense capital goods were little changed, on net, in May and June; however, the level of orders was above that for shipments, pointing to increases in shipments in subsequent months. Other forward-looking indicators, such as national and regional surveys of business conditions, also generally suggested moderate increases in business equipment spending in the near term. Real business expenditures for nonresidential construction also increased in the second quarter. Meanwhile, business inventories generally appeared well aligned with sales, apart from the energy sector, where inventories remained below year-earlier levels.

Real federal government purchases decreased over the first half of the year, reflecting ongoing fiscal consolidation and continued declines in defense spending. In contrast, real state and local government purchases increased in the second quarter, as payrolls expanded at a faster pace than in the first quarter and outlays for construction moved higher.

The U.S. international trade deficit narrowed in May as imports fell and exports rose. The rise in exports was concentrated in petroleum products and automotive parts. The fall in imports was led by declines in oil and consumer goods. For the second quarter overall, net exports exerted a moderate drag on the change in U.S. real GDP, compared with a more substantial negative contribution in the first quarter.

U.S. consumer prices, as measured by the PCE price index, increased at a faster pace in the second quarter than in the first and were about 1½ percent higher than a year earlier. Consumer energy price inflation rose in the second quarter, but retail gasoline prices, measured on a seasonally adjusted basis, subsequently moved lower through the fourth week of July. Consumer food price inflation also increased in the second quarter, reflecting the effects of drought and disease on crop and livestock production; however, spot prices for crops moved down in recent weeks, and futures prices pointed to lower prices for livestock in the year ahead. The PCE price index for items excluding food and energy also rose more quickly in the second quarter than in the first and was 1½ percent higher than a year earlier. Near-term inflation expectations from the Michigan survey were little changed, on net, in June and early July, while longer-term expectations declined. Measures of labor compensation indicated that gains in nominal wages and employee benefits remained modest.

Recent indicators suggested that foreign economic activity strengthened in the second quarter: Chinese GDP accelerated substantially, and Mexican data suggested a pickup there. Real GDP growth remained strong in the United Kingdom, and data for both Canada and the euro area showed improvement relative to the first quarter. By contrast, household spending in Japan dropped sharply following the country's April 1 consumption tax increase. In many advanced foreign economies, inflation picked up in the second quarter from very low rates in the first, although second-quarter inflation in the euro area remained well below the European Central Bank's objective.

Staff Review of the Financial Situation

Financial conditions eased somewhat, on balance, between the June and July FOMC meetings, although geopolitical risks weighed on investor sentiment at times. On net, yields on longer-term Treasury securities fell, equity prices rose, and the foreign exchange value of the dollar was little changed.

Market participants characterized the Federal Reserve's monetary policy communications over the intermeeting period as suggesting a slightly more accommodative policy stance than had been expected. The anticipated path of the federal funds rate shifted down modestly following the June FOMC statement and the Chair's press conference. Policy expectations also edged down on the release of the minutes of the June FOMC meeting. Market participants took note of the discussion of monetary policy normalization in the minutes and, particularly, the discussion of the likely spread between the ON RRP rate and the IOER rate.

Results from the Desk's July Survey of Primary Dealers, conducted shortly before the July FOMC meeting, indicated that market participants' expectations for the timing of the first increase in the federal funds rate and the subsequent policy path were largely unchanged from those reported in the survey taken just before the June meeting. The median dealer continued to see the third quarter of 2015 as the most likely time for the liftoff of the federal funds rate from the effective lower bound, although, relative to the June survey, the distribution of the modal expected time of liftoff became more concentrated around the third quarter of 2015.

On balance, 10- and 30-year nominal Treasury yields both declined about 20 basis points over the intermeeting period. Concerns about tensions in Ukraine and the Middle East and the release of the June minutes appeared to contribute to the declines in longer-term Treasury yields. The decline in yields at the long end of the curve likely also reflected a continuation of a pattern that began last year, which some market participants attributed to a reduction in investors' expectations for longer-run economic growth and declines in term premiums. Measures of longer-horizon inflation compensation based on Treasury Inflation-Protected Securities were about unchanged.

Conditions in unsecured short-term dollar funding markets remained stable over the intermeeting period. The Federal Reserve continued its ON RRP exercise and TDF testing. As a result of somewhat higher market rates on repurchase agreements, ON RRP take-up, on average, was a little lower than in the prior intermeeting period, although participation in the ON RRP exercise jumped to a record high at quarter-end on June 30. Moreover, the ON RRP exercise appeared to have continued to help firm the floor under money market interest rates. In TDF testing that ran from mid-May to early July, gradual increases in offer rates and in the maximum individual award amounts generally resulted in higher participation.

The S&P 500 index rose about 1½ percent over the intermeeting period, as earnings reports from a range of companies appeared to indicate that profits in the second quarter had increased modestly relative to the first quarter. The VIX, an index of option-implied volatility for one-month returns on the S&P 500 index, remained at low levels over the intermeeting period.

Credit flows to nonfinancial corporations remained strong in the second quarter. Gross issuance of investment- and speculative-grade bonds stayed brisk. Commercial and industrial loans on banks' balance sheets continued to increase at a robust pace, consistent with reports in the July Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS) of easier lending standards and terms as well as stronger loan demand from firms of all sizes. Issuance of leveraged loans by institutional investors also remained solid.

Credit conditions in markets for commercial real estate (CRE) improved further in the second quarter. According to the July SLOOS, banks continued to ease their standards and report stronger demand for CRE loans during the second quarter on balance. CRE loans on banks' books continued to expand moderately, and issuance of commercial mortgage-backed securities remained solid.

Credit conditions in residential mortgage markets generally remained tight over the intermeeting period. Mortgage interest rates held steady around 4 percent, and origination volumes continued to be low. According to the July SLOOS, underwriting standards on prime home-purchase loans appeared to have eased further at banks during the second quarter but, on net, standards on all types of residential real estate loans reportedly remained tighter than the midpoints of the respondent banks' longer-term ranges.

In contrast to mortgage lending, consumer credit continued to expand robustly in May, largely on the strength of auto and student loans, though credit card debt picked up somewhat as well. Banks responding to the July SLOOS indicated that demand for auto loans strengthened further in the second quarter. In addition, demand for credit card loans increased, and a few large banks reported having eased lending policies for such loans.

Benchmark yields on long-term sovereign bonds in the advanced foreign economies continued the downward trend that began at the start of the year, with rising tensions in the Middle East and Ukraine during the intermeeting period likely adding some to the downward pressure. Concerns about one of Portugal's largest banks and about litigation risks facing European banks weighed on European financial markets, prompting yield spreads on peripheral sovereign bonds in the euro area to widen and equity price indexes for European banks to decline. Intermeeting data releases on euro-area industrial production came in below market expectations, also weighing on headline equity markets in the region. Mixed news from emerging market economies, including better-than-expected GDP growth in China and concerns about Argentina's scheduled debt payments, generally had modest market effects. Changes in emerging market equity indexes were mixed over the period, and emerging market bond yields generally declined. The broad trade-weighted dollar was little changed, on net, over the intermeeting period.

The staff's periodic report on potential risks to financial stability concluded that relatively strong capital positions of U.S. banks, subdued use of maturity transformation and leverage within the broader financial sector, and relatively low levels of leverage for the aggregate nonfinancial sector were important factors supporting overall financial stability. However, the staff report also highlighted that low and declining risk premiums, low levels of market volatility, and a loosening of underwriting standards in a number of markets raised somewhat the risk of an eventual correction in asset valuations.

Staff Economic Outlook

The data received since the staff prepared its forecast for the June FOMC meeting suggested that real GDP growth was even weaker in the first half of the year than had been anticipated.[3] However, the staff left its forecast for real GDP growth in the second half of the year essentially unrevised because other indicators of economic activity appeared comparatively strong in relation to real GDP during the first half of the year. In particular, payroll employment continued to advance at a solid pace, the unemployment rate declined further, industrial production posted steady gains, and readings from business surveys were strong. The staff's medium-term forecast for real GDP growth was also little revised. The staff continued to project that real GDP would expand at a faster pace in the second half of this year and over

[3] The staff's forecast for the July FOMC meeting was prepared prior to the July 30 release of the BEA's advance estimate of real GDP in the second quarter and revisions for earlier periods.

the next two years than in 2013. This forecast was predicated on a further anticipated waning of the restraint on spending growth from changes in fiscal policy, continued improvement in credit availability, increases in consumer and business confidence, and a pickup in foreign economic growth. In response to a further downward surprise in the unemployment rate, the staff again lowered its forecast for the unemployment rate over the projection period. To reconcile the downward revision to real GDP growth for the first half of year with an unemployment rate that was now closer to the staff's estimate of its longer-run natural rate, the staff lowered its assumed pace of potential output growth this year by more than it marked down GDP growth. As a result, resource slack in this projection was anticipated to be somewhat narrower this year than in the previous forecast and to be taken up slowly over the projection period.

The staff's near-term forecast for inflation was revised up a little, as recent data showed somewhat faster-than-anticipated increases that were judged to be only partly transitory. With a little less resource slack in this projection, the medium-term forecast for inflation was also revised up slightly. Nonetheless, as in the June projection, inflation was projected to step down in the second half of this year and to remain below the Committee's longer-run objective of 2 percent over the next few years. With longer-run inflation expectations assumed to remain stable, changes in commodity and import prices expected to be subdued, and slack in labor and product markets anticipated to diminish only slowly, inflation was forecast to rise gradually and to reach the Committee's objective in the longer run.

The staff continued to view uncertainty around its projections for real GDP growth, inflation, and the unemployment rate as roughly in line with the average of the past 20 years. Although the risks to GDP growth were still seen as tilted a little to the downside, as neither monetary policy nor fiscal policy was viewed as well positioned to help the economy withstand adverse shocks, these risks were considered to be more nearly balanced than in the previous projection. The staff continued to view the risks around its outlook for the unemployment rate and for inflation as roughly balanced.

Participants' Views on Current Conditions and the Economic Outlook

In their discussion of the economic situation and the outlook, meeting participants generally viewed the rebound in real GDP in the second quarter and the ongoing improvement in labor market conditions as supporting their expectations for continued moderate economic expansion with labor market indicators and inflation moving toward levels the Committee judges consistent with its dual mandate. Although most participants continued to view the risks to the outlook for economic activity and the labor market as nearly balanced, some pointed to possible sources of downside risk, including persistent weakness in the housing sector, a continued slow rise in household income, or spillovers from developments in the Middle East and Ukraine. Participants noted that inflation had moved somewhat closer to the Committee's 2 percent longer-run objective and generally saw the risks of inflation running persistently below their objective as having diminished somewhat.

Household spending appeared to be rising moderately and was expected to contribute to stronger economic growth in the second half of the year than in the first half. Business contacts in several Districts reported a pickup in consumer spending after the weakness in the first quarter. However, a few participants raised concerns that households might remain cautious, with the personal saving rate staying elevated, or that the slow rise in wages and income might be insufficient to support stronger consumer spending.

The recovery in housing activity remained slow according to most participants. Although mortgage rates were still low and housing appeared to be relatively affordable, various factors were seen as restraining demand, including low expected income and high levels of student debt as well as difficulty in obtaining mortgage credit, particularly for younger, first-time homebuyers. It was also noted that the weakness in homebuilding along with the continued rise in house prices suggested that supply constraints were also weighing on construction activity. A couple of participants indicated that some demand appeared to have shifted to rental properties. The rising demand for rentals was in part being satisfied by investors buying homes for the rental market; it was also providing support for multifamily construction. Some participants noted their concern that a number of the factors restraining residential construction might persist, damping the housing recovery for some time.

Many participants reported continued improvement in sentiment among their business contacts and noted positive readings from recent regional and national surveys of manufacturing and service-sector activity. In particular, participants cited strength in airlines, railroads, trucking firms, businesses supplying the motor vehicle and aerospace industries, and those in the high-tech sector. In addition, higher energy prices continued to provide support for activity in the energy sector. In the agriculture sector, favorable growing conditions for crops had lowered prices but increased the profitability of livestock producers. The reports from their business contacts provided support for participants' expectation of stronger economic growth in the second half of the year. In some cases, the information from businesses suggested increases in spending on capital equipment or a pickup in investment in commercial and industrial construction and transportation. Contacts in a number of areas indicated that credit was readily available, and reports from participants' business and financial contacts indicated a strengthening in demand for bank credit. However, several participants reported that businesses remained somewhat uncertain about the economic outlook and thus were still cautious about stepping up capital spending and hiring. Federal fiscal restraint reportedly continued to depress business activity in some areas dependent on federal spending.

Labor market conditions improved in recent months according to participants' reports on developments in their Districts as well as a range of national indicators. The improvement was reflected not only in a pickup in payroll employment gains and a noticeable decline in the overall unemployment rate, but also in reductions in broader measures of underutilization such as long-duration joblessness and the number of workers with part-time jobs who would prefer full-time employment. The labor force participation rate was stable, and a couple of participants pointed out that the transition rate from long-duration unemployment to employment had moved up. Moreover, some participants cited positive signs of increased hiring and turnover in the labor market, including increases in job openings and hiring plans, higher quit rates, and apparent improvements in matching workers and jobs.

Participants generally agreed that both the recent improvement in labor market conditions and the cumulative progress over the past year had been greater than anticipated and that labor market conditions had moved noticeably closer to those viewed as normal in the longer run. Participants differed, however, in their assessments of the remaining degree of labor market slack and how to measure it. A few argued that the unemployment rate continues to serve as a reliable summary statistic for the overall state of the labor market and thought that it should be the Committee's principal focus for evaluating labor market conditions. However, many participants continued to see a larger gap between current labor market conditions and those consistent with their assessments of normal levels of labor utilization than indicated by the difference between the unemployment rate and estimates of its longer-run normal level. These participants cited, for example, the still-elevated levels of long-term unemployment and workers employed part time for economic reasons as well as low labor force participation. Several participants pointed out that the recent drop in the unemployment rate had been associated with progress in reabsorbing the long-term unemployed into jobs and reducing part-time work, suggesting that slack was diminishing and could be reduced further as employment opportunities expanded.

Labor compensation was still rising only modestly. Many participants continued to attribute the subdued rise in wages to the remaining slack in the labor market; it was noted that the elevated level of relatively low-paid part-time workers was holding down overall wage increases. Several other participants pointed to reports that wage pressures had increased in some regions and occupations that were experiencing labor shortages or relatively low unemployment. However, a couple of participants indicated that the pass-through of labor costs has been more attenuated since the mid-1980s and that wage pressures might not be a reliable leading indicator of higher inflation.

Inflation firmed in recent months, and most participants anticipated that it would continue to move up toward the Committee's 2 percent objective. Many of them expected that inflation was likely to rise gradually over the medium term, as resource slack diminished and inflation expectations remained stable. In support of their assessments, several reported results from various statistical models of inflation and inflation expectations. Most now judged that the downside risks to inflation had diminished, but a few participants continued to see inflation as likely to persist below the Committee's objective over the medium term. Several commented that the upside risks had not increased. However, a few others argued that the recent tightening of the labor market had increased the upside risks to inflation and inflation expectations, particularly in an environment in which the economic expansion was expected to strengthen further.

In their discussion of financial stability issues, participants noted evidence of valuation pressures in some particular asset markets, but those pressures did not appear to be widespread and other measures of vulnerability in the financial system were at low to moderate levels. As a result, they generally saw the vulnerabilities in the financial system as well contained. Some participants discussed how the Committee might better incorporate financial stability risks in its discussion of macroeconomic risks. They also suggested that the Committee consider how promptly various financial stability concerns could be addressed, if need be, and which tools, including monetary policy and regulatory responses, would be most timely and effective in doing so.

With respect to monetary policy over the medium run, participants generally agreed that labor market conditions and inflation had moved closer to the Committee's longer-run objectives in recent months, and most anticipated that progress toward those goals would continue. Moreover, many participants noted that if convergence toward the Committee's objectives occurred more quickly than expected, it might become appropriate to begin removing monetary policy accommodation sooner than they currently anticipated. Indeed, some participants viewed the actual and expected progress toward the Committee's goals as sufficient to call for a relatively prompt move toward reducing policy accommodation to avoid overshooting the Committee's unemployment and inflation objectives over the medium term. These participants were increasingly uncomfortable with the Committee's forward guidance. In their view, the guidance suggested a later initial increase in the target federal funds rate as well as lower future levels of the funds rate than they judged likely to be appropriate. They suggested that the guidance should more clearly communicate how policy-setting would respond to the evolution of economic data. However, most participants indicated that any change in their expectations for the appropriate timing of the first increase in the federal funds rate would depend on further information on the trajectories of economic activity, the labor market, and inflation. In particular, although participants generally saw the drop in real GDP in the first quarter as transitory, some noted that it increased uncertainty about the outlook, and they were looking to additional data on production, spending, and labor market developments to shed light on the underlying pace of economic growth. Moreover, despite recent inflation developments, several participants continued to believe that inflation was likely to move back to the Committee's objective very slowly, thereby warranting a continuation of highly accommodative policy as long as projected inflation remained below 2 percent and longer-term inflation expectations were well anchored.

Committee Policy Action

In their discussion of monetary policy in the period ahead, members judged that information received since the Federal Open Market Committee met in June indicated that economic activity rebounded in the second quarter. Household spending appeared to be rising moderately, and business fixed investment was advancing, while the recovery in the housing sector remained slow. Fiscal policy was restraining economic growth, although the extent of the restraint was diminishing. The Committee expected that, with appropriate policy accommodation, economic activity would expand at a moderate pace with labor market indicators and inflation moving toward levels that the Committee judges consistent with its dual mandate.

With the incoming information broadly supporting the Committee's expectation of ongoing improvement in labor market conditions and inflation moving back to the Committee's 2 percent objective, members generally agreed that a further measured reduction in the pace of asset purchases was appropriate at this meeting. Accordingly, the Committee agreed that, beginning in August, it would add to its holdings of agency MBS at a pace of $10 billion per month rather than $15 billion per month, and it would add to its holdings of Treasury securities at a pace of $15 billion per month rather than $20 billion per month. The Committee again judged that, if incoming data broadly supported its expectations that labor market indicators and inflation would continue to move toward mandate-consistent levels, the Committee would likely reduce the pace of asset purchases in further measured steps at future meetings. However, the Committee reiterated that asset purchases were not on a preset course and that its decisions remained contingent on the outlook for the labor market and inflation as well as its assessment of the likely efficacy and costs of such purchases.

Members discussed their assessments of progress—both realized and expected—toward the Committee's objectives of maximum employment and 2 percent inflation and considered enhancements to the statement language that would more clearly communicate the Committee's view on such progress. Regarding the labor market, many members concluded that a range of indicators of labor market conditions—including the unemployment rate as well as a number of other measures of labor utilization—had improved more in recent months than they anticipated earlier. They judged it appropriate to replace the description of recent labor market conditions that mentioned solely the unemployment rate with a description of their assessment of the remaining underutilization of labor resources based on their evaluation of a range of labor market indicators. In their discussion, some members expressed reservations about describing the extent of underutilization in labor resources more broadly. In particular, they worried that the degree of labor market slack was difficult to characterize succinctly and that the statement language might prove difficult to adjust as labor market conditions continued to improve. Moreover, they were concerned that, despite the improvement in labor market conditions, the new language might be misinterpreted as indicating increased concern about underutilization of labor resources. At the conclusion of the discussion, the Committee agreed to state that labor market conditions had improved, with the unemployment rate declining further, while also stating that a range of labor market indicators suggested that there remained significant underutilization of labor resources. Many members noted, however, that the characterization of labor market underutilization might have to change before long, particularly if progress in the labor market continued to be faster than anticipated. Regarding inflation, members agreed to update the language in the statement to acknowledge that inflation had recently moved somewhat closer to the Committee's longer-run objective and to convey their judgment that the likelihood of inflation running persistently below 2 percent had diminished somewhat.

After the discussion, all members but one voted to maintain the Committee's target range for the federal funds rate and to reiterate its forward guidance on how it would assess the appropriate timing of the first increase in the target rate and the anticipated behavior of the federal funds rate after it is raised. One member, however, objected to the guidance that it would likely be appropriate to maintain the current range for the federal funds rate for a considerable time after the asset purchase program ends because it was time dependent and did not recognize the implications for monetary policy of the considerable progress that had been made toward the Committee's goals.

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 SOMA in accordance with the following domestic policy directive:

> "Consistent with its statutory mandate, the Federal Open Market Committee seeks monetary and financial conditions that will foster maximum employment and price stability. In particular, 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 undertake open market operations as necessary to maintain such conditions. Beginning in August, the Desk is directed to purchase longer-term Treasury securities at a pace of about $15 billion per month and to purchase agency mortgage-backed securities at a pace of about $10 billion per month. The Committee also directs the Desk to engage in dollar roll and coupon swap transactions as necessary to facilitate settlement of the Federal Reserve's agency mortgage-backed securities transactions. The Committee directs the Desk to maintain its policy of rolling over maturing Treasury securities into new issues and its policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in agency mortgage-backed securities. 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 2:00 p.m.:

> "Information received since the Federal Open Market Committee met in June indicates that growth in economic activity rebounded in the second quarter. Labor market conditions improved, with the unemployment rate declining further. However, a range of labor market indicators suggests that there remains significant underutilization of labor resources. Household spending appears to be rising moderately and business fixed investment is advancing, while the recovery in the housing sector remains slow. Fiscal policy is restraining economic growth, although the extent of restraint is diminishing. Inflation has moved somewhat closer to the Committee's longer-run objective. 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 that, with appropriate policy accommodation, economic activity will expand at a moderate pace, with labor market indicators and inflation moving toward levels the Committee judges consistent with its dual mandate. The Committee sees the risks to the outlook for economic activity and the labor market as nearly balanced and judges that the likelihood of inflation running persistently below 2 percent has diminished somewhat.

The Committee currently judges that there is sufficient underlying strength in the broader economy to support ongoing improvement in labor market conditions. In light of the cumulative progress toward maximum employment and the improvement in the outlook for labor market conditions since the inception of the current asset purchase program, the Committee decided to make a further measured reduction in the pace of its asset purchases. Beginning in August, the Committee will add to its holdings of agency mortgage-backed securities at a pace of $10 billion per month rather than $15 billion per month, and will add to its holdings of longer-term Treasury securities at a pace of $15 billion per month rather than $20 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 of rolling over maturing Treasury securities at auction. The Committee's sizable and still-increasing holdings of longer-term securities should maintain downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative, which in turn should promote a stronger economic recovery and help to ensure that inflation, over time, is at the rate most consistent with the Committee's dual mandate.

The Committee will closely monitor incoming information on economic and financial developments in coming months and will continue its purchases of Treasury and agency mortgage-backed securities, and employ its other policy tools as appropriate, until the outlook for the labor market has improved substantially in a context of price stability. If incoming information broadly supports the Committee's expectation of ongoing improvement in labor market conditions and inflation moving back toward its longer-run objective, the Committee will likely reduce the pace of asset purchases in further measured steps at future meetings. However, asset purchases are not on a preset course, and the Committee's decisions about their pace will remain contingent on the Committee's outlook for the labor market and inflation as well as its assessment of the likely efficacy and costs of such purchases.

To support continued progress toward maximum employment and price stability, the Committee today reaffirmed its view that a highly accommodative stance of monetary policy remains appropriate. In determining how long to maintain the current 0 to ¼ percent target range for the federal funds rate, the Committee will assess progress—both realized and expected—toward its objectives of maximum employment and 2 percent inflation. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. The Committee continues to anticipate, based on its assessment of these factors, that it likely will be appropriate to maintain the current target range for the federal funds rate for a considerable time after the asset purchase program ends, especially if projected inflation continues to run below the Committee's 2 percent longer-run goal, and provided that longer-term inflation expectations remain well anchored.

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. The Committee currently anticipates that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run."

Voting for this action: Janet L. Yellen, William C. Dudley, Lael Brainard, Stanley Fischer, Richard W. Fisher, Narayana Kocherlakota, Loretta J. Mester, Jerome H. Powell, and Daniel K. Tarullo.

Voting against this action: Charles I. Plosser.

Mr. Plosser dissented because he objected to the statement's guidance indicating that it likely will be appropriate to maintain the current target range for the federal funds rate for "a considerable time after the asset purchase program ends." In his view, the reference to calendar time should be replaced with language that indicates how monetary policy will respond to incoming data. Moreover, he judged that the statement did not acknowledge the substantial progress that had been made toward the Committee's economic goals and thus risks unnecessary and disruptive volatility in financial markets, and perhaps in the economy, if the Committee reduces accommodation sooner or more quickly than financial markets anticipate.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, September 16–17, 2014. The meeting adjourned at 11:55 a.m. on July 30, 2014.

Notation Vote

By notation vote completed on July 8, 2014, the Committee unanimously approved the minutes of the Committee meeting held on June 17–18, 2014.

William B. English
Secretary

Meeting Held on September 16–17, 2014

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, September 16, 2014, at 11:00 a.m. and continued on Wednesday, September 17, 2014, at 9:00 a.m.

Present

Janet L. Yellen
Chair

William C. Dudley
Vice Chairman

Lael Brainard

Stanley Fischer

Richard W. Fisher

Narayana Kocherlakota

Loretta J. Mester

Charles I. Plosser

Jerome H. Powell

Daniel K. Tarullo

Christine Cumming, Charles L. Evans, Jeffrey M. Lacker, Dennis P. Lockhart, and John C. Williams
Alternate Members of the Federal Open Market Committee

James Bullard, Esther L. George, and Eric Rosengren
Presidents of the Federal Reserve Banks of St. Louis, Kansas City, and Boston, respectively

William B. English
Secretary and Economist

Matthew M. Luecke
Deputy Secretary

Michelle A. Smith
Assistant Secretary

Scott G. Alvarez
General Counsel

Steven B. Kamin
Economist

David W. Wilcox
Economist

James A. Clouse, Evan F. Koenig, Thomas Laubach, Michael P. Leahy, Mark E. Schweitzer, and William Wascher
Associate Economists

Simon Potter
Manager, System Open Market Account

Lorie K. Logan
Deputy Manager, System Open Market Account

Robert deV. Frierson[1]
Secretary of the Board, Office of the Secretary, Board of Governors

Michael S. Gibson[2]
Director, Division of Banking Supervision and Regulation, Board of Governors

Matthew J. Eichner[1]
Deputy Director, Division of Research and Statistics, Board of Governors

Stephen A. Meyer and William R. Nelson
Deputy Directors, Division of Monetary Affairs, Board of Governors

Mark E. Van Der Weide[3]
Deputy Director, Division of Banking Supervision and Regulation, Board of Governors

Andreas Lehnert
Deputy Director, Office of Financial Stability Policy and Research, Board of Governors

Andrew Figura, David Reifschneider, and Stacey Tevlin
Special Advisers to the Board, Office of Board Members, Board of Governors

Trevor A. Reeve
Special Adviser to the Chair, Office of Board Members, Board of Governors

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

Christopher J. Erceg
Senior Associate Director, Division of International Finance, Board of Governors

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1 Attended the joint session of the Federal Open Market Committee and the Board of Governors.

2 Attended Wednesday's session only.

3 Attended Tuesday's session only.

Michael T. Kiley[4] and Jeremy B. Rudd[4]
Senior Advisers, Division of Research and Statistics, Board of Governors

Joyce K. Zickler
Senior Adviser, Division of Monetary Affairs, Board of Governors

Eric M. Engen and Michael G. Palumbo
Associate Directors, Division of Research and Statistics, Board of Governors

Fabio M. Natalucci
Associate Director, Division of Monetary Affairs, Board of Governors

Marnie Gillis DeBoer
Deputy Associate Director, Division of Monetary Affairs, Board of Governors

Joshua Gallin
Deputy Associate Director, Division of Research and Statistics, Board of Governors

Edward Nelson
Assistant Director, Division of Monetary Affairs, Board of Governors

Patrick E. McCabe[1]
Adviser, Division of Research and Statistics, Board of Governors

Penelope A. Beattie[1]
Assistant to the Secretary, Office of the Secretary, Board of Governors

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

Katie Ross[1]
Manager, Office of the Secretary, Board of Governors

Valerie Hinojosa
Records Project Manager, Division of Monetary Affairs, Board of Governors

Marie Gooding
First Vice President, Federal Reserve Bank of Atlanta

David Altig, Alberto G. Musalem, and Daniel G. Sullivan
Executive Vice Presidents, Federal Reserve Banks of Atlanta, New York, and Chicago, respectively

Troy Davig, Michael Dotsey, Geoffrey Tootell, Christopher J. Waller, and John A. Weinberg
Senior Vice Presidents, Federal Reserve Banks of Kansas City, Philadelphia, Boston, St. Louis, and Richmond, respectively

Sylvain Leduc, Jonathan P. McCarthy, and Douglas Tillett
Vice Presidents, Federal Reserve Banks of San Francisco, New York, and Chicago, respectively

Kei-Mu Yi
Special Policy Advisor to the President, Federal Reserve Bank of Minneapolis

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

In a joint session of the Federal Open Market Committee (FOMC) and the Board of Governors of the Federal Reserve System, the manager of the System Open Market Account (SOMA) reported on developments in domestic and foreign financial markets and reviewed the effects of recent foreign central bank policy actions on yields on the international portion of the SOMA portfolio. The deputy manager reported on the System open market operations conducted during the period since the Committee met on July 29–30, 2014, summarized plans for additional test operations of the Term Deposit Facility, and described the results from the fixed-rate overnight reverse repurchase agreement (ON RRP) operational exercise.

The deputy manager also outlined a proposal for changes to the ongoing ON RRP exercise to test possible design features that could allow an ON RRP facility to serve as an effective supplementary tool during policy normalization while also mitigating the potential for unintended effects in financial markets. Participants discussed the proposed changes in the ON RRP exercise, including raising the counterparty-specific limit from $10 billion to $30 billion, limiting the overall size of each operation to $300 billion, and introducing an auction process that would be used to determine the interest rate on such operations and allocate take-up if the sum of bids exceeded the overall limit. Testing these design features was generally seen as furthering the Committee's understanding of how an ON RRP facility might be structured to best balance its objectives of supporting monetary control and of limiting the Federal Reserve's role in financial intermediation as well as reducing potential financial stability risks the facility might pose during periods of stress. Partici-

[4] Attended the portion of the meeting following the joint session of the Federal Open Market Committee and the Board of Governors.

pants also discussed other tests that could be incorporated in the exercise at a later date, including a daily time-varying cap along with the overall limit on the size of ON RRP operations, small variations in the offered rate on ON RRP operations, and moderate increases and decreases in the overall size limit. A number of participants expressed concern that these tests could be misunderstood as providing a signal of the Committee's intentions regarding the parameters of the ON RRP program that will be implemented when normalization begins; they wanted to emphasize that the tests are intended to provide additional information to guide the Committee's decisions. Participants agreed to consider potential additional revisions to the ON RRP exercise at future FOMC meetings. Following the discussion, the Committee unanimously approved the following resolution:

> "The Federal Open Market Committee (FOMC) authorizes the Federal Reserve Bank of New York to conduct a series of overnight reverse repurchase operations involving U.S. government securities for the purpose of further assessing the appropriate structure of such operations in supporting the implementation of monetary policy during normalization. The reverse repurchase operations authorized by this resolution shall be (i) conducted at an offering rate that may vary from zero to five basis points, (ii) for an overnight term, or such longer term as is warranted to accommodate weekend, holiday, and similar trading conventions, (iii) subject to a per-counterparty limit of up to $30 billion per day, (iv) subject to an overall size limit of up to $300 billion per day, (v) awarded to all submitters (A) at the specified offering rate if the sum of the bids received is less than or equal to the overall size limit, or (B) at the stopout rate, determined by evaluating bids in ascending order by submitted rate up to the point at which the total quantity of bids equals the overall size limit, with all bids below this rate awarded in full at the stopout rate and all bids at the stopout rate awarded on a pro rata basis, if the sum of the counterparty offers received is greater than the overall size limit, and (vi) offered beginning with the operation conducted on September 22, 2014, with the resolution adopted at the January 28–29, 2014, FOMC meeting remaining in place until the conclusion of the operation conducted on September 19, 2014. The Chair must approve any change in the offering rate within the range specified in (i) and any changes to the per-counterparty and overall size limits subject to the limits specified in (iii) and (iv). The System Open Market Account manager will notify the FOMC in advance about any changes to the offering rate, per-counterparty limit, or overall size limit applied to operations. These operations shall be authorized through January 30, 2015."

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.

Monetary Policy Normalization

Meeting participants considered publication of a summary statement of their monetary policy normalization principles and plans based on the discussions at recent Committee meetings. Participants agreed that it was appropriate at this time to provide additional information regarding their approach to normalization. The proposed statement was seen as a concise summary of participants' views that would help the public understand the steps that the Committee plans to take when the time comes to begin the normalization process and that would convey the Committee's confidence in its plans. However, it was emphasized that the Committee would need to be flexible and pragmatic during normalization, adjusting the details of its approach, if necessary, in light of changing conditions. Regarding the specific points in the proposed statement, a couple of participants expressed their preference that the principles make greater allowance for sales of agency mortgage-backed securities (MBS) over the next few years in order to normalize the size and composition of the Federal Reserve's balance sheet more quickly and to limit distortions in the allocation of credit that they believed were associated with the Federal Reserve's holdings of agency MBS. In addition, a few participants noted that they would have preferred that the principles point to an earlier end to the reinvestment of repayments of principal on securities held in the SOMA portfolio. At the end of the discussion, all but one participant could support the publication of the following statement after the meeting:

> Policy Normalization Principles and Plans
>
> During its recent meetings, the Federal Open Market Committee (FOMC) discussed ways to normalize the stance of monetary policy and the Federal Reserve's securities holdings. The dis-

cussions were part of prudent planning and do not imply that normalization will necessarily begin soon. The Committee continues to judge that many of the normalization principles that it adopted in June 2011 remain applicable. However, in light of the changes in the System Open Market Account (SOMA) portfolio since 2011 and enhancements in the tools the Committee will have available to implement policy during normalization, the Committee has concluded that some aspects of the eventual normalization process will likely differ from those specified earlier. The Committee also has agreed that it is appropriate at this time to provide additional information regarding its normalization plans. All FOMC participants but one agreed on the following key elements of the approach they intend to implement when it becomes appropriate to begin normalizing the stance of monetary policy:

- The Committee will determine the timing and pace of policy normalization—meaning steps to raise the federal funds rate and other short-term interest rates to more normal levels and to reduce the Federal Reserve's securities holdings—so as to promote its statutory mandate of maximum employment and price stability.

  —When economic conditions and the economic outlook warrant a less accommodative monetary policy, the Committee will raise its target range for the federal funds rate.

  —During normalization, the Federal Reserve intends to move the federal funds rate into the target range set by the FOMC primarily by adjusting the interest rate it pays on excess reserve balances.

  —During normalization, the Federal Reserve intends to use an overnight reverse repurchase agreement facility and other supplementary tools as needed to help control the federal funds rate. The Committee will use an overnight reverse repurchase agreement facility only to the extent necessary and will phase it out when it is no longer needed to help control the federal funds rate.

- The Committee intends to reduce the Federal Reserve's securities holdings in a gradual and predictable manner primarily by ceasing to reinvest repayments of principal on securities held in the SOMA.

  —The Committee expects to cease or commence phasing out reinvestments after it begins increasing the target range for the federal funds rate; the timing will depend on how economic and financial conditions and the economic outlook evolve.

  —The Committee currently does not anticipate selling agency mortgage-backed securities as part of the normalization process, although limited sales might be warranted in the longer run to reduce or eliminate residual holdings. The timing and pace of any sales would be communicated to the public in advance.

- The Committee intends that the Federal Reserve will, in the longer run, hold no more securities than necessary to implement monetary policy efficiently and effectively, and that it will hold primarily Treasury securities, thereby minimizing the effect of Federal Reserve holdings on the allocation of credit across sectors of the economy.

- The Committee is prepared to adjust the details of its approach to policy normalization in light of economic and financial developments.

The Board meeting concluded at the end of the discussion of policy normalization principles and plans.

Staff Review of the Economic Situation

The information reviewed for the September 16–17 meeting suggested that economic activity was expanding at a moderate pace in the third quarter. Labor market conditions improved a little further, although the unemployment rate was essentially unchanged over the intermeeting period. Consumer price inflation was running below the FOMC's longer-run objective of 2 percent, but measures of longer-run inflation expectations remained stable.

Total nonfarm payroll employment increased in July and August but at a slower pace than in the first half of the year. The unemployment rate was 6.1 percent in August, the same as in June, and the labor force participation rate and the employment-to-population ratio also were unchanged since that time. Both the share of workers employed part time for economic reasons and the rate of long-duration unemployment declined a little over the past two months. Other recent indicators generally pointed to ongoing improvement in labor market conditions: Although some measures of household expectations of the labor market situation deteriorated somewhat, the rates of job openings and of gross private-sector hiring moved up, initial claims for unemployment insurance were essentially flat at a relatively low level, and some readings on firms' hiring plans improved.

On balance, industrial production edged up over July and August, and the rate of manufacturing capacity utilization was unchanged. Automakers' schedules indicated that the pace of motor vehicle assemblies would decline slightly in the fourth quarter, but broader indicators of manufacturing production, such as the readings on new orders from the national and regional manufacturing surveys, were consistent with moderate increases in factory output in the near term.

Real personal consumption expenditures (PCE) appeared to be rising at a moderate pace in the third quarter.[5] The components of nominal retail sales data used by the Bureau of Economic Analysis (BEA) to construct its estimates of PCE increased at a solid rate in July and August, and sales of light motor vehicles surged in August after edging down in July. Recent information pertaining to key factors that influence consumer spending were positive: Real disposable incomes continued to increase in July, households' net worth likely edged up as equity prices and home values rose somewhat further, and consumer sentiment as measured by the Thomson Reuters/University of Michigan Surveys of Consumers improved in August and early September.

The pace of activity in the housing sector seemed to be picking up. Starts and permits of both new single-family homes and multifamily units were higher in July than their average levels in the second quarter. Sales of existing homes increased further in July, although new home sales declined.

Real private expenditures for business equipment and intellectual property products appeared to rise further going into the third quarter. Nominal shipments of nondefense capital goods excluding aircraft moved up in July. Moreover, new orders for these capital goods continued to be above the level of shipments, pointing to increases in shipments in subsequent months. In addition, other forward-looking indicators, such as surveys of business conditions, were consistent with moderate gains in business equipment spending in the near term. Nominal business expenditures for nonresidential construction also increased in July. Recent book-value data for inventories, along with readings on inventories from national and regional manufacturing surveys, did not point to significant inventory imbalances in most industries; in the energy sector, inventories were drawn down significantly early in the year and, despite substantial stockbuilding since then, remained low.

Total real government purchases seemed to be roughly flat in the third quarter. Federal government purchases probably declined a little, as defense spending was lower in July and August than in the second quarter. State and local government purchases appeared to be rising slowly as the payrolls of these governments expanded a bit further in July and August and their nominal construction expenditures increased in July.

The U.S. international trade deficit narrowed in both June and July. Exports were little changed in June, but they expanded robustly in July, with particular strength in industrial supplies and automotive products. Imports fell in June but then partly recovered in July, driven by swings in imports of oil and automotive products.

Total U.S. consumer price inflation, as measured by the PCE price index, was about 1½ percent over the 12 months ending in July. Over the 12 months ending in August, the consumer price index (CPI) rose about 1¾ percent. Consumer energy prices declined in both July and August, while consumer food prices rose. Core price inflation (which excludes food and energy prices) was essentially the same as total inflation for the PCE price measure and for the CPI over their most recent 12-month periods. Near-term inflation expectations from the Michigan survey moved down a bit in August and early September, while longer-term inflation expectations in the survey were little changed.

Measures of labor compensation increased a little faster than consumer prices. Compensation per hour in the business sector rose 2¾ percent over the year ending in the second quarter; with modest gains in labor productivity, unit labor costs advanced more slowly than compensation per hour. Over the same year-long period, the employment cost index rose only about 2 percent, and average hourly earnings

[5] Recently released data for health-services consumption in the second quarter were notably stronger than the Bureau of Economic Analysis estimated when constructing its most recent PCE estimates for the second quarter.

increased at a similar rate over the 12 months ending in August.

Foreign economies continued to expand in the second quarter, but with significant differences across countries. Economic growth rebounded strongly from a weak first-quarter pace in Canada, China, and Mexico, supported by improvement in exports. In contrast, the Japanese economy contracted sharply following the consumption tax increase in April, economic activity stagnated in the euro area, and the Brazilian economy fell into recession. In the third quarter, household spending appeared to be normalizing in Japan, and production continued to rise in Mexico. However, indicators of economic activity in the euro area remained weak, and Chinese economic data for July and August suggested some slowing in the third quarter. With inflation very low in the euro area, the European Central Bank reduced its policy interest rates at its September 4 meeting and announced plans to purchase private assets.

Staff Review of the Financial Situation

Data releases on domestic economic activity were reportedly interpreted by financial market participants as somewhat better than expected, on balance, notwithstanding the disappointing employment report for August. Federal Reserve communications, particularly the July FOMC minutes and the Chair's speech at the Jackson Hole economic policy symposium, were viewed as signaling slightly less policy accommodation than anticipated. Reflecting these and other developments, yields on nominal Treasury securities rose somewhat and equity prices edged up over the intermeeting period. On net, the conflicts in the Middle East and Ukraine and other geopolitical tensions had limited effects on domestic financial markets.

The federal funds rate path implied by financial market quotes was essentially unchanged over the intermeeting period. But the results from the Desk's September Survey of Primary Dealers indicated that the distribution of the likely date of liftoff across dealers shifted to somewhat earlier dates, and showed the second quarter of 2015 as the most likely date for liftoff. However, the dealers' expected levels of various employment and inflation indicators at the time of liftoff did not change materially from the previous survey.

The yield on 10-year nominal Treasury securities moved up about 15 basis points, on net, since the FOMC met in July, likely boosted in part by Federal Reserve communications. Measures of inflation compensation based on Treasury Inflation-Protected Securities edged down, reportedly reflecting the lower-than-expected CPI data in July and recent declines in oil prices.

Broad measures of domestic equity prices were up modestly over the intermeeting period, with some reports suggesting that investors were interpreting incoming economic data as implying that the economic recovery was strengthening.

Yields on corporate bonds and agency MBS rose about in line with those on comparable-maturity Treasury securities. High-yield bond mutual funds experienced sharp outflows early in the intermeeting period, and spreads on such bonds widened noticeably; however, these spreads returned to their initial levels over subsequent weeks, and high-yield bond funds attracted modest inflows. Measures of liquidity in the corporate bond market remained stable in the face of these substantial flows.

Conditions in short-term dollar funding markets were little changed. The Federal Reserve continued its testing of ON RRP operations over the intermeeting period. Take-up in ON RRP operations increased a little, on average, over the period relative to the previous intermeeting period.

Credit conditions for domestic businesses remained favorable. Corporate bond issuance slowed in July and August, reflecting a fairly typical summer lull as well as the elevated volatility in the high-yield bond market early in the intermeeting period, but issuance rebounded strongly in the first week of September. Commercial paper outstanding and commercial and industrial loans at banks expanded briskly. Credit conditions in the commercial real estate (CRE) sector continued to ease, and growth in CRE loans at banks stayed solid. The issuance of commercial mortgage-backed securities remained robust in July and August.

Issuance of institutional leveraged loans continued apace in July and August, traditionally a slow period in this market. The issuance of "new money" loans, which are typically earmarked for corporate leveraged-buyouts and mergers and acquisitions, was strong, and the pipeline of such loans was reported to be quite large heading into the fall. The issuance of collateralized loan obligations was still a major source of demand for leveraged loans.

Financing conditions for households remained mixed. Auto loans were widely available; standards and terms for credit card loans eased somewhat, though they were still tight; and access to residential mortgages continued to be limited for all but those with excellent credit histories.

Responding in part to disappointing economic data abroad, the U.S. dollar appreciated against most currencies over the intermeeting period, including large appreciations against the euro, the yen, and the pound sterling. Greater monetary accommodation in the euro area and expectations of a lower policy rate in the near term added to the downward pressure on the euro while uncertainty about the outcome of the forthcoming referendum on Scottish independence weighed on the value of the pound. In addition, near-term policy rate expectations moved down in the United Kingdom, reacting to both the release of the August *Inflation Report* and uncertainty induced by the referendum. Sovereign yields in the European economies generally declined, and yield spreads of sovereign bonds from the euro-area periphery over German bunds narrowed considerably. Most foreign equity indexes ended the period modestly higher.

Staff Economic Outlook

In the economic forecast prepared by the staff for the September FOMC meeting, the projection for growth in real gross domestic product (GDP) in the second half of this year was revised down slightly from the one prepared for the previous meeting, primarily because of a somewhat weaker near-term outlook for consumer spending. The staff's medium-term forecast for real GDP was also revised down a little, reflecting a higher projected path for the foreign exchange value of the dollar along with slightly smaller projected gains for home prices. The staff still anticipated that the pace of real GDP growth in 2015 and 2016 would exceed the growth rate of potential output, supported by continued increases in consumer and business confidence, the further easing of the restraint on spending from changes in fiscal policy, additional improvements in credit availability, and a pickup in foreign economic growth. In 2017, real GDP growth was projected to begin slowing toward, but to remain above, the rate of potential output growth. The expansion in economic activity over the projection period was anticipated to steadily reduce resource slack, and the unemployment rate was expected to decline gradually and temporarily move slightly below the staff's estimate of its longer-run natural rate toward the end of the period.

The staff's near-term forecast for inflation was a little lower than the projection prepared for the previous FOMC meeting, reflecting recent readings on core consumer price inflation that were lower than anticipated and declines in oil prices that were faster than expected, but the forecast for inflation over the medium term was little changed. The staff continued to project inflation to be lower in the second half of this year than in the first half and to remain below the Committee's longer-run objective of 2 percent over the next few years. With longer-term inflation expectations assumed to remain stable, resource slack projected to diminish slowly, and changes in commodity and import prices expected to be subdued, inflation was projected to rise gradually and to reach the Committee's objective in the longer run.

Overall, the staff's economic projection for the September meeting was quite similar to the forecast presented at the June meeting, when the FOMC last prepared a Summary of Economic Projections (SEP). The staff's September projection showed a slightly higher path for the unemployment rate, a bit lower real GDP growth, and essentially no change to inflation compared with its June forecast.

The staff continued to view the uncertainty around its projections for real GDP growth, the unemployment rate, and inflation as similar to the average over the past 20 years. The risks to the forecast for real GDP growth were still seen as tilted a little to the downside, as neither monetary policy nor fiscal policy was viewed as well positioned to help the economy withstand adverse shocks. At the same time, the staff viewed the risks around its outlook for the unemployment rate and for inflation as roughly balanced.

Participants' Views on Current Conditions and the Economic Outlook

In conjunction with this FOMC meeting, members of the Board of Governors and the Federal Reserve Bank presidents submitted their projections of real output growth, the unemployment rate, inflation, and the federal funds rate for each year from 2014 through 2017 and over the longer run, conditional on each participant's assessment of appropriate monetary policy. The longer-run projections represent each participant's assessment 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. These economic projections and policy assessments are described in the SEP, which is attached as an addendum to these minutes.

In their discussion of the economic situation and the outlook, meeting participants viewed the information received over the intermeeting period as suggesting that economic activity was expanding at a moderate rate. On balance, labor market conditions improved somewhat further; however, the unemployment rate was little changed, and most participants judged that there remained significant underutilization of labor resources. Participants generally expected that, over the medium term, real economic activity would increase at a pace sufficient to lead to a further gradual decline in the unemployment rate toward levels consistent with the Committee's objective of maximum employment. Inflation was running below the Committee's longer-run objective, but longer-term inflation expectations were stable. Participants anticipated that inflation would move toward the Committee's 2 percent goal in coming years, with several expressing concern that inflation might persist below the Committee's objective for quite some time. Most viewed the risks to the outlook for economic activity and the labor market as broadly balanced. However, a number of participants noted that economic growth over the medium term might be slower than they expected if foreign economic growth came in weaker than anticipated, structural productivity continued to increase only slowly, or the recovery in residential construction continued to lag.

Household spending appeared to be rising moderately, with several participants noting that the recent positive reports on retail sales, motor vehicle purchases, and health-care spending had reduced their concern about weakness in the underlying pace of household spending. Among the favorable factors attending the outlook for consumer spending, participants cited continued gains in household wealth, improved household balance sheets, low delinquency rates, a high saving rate, or rising confidence in employment and income prospects. However, other participants said they heard mixed reports from business contacts regarding consumer spending or were uncertain about the prospects for stronger gains in real income necessary to sustain moderate growth in household spending.

The recovery in housing activity remained slow in all but a few areas of the country despite relatively low mortgage rates, rising house prices, and improvements in household wealth. Contacts in a couple of Districts reported that new construction was being held back by shortages of materials, of lots available for development, and of skilled workers or by the overhang of vacant homes not on the market. Households with relatively low credit scores continued to have difficulty obtaining mortgage loans. It was noted that this difficulty could be a factor restraining the demand for housing, particularly among younger households who have high levels of student loan debt or weak job prospects. A few participants pointed out the relative strength in construction of and demand for multifamily units, which possibly was due to a shift in demand among younger homebuyers away from single-family homes.

Information from business contacts in most parts of the country indicated improvements in business conditions, rising confidence about the economic outlook, and increasing willingness to undertake new investment projects. According to national and regional surveys, manufacturing activity was strong, and several participants had received reports of hiring and increased capital spending in that sector. Among the other industries cited as relatively strong in recent months were transportation, energy, and services. Several participants noted positive signs of further increases in investment spending going forward, including elevated levels of new orders and shipments of capital goods, strong interest in the technology sector, and the need to replace aging capital. A couple of participants added that nonresidential construction activity was rising in their Districts.

The improvement in business conditions was reflected in reports of increased demand for loans at banks in several Districts. Demand rose for loans to both households and businesses, and a couple of participants indicated that borrowers were expanding their use of existing credit lines as well as obtaining new commitments. Bankers in one District stated that, while they had eased the terms and conditions on loans in response to competition from other lenders, they had not taken on riskier loans. Some financial developments that could undermine financial stability over time were noted, including a deterioration in leveraged lending standards, stretched stock market valuations, and compressed risk spreads. However, one participant suggested that the leveraged loan market seemed to be moving into better balance, and that market participants appeared to be taking appropriate account of the changes in interest rates that might be associated with the eventual normalization of the stance of monetary policy. Moreover, a couple of participants, while stressing the importance of remaining vigilant about potential risks to financial stability, observed that conditions in financial markets at present did not suggest the types of financial stability considerations that would impede the achievement of the Committee's macroeconomic objectives.

Some participants noted that expectations for the path of the federal funds rate implied by market quotes appeared to remain below most of the projections of the federal funds rate provided by Committee participants in the SEP, which represent each individual participant's assessment of the appropriate path for the federal funds rate consistent with his or her economic outlook. However, it was pointed out that measures of financial market participants' expectations incorporate their judgments regarding not only the most likely outcomes, but also the possible downside tail risks that might be associated with especially low paths for the federal funds rate. For example, respondents to the recent Survey of Primary Dealers placed considerable odds on the federal funds rate returning to the zero lower bound during the two years following the initial increase in that rate. The probability that investors attach to such low interest rate scenarios could pull the expected path of the federal funds rate computed from market quotes below most Committee participants' assessments of appropriate policy as reported in the SEP.

The restraint on economic activity from fiscal policy was seen as diminishing, and a couple of participants pointed out that, over the second half of the year, the remaining drag was likely to be small. Nonetheless, the cutbacks in both defense and nondefense federal outlays, as well as state governments' budget restraint, continued to weigh on jobs and income in some parts of the country. Fiscal policy overall was anticipated to be a neutral factor for economic growth over the next several years.

During participants' discussion of prospects for economic activity abroad, they commented on a number of uncertainties and risks attending the outlook. Over the intermeeting period, the foreign exchange value of the dollar had appreciated, particularly against the euro, the yen, and the pound sterling. Some participants expressed concern that the persistent shortfall of economic growth and inflation in the euro area could lead to a further appreciation of the dollar and have adverse effects on the U.S. external sector. Several participants added that slower economic growth in China or Japan or unanticipated events in the Middle East or Ukraine might pose a similar risk. At the same time, a couple of participants pointed out that the appreciation of the dollar might also tend to slow the gradual increase in inflation toward the FOMC's 2 percent goal.

Labor market conditions continued to improve over the intermeeting period. Although the unemployment rate was little changed, participants variously cited positive readings from other indicators, including a decline in longer-term unemployment, the low level of new claims for unemployment insurance, the rise in job openings, and survey reports of increased hiring plans and job availability. While the most recent estimate of nonfarm payroll employment showed a smaller monthly gain than earlier in the year, it followed six months in which increases had averaged more than 200,000. Some participants were reluctant to place much weight on one monthly report or noted that the first estimate for August has frequently been revised up in recent years. Participants generally agreed that the accumulated progress in labor market conditions since the Committee's current asset purchase program began in September 2012 had been substantial and expected that progress would be sustained. Nonetheless, they continued to express differing views on the extent of remaining slack in labor markets. Most agreed that underutilization of labor resources remained significant; these participants noted variously that the level of nonfarm payroll jobs had only recently returned to its pre-recession level, that the number of individuals working part time for economic reasons was still elevated relative to the level of unemployment, and that the labor force participation rate was still below assessments of its structural trend. In this regard, a couple of participants pointed out that the stability of the participation rate, on balance, over the past year suggested that some of the cyclical shortfall had diminished. Most agreed that the Committee's assessment of labor market slack should be grounded in its review of a range of labor market indicators, although a few saw the gap between the unemployment rate and their estimate of its longer-run normal level as a reliable indicator of slack.

Most measures of labor compensation showed no broad-based increase in wage inflation. However, businesses in several Districts continued to report upward pressure on wages in specific industries and occupations associated with labor shortages or difficult-to-fill jobs, while a couple of participants noted a more general rise in current or planned wage increases in their regions. Several participants commented that the relatively subdued rise in nominal labor compensation was still below longer-run trend rates of productivity growth and inflation and was a signal of slack remaining in the labor market. However, a couple of others suggested some caution in reading subdued wage inflation as an indicator of labor market underutilization. They pointed out that if nominal wages did not adjust downward when unemployment was high, pent-up wage deflation could help explain the modest increases in wages so far during the recovery, and wages could rise more rapidly going forward as the unemployment rate continues to decline.

Inflation had been running below the Committee's longer-run objective, and the readings on consumer prices over the intermeeting period were somewhat softer than during the preceding four months, in part because of declining energy prices. Most participants anticipated that inflation would move gradually back toward its objective over the medium term. However, participants differed somewhat in their assessments of how quickly inflation would move up. Some cited the stability of longer-run inflation expectations at a level consistent with the Committee's objective as an important factor in their forecasts that inflation would reach 2 percent in coming years. Participants' views on the responsiveness of inflation to the level and change in resource utilization varied, with a few seeing labor markets as sufficiently tight that wages and prices would soon begin to move up noticeably but with some others indicating that inflation was unlikely to approach 2 percent until the unemployment rate falls below its longer-run normal level. While most viewed the risk that inflation would run persistently below 2 percent as having diminished somewhat since earlier in the year, a couple noted the possibility that longer-term inflation expectations might be slightly lower than the Committee's 2 percent objective or that domestic inflation might be held down by persistent disinflation among U.S. trading partners and further appreciation of the dollar.

In their discussion of the appropriate path for monetary policy over the medium term, meeting participants agreed that the timing of the first increase in the federal funds rate and the appropriate path of the policy rate thereafter would depend on incoming economic data and their implications for the outlook. That said, several participants thought that the current forward guidance regarding the federal funds rate suggested a longer period before liftoff, and perhaps also a more gradual increase in the federal funds rate thereafter, than they believed was likely to be appropriate given economic and financial conditions. In addition, the concern was raised that the reference to "considerable time" in the current forward guidance could be misunderstood as a commitment rather than as data dependent. However, it was noted that the current formulation of the Committee's forward guidance clearly indicated that the Committee's policy decisions were conditional on its ongoing assessment of realized and expected progress toward its objectives of maximum employment and 2 percent inflation, and that its assessment reflected its review of a broad array of economic indicators. It was emphasized that the current forward guidance for the federal funds rate was data dependent and did not indicate that the first increase in the target range for the federal funds rate would occur mechanically after some fixed calendar interval following the completion of the current asset purchase program. If employment and inflation converged more rapidly toward the Committee's goals than currently expected, the date of liftoff could be earlier, and subsequent increases in the federal funds rate target more rapid, than participants currently anticipated. Conversely, if employment and inflation returned toward the Committee's objectives more slowly than currently anticipated, the date of liftoff for the federal funds rate could be later, and future federal funds rate target increases could be more gradual. In addition, some participants saw the current forward guidance as appropriate in light of risk-management considerations, which suggested that it would be prudent to err on the side of patience while awaiting further evidence of sustained progress toward the Committee's goals. In their view, the costs of downside shocks to the economy would be larger than those of upside shocks because, in current circumstances, it would be less problematic to remove accommodation quickly, if doing so becomes necessary, than to add accommodation. A number of participants also noted that changes to the forward guidance might be misinterpreted as a signal of a fundamental shift in the stance of policy that could result in an unintended tightening of financial conditions.

Participants also discussed how the forward-guidance language might evolve once the Committee decides that the current formulation no longer appropriately conveys its intentions about the future stance of policy. Most participants indicated a preference for clarifying the dependence of the current forward guidance on economic data and the Committee's assessment of progress toward its objectives of maximum employment and 2 percent inflation. A clarification along these lines was seen as likely to improve the public's understanding of the Committee's reaction function while allowing the Committee to retain flexibility to respond appropriately to changes in the economic outlook. One participant favored using a numerical threshold based on the inflation outlook as a form of forward guidance. A few participants, however, noted the difficulties associated with expressing forward guidance in terms of numerical thresholds for some set of economic variables. Another participant indicated a preference for reducing reliance on explicit forward guidance in the statement and conveying instead guidance regarding the future stance of monetary policy through other mechanisms, including the SEP. It was noted that providing explicit forward guidance regarding the future path of the federal funds rate might become less important once a highly accommodative stance of policy is no longer appropriate and the process of policy normalization is well under way. It was generally agreed that when changes to the forward guidance become appropriate, they will likely present communication challenges, and that caution will be needed to avoid sending unintended signals about the Committee's policy outlook.

Committee Policy Action

In their discussion of monetary policy for the period ahead, members judged that information received since the FOMC met in July indicated that economic activity was expanding at a moderate pace. Household spending appeared to be rising moderately, and business fixed investment was advancing, while the recovery in the housing sector remained slow. Fiscal policy was restraining economic growth, although the extent of restraint was diminishing and would soon be quite small. Inflation was running below the Committee's longer-run objective, but longer-term inflation expectations were stable. The Committee expected that, with appropriate policy accommodation, economic activity would expand at a moderate pace, with labor market indicators and inflation moving toward levels that the Committee judges consistent with its dual mandate.

With incoming information continuing to broadly support the Committee's expectation of ongoing improvement in labor market conditions and inflation moving back toward the Committee's 2 percent objective, members agreed that a further measured reduction in the pace of asset purchases was appropriate at this meeting. Accordingly, the Committee agreed that, beginning in October, it would add to its holdings of agency MBS at a pace of $5 billion per month rather than $10 billion per month, and it would add to its holdings of longer-term Treasury securities at a pace of $10 billion per month rather than $15 billion per month. The Committee judged that, if incoming information broadly supported its expectations that labor market indicator and inflation would continue to move toward mandate-consistent levels, it would end its current program of asset purchases at its October meeting.

Members discussed their assessments of progress toward the Committee's objectives of maximum employment and 2 percent inflation and considered possible enhancements to the statement that would more clearly communicate the Committee's view on such progress. Regarding the labor market, many members indicated that, although labor market conditions had generally continued to improve, there was still significant slack in labor markets. A few members, however, expressed reservations about continuing to characterize the extent of underutilization of labor resources as significant. In the end, members agreed to indicate that labor market conditions had improved somewhat further, but that the unemployment rate was little changed and a range of labor market indicators continued to suggest that there remained significant underutilization of labor resources. It was noted, however, that the characterization of labor market underutilization might have to be changed if progress in the labor market continued. Regarding inflation, members agreed that inflation had moved closer to the Committee's 2 percent objective during the first half of the year but, more recently, had fallen back somewhat. As a consequence, they updated the language in the statement to indicate that inflation had been running below the Committee's longer-run objective. However, with stable longer-term inflation expectations, the Committee continued to judge that the likelihood of inflation running persistently below 2 percent had diminished somewhat since early in the year.

After the discussion, all members but two voted to maintain the Committee's target range for the federal funds rate and to reiterate its forward guidance about the federal funds rate. The guidance continued to state that the Committee's decisions about how long to maintain the current target range for the federal funds rate would depend on its assessment of actual and expected progress toward its objectives of maximum employment and 2 percent inflation. The Committee again anticipated that it likely would be appropriate to maintain the current target range for the federal funds rate for a considerable time after the asset purchase program ends, especially if projected inflation continued to run below the Committee's

2 percent longer-run goal, and provided that longer-term inflation expectations remained well anchored. The forward guidance also reiterated the Committee's expectation that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run. Two members, however, dissented because, in their view, the statement language did not accurately reflect the progress made to date toward the Committee's goals of maximum employment and inflation of 2 percent, and they believed that ongoing progress will likely warrant an earlier increase in the federal funds rate than suggested by the forward guidance in the Committee's postmeeting statement.

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 SOMA in accordance with the following domestic policy directive:

> "Consistent with its statutory mandate, the Federal Open Market Committee seeks monetary and financial conditions that will foster maximum employment and price stability. In particular, 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 undertake open market operations as necessary to maintain such conditions. Beginning in October, the Desk is directed to purchase longer-term Treasury securities at a pace of about $10 billion per month and to purchase agency mortgage-backed securities at a pace of about $5 billion per month. The Committee also directs the Desk to engage in dollar roll and coupon swap transactions as necessary to facilitate settlement of the Federal Reserve's agency mortgage-backed securities transactions. The Committee directs the Desk to maintain its policy of rolling over maturing Treasury securities into new issues and its policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in agency mortgage-backed securities. 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 2:00 p.m.:

> "Information received since the Federal Open Market Committee met in July suggests that economic activity is expanding at a moderate pace. On balance, labor market conditions improved somewhat further; however, the unemployment rate is little changed and a range of labor market indicators suggests that there remains significant underutilization of labor resources. Household spending appears to be rising moderately and business fixed investment is advancing, while the recovery in the housing sector remains slow. Fiscal policy is restraining economic growth, although the extent of restraint is diminishing. Inflation has been running below the Committee's longer-run objective. 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 that, with appropriate policy accommodation, economic activity will expand at a moderate pace, with labor market indicators and inflation moving toward levels the Committee judges consistent with its dual mandate. The Committee sees the risks to the outlook for economic activity and the labor market as nearly balanced and judges that the likelihood of inflation running persistently below 2 percent has diminished somewhat since early this year.
>
> The Committee currently judges that there is sufficient underlying strength in the broader economy to support ongoing improvement in labor market conditions. In light of the cumulative progress toward maximum employment and the improvement in the outlook for labor market conditions since the inception of the current asset purchase program, the Committee decided to make a further measured reduction in the pace of its asset purchases. Beginning in October, the Committee will add to its holdings of agency mortgage-backed securities at a pace of $5 billion per month rather than $10 billion per month, and will add to its holdings of longer-term Treasury securities at a pace of $10 billion per month rather than $15 billion per month. The Committee is maintaining its existing policy of reinvesting principal payments from its hold-

ings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. The Committee's sizable and still-increasing holdings of longer-term securities should maintain downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative, which in turn should promote a stronger economic recovery and help to ensure that inflation, over time, is at the rate most consistent with the Committee's dual mandate.

The Committee will closely monitor incoming information on economic and financial developments in coming months and will continue its purchases of Treasury and agency mortgage-backed securities, and employ its other policy tools as appropriate, until the outlook for the labor market has improved substantially in a context of price stability. If incoming information broadly supports the Committee's expectation of ongoing improvement in labor market conditions and inflation moving back toward its longer-run objective, the Committee will end its current program of asset purchases at its next meeting. However, asset purchases are not on a preset course, and the Committee's decisions about their pace will remain contingent on the Committee's outlook for the labor market and inflation as well as its assessment of the likely efficacy and costs of such purchases.

To support continued progress toward maximum employment and price stability, the Committee today reaffirmed its view that a highly accommodative stance of monetary policy remains appropriate. In determining how long to maintain the current 0 to ¼ percent target range for the federal funds rate, the Committee will assess progress—both realized and expected—toward its objectives of maximum employment and 2 percent inflation. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. The Committee continues to anticipate, based on its assessment of these factors, that it likely will be appropriate to maintain the current target range for the federal funds rate for a considerable time after the asset purchase program ends, especially if projected inflation continues to run below the Committee's 2 percent longer-run goal, and provided that longer-term inflation expectations remain well anchored.

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. The Committee currently anticipates that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run."

Voting for this action: Janet L. Yellen, William C. Dudley, Lael Brainard, Stanley Fischer, Narayana Kocherlakota, Loretta J. Mester, Jerome H. Powell, and Daniel K. Tarullo.

Voting against this action: Richard W. Fisher and Charles I. Plosser.

President Fisher dissented because he believed that the continued strengthening of the real economy, the improved outlook for labor utilization and for general price stability, and continued signs of financial market excess will likely warrant an earlier reduction in monetary accommodation than is suggested by the Committee's stated forward guidance.

Mr. Plosser dissented because he objected to the statement's guidance indicating that it likely will be appropriate to maintain the current target range for the federal funds rate for "a considerable time after the asset purchase program ends." In his view, the reference to calendar time should be replaced with language that indicates how monetary policy will respond to incoming data. Moreover, he judged that the statement did not acknowledge the substantial progress that had been made toward the Committee's economic goals and thus risks unnecessary and disruptive volatility in financial markets, and perhaps in the economy, if the Committee reduces accommodation sooner or more quickly than financial markets anticipate.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, October 28–29, 2014. The meeting adjourned at 10:35 a.m. on September 17, 2014.

Notation Vote

By notation vote completed on August 19, 2014, the Committee unanimously approved the minutes of the Committee meeting held on July 29–30, 2014.

William B. English
Secretary

Addendum: Summary of Economic Projections

In conjunction with the September 16–17, 2014, Federal Open Market Committee (FOMC) meeting, meeting participants submitted their projections of real output growth, the unemployment rate, inflation, and the federal funds rate for each year from 2014 through 2017 and in the longer run.[5] Each participant's projection was based on information available at the time of the meeting plus his or her assessment of appropriate monetary policy and assumptions about the factors likely to affect economic outcomes. The longer-run projections represent each participant's assessment 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, FOMC participants expected that, under appropriate monetary policy, economic growth would be faster in the second half of 2014 and in 2015 than their estimates of the U.S. economy's longer-run normal growth rate. Participants then saw real growth moving back slowly toward its longer-run rate in 2016 and 2017. The unemployment rate was projected to continue to decline gradually over the forecast period, and to be at or below participants' individual judgments of its longer-run normal level by the end of 2017 (table 1 and figure 1). Almost all participants projected that inflation, as measured by the four-quarter change in the price index for personal consumption expenditures (PCE), would rise gradually over the next few years, reaching a level at or near the Committee's 2 percent objective in 2016 or 2017.

Participants judged that it would be appropriate to begin adjusting the current highly accommodative stance of policy over the projection period as labor

5 As discussed in its Policy Normalization Principles and Plans, released on September 17, 2014, the Committee intends to target a range for the federal funds rate during normalization. Participants were asked to provide, in their contributions to the Summary of Economic Projections, either the midpoint of the target range for the federal funds rate for any period when a range was anticipated or the target level for the federal funds rate, as appropriate. In the lower panel of figure 2, these values have been rounded to the nearest ⅛ percentage point.

Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, September 2014
Percent

Variable	Central tendency[1]					Range[2]				
	2014	2015	2016	2017	Longer run	2014	2015	2016	2017	Longer run
Change in real GDP	2.0 to 2.2	2.6 to 3.0	2.6 to 2.9	2.3 to 2.5	2.0 to 2.3	1.8 to 2.3	2.1 to 3.2	2.1 to 3.0	2.0 to 2.6	1.8 to 2.6
June projection	2.1 to 2.3	3.0 to 3.2	2.5 to 3.0	n.a.	2.1 to 2.3	1.9 to 2.4	2.2 to 3.6	2.2 to 3.2	n.a.	1.8 to 2.5
Unemployment rate	5.9 to 6.0	5.4 to 5.6	5.1 to 5.4	4.9 to 5.3	5.2 to 5.5	5.7 to 6.1	5.2 to 5.7	4.9 to 5.6	4.7 to 5.8	5.0 to 6.0
June projection	6.0 to 6.1	5.4 to 5.7	5.1 to 5.5	n.a.	5.2 to 5.5	5.8 to 6.2	5.2 to 5.9	5.0 to 5.6	n.a.	5.0 to 6.0
PCE inflation	1.5 to 1.7	1.6 to 1.9	1.7 to 2.0	1.9 to 2.0	2.0	1.5 to 1.8	1.5 to 2.4	1.6 to 2.1	1.7 to 2.2	2.0
June projection	1.5 to 1.7	1.5 to 2.0	1.6 to 2.0	n.a.	2.0	1.4 to 2.0	1.4 to 2.4	1.5 to 2.0	n.a.	2.0
Core PCE inflation[3]	1.5 to 1.6	1.6 to 1.9	1.8 to 2.0	1.9 to 2.0		1.5 to 1.8	1.6 to 2.4	1.7 to 2.2	1.8 to 2.2	
June projection	1.5 to 1.6	1.6 to 2.0	1.7 to 2.0	n.a.		1.4 to 1.8	1.5 to 2.4	1.6 to 2.0	n.a.	

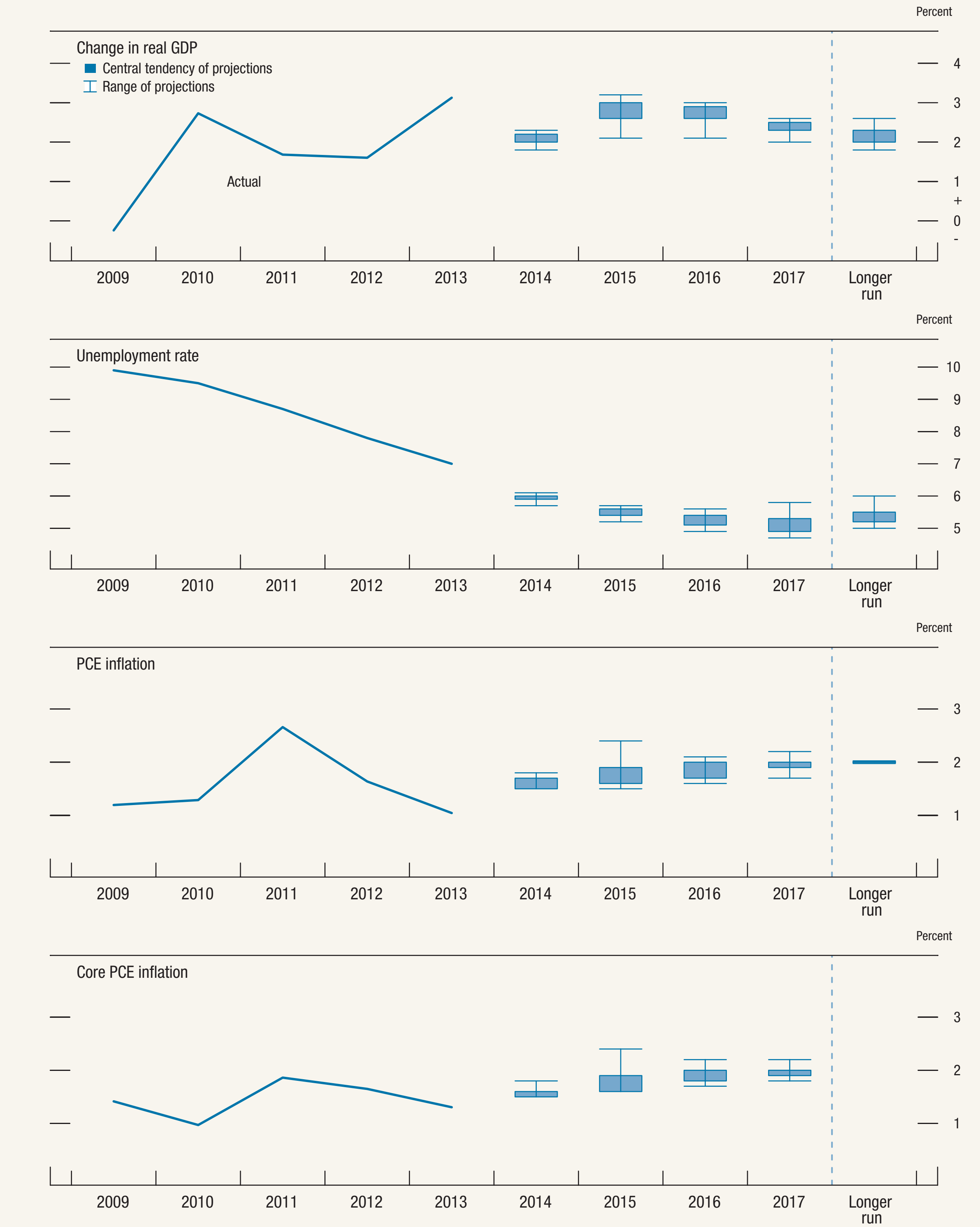
Note: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price 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 17–18, 2014.

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, 2014–17 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.

market indicators and inflation move back toward values the Committee judges consistent with the attainment of its mandated objectives of maximum employment and stable prices. As shown in figure 2, all but a few participants anticipated that it would be appropriate to begin raising the target range for the federal funds rate in 2015, with most projecting that it will be appropriate to raise the target federal funds rate fairly gradually. Consistent with the improvement in the outlook for the labor market since the Committee began its current asset purchase program in September 2012, as well as participants' expectation of ongoing improvement in labor market conditions and inflation moving back toward their longer-run objective, all participants judged that it would be appropriate to complete the asset purchase program in October of this year.

Most participants saw the uncertainty associated with their outlooks for economic growth, the unemployment rate, and inflation as similar to that of the past 20 years, although a few judged it as somewhat higher. In addition, most participants considered the risks to the outlook for real gross domestic product (GDP) growth and the unemployment rate to be broadly balanced, and a substantial majority saw the risks to inflation as broadly balanced. However, a few participants, on net, saw the risks to their forecasts for economic growth or inflation as tilted to the downside.

The Outlook for Economic Activity

Participants generally projected that, conditional on their individual assumptions about appropriate monetary policy, economic growth would pick up from its low level in the first half of the year and run above their estimates of the longer-run normal rate of economic growth in the second half of 2014 and in 2015. Participants pointed to a number of factors that they expected would contribute to a pickup in economic growth in the second half of this year and next year, including rising household net worth, diminished restraint from fiscal policy, improving labor market conditions, and highly accommodative monetary policy. In general, participants then saw real growth moving gradually back toward, but remaining at or somewhat above, its longer-run rate in 2016 and 2017.

Many participants revised down their projections of real GDP growth somewhat in one or more years and particularly for 2015, compared with their projections in June. Participants pointed to a couple of factors leading them to mark down their projected paths for real GDP growth including the incorporation of weaker-than-expected data on consumer spending and perceptions of slower growth in potential GDP. The central tendencies of participants' projections for real GDP growth in their most recent projections were 2.0 to 2.2 percent in 2014, 2.6 to 3.0 percent in 2015, 2.6 to 2.9 percent in 2016, and 2.3 to 2.5 percent in 2017. The central tendency of the projections of real GDP growth over the longer run was 2.0 to 2.3 percent, essentially the same as in June.

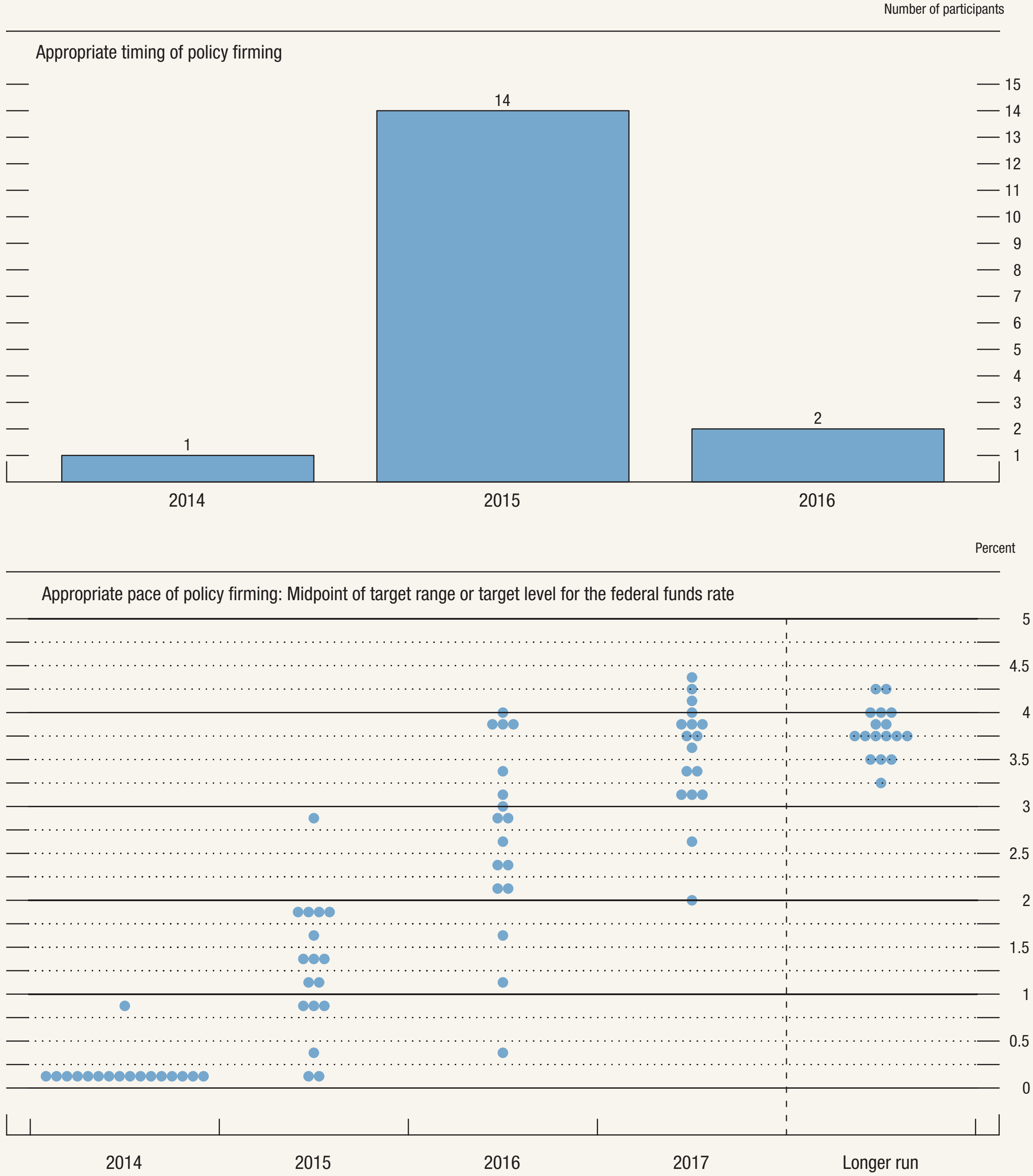
Participants anticipated that the unemployment rate would continue to decline gradually over the forecast period and, by the fourth quarter of 2017, would be close to or below their individual assessments of its longer-run normal level. The central tendencies of participants' forecasts for the unemployment rate in the fourth quarter of each year were 5.9 to 6.0 percent in 2014, 5.4 to 5.6 percent in 2015, 5.1 to 5.4 percent in 2016, and 4.9 to 5.3 percent in 2017. Participants' projected paths for the unemployment rate were slightly lower than in June, with many participants citing lower-than-expected incoming unemployment data. 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 unchanged at 5.2 to 5.5 percent.

Figures 3.A and 3.B show that participants held a range of views regarding the likely outcomes for real GDP growth and the unemployment rate through 2017. The diversity of views reflected their individual assessments of the rate at which the forces that have been restraining the pace of the economic recovery would abate, of the anticipated path for foreign economic activity, of the trajectory for growth in consumption as labor market slack diminishes, and of the appropriate path of monetary policy. Relative to June, the dispersions of participants' projections for real GDP growth and for the unemployment rate over the entire projection period were little changed.

The Outlook for Inflation

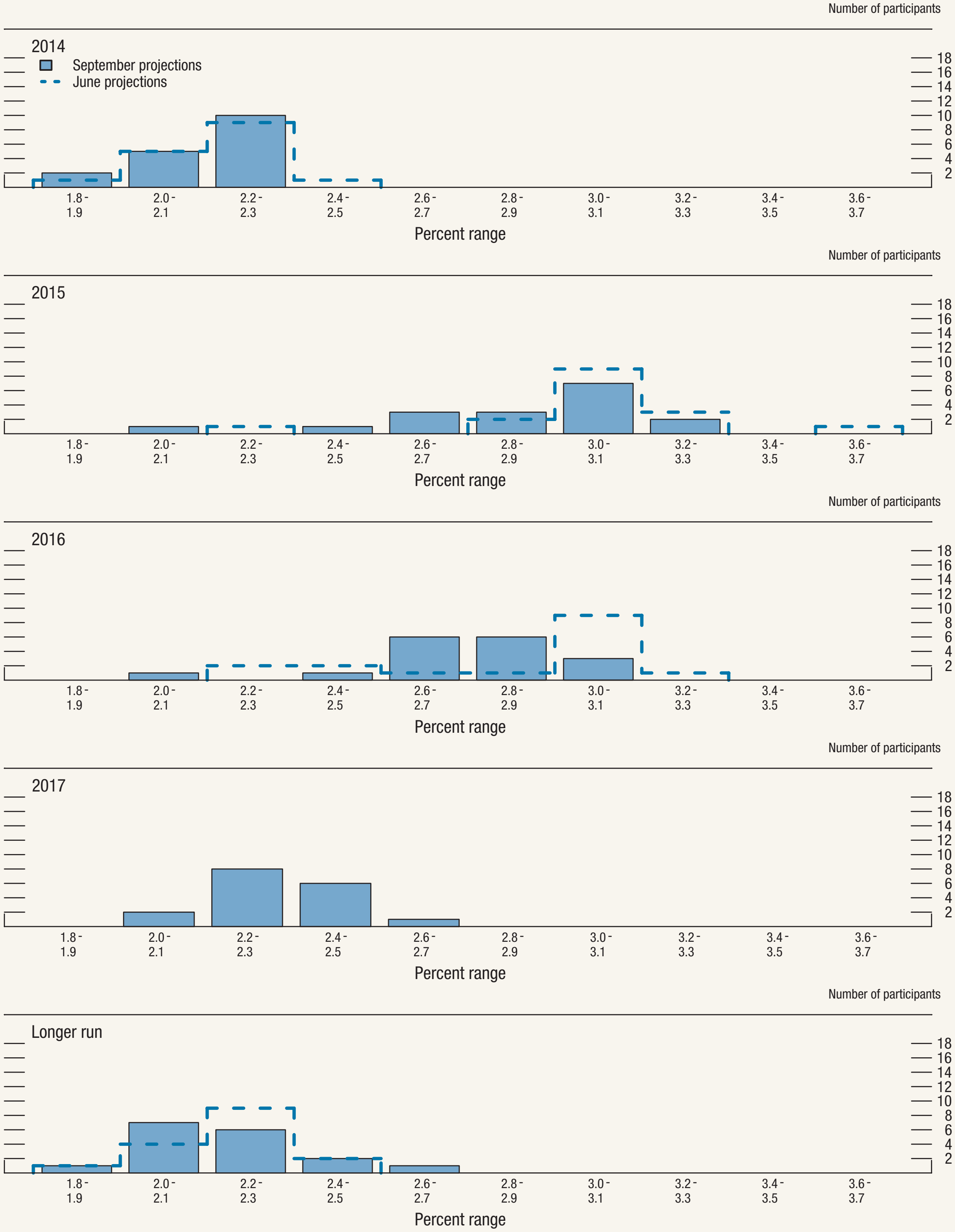
Compared with June, the central tendencies of participants' projections for inflation under the assumption of appropriate policy were largely unchanged for 2014 to 2016, and the trends anticipated over that period were generally expected to continue in 2017. Almost all participants projected that PCE inflation would rise gradually over the next few years to a level at or near the Committee's 2 percent objective. A few

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



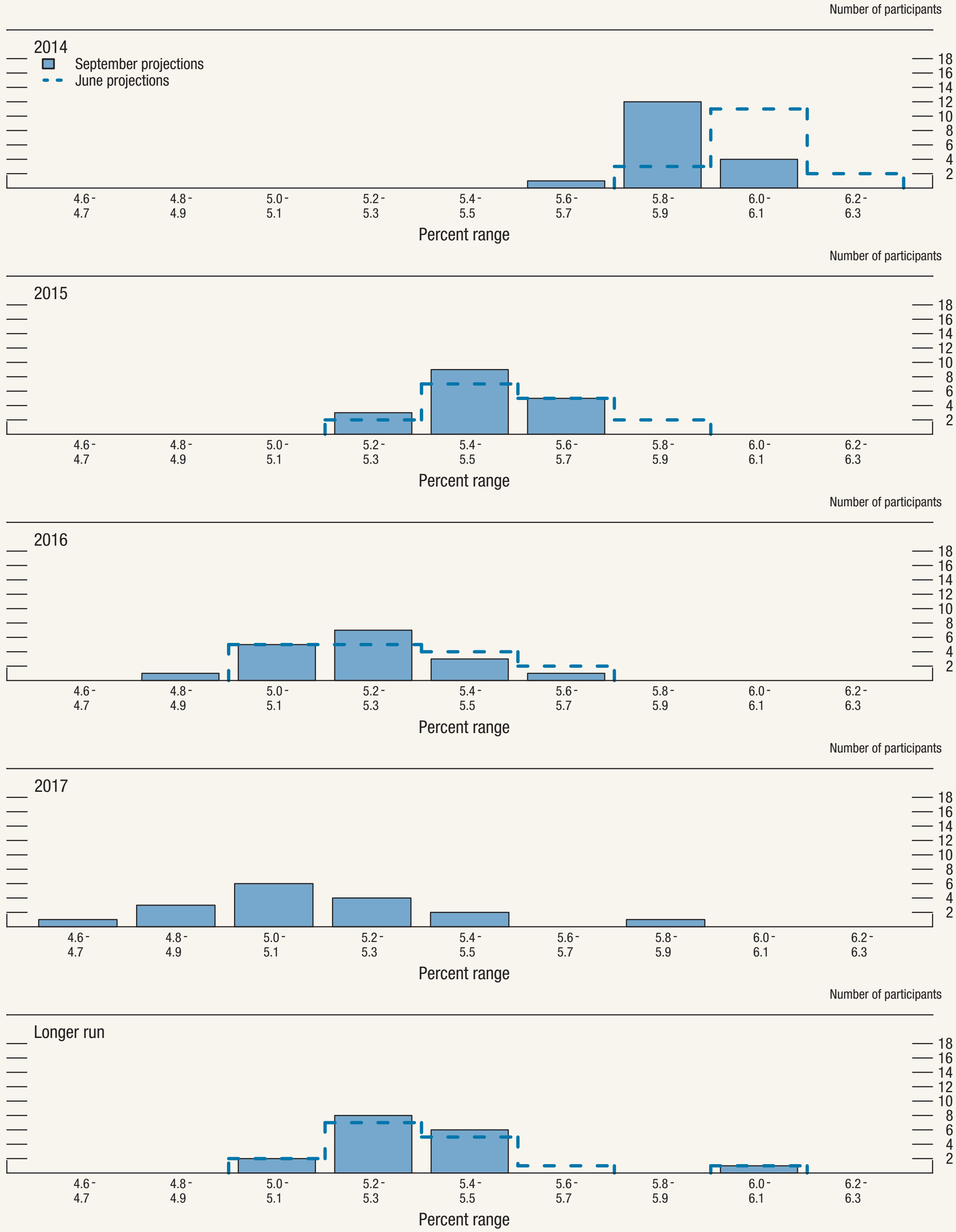
Note: In the upper panel, the height of each bar denotes the number of FOMC participants who judge that, under appropriate monetary policy, the first increase in the target range for the federal funds rate from its current range of 0 to ¼ percent will occur in the specified calendar year. In June 2014, the numbers of FOMC participants who judged that the first increase in the target federal funds rate would occur in 2014, 2015, and 2016 were, respectively, 1, 12, and 3. In the lower panel, each shaded circle indicates the value (rounded to the nearest ⅛ percentage point) of an individual participant's judgment of the midpoint of the appropriate target range for the federal funds rate or the appropriate target level for the federal funds rate at the end of the specified calendar year or over the longer run.

Figure 3.A. Distribution of participants' projections for the change in real GDP, 2014–17 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, 2014–17 and over the longer run



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

participants expected PCE inflation to rise somewhat above 2 percent at some point during the forecast period, while several others expected inflation to remain below 2 percent even at the end of 2017. The central tendencies for PCE inflation were 1.5 to 1.7 percent in 2014, 1.6 to 1.9 percent in 2015, 1.7 to 2.0 percent in 2016, and 1.9 to 2.0 percent in 2017. The central tendencies of the forecasts for core inflation were broadly similar to those for the headline measure. It was noted that a combination of factors—including stable inflation expectations, steadily diminishing resource slack, a pickup in wage growth, a gradual decline in the foreign exchange value for the dollar, and still-accommodative monetary policy—was likely to contribute to a gradual rise of inflation back toward the Committee's longer-run objective of 2 percent.

Figures 3.C and 3.D provide information on the diversity of participants' views about the outlook for inflation. The ranges of participants' projections for inflation in 2014, 2015, and 2016 were little changed relative to June. The range in 2017 shows a very substantial concentration near the Committee's 2 percent longer-run objective by that time.

Appropriate Monetary Policy

Participants judged that it would be appropriate to begin reducing policy accommodation over the projection period as labor market indicators and inflation move back toward values the Committee judges consistent with the attainment of its mandated objectives of maximum employment and price stability. As shown in figure 2, all but a few participants anticipated that it would be appropriate to begin raising the target range for the federal funds rate in 2015, and most projected that the appropriate level of the federal funds rate would remain below its longer-run normal level through 2016. Most participants expected the appropriate level of the federal funds rate would be approaching, or would already have reached, their individual view of its longer-run normal level by the end of 2017.

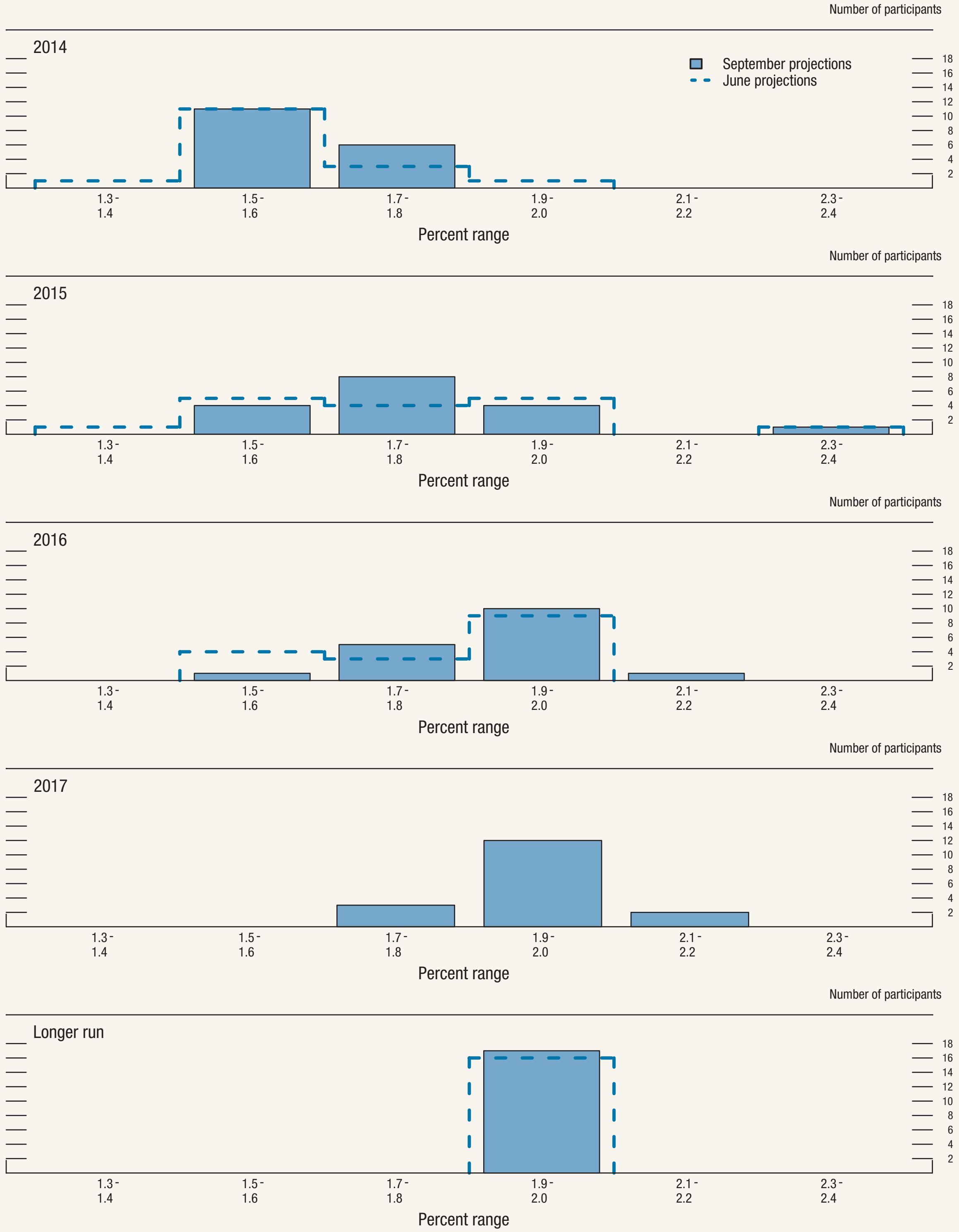
All participants projected that the unemployment rate would be below 5.75 percent at the end of the year in which they judged the initial increase in the target range for the federal funds rate would be warranted, and all but one anticipated that inflation would be at or below the Committee's 2 percent goal at that time. Most participants projected that the unemployment rate would be above their estimates of its longer-run normal level at the end of the year in which they saw the target range for the federal funds rate increasing from its effective lower bound, although all but one thought that, by the end of 2016, the unemployment rate would be at or below their individual judgments of its longer-run normal rate.

Figure 3.E provides the distribution of participants' judgments regarding the appropriate level of the target federal funds rate at the end of each calendar year from 2014 to 2017 and over the longer run. As noted earlier, nearly all participants judged that economic conditions would warrant maintaining the current exceptionally low level of the federal funds rate into 2015. Relative to their projections in June, the median values of the federal funds rate at the end of 2015 and 2016 increased 26 basis points and 38 basis points to 1.38 percent and 2.88 percent, respectively, while the mean values rose 10 basis points and 16 basis points to 1.28 percent and 2.69 percent, respectively. The dispersion of projections for the appropriate level of the federal funds rate was little changed in 2015 and 2016. Most participants judged that it would be appropriate to set the federal funds rate at or near its longer-run normal level in 2017, though some projected that the federal funds rate would still need to be set appreciably below its longer-run normal level, and one anticipated that it would be appropriate to target a level noticeably above its longer-run normal level. Participants provided a number of reasons why they thought it would be appropriate for the federal funds rate to remain below its longer-run normal level for some time after inflation and unemployment were near mandate-consistent levels. These reasons included an assessment that headwinds holding back the recovery will continue to exert restraint on economic activity at that time and that the risks to the economic outlook are asymmetric as a result of the constraints on monetary policy caused by the effective lower bound on the federal funds rate.

As in June, estimates of the longer-run level of the federal funds rate ranged from 3.25 to about 4.25 percent. All participants judged that inflation in the longer run would be equal to the Committee's inflation objective of 2 percent, implying that their individual judgments regarding the appropriate longer-run level of the real federal funds rate in the absence of further shocks to the economy ranged from 1.25 to about 2.25 percent.

Participants also described their views regarding the appropriate path of the Federal Reserve's balance

Figure 3.C. Distribution of participants' projections for PCE inflation, 2014–17 and over the longer run

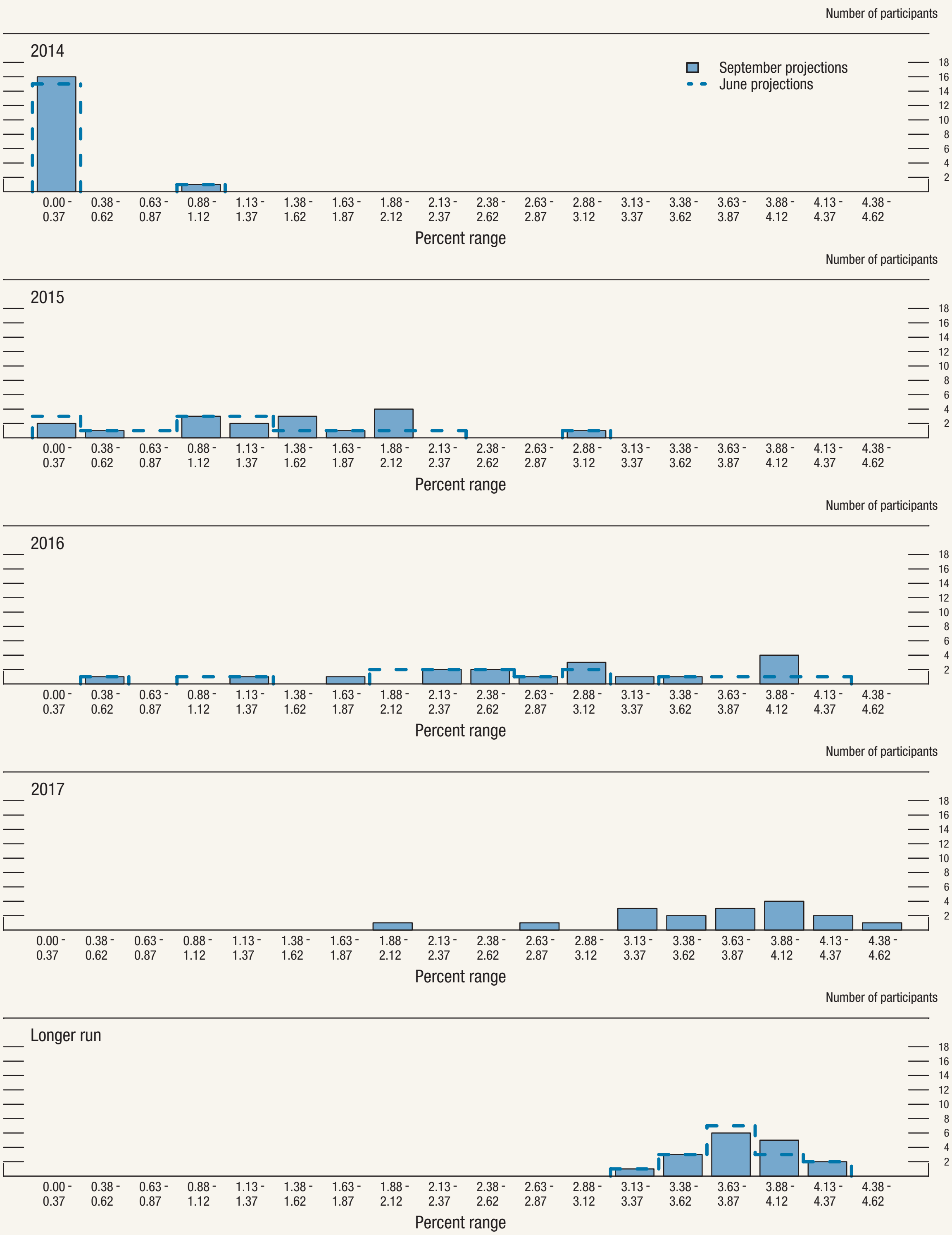


Note: Definitions of variables are in the general note to table 1.

Figure 3.D. Distribution of participants' projections for core PCE inflation, 2014–17

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

Figure 3.E. Distribution of participants' judgments of the midpoint of the appropriate target range for the federal funds rate or the appropriate target level for the federal funds rate, 2014–17 and over the longer run



Note: The midpoints of the target ranges for the federal funds rate and the target levels for the federal funds rate are measured at the end of the specified calendar year or over the longer run.

sheet. Conditional on their respective economic outlooks, all participants judged that it likely would be appropriate to conclude asset purchases in October of this year. A few participants thought that it would be appropriate to begin reducing the size of the balance sheet relatively soon, with a couple of them judging that the Committee should reduce or cease the reinvestment of principal payments on securities held in the Federal Reserve's portfolio.

Participants' views of the appropriate path for monetary policy were informed by their judgments about the state of the economy, including the values of the unemployment rate and other labor market indicators that would be consistent with maximum employment, the extent to which the economy was currently falling short of maximum employment, the prospects for inflation to return to the Committee's longer-term objective of 2 percent, the desire to minimize potential disruption in financial markets, and the balance of risks around the outlook. Many participants also mentioned the prescriptions of various monetary policy rules as factors they considered in judging the appropriate path for the federal funds rate.

Uncertainty and Risks

A significant majority of participants continued to judge the levels of uncertainty about their projections for real GDP growth and the unemployment rate as broadly similar to the norms during the previous 20 years (figure 4).[6] Most participants continued to judge the risks to their outlooks for real GDP growth and the unemployment rate to be broadly balanced. A few participants viewed the risks to real GDP growth as weighted to the downside; one viewed the risks as weighted to the upside. Those participants who viewed risks as weighted to the downside cited, for example, concern about the limited ability of monetary policy at the effective lower bound to respond to further negative shocks to the economy. As in June, nearly all participants judged the risks to the outlook for the unemployment rate to be broadly balanced.

Participants generally saw the level of uncertainty and the balance of risks around their forecasts for overall PCE inflation and core inflation as little changed from June. Most participants continued to judge the levels of uncertainty associated with their forecasts for the two inflation measures to be broadly similar to historical norms, and most continued to see the risks to those projections as broadly balanced. Several participants, however, viewed the risks to their inflation forecasts as tilted to the downside, reflecting, for example, the possibility that the recent low levels of inflation could prove more persistent than anticipated; the possibility that the upward pull on prices from inflation expectations might be weaker than assumed; the current lack of inflationary pressures domestically or from abroad; and the judgment that, in current circumstances, it would be difficult for the Committee to respond effectively to low-inflation outcomes. Conversely, one participant saw upside risks to inflation, citing uncertainty about the timing and efficacy of the Committee's withdrawal of monetary policy accommodation.

Table 2. Average historical projection error ranges
Percentage points

Variable	2014	2015	2016	2017
Change in real GDP[1]	±1.3	±1.9	±2.1	±2.2
Unemployment rate[1]	±0.3	±1.0	±1.6	±1.9
Total consumer prices[2]	±0.8	±1.0	±1.1	±1.0

Note: Error ranges shown are measured as plus or minus the root mean squared error of projections for 1994 through 2013 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. For more information, see 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), available at www.federalreserve.gov/pubs/feds/2007/200760/200760abs.html; and Board of Governors of the Federal Reserve System, Division of Research and Statistics (2014), "Updated Historical Forecast Errors," memorandum, April 9, www.federalreserve.gov/foia/files/20140409-historical-forecast-errors.pdf.

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.

6 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 1994 through 2013. 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 1.7 to 4.3 percent in the current year, 1.1 to 4.9 percent in the second year, 0.9 to 5.1 percent in the third year, and 0.8 to 5.2 percent in the fourth 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, 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 28–29, 2014

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 28, 2014, at 1:00 p.m. and continued on Wednesday, October 29, 2014, at 9:00 a.m.

Present

Janet L. Yellen
Chair

William C. Dudley
Vice Chairman

Lael Brainard

Stanley Fischer

Richard W. Fisher

Narayana Kocherlakota

Loretta J. Mester

Charles I. Plosser

Jerome H. Powell

Daniel K. Tarullo

Christine Cumming, Charles L. Evans, Jeffrey M. Lacker, Dennis P. Lockhart, and John C. Williams
Alternate Members of the Federal Open Market Committee

James Bullard, Esther L. George, and Eric Rosengren
Presidents of the Federal Reserve Banks of St. Louis, Kansas City, and Boston, respectively

William B. English
Secretary and Economist

Matthew M. Luecke
Deputy 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

James A. Clouse, Thomas A. Connors, Evan F. Koenig, Thomas Laubach, Samuel Schulhofer-Wohl, and William Wascher
Associate Economists

Simon Potter
Manager, System Open Market Account

Lorie K. Logan
Deputy Manager, System Open Market Account

Robert deV. Frierson[1]
Secretary of the Board, Office of the Secretary, Board of Governors

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

Stephen A. Meyer and William R. Nelson
Deputy Directors, Division of Monetary Affairs, Board of Governors

Andrew Figura, David Reifschneider, and Stacey Tevlin
Special Advisers to the Board, Office of Board Members, Board of Governors

Trevor A. Reeve
Special Adviser to the Chair, Office of Board Members, Board of Governors

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

Christopher J. Erceg
Senior Associate Director, Division of International Finance, Board of Governors

Ellen E. Meade and Joyce K. Zickler
Senior Advisers, Division of Monetary Affairs, Board of Governors

Eric M. Engen and David E. Lebow
Associate Directors, Division of Research and Statistics, Board of Governors

Fabio M. Natalucci[1]
Associate Director, Division of Monetary Affairs, Board of Governors

---

1 Attended the joint session of the Federal Open Market Committee and the Board of Governors.

Joseph W. Gruber
Deputy Associate Director, Division of International Finance, Board of Governors

John J. Stevens[2]
Deputy Associate Director, Division of Research and Statistics, Board of Governors

Steven A. Sharpe
Assistant Director, Division of Research and Statistics, Board of Governors

Patrick E. McCabe[1]
Adviser, Division of Research and Statistics, Board of Governors

Robert J. Tetlow[3]
Adviser, Division of Monetary Affairs, Board of Governors

Penelope A. Beattie[1]
Assistant to the Secretary, Office of the Secretary, Board of Governors

Christopher J. Gust
Section Chief, Division of Monetary Affairs, Board of Governors

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

Katie Ross[1]
Manager, Office of the Secretary, Board of Governors

Canlin Li
Senior Economist, Division of Monetary Affairs, Board of Governors

Randall A. Williams
Records Project Manager, Division of Monetary Affairs, Board of Governors

Helen E. Holcomb
First Vice President, Federal Reserve Bank of Dallas

David Altig, Jeff Fuhrer, James J. McAndrews, and Glenn D. Rudebusch
Executive Vice Presidents, Federal Reserve Banks of Atlanta, Boston, New York, and San Francisco, respectively

Troy Davig, Michael Dotsey, Joshua L. Frost,[1] **Spencer Krane, and Christopher J. Waller**
Senior Vice Presidents, Federal Reserve Banks of Kansas City, Philadelphia, New York, Chicago, and St. Louis, respectively

Todd E. Clark and Douglas Tillett
Vice Presidents, Federal Reserve Banks of Cleveland and Chicago, respectively

Andreas L. Hornstein
Senior Advisor, Federal Reserve Bank of Richmond

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

In a joint session of the Federal Open Market Committee (FOMC) and the Board of Governors of the Federal Reserve System, the deputy manager of the System Open Market Account (SOMA) reported on developments in domestic and foreign financial markets as well as System open market operations conducted during the period since the Committee met on September 16–17, 2014. In addition, the deputy manager summarized the outcomes of recent test operations of the Term Deposit Facility, described the results from the overnight reverse repurchase agreement (ON RRP) operational exercise, and reviewed the implications of recent foreign central bank policy actions for the international portion of the SOMA portfolio. The SOMA manager then discussed the Open Market Desk's plans for modestly expanding the list of counterparties eligible to participate in ON RRP operations based on substantially the same criteria established in the past for such counterparties. The manager also described ongoing staff work on improving data collections regarding bank funding markets and possibly using those data to provide more robust measures of bank funding rates. Finally, the manager reported on potential arrangements that would allow depository institutions to pledge funds held in a segregated account at the Federal Reserve as collateral in borrowing transactions with private creditors and would provide an additional supplementary tool during policy normalization; the manager noted possible next steps that the staff could potentially undertake to investigate the issues related to such arrangements.

Next, the staff outlined two proposals that the Committee could consider for further testing of RRP operations. In the first proposal, the Desk would vary by modest amounts the interest rate on ON RRP operations according to a preannounced schedule. Varying the spread between the ON RRP rate and

2 Attended the portion of the meeting following the joint session of the Federal Open Market Committee and the Board of Governors.

3 Attended the discussion of longer-run goals and monetary policy strategy.

the interest on excess reserves rate could provide the Committee with information about the effect of that spread on money markets and the demand for ON RRP. In addition, changes in the ON RRP rate would provide further information about the effectiveness of an ON RRP facility in providing a floor for money market rates during policy normalization. In the second proposal, the Desk would conduct a series of preannounced term RRP operations that would extend across the end of the year. In their discussion of term RRP testing, participants noted that the testing could provide information about the potential effectiveness of another of the Committee's supplementary policy tools and would help address expected downward pressures on short-term rates at year-end. But it was also noted that by conducting the term RRPs, the Committee would be losing information on how market participants might adjust and make investment arrangements prior to year-end with only the $300 billion in ON RRP available. One participant commented that the downward pressure on rates at year-end might be more directly addressed by raising the overall size limit on the ON RRP exercise. However, it was emphasized that increasing the cap on ON RRP operations at year-end could raise the risks for financial markets that had led the FOMC to impose the cap; these concerns were seen as less pronounced with a temporary program of term RRP operations. It was also noted that the proposed term RRP operations were only a test and that the Committee had not yet decided the conditions under which such operations would be used in the future.[4]

Following the discussion of the testing of RRP operations, the Committee unanimously approved the following resolution on the ON RRP exercise:

> "The Federal Open Market Committee (FOMC) modifies the authorization concerning overnight reverse repurchase operations adopted at the September 17, 2014, FOMC meeting as follows:
>
> (i) The offering rate of the operations may vary from zero to ten basis points.
>
> This modification shall be effective beginning with the operation conducted on November 3, 2014, and conclude with the operation conducted on December 12, 2014."

[4] Following the conclusion of the meeting, the Desk released a statement outlining the planned ON RRP and term RRP exercises.

By unanimous vote, the Committee approved the following resolution on term RRP operations:

> "During the period of December 1, 2014, to December 30, 2014, the Federal Open Market Committee (FOMC) authorizes the Federal Reserve Bank of New York to conduct a series of term reverse repurchase operations involving U.S. Government securities. Such operations shall: (i) mature no later than January 5, 2015; (ii) be subject to an overall size limit of $300 billion outstanding at any one time; (iii) be subject to a maximum bid rate of ten basis points; (iv) be awarded to all submitters: (A) at the highest submitted rate if the sum of the bids received is less than or equal to the preannounced size of the operation, or (B) at the stopout rate, determined by evaluating bids in ascending order by submitted rate up to the point at which the total quantity of bids equals the preannounced size of the operation, with all bids below this rate awarded in full at the stopout rate and all bids at the stopout rate awarded on a pro rata basis, if the sum of the counterparty offers received is greater than the preannounced size of the operation. Such operations may be for forward settlement. The System Open Market Account manager will inform the FOMC in advance of the terms of the planned operations. The Chair must approve the terms of, timing of the announcement of, and timing of the operations. These operations shall be conducted in addition to the authorized overnight reverse repurchase agreements, which remain subject to a separate overall size limit of $300 billion per day."

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.

The Board meeting concluded at the end of the discussion of developments in financial markets and the Federal Reserve's balance sheet.

Staff Review of the Economic Situation

The information reviewed for the October 28–29 meeting indicated that economic activity expanded at a moderate pace in the third quarter and that labor market conditions improved over the intermeeting period. Consumer price inflation continued to run below the FOMC's longer-run objective of 2 percent.

Market-based measures of inflation compensation declined somewhat, while survey-based measures of longer-term inflation expectations remained stable.

Total nonfarm payroll employment rose in September and the gains for July and August were revised up, leaving the average increase in the third quarter similar to that for the first half of the year. In September, the unemployment rate declined to 5.9 percent, and the share of workers employed part time for economic reasons decreased a little. The labor force participation rate edged down, and the employment-to-population ratio remained essentially unchanged. Other indicators generally suggested a continued improvement in labor market conditions. Although the rate of gross private-sector hiring declined, the rate of job openings moved up, measures of firms' hiring plans increased, initial claims for unemployment insurance remained low, and some measures of household expectations for labor market conditions improved.

Industrial production increased briskly in September after having been little changed, on net, over the first two months of the quarter, and the rate of capacity utilization in the manufacturing sector moved up. Readings on new orders from the national and regional manufacturing surveys were generally consistent with moderate near-term increases in factory output, but automakers' production schedules for the fourth quarter pointed to some slowing in the pace of motor vehicle assemblies.

Real personal consumption expenditures (PCE) appeared to have increased at a modest pace in the third quarter. The components of the nominal retail sales data used by the Bureau of Economic Analysis to construct its estimates of PCE were, in total, little changed in September following solid gains in July and August. In addition, sales of light motor vehicles fell back in September following a steep increase in August. Recent data on factors that tend to support household spending were mixed. Real disposable income continued to increase in August, and consumer sentiment as measured by the Thomson Reuters/University of Michigan Surveys of Consumers improved in September and early October. In contrast, household net worth likely decreased because of a decline in equity prices.

Housing market conditions seemed to be improving only slowly. Starts and permits of single-family homes were little changed, on net, in recent months. New home sales were flat in September after moving up in August, and sales of existing single-family homes moved essentially sideways over the past several months.

Real spending on business equipment and intellectual property products appeared to have risen at a moderate pace in the third quarter. Nominal shipments of nondefense capital goods excluding aircraft were little changed, on net, in August and September after a solid increase in July. New orders for these capital goods declined in September but remained above the level of shipments, indicating that shipments may increase further in subsequent months. Other forward-looking indicators, such as national and regional surveys of business conditions, were generally consistent with moderate gains in business equipment spending in the near term. Nominal business spending for new nonresidential construction decreased in August, and vacancy rates for nonresidential buildings remained elevated. Meanwhile, inventories in most industries were about in line with sales; in the energy sector, inventories appeared somewhat lean despite substantial stockbuilding since earlier in the year.

Total real government purchases appeared to have risen modestly in the third quarter. Federal government purchases likely increased, as nominal defense spending was higher in the third quarter than in the second quarter. In addition, real state and local government purchases probably rose somewhat, as the payrolls of these governments expanded and their nominal construction expenditures increased during the third quarter.

The U.S. international trade deficit narrowed slightly in August. Following large increases in July, both exports and imports grew only modestly, with gains concentrated in capital goods excluding automotive products.

Total U.S. consumer price inflation, as measured by the PCE price index, was about 1½ percent over the 12 months ending in August. Over the 12 months ending in September, both the consumer price index (CPI) and the CPI excluding food and energy prices rose about 1¾ percent. Consumer energy prices declined further in September, largely reflecting continued declines in retail gasoline prices, and survey data suggested gasoline prices fell further over the first few weeks of October. Consumer food prices rose solidly in recent months. Near-term inflation expectations from the Michigan survey declined in September and early October, while longer-term inflation expectations in the survey were little changed.

Foreign economies appeared to have continued to expand at a moderate rate in the third quarter, although with considerable divergence across countries. In Japan, consumption staged a mild rebound after contracting in the previous quarter in response to a tax increase, while indicators for the euro area pointed to only continued sluggish growth. Third-quarter growth in real gross domestic product (GDP) remained healthy in the United Kingdom, and indicators for Canada also were positive. Among emerging market economies, GDP growth remained strong in the third quarter in China and Korea and indicators for Mexico were favorable as well. The Brazilian economy appeared to be stabilizing. Foreign inflation remained generally subdued and in some regions quite low, especially in the euro area, where headline inflation was well below 1 percent.

Staff Review of the Financial Situation

Concerns about the global economic outlook apparently helped to prompt a sharp pullback from risky assets in the United States, but prices of those assets subsequently reversed much of their declines by the end of the intermeeting period. In addition, a number of technical factors reportedly contributed to volatile interest rate moves in mid-October. Worries about a possible spread of Ebola also appeared to weigh on market sentiment somewhat at times. On net, yields on longer-term Treasury securities fell notably, U.S. equity prices edged down, corporate bond spreads widened modestly, and the dollar appreciated moderately against most other currencies.

Federal Reserve communications were reportedly viewed as slightly more accommodative than anticipated, on balance. The expected path of the federal funds rate implied by market quotes shifted down notably, on net, over the period. Market-based measures suggested that the expected date of the first increase in the federal funds rate was pushed out from the third quarter of 2015 to late 2015. However, the results from the Desk's October Survey of Primary Dealers indicated that the dealers' projected path of the federal funds rate was little changed from the September survey, with dealers continuing to see the middle of next year as the most likely time of liftoff.

The Treasury market experienced significant volatility on October 15, with 5- and 10-year Treasury yields dropping as much as 30 basis points in about an hour before retracing much of those moves by the end of the day. Amid very high trading volumes, Treasury market liquidity, as measured by bid–asked spreads, worsened significantly, and measures of the implied volatility of longer-term rates jumped on the day but subsequently fell back. While the release of the somewhat weaker-than-expected data for September U.S. retail sales was seen as the trigger for these sharp movements, market participants indicated that a number of technical factors related to investor positioning and trading strategies likely amplified the swing in interest rates.

Over the intermeeting period as a whole, longer-term nominal Treasury yields declined about 30 basis points. Market-based measures of inflation compensation moved lower as well, extending the declines seen since the summer. The decline in inflation compensation reportedly reflected in part concerns about global growth and the risk of building disinflationary pressures, the lower-than-expected August CPI report, the decline in oil prices, and the appreciation of the U.S. dollar. Yields on agency mortgage-backed securities (MBS) declined roughly in line with comparable Treasury yields, while spreads on both investment- and speculative-grade corporate bonds widened modestly relative to Treasury securities.

The S&P 500 index decreased about 1 percent, on net, over the intermeeting period. Option-implied volatility for the S&P 500 index over the next month increased moderately, on balance, ending the period below its long-run historical average, though during the mid-October volatility spike, it briefly touched high levels last seen in 2011. About half of the firms in the S&P 500 index reported earnings for the third quarter, with the reports generally viewed as positive. Overall, third-quarter earnings estimates continued to imply modest growth in earnings per share compared with the previous quarter.

Despite some volatility related to quarter-end, conditions in unsecured funding markets were little changed, on net, over the intermeeting period. In secured funding markets, some money market rates fell in the days leading up to quarter-end, reportedly reflecting in part the announcement of the $300 billion overall size limit on the ON RRP exercise following the September FOMC meeting. After quarter-end, however, short-term rates generally moved back toward their preannouncement levels.

Credit flows to nonfinancial business picked up in September and early October. Gross issuance of investment- and speculative-grade bonds rebounded from seasonal lows over the summer, notwithstanding the slowdown during the mid-October market volatility spike. Commercial and industrial loans on banks' books continued to expand at a robust pace in the third quarter, consistent with the strong demand from large and middle-market firms reported in the October Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS). In the leveraged loan market, institutional issuance slowed some in September, though investors' interest in the asset class remained strong.

Financing conditions in the commercial real estate (CRE) market continued to ease. According to the October SLOOS, banks eased CRE lending standards, on net, and reported stronger demand for such loans. Growth of CRE loans on the balance sheets of large banks slowed in the third quarter, while growth at small banks remained moderate. Issuance of commercial mortgage-backed securities stayed robust in September.

Over the intermeeting period, mortgage rates to qualified borrowers declined about 25 basis points. The decline in rates coincided with an appreciable increase in the volume of refinancing activity. Mortgage lending conditions were little changed on net.

Conditions in most consumer credit markets remained accommodative during the third quarter. Auto loans continued to be widely available, and respondents to the October SLOOS indicated that demand for auto loans had strengthened further in the third quarter. In addition, demand for credit card loans increased, and a few large banks reported having eased lending policies on such loans.

As in the United States, participants in foreign financial markets became more concerned, on balance, about prospects for global economic growth. On net over the period, equity indexes were down in most advanced and emerging market economies, and measures of implied volatility rose. Benchmark sovereign yields fell sharply, with German yields reaching record lows. Expected policy rate paths moved down in most advanced economies, and market-based measures of inflation compensation continued to decline. The Riksbank unexpectedly cut its main policy rate to zero in response to the low level of Swedish inflation. Spreads on peripheral European sovereign bonds increased, modestly for most countries but more substantially for Greek bonds, reflecting, in part, market concerns that Greece might exit its International Monetary Fund program prematurely. Spreads on emerging market bonds generally edged higher. In addition, the broad nominal dollar index ended the period moderately higher.

The European Central Bank released the results of the 2014 comprehensive assessment, which included both an asset quality review and a forward-looking stress test. Under the stress test, which recognizes capital raising and balance sheet adjustments through September 2014, 13 banks were identified as needing to strengthen their capital positions and 8 will be required to raise net new capital. The results were broadly in line with expectations, and the market reaction to the release was limited.

The staff's periodic report on potential risks to financial stability noted that recent developments in financial markets highlighted the potential for shocks to trigger increases in market volatility and declines in asset prices that could undermine financial stability. Nevertheless, the U.S. financial system appeared resilient to shocks of the magnitude seen recently due to the relatively strong capital and liquidity profiles of large domestic banking firms, subdued aggregate leverage in the nonfinancial sector, and relatively restrained use of short-term wholesale funding across the financial sector. However, the staff report also pointed to asset valuation pressures that were broadening, as well as a loosening of underwriting standards in the speculative corporate debt and CRE markets; it noted the need to closely monitor these developments going forward.

Staff Economic Outlook

The information on economic activity received since the staff prepared its forecast for the September FOMC meeting was close to expectations, and therefore, the staff's projection for real GDP growth over the remainder of the year was little revised. However, in response to a further rise in the foreign exchange value of the dollar, a deterioration in global growth prospects, and a decline in equity prices, the staff revised down its projection for real GDP growth a little over the medium term. Even with the slower expansion of economic activity in this projection, real GDP was still expected to rise faster than potential output in 2015 and 2016, supported by accommodative monetary policy and a further easing of the restraint on spending from changes in fiscal policy; in 2017, real GDP growth was projected to step down toward the rate of potential output growth. As a result, resource slack was anticipated to decline steadily, albeit at a slightly slower rate than in the previous projection, and the unemployment rate was expected to gradually improve and to be at the staff's estimate of its longer-run natural rate in 2017.

The staff's forecast for inflation this quarter and early next year was reduced in response to further declines in crude oil prices, but the forecast for inflation over the medium term was only a touch lower. Consumer price inflation was projected to be lower in the second half of this year than in the first half and to remain below the Committee's longer-run objective of 2 percent over the next few years. With resource slack projected to diminish slowly and changes in commodity and import prices anticipated to be subdued, inflation was projected to rise gradually and to reach the Committee's objective in the longer run.

The staff continued to view the uncertainty around its projections for real GDP growth, the unemployment rate, and inflation as similar to the average over the past 20 years. The risks to the forecast for real GDP growth and inflation were seen as tilted to the downside, reflecting recent financial developments and concerns about the foreign economic outlook, as well as the staff's assessment that neither monetary policy nor fiscal policy appeared well positioned to help the economy withstand adverse shocks. At the same time, the staff continued to view the risks around its outlook for the unemployment rate as roughly balanced.

Participants' Views on Current Conditions and the Economic Outlook

In their discussion of the economic situation and the outlook, most meeting participants viewed the information received over the intermeeting period as suggesting that economic activity continued to expand at a moderate pace. Labor market conditions improved somewhat further, with solid job gains and a lower unemployment rate; on balance, participants judged that the underutilization of labor resources was gradually diminishing. Participants generally expected that, over the medium term, real economic activity would increase at a pace sufficient to lead to a further gradual decline in the unemployment rate toward levels consistent with the Committee's objective of maximum employment. Inflation was continuing to run below the Committee's longer-run objective. Market-based measures of inflation compensation declined somewhat, while survey-based measures of longer-term inflation expectations remained stable. Participants anticipated that inflation would be held down over the near term by the decline in energy prices and other factors, but would move toward the Committee's 2 percent goal in coming years, although a few expressed concern that inflation might persist below the Committee's objective for quite some time. Most viewed the risks to the outlook for economic activity and the labor market as nearly balanced. However, a number of participants noted that economic growth over the medium term might be slower than they currently expected if the foreign economic or financial situation deteriorated significantly.

Household spending advanced at a moderate pace over the intermeeting period, and reports from contacts in several parts of the country indicated that recent retail or auto sales had been robust. However, one participant pointed to mixed retail sales reports that likely reflected a continuation of restrained discretionary spending on the part of low- and middle-income households. Many participants judged that the recent significant decline in energy prices would provide a boost to consumer spending over the near term, with several of them noting that the drop in gasoline prices would benefit lower-income households in particular. Among the other favorable factors that were expected to support continued growth in consumer spending, participants cited solid gains in payroll employment, low interest rates, rising consumer confidence, and the decline in levels of household debt relative to income.

The recovery in the housing sector remained slow despite low interest rates and some recent improvement in the availability of mortgage credit. Contacts in some parts of the country reported continued weakness in single-family construction, while in other regions activity reportedly was picking up gradually following a sluggish summer. A few participants pointed to continued strong growth in multifamily construction, although the limited pipeline of new projects in one District suggested that activity could slow in 2015.

Reports from business contacts in many parts of the country pointed to an improvement in business conditions, with indexes of the manufacturing sector posting broad-based gains in recent months in a number of Districts. A couple of participants reported expectations of a robust holiday sales season based on accumulating inventories of consumer goods or an increase in e-commerce traffic and related transportation activity. Contacts in several regions reported ready availability of credit, strong loan growth, or a steady increase in commercial construction activity. While the fall in energy prices was generally regarded as a positive development for many businesses, it was noted that a sustained drop in prices would have effects on oil drilling and related investment activity. In the agricultural sector, the robust fall harvest had driven down crop prices; food processing and farm equipment businesses were slowing as a result of lower farm income and a drop in exports.

In discussing economic developments abroad, participants pointed to a somewhat weaker economic outlook and increased downside risks in Europe, China, and Japan, as well as to the strengthening of the dollar over the period. It was observed that if foreign economic or financial conditions deteriorated further, U.S. economic growth over the medium term might be slower than currently expected. However, many participants saw the effects of recent developments on the domestic economy as likely to be quite limited. These participants suggested variously that the share of external trade in the U.S. economy is relatively small, that the effects of changes in the value of the dollar on net exports are modest, that shifts in the structure of U.S. trade and production over time may have reduced the effects on U.S. trade of developments like those seen of late, or that the slowdown in external demand would likely prove to be less severe than initially feared. Several participants judged that the decline in the prices of energy and other commodities as well as lower long-term interest rates would likely provide an offset to the higher dollar and weaker foreign growth, or that the domestic recovery remained on a firm footing.

Indicators of labor market conditions continued to improve over the intermeeting period, with a further reduction in the unemployment rate, declines in longer-duration unemployment, strong growth in payroll employment, and a low level of initial claims for unemployment insurance. Business contacts reported employment gains in several parts of the country, with relatively few pointing to emerging wage pressures, although one participant indicated that larger wage gains had been accruing to some individuals who switched jobs. Labor market conditions indexes constructed from a broad set of indicators suggested that the underutilization of labor had continued to diminish, although a number of participants noted that underutilization of labor market resources remained. A couple of participants judged that the large number of individuals working part time for economic reasons and the continued drift down in the labor force participation rate suggested that the unemployment rate was understating the degree of labor market underutilization.

Most participants anticipated that inflation was likely to edge lower in the near term, reflecting the decline in oil and other commodity prices and lower import prices. These participants continued to expect inflation to move back to the Committee's 2 percent target over the medium term as resource slack diminished in an environment of well-anchored inflation expectations, although a few of them thought the return to 2 percent might be quite gradual. Survey-based measures of inflation expectations remained well anchored, but market-based measures of inflation compensation over the next five years as well as over the five-year period beginning five years ahead had declined over the intermeeting period. Various explanations were offered for the decline in the market-based measures, and participants expressed different views about how to interpret these recent movements. The explanations included a decline in inflation risk premiums, possibly reflecting a lower perceived probability of higher inflation outcomes; and special factors, including liquidity risk premiums, that might be influencing the pricing of Treasury Inflation-Protected Securities and inflation derivatives. One participant noted that even if the declines reflected lower inflation risk premiums and not a reduction in expected inflation, policymakers might still want to take them into account because such a change could reflect increased concerns on the part of investors about adverse outcomes in which low inflation was accompanied by weak economic activity. A couple of participants noted that it was likely too early to draw conclusions regarding these developments, especially in light of the recent market volatility. However, many participants observed that the Committee should remain attentive to evidence of a possible downward shift in longer-term inflation expectations; some of them noted that if such an outcome occurred, it would be even more worrisome if growth faltered.

In their discussion of financial market developments and financial stability issues, participants judged that the movements in the prices of stocks, bonds, commodities, and the U.S. dollar over the intermeeting period appeared to have been driven primarily by concerns about prospects for foreign economic growth. Many participants commented on the turbulence in financial markets that occurred in mid-October. Some participants pointed out that, despite the market volatility, financial conditions remained highly accommodative and that further pockets of turbulence were likely to arise as the start of policy normalization approached. That said, more work to better understand the recent market dynamics was seen as desirable. In addition, a couple of participants noted the potential usefulness of collecting additional data on wholesale funding markets in order to better understand how changes in interest rates could influence those markets.

In their discussion of communications regarding the path of the federal funds rate over the medium term, meeting participants agreed that the timing of the first increase in the federal funds rate and the appropriate path of the policy rate thereafter would depend on incoming economic data and their implications for the outlook. Most participants judged that it would be helpful to include new language in the Committee's forward guidance to clarify how the Committee's decision about when to begin the policy normalization process will depend on incoming information about the economy. Some participants preferred to eliminate language in the statement indicating that the current target range for the federal funds rate would likely be maintained for a "considerable time" after the end of the asset purchase program. These participants were concerned that such a characterization could be misinterpreted as suggesting that the Committee's decisions would not depend on the incoming data. However, other participants thought that the "considerable time" phrase was useful in communicating the Committee's policy intentions or that additional wording could be used to emphasize the data-dependence of the Committee's decision process. A couple of them noted that the removal of the "considerable time" phrase might be seen as signaling a significant shift in the stance of policy, potentially resulting in an unintended tightening of financial conditions. A couple of others thought that the current forward guidance might be read as suggesting an earlier date of liftoff than was likely to prove appropriate, given the outlook for inflation and the downside risks to the economy associated with the effective lower bound on interest rates. With regard to the pace of interest rate increases after the start of policy normalization, a number of participants thought that it could soon be helpful to clarify the Committee's likely approach. It was noted that communication about post-liftoff policy would pose challenges given the inherent uncertainty of the economic and financial outlook and the Committee's desire to retain flexibility to adjust policy in response to the incoming data. Most participants supported retaining the language in the statement indicating that the Committee anticipates that economic conditions may warrant keeping the target range for the federal funds rate below longer-run normal levels even after employment and inflation are near mandate-consistent levels. However, a couple of participants thought that the language should be amended in light of the prescriptions suggested by many monetary policy rules and the risks associated with keeping interest rates below their longer-run values for an extended period of time.

Committee Policy Action

In their discussion of monetary policy for the period ahead, members judged that information received since the FOMC met in September indicated that economic activity was expanding at a moderate pace. Labor market conditions had improved somewhat further, with solid job gains and a lower unemployment rate; on balance, a range of indicators suggested that underutilization of labor resources was gradually diminishing. Household spending was rising moderately and business fixed investment was advancing, while the recovery in the housing sector remained slow. Inflation had continued to run below the Committee's longer-run objective. Market-based measures of inflation compensation had declined somewhat, but survey-based measures of longer-term inflation expectations had remained stable. The Committee expected that, with appropriate policy accommodation, economic activity would expand at a moderate pace, with labor market indicators and inflation moving toward levels the Committee judges consistent with its dual mandate.

In their discussion of language for the post-meeting statement, a number of members judged that, while some underutilization in the labor market remained, it appeared to be gradually diminishing. In addition, members considered the advantages and disadvantages of adding language to the statement to acknowledge recent developments in financial markets. On the one hand, including a reference would show that the Committee was monitoring financial developments while also providing an opportunity to note that financial conditions remained highly supportive of growth. On the other hand, including a reference risked the possibility of suggesting greater concern on the part of the Committee than was actually the case, perhaps leading to the misimpression that monetary policy was likely to respond to increases in volatility. In the end, the Committee decided not to include such a reference. Finally, a couple of members suggested including language in the statement indicating that recent foreign economic developments had increased uncertainty or had boosted downside risks to the U.S. economic outlook, but participants generally judged that such wording would suggest greater pessimism about the economic outlook than they thought appropriate.

In their discussion of the asset purchase program, members generally agreed that the condition articulated by the Committee when it began the program in September 2012 had been achieved—that is, there had been a substantial improvement in the outlook for the labor market—and that there was sufficient underlying strength in the broader economy to support ongoing progress toward maximum employment in a context of price stability. Accordingly, all members but one supported concluding the Committee's asset purchase program at the end of October and maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency MBS in agency MBS and of rolling over maturing Treasury securities at auction. By keeping the Committee's holdings of longer-term securities at sizable levels, this policy was expected to help maintain accommodative financial conditions.

In addition, the Committee agreed to maintain the target range for the federal funds rate at 0 to ¼ percent and to reaffirm the indication in the statement that the Committee's decision about how long to maintain the current target range for the federal funds rate would depend on its assessment of actual and expected progress toward its objectives of maximum employment and 2 percent inflation. All but one member agreed that the Committee should reiterate the expectation that it likely would be appropriate to maintain the current target range for the federal funds rate for a considerable time following the end of the asset purchase program in October, especially if projected inflation continued to run below the Committee's 2 percent longer-run goal, and provided that longer-term inflation expectations remained well anchored. The one member thought that the Committee should instead strengthen the forward guidance in order to underscore the Committee's commitment to its 2 percent inflation objective. The Committee agreed to include additional wording in the statement in order to emphasize that the Committee's decision on the timing of the first increase in the federal funds rate would be data dependent. In particular, the statement would say that, if incoming information indicated faster progress toward the Committee's employment and inflation objectives than the Committee now expects, then increases in the target range for the federal funds rate would likely occur sooner than currently anticipated. It would also note that, if progress proves slower than expected, then increases in the target range would likely occur later than currently anticipated. The Committee also agreed to reiterate its expectation that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer 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 SOMA in accordance with the following domestic policy directive:

> "Consistent with its statutory mandate, the Federal Open Market Committee seeks monetary and financial conditions that will foster maximum employment and price stability. In particular, 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 undertake open market operations as necessary to maintain such conditions. The Desk is directed to conclude the current program of purchases of longer-term Treasury securities and agency mortgage-backed securities by the end of October. The Committee directs the Desk to maintain its policy of rolling over maturing Treasury securities into new issues and its policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in agency mortgage-backed securities. The Committee also directs the Desk to engage in dollar roll and coupon swap transactions as necessary to facilitate settlement of the Federal Reserve's agency mortgage-backed securities 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 2:00 p.m.:

"Information received since the Federal Open Market Committee met in September suggests that economic activity is expanding at a moderate pace. Labor market conditions improved somewhat further, with solid job gains and a lower unemployment rate. On balance, a range of labor market indicators suggests that underutilization of labor resources is gradually diminishing. Household spending is rising moderately and business fixed investment is advancing, while the recovery in the housing sector remains slow. Inflation has continued to run below the Committee's longer-run objective. Market-based measures of inflation compensation have declined somewhat; survey-based measures of 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 that, with appropriate policy accommodation, economic activity will expand at a moderate pace, with labor market indicators and inflation moving toward levels the Committee judges consistent with its dual mandate. The Committee sees the risks to the outlook for economic activity and the labor market as nearly balanced. Although inflation in the near term will likely be held down by lower energy prices and other factors, the Committee judges that the likelihood of inflation running persistently below 2 percent has diminished somewhat since early this year.

The Committee judges that there has been a substantial improvement in the outlook for the labor market since the inception of its current asset purchase program. Moreover, the Committee continues to see sufficient underlying strength in the broader economy to support ongoing progress toward maximum employment in a context of price stability. Accordingly, the Committee decided to conclude its asset purchase program this 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 of rolling over maturing Treasury securities at auction. This policy, by keeping the Committee's holdings of longer-term securities at sizable levels, should help maintain accommodative financial conditions.

To support continued progress toward maximum employment and price stability, the Committee today reaffirmed its view that the current 0 to ¼ percent target range for the federal funds rate remains appropriate. In determining how long to maintain this target range, the Committee will assess progress—both realized and expected—toward its objectives of maximum employment and 2 percent inflation. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. The Committee anticipates, based on its current assessment, that it likely will be appropriate to maintain the 0 to ¼ percent target range for the federal funds rate for a considerable time following the end of its asset purchase program this month, especially if projected inflation continues to run below the Committee's 2 percent longer-run goal, and provided that longer-term inflation expectations remain well anchored. However, if incoming information indicates faster progress toward the Committee's employment and inflation objectives than the Committee now expects, then increases in the target range for the federal funds rate are likely to occur sooner than currently anticipated. Conversely, if progress proves slower than expected, then increases in the target range are likely to occur later than currently anticipated.

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. The Committee currently anticipates that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run."

Voting for this action: Janet L. Yellen, William C. Dudley, Lael Brainard, Stanley Fischer, Richard W. Fisher, Loretta J. Mester, Charles I. Plosser, Jerome H. Powell, and Daniel K. Tarullo.

Voting against this action: Narayana Kocherlakota.

Mr. Kocherlakota dissented because he believed that, in light of continued sluggishness in the inflation outlook and the recent slide in market-based measures of longer-term inflation expectations, the Committee should commit to maintaining the current target range for the federal funds rate at least until projected inflation one to two years ahead has returned to 2 percent and should continue the asset purchase program at its current pace. Mr. Kocherlakota noted that when the Committee first reduced its asset purchases in December 2013, it said in the post-meeting statement that it would be monitoring inflation developments carefully for evidence that inflation was moving back toward its objective over the medium term; Mr. Kocherlakota indicated he saw no such evidence.

Longer-Run Goals and Monetary Policy Strategy

In the discussion at the January 2014 FOMC meeting regarding the annual reaffirmation of the Statement on Longer-Run Goals and Monetary Policy Strategy, participants noted that, while they were generally satisfied with the statement, it would be appropriate to consider whether any changes might be warranted before the statement was reaffirmed in 2015. The Committee subsequently referred the matter to the subcommittee on communications, which identified possible issues for consideration by the full Committee. The subcommittee then asked the staff to prepare a memorandum to the Committee exploring those issues. At this meeting, a staff presentation discussed three issues related to the existing statement that might warrant elaboration or clarification: whether inflation persistently below the Committee's 2 percent longer-run objective and inflation similarly persistently above that objective would be regarded as equally undesirable, whether additional information should be provided about the "balanced approach" that the Committee takes in promoting its two objectives under circumstances in which these objectives are judged not to be complementary, and how financial stability is linked to the Committee's mandated goals of maximum employment and price stability. Following the staff presentation, participants discussed a range of topics related to these three issues and to monetary policy communications more broadly. Participants generally thought that it was worthwhile to periodically consider possible changes to the statement, regardless of whether any were ultimately implemented. Most participants agreed that the existing consensus statement was working well as a communications tool and judged that the threshold for making changes to the document should be a high one. On the specific issues, there was widespread agreement that inflation moderately above the Committee's 2 percent goal and inflation the same amount below that level were equally costly—and many participants thought that that view was largely shared by the public. One participant suggested that the Committee should clarify the time horizon within which it seeks to achieve its inflation objective. Participants believed that the language referring to the Committee's balanced approach in promoting its objectives was appropriately broad and encompassed the views of participants. A number of participants noted that financial stability is a necessary condition for the achievement of the Committee's longer-run goals. A few of them offered suggestions for communicating more specifically how financial stability, and perhaps other asymmetric risks to the outlook, are taken into account in the setting of monetary policy. However, several other participants noted that reaching an agreement in the near term on clarifying the linkages between monetary policy and financial stability could prove challenging, in part because the issues involved are complex and need further study. Regarding broader communications issues, a number of participants suggested that the subcommittee could again investigate the feasibility and desirability of constructing a consensus forecast, building on the lessons of the experiments carried out in 2012, and several thought that further enhancements to the Summary of Economic Projections might also be worth considering. No decisions were made at this meeting, and participants generally agreed that it would be useful to discuss these issues further at upcoming meetings.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, December 16–17, 2014. The meeting adjourned at 12:45 p.m. on October 29, 2014.

Notation Vote

By notation vote completed on October 7, 2014, the Committee unanimously approved the minutes of the Committee meeting held on September 16–17, 2014.

William B. English
Secretary

Meeting Held on December 16–17, 2014

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 16, 2014, at 1:00 p.m. and continued on Wednesday, December 17, 2014, at 9:00 a.m.

Present

Janet L. Yellen
Chair

William C. Dudley
Vice Chairman

Lael Brainard

Stanley Fischer

Richard W. Fisher

Narayana Kocherlakota

Loretta J. Mester

Charles I. Plosser

Jerome H. Powell

Daniel K. Tarullo

Christine Cumming, Charles L. Evans, Jeffrey M. Lacker, Dennis P. Lockhart, and John C. Williams
Alternate Members of the Federal Open Market Committee

James Bullard, Esther L. George, and Eric Rosengren
Presidents of the Federal Reserve Banks of St. Louis, Kansas City, and Boston, respectively

William B. English
Secretary and Economist

Matthew M. Luecke
Deputy Secretary

Michelle A. Smith
Assistant Secretary

Scott G. Alvarez
General Counsel

Steven B. Kamin
Economist

David W. Wilcox
Economist

James A. Clouse, Thomas A. Connors, Evan F. Koenig, Thomas Laubach, Michael P. Leahy, Paolo A. Pesenti, Samuel Schulhofer-Wohl, Mark E. Schweitzer, and William Wascher
Associate Economists

Simon Potter
Manager, System Open Market Account

Lorie K. Logan
Deputy Manager, System Open Market Account

Robert deV. Frierson[1]
Secretary of the Board, Office of the Secretary, Board of Governors

Michael S. Gibson
Director, Division of Banking Supervision and Regulation, Board of Governors

Stephen A. Meyer and William R. Nelson
Deputy Directors, Division of Monetary Affairs, Board of Governors

Andreas Lehnert
Deputy Director, Office of Financial Stability Policy and Research, Board of Governors

Andrew Figura, David Reifschneider, and Stacey Tevlin
Special Advisers to the Board, Office of Board Members, Board of Governors

Trevor A. Reeve
Special Adviser to the Chair, Office of Board Members, Board of Governors

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

Christopher J. Erceg
Senior Associate Director, Division of International Finance, Board of Governors

Michael T. Kiley
Senior Adviser, Division of Research and Statistics, and
Senior Associate Director, Office of Financial Stability Policy and Research, Board of Governors

Ellen E. Meade and Joyce K. Zickler
Senior Advisers, Division of Monetary Affairs, Board of Governors

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[1] Attended the joint session of the Federal Open Market Committee and the Board of Governors.

Daniel M. Covitz, Eric M. Engen, and Diana Hancock
Associate Directors, Division of Research and Statistics, Board of Governors

David Lopez-Salido
Deputy Associate Director, Division of Monetary Affairs, Board of Governors

John J. Stevens
Deputy Associate Director, Division of Research and Statistics, Board of Governors

Stephanie R. Aaronson
Assistant Director, Division of Research and Statistics, Board of Governors

Robert J. Tetlow
Adviser, Division of Monetary Affairs, Board of Governors

Elizabeth Klee
Section Chief, Division of Monetary Affairs, Board of Governors

Katie Ross[1]
Manager, Office of the Secretary, Board of Governors

Achilles Sangster II
Information Management Analyst, Division of Monetary Affairs, Board of Governors

Kelly J. Dubbert
First Vice President, Federal Reserve Bank of Kansas City

David Altig and Alberto G. Musalem
Executive Vice Presidents, Federal Reserve Banks of Atlanta and New York, respectively

Michael Dotsey, Geoffrey Tootell, and Christopher J. Waller
Senior Vice Presidents, Federal Reserve Banks of Philadelphia, Boston, and St. Louis, respectively

Hesna Genay, Douglas Tillett, Robert G. Valletta, and Alexander L. Wolman
Vice Presidents, Federal Reserve Banks of Chicago, Chicago, San Francisco, and Richmond, respectively

Willem Van Zandweghe
Assistant Vice President, Federal Reserve Bank of Kansas City

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

In a joint session of the Federal Open Market Committee (FOMC) and the Board of Governors of the Federal Reserve System, the manager of the System Open Market Account (SOMA) reported on developments in domestic and foreign financial markets as well as System open market operations conducted during the period since the Committee met on October 28–29, 2014. In addition, the manager reviewed the implications of recent foreign central bank policy actions for the international portion of the SOMA portfolio. The manager also provided an update on staff work related to potential arrangements that would allow depository institutions to pledge funds held in a segregated account at the Federal Reserve as collateral in borrowing transactions with private creditors and which could potentially provide an additional supplementary tool during policy normalization. After further review, staff analysis suggested that such accounts involved a number of operational, regulatory, and policy issues. These issues raised questions about these accounts' possible effectiveness that would be difficult to resolve in a timely fashion. It was therefore decided that further work to implement such accounts would be shelved for now.

The deputy manager followed with a discussion of the outcomes of recent tests of supplementary normalization tools, namely the Term Deposit Facility (TDF) and term and overnight reverse repurchase agreements (term RRPs and ON RRPs, respectively). Regarding the TDF testing, the introduction of an early withdrawal option led to significant increases in the number of participating depository institutions and in take-up relative to earlier operations without this feature. As expected, both participation and take-up in the operations continued to be sensitive to the offering rate and maximum individual award amount. The Open Market Desk successfully conducted the first two of four preannounced term RRP operations extending across the end of the year to help address expected downward pressures on short-term rates. Commentary from market participants suggested that these operations may help alleviate some of the volatility in short-term rates that would otherwise be expected around the year-end. Regarding the ON RRP testing—during which the offered rate was varied between 3 and 10 basis points—increases in offered rates appeared to put some upward pressure on unsecured money market rates, as anticipated, and the offered rate continued to provide a soft floor for secured rates. Changes in the spread between the rate paid on reserves and the ON RRP offered rate did not appear to affect the volume of activity in the federal funds market. While the tests of ON RRPs had been informative, the staff suggested that additional testing could further improve understanding of how this supplementary tool could be used to achieve greater control of the federal funds rate during policy normalization. Accordingly, participants discussed a draft resolution to extend the Desk's authority to conduct the ON RRP exercise for 12 months beyond the expiration of the current authorization on January 30, 2015. It was noted that a one-year extension to what had been a one-year testing program was a practical step and signaled nothing about either the timing of the start of policy normalization or how long an ON RRP facility might be needed.

Following the discussion of the extension of ON RRP test operations, the Committee unanimously approved the following resolution:

> "The Federal Open Market Committee (FOMC) authorizes the Federal Reserve Bank of New York to conduct a series of overnight reverse repurchase operations involving U.S. government securities for the purpose of further assessing the appropriate structure of such operations in supporting the implementation of monetary policy during normalization. The reverse repurchase operations authorized by this resolution shall be (i) conducted at an offering rate that may vary from zero to five basis points; (ii) for an overnight term or such longer term as is warranted to accommodate weekend, holiday, and similar trading conventions; (iii) subject to a per-counterparty limit of up to $30 billion per day; (iv) subject to an overall size limit of up to $300 billion per day; and (v) awarded to all submitters (A) at the specified offering rate if the sum of the bids received is less than or equal to the overall size limit, or (B) at the stop-out rate, determined by evaluating bids in ascending order by submitted rate up to the point at which the total quantity of bids equals the overall size limit, with all bids below this rate awarded in full at the stop-out rate and all bids at the stop-out rate awarded on a pro rata basis, if the sum of the counterparty offers received is greater than the overall size limit. The Chair must approve any change in the offering rate within the range specified in (i) and any changes to the per-counterparty and overall size limits subject to the limits specified in (iii) and (iv). The System Open Market Account manager will notify the FOMC in advance about any changes to the offering rate, per-counterparty limit, or overall size limit applied to operations. These operations shall be authorized for one additional year beyond the previously authorized end date—that is, through January 29, 2016."

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.

The Board meeting concluded at the end of the discussion of developments in financial markets and the Federal Reserve's balance sheet.

Staff Review of the Economic Situation

The information reviewed for the December 16–17 meeting suggested that economic activity was increasing at a moderate pace in the fourth quarter and that labor market conditions had improved further. Consumer price inflation continued to run below the FOMC's longer-run objective of 2 percent, partly restrained by declining energy prices. Market-based measures of inflation compensation moved lower, but survey measures of longer-run inflation expectations remained stable.

Total nonfarm payroll employment expanded in October and November at a faster pace than in the third quarter. The unemployment rate edged down to 5.8 percent in October and remained at that level in November. Both the labor force participation rate and the employment-to-population ratio rose slightly, and the share of workers employed part time for economic reasons declined. The rate of private-sector job openings stayed, on balance, at its recent elevated level in September and October, and the rates of hiring and of quits stepped up on net.

Industrial production rose in October and November, led by strong increases in manufacturing output. Automakers' schedules indicated that the pace of light motor vehicle assemblies would move up somewhat in the first quarter, and broader indicators of manufacturing production, such as the readings on new orders from the national and regional manufacturing surveys, were generally consistent with solid gains in factory output over the near term.

Real personal consumption expenditures (PCE) appeared to be rising robustly in the fourth quarter. The components of the nominal retail sales data used to construct estimates of PCE rose strongly in October and November, and light motor vehicle sales increased noticeably. Key factors that influence household spending pointed toward further solid PCE growth. Real disposable income rose further in October, energy prices continued to decline, households' net worth likely increased as home values advanced, and consumer sentiment in early December from the Thomson Reuters/University of Michigan Surveys of Consumers was at its highest level since before the most recent recession.

The pace of activity in the housing sector generally remained slow. Both starts and permits of new single-family homes increased only a little, on balance, in October and November. Starts of multifamily units declined, on net, over the past two months. Sales of new and existing homes rose modestly in October.

Real private expenditures for business equipment and intellectual property appeared to be decelerating in the fourth quarter. Nominal orders and shipments of nondefense capital goods excluding aircraft declined in October. However, new orders for these capital goods remained above the level of shipments, and other forward-looking indicators, such as national and regional surveys of business conditions, were generally consistent with modest near-term gains in business equipment spending. Firms' nominal spending for nonresidential structures edged down in October after rising slightly in the third quarter.

Data for October and November pointed toward a decline in real federal government purchases in the fourth quarter after a surprisingly large third-quarter increase. Real state and local government purchases appeared to be rising modestly in the fourth quarter as their payrolls and construction expenditures increased a little in recent months.

The U.S. international trade deficit was little changed in October, as exports and imports both rose. The gains in exports were concentrated in aircraft and other capital goods, and the increase in imports reflected a pickup in purchases of automotive products and computers. But with the October deficit remaining wider than the monthly average in the third quarter, real net exports looked to be declining in the fourth quarter.

Both total U.S. consumer price inflation, as measured by the PCE price index, and core inflation, as measured by PCE prices excluding food and energy, were about 1½ percent over the 12 months ending in October; consumer energy prices declined, while consumer food prices rose more than overall prices. Over the 12 months ending in November, total inflation as measured by the consumer price index (CPI) was 1¼ percent, partly reflecting the further decline in energy prices, while core CPI inflation was 1¾ percent. Measures of expected long-run inflation from a variety of surveys, including the Michigan survey, the *Blue Chip Economic Indicators*, the Survey of Professional Forecasters, and the Desk's Survey of Primary Dealers, remained stable. In contrast, market-based measures of inflation compensation moved lower.

Labor compensation continued to increase only a little faster than consumer prices. Compensation per hour in the nonfarm business sector rose about 2 percent over the year ending in the third quarter. Similar rates of increase were observed for the employment cost index over the same year-long period and for average hourly earnings for all employees over the 12 months ending in November.

Overall growth in foreign real gross domestic product (GDP) remained subdued in the third quarter. In the advanced foreign economies, real GDP contracted for a second consecutive quarter in Japan, rose only slightly in the euro area, but continued to expand moderately in Canada and the United Kingdom. In the emerging market economies, economic growth slowed in Mexico in the third quarter and remained sluggish in Brazil; economic growth in China likely slowed moderately in the fourth quarter. Oil prices continued to decline, likely reflecting favorable supply developments as well as some weakening in global demand. Inflation in the advanced foreign economies remained quite low during the intermeeting period, partly because of the fall in oil prices. Declining oil prices had a smaller effect on inflation in the emerging market economies, reflecting the greater prevalence of administered energy prices.

Staff Review of the Financial Situation

Over the intermeeting period, market participants became a bit more optimistic about U.S. economic prospects while also responding to economic and policy developments abroad. The sharp decline in oil prices weighed on inflation compensation and left a mixed imprint on other asset markets. On net, yields on longer-term Treasury securities fell, corporate bond spreads widened, equity prices were little changed, and the foreign exchange value of the dollar appreciated.

Economic data releases reinforced the views of market participants that the U.S. economic recovery continued to gain momentum. In addition, investors appeared to read the October FOMC statement as suggesting a slightly less accommodative path for future monetary policy than they had previously expected.

Results from the December Survey of Primary Dealers indicated that the dealers' expectations for the timing of the first increase in the federal funds target range and the subsequent policy path were little changed from the October survey. The average probability distribution of the expected date of liftoff continued to imply that the most likely date would be around the middle of 2015, with the distribution having narrowed slightly compared with the previous survey.

Longer-term nominal Treasury yields declined significantly, on balance, over the intermeeting period. Measures of inflation compensation based on Treasury Inflation-Protected Securities and on inflation swaps decreased, reportedly reflecting, in part, the decline in oil prices and increased concerns about global economic growth.

Broad U.S. equity price indexes were about unchanged over the intermeeting period. Option-implied volatility for one-month returns on the S&P 500 index—the VIX—rose sharply late in the period to levels close to those in mid-October. Investment- and speculative-grade corporate bond spreads widened over the period. Spreads on speculative-grade bonds for energy-related firms rose substantially because of the pronounced decline in oil prices.

Business financing flows were robust over the intermeeting period. Gross bond issuance by nonfinancial corporations was the strongest in more than a year. Nonfinancial commercial paper outstanding expanded noticeably in November, more than compensating for a slowdown in October. Commercial and industrial loans on banks' books continued to expand briskly. In addition, issuance of both leveraged loans and collateralized loan obligations were strong in October and November.

Financing for commercial real estate (CRE) remained broadly available. CRE loans on banks' books expanded at a moderate pace in October and November, and issuance of commercial mortgage-backed securities (CMBS) was strong. According to the December Senior Credit Officer Opinion Survey on Dealer Financing Terms, broker-dealers had eased somewhat all of the terms on which they finance CMBS for most-favored clients.

Measures of residential mortgage lending conditions were little changed over the intermeeting period. Credit conditions for mortgages remained tight for borrowers with less-than-pristine credit. Interest rates on 30-year fixed-rate mortgages declined, consistent with the moves in longer-term Treasury yields. Refinancing activity was subdued.

Financing conditions in consumer credit markets generally stayed accommodative. Auto and student loan balances expanded robustly in October, and revolving credit balances increased at a moderate pace. Issuance of consumer asset-backed securities was strong in the fourth quarter.

Reflecting divergent economic and monetary policy prospects in the United States and abroad, the dollar appreciated substantially against most currencies over the intermeeting period. The dollar moved up significantly against the yen as the Bank of Japan expanded its asset purchase program as well as against the currencies of oil exporters as oil prices declined. Over the period, market participants seemed to conclude that monetary policy in Europe was likely to be put on a more accommodative path, and 10-year yields in Germany and the United Kingdom declined further. As German yields fell to new record lows, spreads of most euro-area peripheral bonds over those yields narrowed. Changes in stock prices abroad were mixed, on net, over the intermeeting period: There were large increases in Japan and China along with large decreases in oil-exporting countries, such as Canada, Mexico, and Russia.

Late in the intermeeting period, following the sharp fall in oil prices, the Russian ruble depreciated rapidly and substantially, prompting the Russian central bank, which had already raised its policy rate in early

November, to raise the rate twice more in five days, with the most recent increase following an unscheduled policy meeting on December 15.

Staff Economic Outlook

In the staff forecast prepared for the December FOMC meeting, real GDP growth in the second half of 2014 was higher than in the projection for the October meeting, largely reflecting stronger-than-expected data for PCE. Nevertheless, real GDP growth was anticipated to slow in the fourth quarter as both net exports and federal government purchases—important positive contributors to real GDP growth in the third quarter—were anticipated to drop back. The staff's medium-term forecast for real GDP growth was revised up a little on net. The projected path for oil prices was lower, and the trajectory for equity prices was a bit higher. And although the projected path of the dollar was revised up, the staff revised down its estimate of how much the appreciation of the dollar since last summer would restrain projected growth in real GDP. The staff continued to forecast that real GDP would expand at a faster pace in 2015 and 2016 than it had this year and that it would rise more quickly than potential output, supported by increases in consumer and business confidence and a pickup in foreign economic growth, along with monetary policy that was assumed to remain highly accommodative for some time. In 2017, real GDP growth was projected to begin slowing toward, but to remain above, the rate of potential output growth as the normalization of monetary policy was assumed to proceed. The expansion in economic activity over the medium term was anticipated to slowly reduce resource slack, and the unemployment rate was expected to decline gradually and to temporarily move slightly below the staff's estimate of its longer-run natural rate.

The staff's forecast for inflation in the near term was revised down to reflect the further large energy price declines since the October FOMC meeting, which were anticipated to lead to a temporary decrease in the total PCE price index late this year and early next year. The staff's inflation projection for the next few years was essentially unchanged; the staff continued to project that inflation would move up gradually toward, but run somewhat below, the Committee's longer-run objective of 2 percent. Nevertheless, inflation was projected to reach the Committee's objective over time, with longer-run inflation expectations assumed to remain stable, prices of energy and non-oil imports forecast to begin rising next year, and slack in labor and product markets anticipated to diminish slowly.

The staff viewed the uncertainty around its projections for real GDP growth, the unemployment rate, and inflation as similar to the average over the past 20 years. The risks to the forecast for real GDP growth and inflation were viewed as tilted a little to the downside, reflecting the staff's assessment that neither monetary policy nor fiscal policy was well positioned to help the economy withstand adverse shocks. At the same time, the staff viewed the risks around its outlook for the unemployment rate as roughly balanced.

Participants' Views on Current Conditions and the Economic Outlook

In conjunction with this FOMC meeting, members of the Board of Governors and the Federal Reserve Bank presidents submitted their projections of the most likely outcomes for real GDP growth, the unemployment rate, inflation, and the federal funds rate for each year from 2014 through 2017 and over the longer run, conditional on 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 (SEP), which is attached as an addendum to these minutes.

In their discussion of the economic situation and the outlook, meeting participants regarded the information received over the intermeeting period as supporting their view that economic activity was expanding at a moderate pace. Labor market conditions improved further, with solid job gains and a lower unemployment rate; participants judged that the underutilization of labor resources was continuing to diminish. Participants expected that, over the medium term, real economic activity would increase at a pace sufficient to lead to further improvements in labor market indicators toward levels consistent with the Committee's objective of maximum employment. Inflation was continuing to run below the Committee's longer-run objective, reflecting in part continued reductions in oil prices and falling import prices. Market-based measures of inflation compensation declined further, while survey-based measures of longer-term inflation expectations remained stable. Participants generally anticipated that inflation would rise gradually toward the Committee's 2 percent objective as the labor market improved further and the transitory effects of lower energy prices and other factors dissipated. The risks to the outlook for economic activity and the labor market were seen as nearly balanced. Some participants suggested that the recent domestic economic data had increased their confidence in the outlook for growth going forward. Participants generally regarded the net effect of the recent decline in energy prices as likely to be positive for economic activity and employment. However, many of them thought that a further deterioration in the foreign economic situation could result in slower domestic economic growth than they currently expected.

Household spending continued to advance over the intermeeting period, and reports from contacts in several parts of the country indicated that recent retail or auto sales had been robust. Many participants pointed to relatively high levels of consumer confidence as signaling near-term strength in discretionary consumer spending, and most participants judged that the recent significant decline in energy prices would provide a boost to consumer spending. Participants also cited solid gains in payroll employment, low interest rates, and the decline in levels of household debt relative to income as factors that were expected to support continued growth in consumer spending. In contrast, residential construction continued to be slow, and recent readings on single-family building permits suggested that this sluggishness was likely to continue in the short run.

Industry contacts pointed to generally solid business conditions, with businesses in many parts of the country expressing some optimism about prospects for further improvement in 2015. Manufacturing activity was strong, as indicated by the index of industrial production and a variety of regional reports. Information from some regions pointed to a pickup in capital investment, although the continued decline in oil prices led business contacts to expect a slowdown in drilling activity and, if prices remain low, reduced capital investment in the oil and gas industries. In the agricultural sector, the robust fall harvest reportedly lowered crop prices; operating margins for food processing and farm equipment businesses have been narrowing, putting stress on some producers.

In their discussion of the foreign economic outlook, participants noted that the implications of the drop in crude oil prices would differ across regions, especially if the price declines affected inflation expectations and financial markets; a few participants said that the effect on overseas employment and output as a whole was likely to be positive. While some participants had lowered their assessments of the prospects for global economic growth, several noted that the likelihood of further responses by policymakers abroad had increased. Several participants indicated that they expected slower economic growth abroad to negatively affect the U.S. economy, principally through lower net exports, but the net effect of lower oil prices on U.S. economic activity was anticipated to be positive.

Participants saw broad-based improvement in labor market conditions over the intermeeting period, including solid gains in payroll employment, a slight reduction in the unemployment rate, and increases in the rates of hiring and quits. Positive signals were also seen in the decline in the share of workers employed part time for economic reasons and in the increase in the labor force participation rate. These favorable trends notwithstanding, the levels of these measures suggested to some participants that there remained more labor market slack than was indicated by the unemployment rate alone. However, a few others continued to view the unemployment rate as a reliable indicator of overall labor market conditions and saw a narrower degree of labor underutilization remaining. Although a few participants suggested that the recent uptick in the employment cost index or average hourly earnings could be a tentative sign of an upturn in wage growth, most participants saw no clear evidence of a broad-based acceleration in wages. A couple of participants, however, pointing to the weak statistical relationship between wage inflation and labor market conditions, suggested that the pace of wage inflation was providing relatively little information about the degree of labor underutilization.

Participants generally anticipated that inflation was likely to decline further in the near term, reflecting the reduction in oil prices and the effects of the rise in the foreign exchange value of the dollar on import prices. Most participants saw these influences as temporary and thus continued to expect inflation to move back gradually to the Committee's 2 percent longer-run objective as the labor market improved further in an environment of well-anchored inflation expectations. Survey-based measures of longer-term inflation expectations remained stable, although market-based measures of inflation compensation over the next five years, as well as over the five-year period beginning five years ahead, moved down further over the intermeeting period. Participants discussed various explanations for the decline in market-based measures, including a fall in expected future inflation, reductions in inflation risk premiums, and higher liquidity and other premiums that might be influencing the prices of Treasury Inflation-Protected Securities and inflation derivatives. Model-based decompositions of inflation compensation seemed to support the message from surveys that longer-term inflation expectations had remained stable, although it was observed that these results were sensitive to the assumptions underlying the particular models used. It was noted that even if the declines in inflation compensation reflected lower inflation risk premiums rather than a reduction in expected inflation, policymakers might still want to take them into account because such changes could reflect increased concerns on the part of investors about adverse outcomes in which low inflation was accompanied by weak economic activity. In the end, participants generally agreed that it would take more time and analysis to draw definitive conclusions regarding the recent behavior of inflation compensation.

In their discussion of financial market developments, participants observed that movements in asset prices over the intermeeting period appeared to have been importantly influenced by concerns about prospects for foreign economic growth and by associated expectations of monetary policy actions in Europe and Japan. A couple of participants remarked on the apparent disparity between market-based measures of expected future U.S. short-term interest rates and projections for short-term rates based on surveys or based on the median of federal funds rate projections in the SEP. One participant noted that very low term premiums in market-based measures might explain at least some portion of this gap. Another possibility was that market-based measures might be assigning considerable weight to less favorable outcomes for the U.S. economy in which the federal funds rate would remain low for quite some time or fall back to very low levels in the future, whereas the projections in the SEP report the paths for the federal funds rate that participants see as appropriate given their views of the most likely evolution of inflation and real activity.

Participants discussed a number of risks to the economic outlook. Many participants regarded the international situation as an important source of downside risks to domestic real activity and employment, particularly if declines in oil prices and the persistence of weak economic growth abroad had a substantial negative effect on global financial markets or if foreign policy responses were insufficient. However, the downside risks were seen as nearly balanced by risks to the upside. Several participants, pointing to indicators of consumer and business confidence as well as to the solid record of payroll employment gains in 2014, suggested that the real economy may end up showing more momentum than anticipated, while a few others thought that the boost to domestic spending coming from lower energy prices could turn out to be quite large. With regard to inflation, a number of participants saw a risk that it could run persistently below their 2 percent objective, with some expressing concern that such an outcome could undermine the credibility of the Committee's commitment to that objective. Some participants were worried that the recent substantial fall in energy prices could lead to a reduction in longer-term inflation expectations, while others were concerned that the decline in market-based measures of inflation compensation might reflect, in part, that such a decline had already begun. However, a couple of others noted that if the unemployment rate continued to decline quickly, wage and price inflation could rise more than generally anticipated.

In their discussion of communications regarding the path of the federal funds rate over the medium term, most participants concluded that updating the Committee's forward guidance would be appropriate in light of the conclusion of the asset purchase program in October and the further progress that the economy had made toward the Committee's objectives. Most participants agreed that it would be useful to state that the Committee judges that it can be patient in beginning to normalize the stance of monetary policy; they noted that such language would provide more flexibility to adjust policy in response to incoming information than the previous language, which had tied the beginning of normalization to the end of the asset purchase program. This approach was seen as consistent, given the Committee's assessment of the economic outlook at the current meeting, with the Committee's previous statement. Most participants thought the reference to patience indicated that the Committee was unlikely to begin the normalization process for at least the next couple of meetings. Some participants regarded the revised language as risking an unwarranted concentration of market expectations for the timing of the initial increase in the federal funds rate target on a narrow range of dates around mid-2015, and as not adequately allowing for the possibility that economic conditions might evolve in a way that could call for either an earlier or a later liftoff date. A few participants suggested that the statement should focus on the economic conditions that would likely accompany the decision to raise rates. Participants generally stressed the need to communicate that the timing of the first increase in the federal funds rate would depend on the incoming data and their implications for the Committee's assessment of progress toward its objectives of maximum employment and inflation of 2 percent. With lower energy prices and the stronger dollar likely to keep inflation below target for some time, it was noted that the Committee might begin normalization at a time when core inflation was near current levels, although in that circumstance participants would want to be reasonably confident that inflation will move back toward 2 percent over time.

A few participants spoke of the importance of explaining to the public how economic and financial conditions would influence the Committee's decisions regarding the appropriate path for the federal funds rate after normalization begins. It was noted that to the extent that such guidance can be effectively communicated, the precise date of liftoff becomes less important for economic outcomes. In this regard, some participants emphasized that policy will still be highly accommodative for a time after the first increase in the federal funds rate target, given the difference between the current setting of the federal funds rate target range and the Committee's view of the longer-run normal rate as well as the Federal Reserve's elevated holdings of longer-term securities.

Committee Policy Action

In their discussion of monetary policy for the period ahead, members judged that information received since the FOMC met in October indicated that economic activity was expanding at a moderate pace. Labor market conditions had improved further, with solid job gains and a lower unemployment rate; taken as a whole, labor market indicators suggested that the underutilization of labor resources was continuing to diminish. Household spending was rising moderately and business fixed investment was advancing, while the recovery in the housing sector remained slow. Inflation had continued to run below the Committee's longer-run objective, in part reflecting declines in energy prices. Market-based measures of inflation compensation had declined somewhat further, but survey-based measures of longer-term inflation expectations had remained stable. The Committee expected that, with appropriate monetary policy accommodation, economic activity would continue to expand at a moderate pace, with labor market indicators moving toward levels the Committee judges consistent with its dual mandate. The Committee also expected that inflation would rise gradually toward 2 percent as the labor market improves further and the transitory effects of lower energy prices and other factors dissipate.

In their discussion of language for the postmeeting statement, members generally agreed that they should acknowledge the broad improvement in labor market conditions over the intermeeting period as well as their judgment that labor market slack continued to diminish. In addition, they decided that the statement should note that the low level of inflation seen of late partly reflected the recent decline in energy prices. The Committee modified the previous statement language to make clear that it expects that inflation will rise gradually toward 2 percent as the labor market improves further and the transitory effects of lower energy prices and other factors dissipate. Given the uncertainties about the outlook for inflation, members decided that it would be appropriate to indicate that the Committee continues to monitor inflation developments closely.

The Committee agreed to maintain the target range for the federal funds rate at 0 to ¼ percent and to reaffirm the indication in the statement that the Committee's decision about how long to maintain the current target range for the federal funds rate would depend on its assessment of actual and expected progress toward its objectives of maximum employment and 2 percent inflation. Most members agreed to update the Committee's forward guidance with language indicating that it judges that it can be patient in beginning to normalize the stance of monetary policy. In order to avoid the misinterpretation that this new wording reflected a change in the Committee's policy intentions, the statement included a sentence indicating that the Committee sees this guidance as consistent with its previous statement that it likely will be appropriate to maintain the 0 to ¼ percent target range for the federal funds rate for a considerable time following the end of its asset purchase program in October, especially if projected inflation continues to run below the Committee's 2 percent longer-run goal, and provided that longer-term inflation expectations remain well anchored. Two members thought that this forward guidance did not take sufficient account of the progress that had been made toward the Committee's objectives, while one wanted to strengthen the forward guidance in order to underscore the Committee's commitment to its 2 percent inflation objective. Members agreed that their policy decisions would remain data dependent, and they continued to include wording in the statement noting that if incoming information indicates faster progress toward the Committee's employment and inflation objectives than the Committee now expects, then increases in the target range for the federal funds rate would likely occur sooner than currently anticipated, and, similarly, that if progress proves slower than expected, then increases in the target range would likely occur later than currently anticipated. The Committee decided to maintain its policy 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. This policy, by keeping the Committee's holdings of longer-term securities at sizable levels, should help maintain accommodative financial conditions. Finally, the Committee also decided to reiterate its expectation that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer 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 SOMA in accordance with the following domestic policy directive:

> "Consistent with its statutory mandate, the Federal Open Market Committee seeks monetary and financial conditions that will foster maximum employment and price stability. In particular, 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 undertake open market operations as necessary to maintain such conditions. The Committee directs the Desk to maintain its policy of rolling over maturing Treasury securities into new issues and its policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in agency mortgage-backed securities. The Committee also directs the Desk to engage in dollar roll and coupon swap transactions as necessary to facilitate settlement of the Federal Reserve's agency mortgage-backed securities 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 2:00 p.m.:

> "Information received since the Federal Open Market Committee met in October suggests that economic activity is expanding at a moderate pace. Labor market conditions improved further, with solid job gains and a lower unemployment rate. On balance, a range of labor market indicators suggests that underutilization of labor resources continues to diminish. Household spending is rising moderately and business fixed investment is advancing, while the recovery in the housing sector remains slow. Inflation has continued to run below the Committee's longer-run objective, partly reflecting declines in energy prices. Market-based measures of inflation compensation have declined somewhat further; survey-based measures of 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 that, with appropriate policy accommodation, economic activity will expand at a moderate pace, with labor market indicators moving toward levels the Committee judges consistent with its dual mandate. The Committee sees the risks to the outlook for economic activity and the labor market as nearly balanced. The Committee expects inflation to rise gradually toward 2 percent as the labor market improves further and the transitory effects of lower energy prices and other factors dissipate. The Committee continues to monitor inflation developments closely.
>
> To support continued progress toward maximum employment and price stability, the Committee today reaffirmed its view that the current 0 to ¼ percent target range for the federal funds rate remains appropriate. In determining how long to maintain this target range, the Committee will assess progress—both realized and expected—toward its objectives of maximum employment and 2 percent inflation. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and

inflation expectations, and readings on financial developments. Based on its current assessment, the Committee judges that it can be patient in beginning to normalize the stance of monetary policy. The Committee sees this guidance as consistent with its previous statement that it likely will be appropriate to maintain the 0 to ¼ percent target range for the federal funds rate for a considerable time following the end of its asset purchase program in October, especially if projected inflation continues to run below the Committee's 2 percent longer-run goal, and provided that longer-term inflation expectations remain well anchored. However, if incoming information indicates faster progress toward the Committee's employment and inflation objectives than the Committee now expects, then increases in the target range for the federal funds rate are likely to occur sooner than currently anticipated. Conversely, if progress proves slower than expected, then increases in the target range are likely to occur later than currently anticipated.

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 of rolling over maturing Treasury securities at auction. This policy, by keeping the Committee's holdings of longer-term securities at sizable levels, should help maintain accommodative financial conditions.

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. The Committee currently anticipates that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run."

Voting for this action: Janet L. Yellen, William C. Dudley, Lael Brainard, Stanley Fischer, Loretta J. Mester, Jerome H. Powell, and Daniel K. Tarullo.

Voting against this action: Richard W. Fisher, Narayana Kocherlakota, and Charles I. Plosser.

Mr. Fisher agreed that the Committee should be patient in beginning to normalize the stance of monetary policy. He dissented because he saw the improvement in the U.S. economic outlook since October as indicating that it likely will be appropriate to increase the federal funds rate sooner than the Committee's current statement envisions.

Mr. Kocherlakota dissented because he believed that the Committee's decision and statement did not respond to ongoing below-target inflation and falling market-based measures of longer-term inflation expectations. In his judgment, the credibility of the Committee's 2 percent inflation target was at risk, calling for a more accommodative policy stance.

Mr. Plosser dissented for two reasons. He believed that the Committee's policy guidance should be more data dependent and not focus on time. In his view, the improvement in economic conditions that has occurred over the course of the year was greater than anticipated, and he believed that the statement should communicate that there is a measurable probability that liftoff may occur in the first quarter of next year, even if the most likely scenario is for normalization to begin around midyear. He further believed that waiting too long to raise rates could lead to the need for more-aggressive policy in the future, which could potentially lead to unnecessary volatility and instability.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, January 27–28, 2015. The meeting adjourned at 11:00 a.m. on December 17, 2014.

Notation Vote

By notation vote completed on November 18, 2014, the Committee unanimously approved the minutes of the Committee meeting held on October 28–29, 2014.

William B. English
Secretary

Addendum: Summary of Economic Projections

In conjunction with the Federal Open Market Committee (FOMC) meeting held on December 16–17, 2014, meeting participants submitted their projections of the most likely outcomes for real output growth, the unemployment rate, inflation, and the federal funds rate for each year from 2014 to 2017 and over the longer run.[2] Each participant's projection was based on information available at the time of the meeting plus his or her assessment of appropriate monetary policy and assumptions about the factors likely to affect economic outcomes. The longer-run projections represent each participant's assessment 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, FOMC participants expected that, after a slowdown in the first half of 2014, economic growth under appropriate policy would be faster in the second half of 2014 and over 2015 and 2016 than their estimates of the U.S. economy's longer-run normal growth rate. On balance, participants then saw economic growth moving back toward their assessments of its longer-run pace in 2017 (table 1 and figure 1). Most participants projected that the unemployment rate will continue to decline in 2015 and 2016, and all participants projected that the unemployment rate will be at or below their individual judgments of its longer-run normal level by the end of 2016. All participants projected that inflation, as measured by the four-quarter change in the price index for personal consumption expenditures (PCE), would rise gradually, on balance, over the next few years. Most participants saw inflation approaching the Committee's 2 percent longer-run objective in 2016 and 2017. While a few participants projected that inflation would rise temporarily above 2 percent during the forecast period, many others expected inflation to remain low through 2017.

Participants judged that it would be appropriate to begin raising the target range for the federal funds rate over the projection period as labor market indicators and inflation move back toward values the Committee judges consistent with the attainment of

[2] As discussed in its Policy Normalization Principles and Plans, released on September 17, 2014, the Committee intends to target a range for the federal funds rate during normalization. Participants were asked to provide, in their contributions to the Summary of Economic Projections, either the midpoint of the target range for the federal funds rate for any period when a range was anticipated or the target level for the federal funds rate, as appropriate. In the lower panel of figure 2, these values have been rounded to the nearest ⅛ percentage point.

Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, December 2014
Percent

Variable	Central tendency[1]					Range[2]				
	2014	2015	2016	2017	Longer run	2014	2015	2016	2017	Longer run
Change in real GDP	2.3 to 2.4	2.6 to 3.0	2.5 to 3.0	2.3 to 2.5	2.0 to 2.3	2.3 to 2.5	2.1 to 3.2	2.1 to 3.0	2.0 to 2.7	1.8 to 2.7
September projection	2.0 to 2.2	2.6 to 3.0	2.6 to 2.9	2.3 to 2.5	2.0 to 2.3	1.8 to 2.3	2.1 to 3.2	2.1 to 3.0	2.0 to 2.6	1.8 to 2.6
Unemployment rate	5.8	5.2 to 5.3	5.0 to 5.2	4.9 to 5.3	5.2 to 5.5	5.7 to 5.8	5.0 to 5.5	4.9 to 5.4	4.7 to 5.7	5.0 to 5.8
September projection	5.9 to 6.0	5.4 to 5.6	5.1 to 5.4	4.9 to 5.3	5.2 to 5.5	5.7 to 6.1	5.2 to 5.7	4.9 to 5.6	4.7 to 5.8	5.0 to 6.0
PCE inflation	1.2 to 1.3	1.0 to 1.6	1.7 to 2.0	1.8 to 2.0	2.0	1.2 to 1.6	1.0 to 2.2	1.6 to 2.1	1.8 to 2.2	2.0
September projection	1.5 to 1.7	1.6 to 1.9	1.7 to 2.0	1.9 to 2.0	2.0	1.5 to 1.8	1.5 to 2.4	1.6 to 2.1	1.7 to 2.2	2.0
Core PCE inflation[3]	1.5 to 1.6	1.5 to 1.8	1.7 to 2.0	1.8 to 2.0		1.5 to 1.6	1.5 to 2.2	1.6 to 2.1	1.8 to 2.2	
September projection	1.5 to 1.6	1.6 to 1.9	1.8 to 2.0	1.9 to 2.0		1.5 to 1.8	1.6 to 2.4	1.7 to 2.2	1.8 to 2.2	

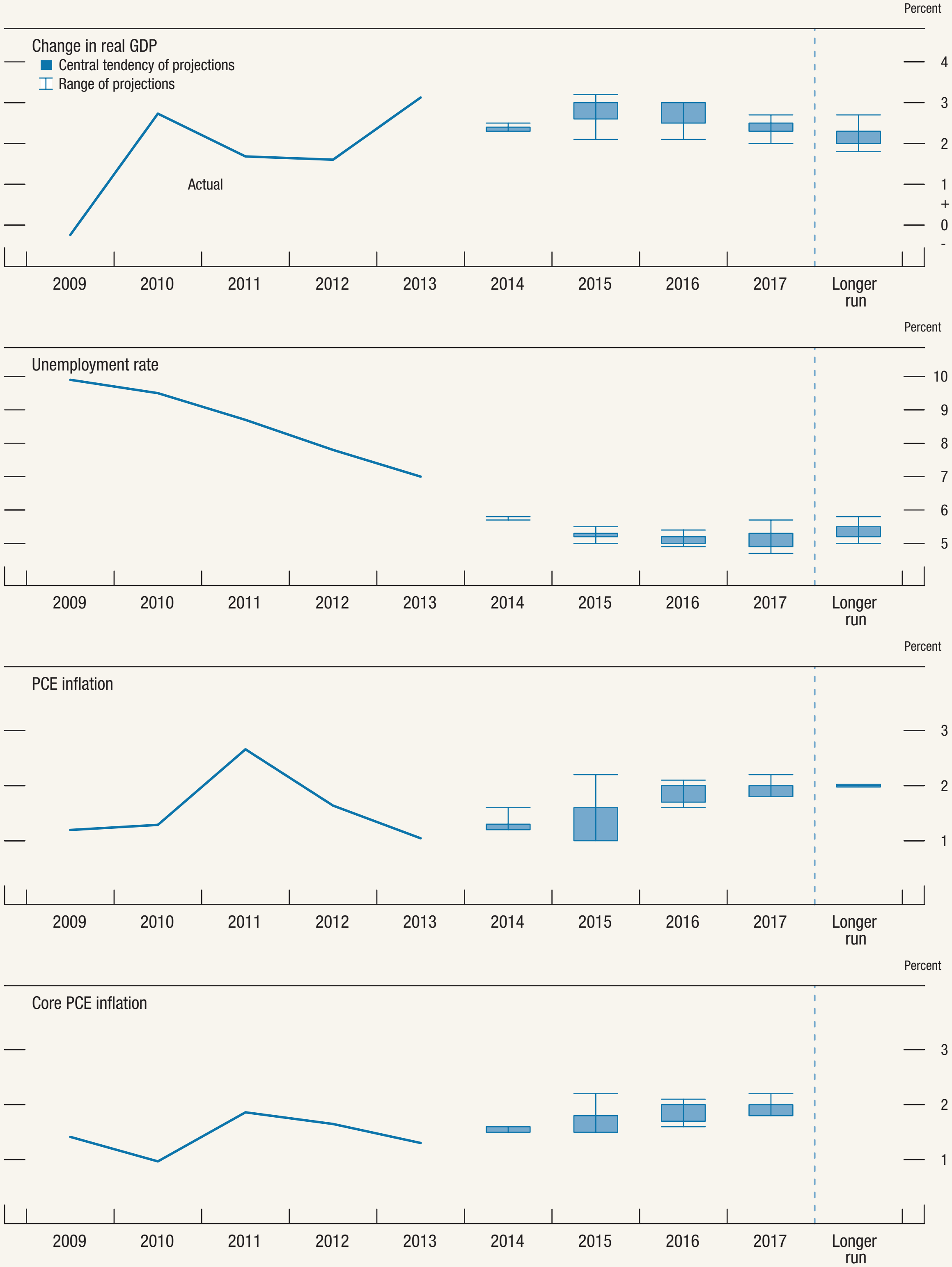
Note: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are percent changes from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, 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 16–17, 2014.

[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, 2014–17 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.

its mandated objectives of maximum employment and stable prices. As shown in figure 2, all but a couple of participants anticipated that it would be appropriate to begin raising the target range for the federal funds rate in 2015, with most projecting that it will be appropriate to raise the target federal funds rate fairly gradually.

Most participants viewed the uncertainty associated with their outlooks for economic growth and the unemployment rate as broadly similar to the average level of the past 20 years. Most participants also judged the level of uncertainty about inflation to be broadly similar to the average level of the past 20 years, although a few participants viewed it as higher. In addition, most participants continued to see the risks to the outlook for economic growth and for the unemployment rate as broadly balanced. A majority saw the risks to inflation as broadly balanced; however, a number of participants saw the risks to inflation as weighted to the downside, while one judged these risks as tilted to the upside.

The Outlook for Economic Activity

Participants projected that, conditional on their individual assumptions about appropriate monetary policy, growth in real gross domestic product (GDP) would pick up from its low level in the first half of 2014 and run above their estimates of its longer-run normal rate in the second half of 2014 and over 2015 and 2016. Participants pointed to a number of factors that they expected would contribute to stronger real output growth, including improving labor market conditions, lower energy prices, rising household net worth, diminishing restraint from fiscal policy, and highly accommodative monetary policy. On balance, participants saw real GDP growth moving back toward, but remaining at or somewhat above, its longer-run rate in 2017 as monetary policy adjusts appropriately.

In general, participants' revisions to their forecasts for real GDP growth relative to their projections for the September meeting were modest. However, all participants revised up their projections of real GDP growth somewhat for 2014, with a number of them noting that recent data releases regarding real economic activity had been stronger than anticipated. The central tendencies of participants' current projections for real GDP growth were 2.3 to 2.4 percent in 2014, 2.6 to 3.0 percent in 2015, 2.5 to 3.0 percent in 2016, and 2.3 to 2.5 percent in 2017. The central tendency of the projections of real GDP growth over the longer run was 2.0 to 2.3 percent, unchanged from September.

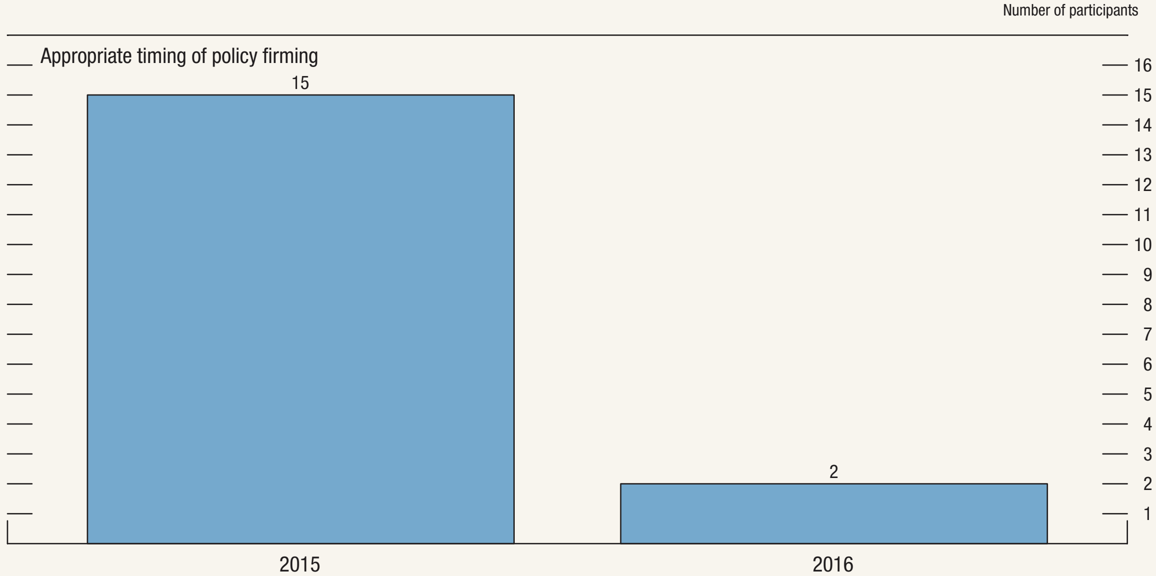
All participants projected that the unemployment rate will decline, on balance, through 2016, and all participants projected that, by the end of that year, the unemployment rate will be at or below their individual judgments of its longer-run normal level. The central tendencies of participants' forecasts for the unemployment rate in the fourth quarter of each year were 5.8 percent in 2014, 5.2 to 5.3 percent in 2015, 5.0 to 5.2 percent in 2016, and 4.9 to 5.3 percent in 2017. Almost all participants' projected paths for the unemployment rate shifted down slightly through 2015 compared with their projections in September; many participants noted that recent data pointing to improving labor market conditions were an important factor underlying the downward revisions in their unemployment rate forecasts. 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 unchanged at 5.2 to 5.5 percent; the range of these estimates was 5.0 to 5.8 percent, down slightly from 5.0 to 6.0 percent in September.

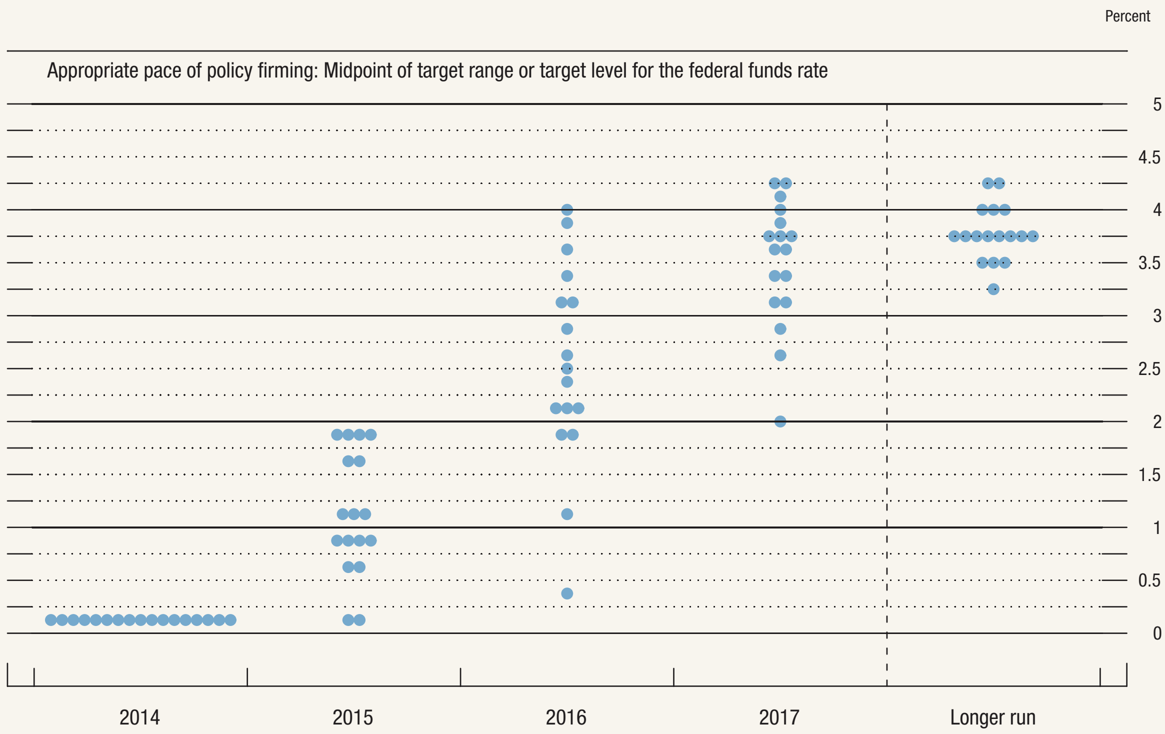
Figures 3.A and 3.B show that participants held a range of views regarding the likely outcomes for real GDP growth and the unemployment rate through 2017. Some of the diversity of views reflected their individual assessments of the effects of lower oil prices on consumer spending and business investment, of the rate at which the forces that have been restraining the pace of the economic recovery would continue to abate, of the trajectory for growth in consumption as labor market slack diminishes, and of the appropriate path of monetary policy. Relative to September, the dispersion of participants' projections for real GDP growth was little changed from 2015 to 2017, while for the unemployment rate, the dispersion was a bit narrower.

The Outlook for Inflation

Compared with September, the central tendencies of participants' projections for PCE inflation under the assumption of appropriate monetary policy moved down for 2014 and 2015 but were largely unchanged for 2016 and 2017. In commenting on the changes to their projections, many participants indicated that the significant decline in energy prices and the appreciation of the dollar since the Committee's September meeting likely will put temporary downward

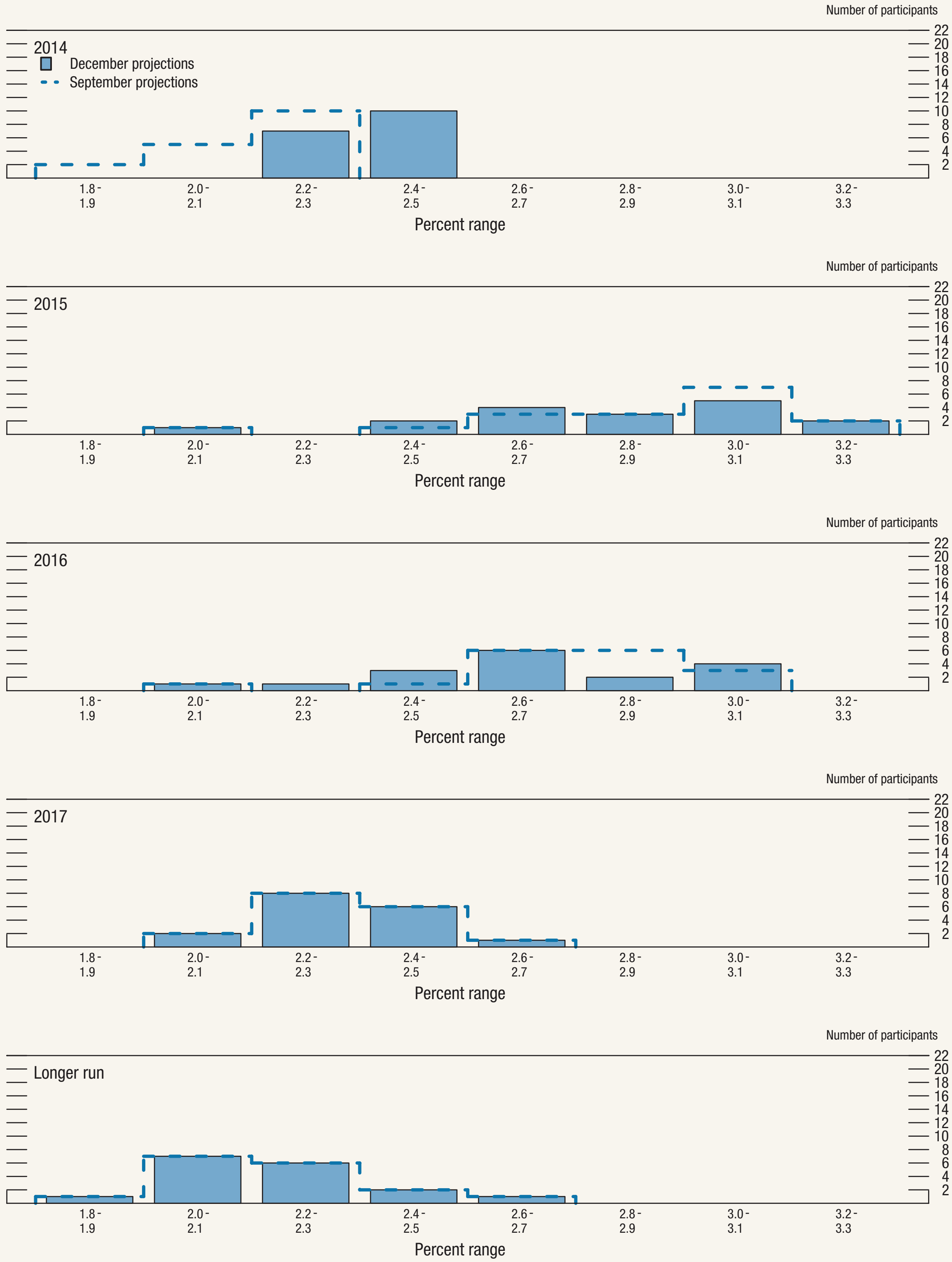
Figure 2. Overview of FOMC participants' assessments of appropriate monetary policy





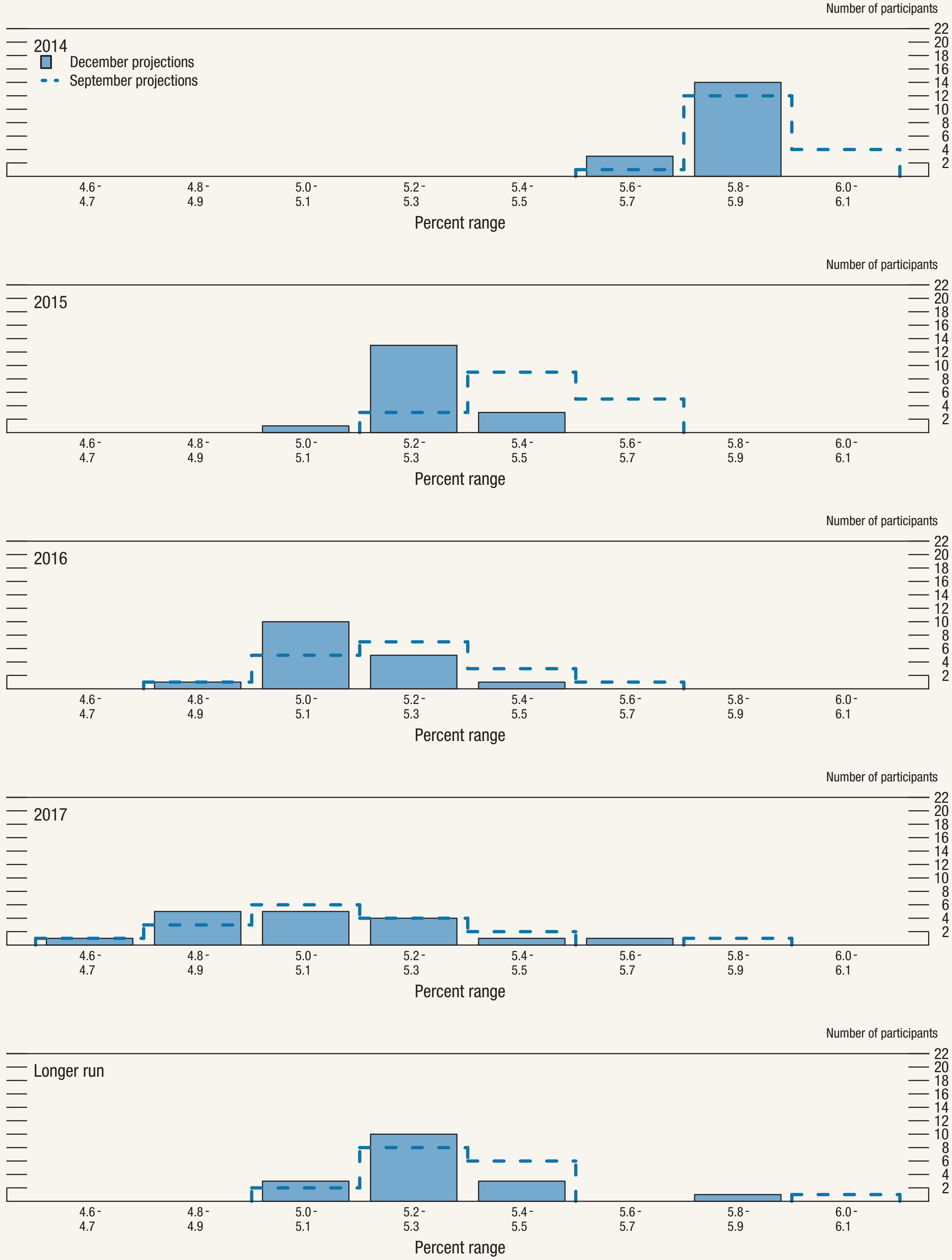
Note: In the upper panel, the height of each bar denotes the number of FOMC participants who judge that, under appropriate monetary policy, the first increase in the target range for the federal funds rate from its current range of 0 to ¼ percent will occur in the specified calendar year. In September 2014, the numbers of FOMC participants who judged that the first increase in the target federal funds rate would occur in 2014, 2015, and 2016 were, respectively, 1, 14, and 2. In the lower panel, each shaded circle indicates the value (rounded to the nearest ⅛ percentage point) of an individual participant's judgment of the midpoint of the appropriate target range for the federal funds rate or the appropriate target level for the federal funds rate at the end of the specified calendar year or over the longer run.

Figure 3.A. Distribution of participants' projections for the change in real GDP, 2014–17 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, 2014–17 and over the longer run



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

pressure on inflation. The central tendencies of participants' projections for core PCE inflation moved down somewhat for 2015 but were mostly unchanged in other years. Almost all participants projected that PCE inflation would rise gradually, on balance, over the period from 2015 to 2017, reaching a level at or near the Committee's 2 percent objective. A few participants expected PCE inflation to rise slightly above 2 percent at some point during the forecast period, while many others expected inflation to remain below 2 percent for the entire period. The central tendencies for PCE inflation were 1.2 to 1.3 percent in 2014, 1.0 to 1.6 percent in 2015, 1.7 to 2.0 percent in 2016, and 1.8 to 2.0 percent in 2017. The central tendencies of the forecasts for core inflation were higher than those for the headline measure in 2014 and 2015, reflecting the effects of lower oil prices. The central tendencies of the two measures were equal in 2016 and in 2017. Factors cited by participants as likely to contribute to a gradual rise of inflation toward the Committee's longer-run objective of 2 percent included stable longer-term inflation expectations, steadily diminishing resource slack, a pickup in wage growth, waning effects of declines in oil prices, and still-accommodative monetary policy.

Figures 3.C and 3.D provide information on the diversity of participants' views about the outlook for inflation. In addition to moving lower, the range of participants' projections for PCE inflation in 2015 widened somewhat relative to September, likely reflecting in part differences in participants' assessments of the effects of the recent decline in energy prices on the outlook for inflation. The ranges for core inflation narrowed in 2014 and 2015. In other years of the projection, the ranges of the inflation projections were relatively little changed. The range for both measures in 2017 continued to show a very substantial concentration near the Committee's 2 percent longer-run objective by that time.

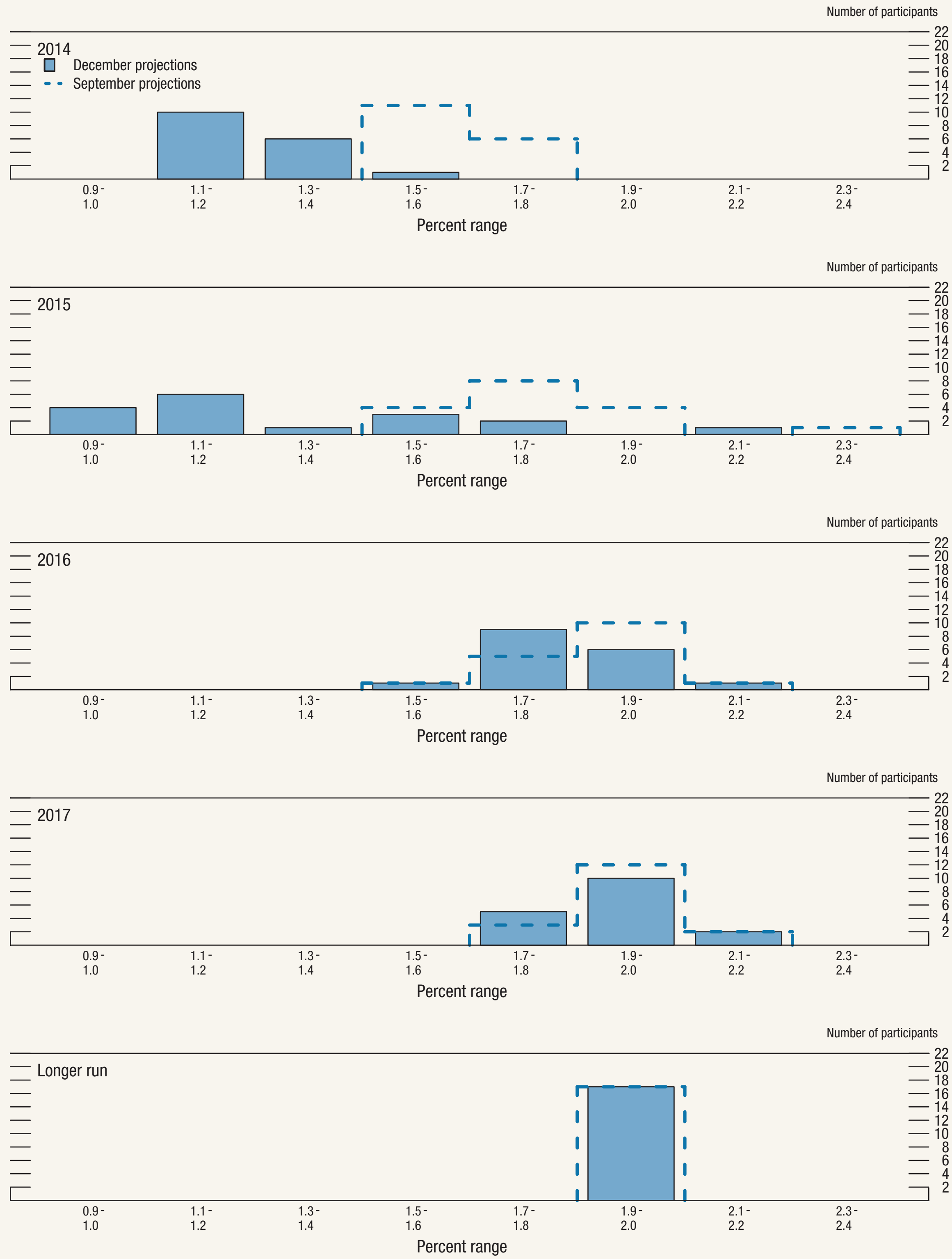
Appropriate Monetary Policy

Participants judged that it would be appropriate to begin raising the target range for the federal funds rate over the projection period as labor market indicators and inflation move back toward values the Committee judges consistent with the attainment of its mandated objectives of maximum employment and price stability. As shown in figure 2, all but two participants anticipated that it would be appropriate to begin raising the target range for the federal funds rate during 2015. However, most projected that the appropriate level of the federal funds rate would remain considerably below its longer-run normal level through 2016. Most participants expected the appropriate level of the federal funds rate would be near, or already would have reached, their individual view of its longer-run normal level by the end of 2017.

All participants projected that the unemployment rate would be at or below 5.5 percent at the end of the year in which they judged the initial increase in the target range for the federal funds rate would be warranted, and all but one anticipated that inflation would be at or below the Committee's 2 percent goal at the end of that year. Most participants projected that the unemployment rate would be at or somewhat above their estimates of its longer-run normal level at that time.

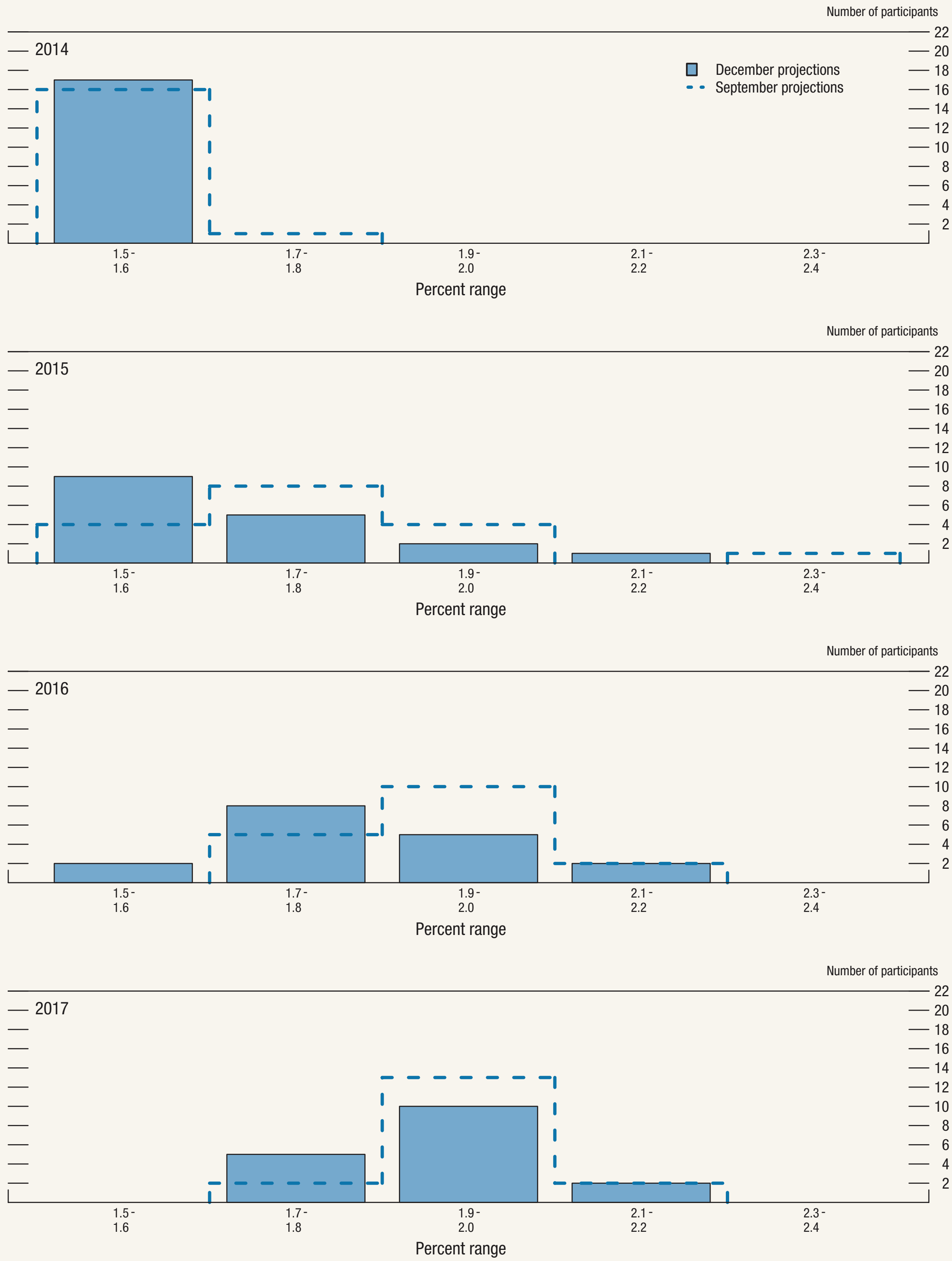
Figure 3.E provides the distribution of participants' judgments regarding the appropriate level of the target federal funds rate, conditional on their assessments of the economic outlook, at the end of each calendar year from 2014 to 2017 and over the longer run. All participants judged that economic conditions would warrant maintaining the current exceptionally low level of the federal funds rate into 2015. The median values of the federal funds rate at the end of 2015 and 2016 fell 25 basis points and 38 basis points relative to September, to 1.13 percent and 2.50 percent, respectively, while the mean values fell 15 basis points for both years, to 1.13 percent in 2015 and 2.54 percent in 2016. The dispersion of the projections for the appropriate level of the federal funds rate was narrower in 2014 and 2015 and was little changed in 2016 and 2017. Most participants judged that it would be appropriate to set the federal funds rate at or near its longer-run normal level in 2017, although a number of them projected that the federal funds rate would still need to be set appreciably below its longer-run normal level at that time and one anticipated that it would be appropriate to target a level noticeably above its longer-run normal level. Participants provided a number of reasons why they thought it would be appropriate for the federal funds rate to remain below its longer-run normal level for some time after inflation and the unemployment rate were near mandate-consistent levels. These reasons included an assessment that the headwinds that have been holding back the recovery will continue to exert some restraint on economic activity at that time, that residual slack in the labor market will still be evident in other measures of labor utilization, and that the risks to the economic outlook are asymmetric as a result of the constraints on monetary policy associ-

Figure 3.C. Distribution of participants' projections for PCE inflation, 2014–17 and over the longer run



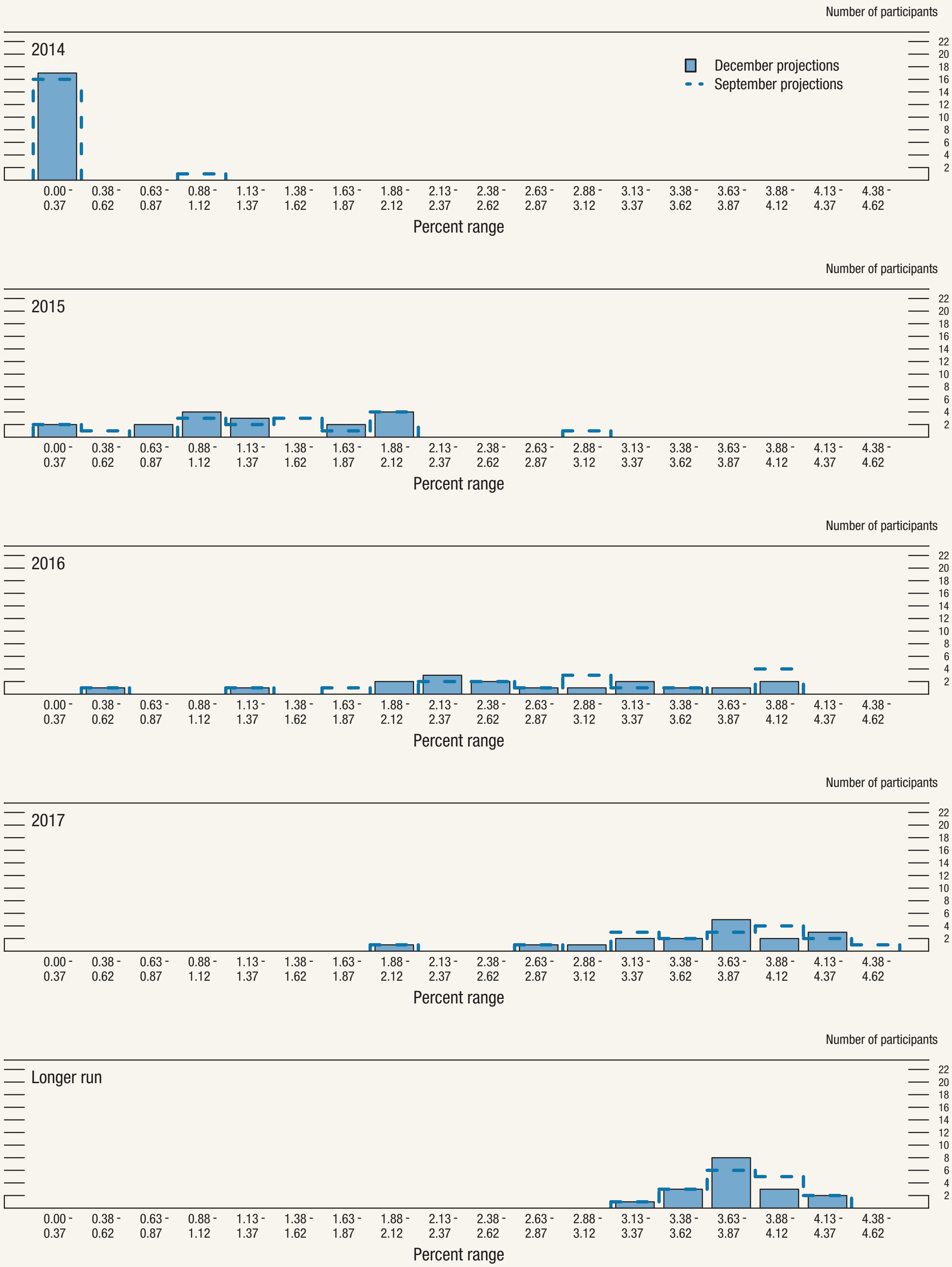
Note: Definitions of variables are in the general note to table 1.

Figure 3.D. Distribution of participants' projections for core PCE inflation, 2014–17



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, 2014–17 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.

ated with the effective lower bound on the federal funds rate.

As in September, estimates of the longer-run level of the federal funds rate ranged from 3.25 to 4.25 percent. All participants judged that inflation over the longer run would be equal to the Committee's inflation objective of 2 percent, implying that their individual judgments regarding the appropriate longer-run level of the real federal funds rate in the absence of further shocks to the economy ranged from 1.25 to 2.25 percent.

Participants' views of the appropriate path for monetary policy were informed by their judgments about the state of the economy, including the values of the unemployment rate and other labor market indicators that would be consistent with maximum employment, the extent to which the economy was currently falling short of maximum employment, the prospects for inflation to return to the Committee's longer-term objective of 2 percent, the desire to minimize potential disruption in financial markets by avoiding unusually rapid increases in the federal funds rate, and the balance of risks around the outlook. Some participants also mentioned the prescriptions of various monetary policy rules as factors they considered in judging the appropriate path for the federal funds rate.

Uncertainty and Risks

Nearly all participants continued to judge the levels of uncertainty attending their projections for real GDP growth and the unemployment rate as broadly similar to the norms during the previous 20 years (figure 4).[3] Most participants continued to see the risks to their outlooks for real GDP growth as broadly balanced. A few participants viewed the risks to real GDP growth as weighted to the downside; one viewed the risks as weighted to the upside. Those participants who viewed the risks as weighted to the downside cited, for example, concern about the limited ability of monetary policy at the effective lower bound to respond to further negative shocks to the economy or about the trajectory for economic growth abroad. As in September, nearly all participants judged the risks to the outlook for the unemployment rate to be broadly balanced.

As in September, participants generally agreed that the levels of uncertainty associated with their inflation forecasts were broadly similar to historical norms, and most saw the risks to those projections as broadly balanced. A number of participants, however, viewed the risks to their inflation forecasts as tilted to the downside; the reasons discussed included the possibility that the recent low levels of inflation could prove more persistent than anticipated; the possibility that the upward pull on prices from inflation expectations might be weaker than assumed; or the judgment that, in current circumstances, it would be difficult for the Committee to respond effectively to low-inflation outcomes. Conversely, one participant saw upside risks to inflation, citing uncertainty about the timing and efficacy of the Committee's withdrawal of monetary policy accommodation.

Table 2. Average historical projection error ranges
Percentage points

Variable	2014	2015	2016	2017
Change in real GDP[1]	±0.9	±1.8	±2.1	±2.1
Unemployment rate[1]	±0.2	±0.8	±1.4	±1.8
Total consumer prices[2]	±0.2	±0.9	±1.0	±1.0

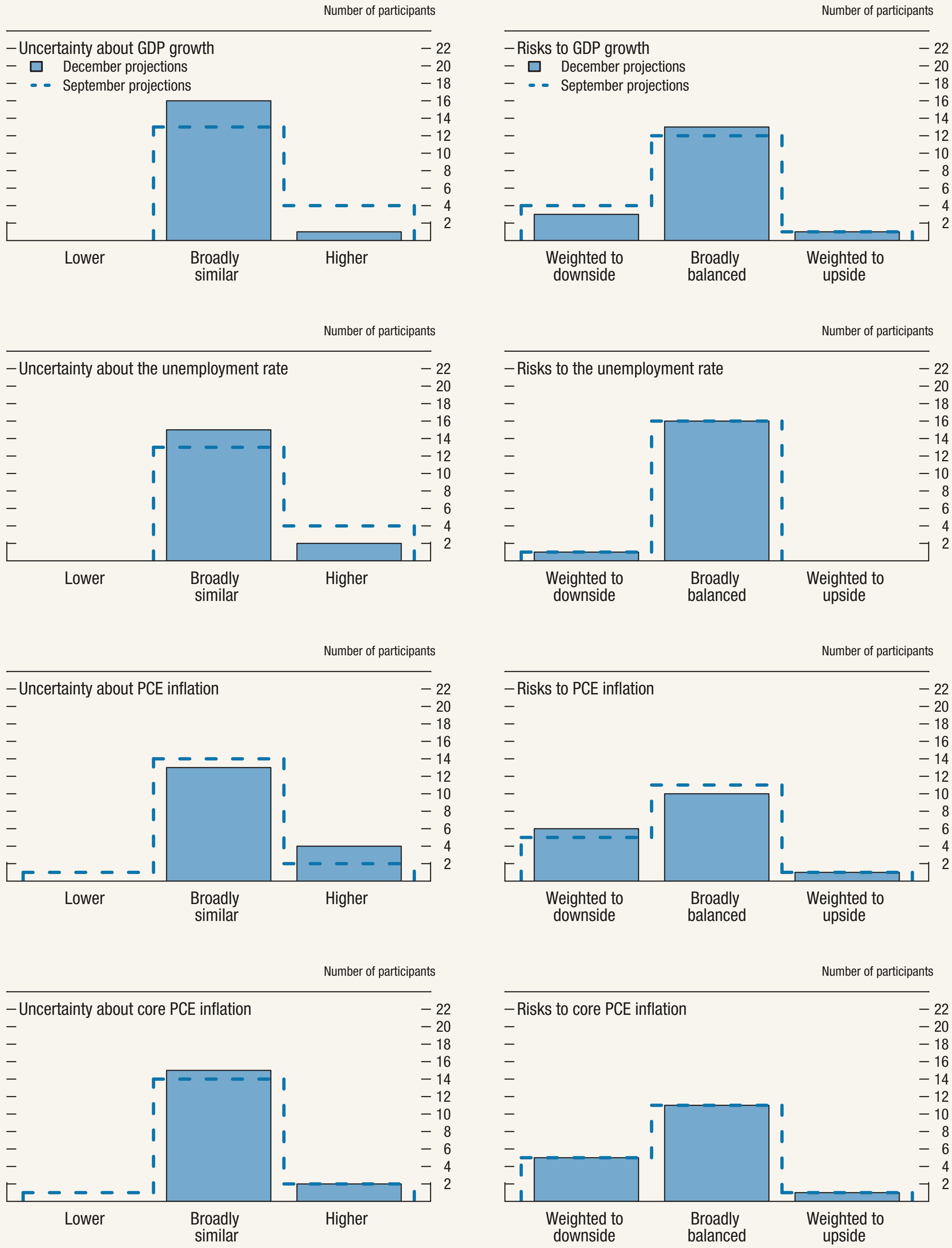
Note: Error ranges shown are measured as plus or minus the root mean squared error of projections for 1994 through 2013 that were released in the winter by various private and government forecasters. As described in the box "Forecast Uncertainty," under certain assumptions, there is about a 70 percent 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. For more information, see 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), available at www.federalreserve.gov/pubs/feds/2007/200760/200760abs.html; and Board of Governors of the Federal Reserve System, Division of Research and Statistics (2014), "Updated Historical Forecast Errors," memorandum, April 9, www.federalreserve.gov/foia/files/20140409-historical-forecast-errors.pdf.

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.

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 1994 through 2013. 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 2.1 to 3.9 percent in the current year, 1.2 to 4.8 percent in the second year, and 0.9 to 5.1 percent in the third and fourth years. The corresponding 70 percent confidence intervals for overall inflation would be 1.8 to 2.2 percent in the current year, 1.1 to 2.9 percent in the second year, and 1.0 to 3.0 percent in the third and fourth 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.

10 Litigation

During 2014, the Board of Governors was a party in 6 lawsuits or appeals filed that year and was a party in 14 other cases pending from previous years, for a total of 20 cases. In 2013, the Board had been a party in a total of 29 cases. As of December 31, 2014, 13 cases were pending.

Ramey v. Board of Governors, No. 14-cv-220 (D.D.C., filed December 22, 2014), is a Freedom of Information Act case.

The Loan Syndications and Trading Association v. Board of Governors, No. 14-1240 (D.C. Circuit, petition for review filed November 10, 2014), is a challenge to the credit risk retention rules issued under section 941 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010.

Richardson v. Board of Governors, No. 14-cv-01673 (D. District of Columbia, filed October 8, 2014), is an employment discrimination claim.

Nobles v. Federal Reserve Bank of Atlanta and Board of Governors, No. 14-cv-02541 (N.D. Georgia, filed August 6, 2014), was a discrimination claim brought by former employee of the Federal Reserve Bank of Atlanta. On October 27, 2014, the plaintiff voluntarily dismissed the Board as a defendant in the action.

Community Financial Services Association of America, Ltd., v. Board of Governors, No. 14-cv-00853 (D. District of Columbia, filed June 11, 2014), is a challenge to actions of the Board, the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency that allegedly disadvantage payday lenders.

Johnson v. Federal Reserve Board, No. 14-cv-50 (E.D. North Carolina, filed March 28, 2014), was a complaint by incarcerated individual that his prosecution and imprisonment violated his rights under the "redemption theory." On January 30, 2015, the District Court granted the Board's motion to dismiss the action.

American Bankers Association, et al., v. Board of Governors, No. 13-cv-02050 (D. District of Columbia, filed December 24, 2013), was a challenge to a portion of the so-called Volcker rule issued by the Board and other regulators. On February 12, 2014, the plaintiffs voluntarily dismissed the action.

American Bankers Association, et al., v. Board of Governors, No. 13-1310 (D.C. Circuit, filed December 23, 2013), was a challenge to a portion of the so-called Volcker rule issued by the Board and other regulators. On February 12, 2014, the parties stipulated to a dismissal of the petition for review.

Blair v. Bernanke, No. CJ-2013-3525, No. 14-CV-00022 (N.D. Oklahoma, filed November 25, 2013), was a third-party, pro se complaint originally filed in Oklahoma state court alleging that the Board violated the plaintiff's constitutional rights through its regulation of direct deposit payments. On July 14, 2014, the District Court dismissed the action as to the Board.

Richter v. Board of Governors, No. 13-cv-015107 (D. District of Columbia, filed October 1, 2013), was a Freedom of Information Act case. On February 14, 2014, the District Court granted the Board's motion for summary judgment.

WMI Liquidating Trust v. Board of Governors, No. 13-cv-01706 (W.D. Washington, filed September 20, 2013), is an action for a declaratory judgment regarding golden parachute payments. On July 3, 2014, the action was transferred to the United States Bankruptcy Court for the District of Delaware (Adv. Pro. No. 14-50435-MFW (Bankr. D. Del.)).

NACS et al. v. Board of Governors, No. 13-5720 (D.C. Circuit, notice of appeal filed August 21, 2013), was an appeal from a District Court ruling invalidating Board regulations issued pursuant to section 1075 of the Dodd-Frank Wall Street Reform and Consumer

Protection Act relating to debit card interchange fees. On March 21, 2014, the Court of Appeals reversed the District Court's grant of summary judgment and remanded the action to the District Court. On January 20, 2015, the Supreme Court denied NACS's petition for certiorari (No. 14-200).

State National Bank of Big Spring v. Bernanke, No. 13-5247 (D.C. Circuit, notice of appeal filed August 2, 2013), is an appeal of a District Court ruling dismissing plaintiffs' challenge to the constitutionality of the Consumer Financial Protection Bureau and the Financial Stability Oversight Council.

Ferrer v. Bernanke, No. 13-29975 (S.D. Florida, filed July 29, 2013), is an action alleging that plaintiffs received improper relief under the Board's and the Office of the Comptroller of the Currency's financial remediation orders regarding deficient mortgage servicing and foreclosure practices. On October 28, 2014, the District Court granted the Board's motion to dismiss the action. On November 26, the plaintiffs filed a notice of appeal to the Eleventh Circuit (No. 14-15325).

Goldstein, Trustee v. Board of Governors, No. 13-MC-00445-RC (D. District of Columbia, motion to compel filed May 1, 2013), was a motion to compel production of bank examination material. On January 17, 2014, the plaintiff voluntarily dismissed the action.

Ball v. Board of Governors, No. 13-cv-00603 (D. District of Columbia, filed April 30, 2013), was a Freedom of Information Act case. On March 31, 2015, the District Court granted the Board's motion for summary judgment.

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.

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), was 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 on April 14, 2014, the Fourth Circuit Court of Appeals dismissed the appeal on the appellant's motion (No. 12-1917).

Artis v. Greenspan, No. 01-cv-0400 (D. District of Columbia, filed February 22, 2001), is an employment discrimination action. On September 29, 2014, the District Court denied the plaintiffs' motion for class certification, and on January 15, 2015, the Court of Appeals for the District of Columbia Circuit denied the plaintiffs' petition for interlocutory appeal of that denial (No. 14-8003).

11 Statistical Tables

Table 1. Federal Reserve open market transactions, 2014

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	0	0	0	0	0	0	0	0	0	0	0	0	0
For new bills	0	0	0	0	0	0	0	0	0	0	0	0	0
Redemptions	0	0	0	0	0	0	0	0	0	0	0	0	0
Others within 1 year													
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	0	-295	0	0	0	-37	-40	0	-5	0	-88	0	-464
Redemptions	1	1	1	2	0	1	0	2	1	1	0	1	10
1 to 5 years													
Gross purchases	2,477	8,790	3,738	6,688	3,224	5,711	3,790	2,965	3,210	2,161	0	0	42,754
Gross sales	0	0	0	0	0	0	0	0	0	0	0	0	0
Exchanges	0	90	0	0	0	12	14	0	1	0	35	0	152
5 to 10 years													
Gross purchases	20,474	19,593	19,662	13,731	13,415	11,291	9,203	7,255	6,770	4,578	0	0	125,972
Gross sales	0	0	0	0	0	0	0	0	0	0	0	0	0
Exchanges	0	180	0	0	0	25	21	0	3	0	0	0	228
More than 10 years													
Gross purchases	13,019	10,349	12,296	9,716	7,064	8,318	6,280	6,154	4,757	3,262	0	0	81,215
Gross sales	0	0	0	0	0	0	0	0	0	0	0	0	0
Exchanges	0	25	0	0	0	0	5	0	0	0	53	0	84
All maturities													
Gross purchases	35,970	38,732	35,696	30,135	23,703	25,320	19,273	16,374	14,737	10,001	0	0	249,941
Gross sales	0	0	0	0	0	0	0	0	0	0	0	0	0
Redemptions	1	1	1	2	0	1	0	2	1	1	0	1	10
Net change in U.S. Treasury securities	35,969	38,731	35,695	30,133	23,703	25,319	19,273	16,372	14,736	10,000	0	-1	249,931
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	2,310	3,500	4,068	2,378	883	423	1,532	565	1,556	306	1,023	0	18,544
Net change in federal agency obligations	-2,310	-3,500	-4,068	-2,378	-883	-423	-1,532	-565	-1,556	-306	-1,023	0	-18,544
Mortgage-backed securities[3]													
Net settlements[2]													
Net change in mortgage-backed securities	42,066	37,866	33,014	28,767	16,108	15,917	10,463	3,949	18,112	21,471	11,906	7,031	246,671

(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	0	0	0	0	0	0
Gross sales	0	0	0	0	0	0	0	0	0	0	0	0	0
Reverse repurchase agreements[4]													
Gross purchases	3,888,403	3,793,139	3,714,026	4,734,608	6,327,094	4,466,710	5,185,940	5,094,880	5,542,761	5,626,645	4,219,033	4,087,951	56,681,190
Gross sales	3,776,234	3,805,923	3,838,511	4,719,082	6,278,279	4,646,528	4,996,369	5,105,118	5,675,723	5,512,078	4,200,731	4,320,526	56,875,104
Net change in temporary transactions	112,169	-12,784	-124,485	15,525	48,815	-179,818	189,571	-10,239	-132,962	114,567	18,301	-232,575	-193,913
Total net change in System Open Market Account	**187,894**	**60,313**	**-59,844**	**72,048**	**87,743**	**-139,005**	**217,775**	**9,518**	**-101,670**	**145,732**	**29,185**	**-225,544**	**284,144**

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. Please reference table 2 of the H.4.1 release (www.federalreserve.gov/releases/h41/) for the maturity distribution of the securities.

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 the remaining principal balance of the securities, reported at face value.

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, 2012–14
Millions of dollars

Description	December 31			Change	
	2014	2013	2012	2013 to 2014	2012 to 2013
U.S. Treasury securities					
Held outright[1]	**2,461,363**	**2,208,775**	**1,666,145**	**252,588**	**542,630**
By remaining maturity					
Bills					
1–90 days	0	0	0	0	0
91 days to 1 year	0	0	0	0	0
Notes and bonds					
1 year or less	3,520	474	21	3,046	453
More than 1 year through 5 years	1,112,927	763,329	378,476	349,598	384,853
More than 5 years through 10 years	686,627	864,700	862,410	-178,073	2,290
More than 10 years	658,289	580,272	425,238	78,017	155,034
By type					
Bills	0	0	0	0	0
Notes	1,634,949	1,467,427	1,110,398	167,522	357,029
Bonds	826,414	741,348	555,747	85,066	185,601
Federal agency securities					
Held outright[1]	**38,677**	**57,221**	**76,783**	**-18,544**	**-19,562**
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	5,733	18,544	19,562	-12,811	-1,018
More than 1 year through 5 years	30,597	36,268	52,830	-5,671	-16,562
More than 5 years though 10 years	0	62	2,044	-62	-1,982
More than 10 years	2,347	2,347	2,347	0	0
By type					
Discount notes	0	0	0	0	0
Coupons	38,677	57,221	76,783	-18,544	-19,562
By issuer					
Federal Home Loan Mortgage Corporation	19,515	24,986	32,261	-5,471	-7,275
Federal National Mortgage Association	13,470	25,555	31,906	-12,085	-6,351
Federal Home Loan Banks	5,692	6,680	12,616	-988	-5,936
Mortgage-backed securities[2]					
Held outright[1]	**1,736,833**	**1,490,162**	**926,662**	**246,671**	**563,500**
By remaining maturity					
1 year or less	0	0	2	0	-2
More than 1 year through 5 years	13	5	1	8	4
More than 5 years though 10 years	6,453	2,549	2,365	3,904	184
More than 10 years	1,730,367	1,487,608	924,294	242,759	563,314
By issuer					
Federal Home Loan Mortgage Corporation	501,914	426,311	292,155	75,603	134,156
Federal National Mortgage Association	886,716	774,689	503,696	112,027	270,993
Government National Mortgage Association	348,203	289,162	130,811	59,041	158,351
Temporary transactions					
Repurchase agreements[3]	**0**	**0**	**0**	**0**	**0**
Reverse repurchase agreements[3]	**509,837**	**315,924**	**107,188**	**193,913**	**208,736**
Foreign official and international accounts	113,132	118,169	107,188	-5,037	10,981
Dealers	396,705	197,755	0	198,950	197,755

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, 2014

Percent

Reserve Bank	Primary credit	Secondary credit	Seasonal credit
All banks	0.75	1.25	0.15

Note: For details on rate changes over the course of 2014, see the section on discount rates in "Record of Policy Actions of the Board of Governors." *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, 2014

Type of deposit	Requirements	
	Percentage of deposits	Effective date
Net transaction accounts[1]		
\$0 million–\$14.5 million[2]	0	12/23/2014
More than \$14.5 million–\$103.6 million[3]	3	12/23/2014
More than \$103.6 million	10	12/23/2014
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, 2013 and 2014

Type of office	Total	Commercial banks[1]					State-chartered savings banks
		Total	Member			Nonmember	
			Total	National	State		
All banking offices							
Banks							
Number, Dec. 31, 2013	**6,134**	**5,842**	**1,978**	**1,143**	**835**	**3,864**	**292**
Changes during 2014							
New banks	19	15	8	4	4	7	4
Banks converted into branches	-225	-219	-83	-47	-36	-136	-6
Ceased banking operations[2]	-42	-38	-14	-11	-3	-24	-4
Other[3]	0	1	3	-33	36	-2	-1
Net change	-248	-241	-86	-87	1	-155	-7
Number, Dec. 31, 2014	**5,886**	**5,601**	**1,892**	**1,056**	**836**	**3,709**	**285**
Branches and additional offices							
Number, Dec. 31, 2013	**83,977**	**81,275**	**57,958**	**43,828**	**14,130**	**23,317**	**2,702**
Changes during 2014							
New branches	1,369	1,253	724	541	183	529	116
Banks converted to branches	225	220	106	65	41	114	5
Discontinued[2]	-2,171	-2,125	-1,584	-1,231	-353	-541	-46
Other[3]	0	-3	61	-94	155	-64	3
Net change	-577	-655	-693	-719	26	38	78
Number, Dec. 31, 2014	**83,400**	**80,620**	**57,265**	**43,109**	**14,156**	**23,355**	**2,780**
Banks affiliated with bank holding companies							
Banks							
Number, Dec. 31, 2013	**5,014**	**4,886**	**1,741**	**1,000**	**741**	**3,145**	**128**
Changes during 2014							
BHC-affiliated new banks	54	50	19	9	10	31	4
Banks converted into branches	-192	-189	-77	-45	-32	-112	-3
Ceased banking operations[2]	-40	-39	-15	-12	-3	-24	-1
Other[3]	0	0	1	-29	30	-1	0
Net change	-178	-178	-72	-77	5	-106	0
Number, Dec. 31, 2014	**4,836**	**4,708**	**1,669**	**923**	**746**	**3,039**	**128**

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 1984–2014 and month-end 2014
Millions of dollars

Period	Factors supplying reserve funds								
	Federal Reserve Bank credit outstanding						Gold stock	Special drawing rights certificate account	Treasury currency outstanding[5]
	Securities held outright[1]	Repurchase agreements[2]	Loans and other credit extensions[3]	Float	Other Federal Reserve assets[4]	Total[4]			
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	2,161,094	0	138,311	-1,421	110,255	2,408,240	11,041	5,200	43,542
2011	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	44,751
2013[r]	3,756,158	0	2,177	-962	246,947	4,004,320	11,041	5,200	45,493
2014	4,236,873	0	3,351	-555	239,238	4,478,908	11,041	5,200	46,355
Jan	3,831,690	0	2,245	-347	250,614	4,084,202	11,041	5,200	45,608
Feb	3,904,796	0	2,330	-586	239,529	4,146,068	11,041	5,200	45,677
Mar	3,970,056	0	2,298	-546	244,177	4,215,985	11,041	5,200	45,749
Apr	4,027,112	0	2,252	-770	248,459	4,277,053	11,041	5,200	45,814
May	4,066,824	0	2,168	-529	240,205	4,308,668	11,041	5,200	45,894
Jun	4,108,135	0	2,167	-524	243,896	4,353,674	11,041	5,200	45,963
Jul	4,136,789	0	2,125	-593	248,462	4,386,783	11,041	5,200	46,049
Aug	4,156,865	0	2,156	-509	238,624	4,397,136	11,041	5,200	46,104
Sep	4,188,172	0	2,289	-915	241,330	4,430,876	11,041	5,200	46,171
Oct	4,219,162	0	1,870	-450	245,971	4,466,554	11,041	5,200	46,243
Nov	4,230,132	0	1,794	-837	236,638	4,467,727	11,041	5,200	46,299
Dec	4,236,873	0	3,351	-555	239,238	4,478,908	11,041	5,200	46,355

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 1984–2014 and month-end 2014" for detail.

4 As of 2013, unamortized discounts on securities held outright are included as a component of Other Federal Reserve assets. Previously, they were included in Other Federal Reserve liabilities and capital.

5 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[6]	Treasury cash holdings[7]	Deposits with Federal Reserve Banks, other than reserve balances					Required clearing balances[9]	Other Federal Reserve liabilities and capital[4,10]	
				Term deposits	Treasury general account	Treasury supplementary financing account	Foreign	Other[8]			
1984	183,796	0	513	n/a	5,316	n/a	253	867	1,126	5,952	20,693
1985	197,488	0	550	n/a	9,351	n/a	480	1,041	1,490	5,940	27,141
1986	211,995	0	447	n/a	7,588	n/a	287	917	1,812	6,088	46,295
1987	230,205	0	454	n/a	5,313	n/a	244	1,027	1,687	7,129	40,097
1988	247,649	0	395	n/a	8,656	n/a	347	548	1,605	7,683	37,742
1989	260,456	0	450	n/a	6,217	n/a	589	1,298	1,618	8,486	36,713
1990	286,963	0	561	n/a	8,960	n/a	369	528	1,960	8,147	36,081
1991	307,756	0	636	n/a	17,697	n/a	968	1,869	3,946	8,113	25,051
1992	334,701	0	508	n/a	7,492	n/a	206	653	5,897	7,984	25,544
1993	365,271	0	377	n/a	14,809	n/a	386	636	6,332	9,292	27,967
1994	403,843	0	335	n/a	7,161	n/a	250	1,143	4,196	11,959	25,061
1995	424,244	0	270	n/a	5,979	n/a	386	2,113	5,167	12,342	22,960
1996	450,648	0	249	n/a	7,742	n/a	167	1,178	6,601	13,829	17,310
1997	482,327	0	225	n/a	5,444	n/a	457	1,171	6,684	15,500	23,447
1998	517,484	0	85	n/a	6,086	n/a	167	1,869	6,780	16,354	19,164
1999	628,359	0	109	n/a	28,402	n/a	71	1,644	7,481	17,256	16,039
2000	593,694	0	450	n/a	5,149	n/a	216	2,478	6,332	17,962	11,295
2001	643,301	0	425	n/a	6,645	n/a	61	1,356	8,525	17,083	8,469
2002	687,518	21,091	367	n/a	4,420	n/a	136	1,266	10,534	18,977	11,988
2003	724,187	25,652	321	n/a	5,723	n/a	162	995	11,829	19,793	11,054
2004	754,877	30,783	270	n/a	5,912	n/a	80	1,285	9,963	26,378	14,137
2005	794,014	30,505	202	n/a	4,573	n/a	83	2,144	8,651	30,466	10,678
2006	820,176	29,615	252	n/a	4,708	n/a	98	972	6,842	36,231	11,847
2007	828,938	43,985	259	n/a	16,120	n/a	96	1,830	6,614	41,622	13,986
2008	889,898	88,352	259	n/a	106,123	259,325	1,365	21,221	4,387	48,921	855,599
2009	928,249	77,732	239	n/a	186,632	5,001	2,411	35,262	3,020	63,219	973,814
2010	982,750	59,703	177	0	140,773	199,964	3,337	13,631	2,374	99,602	965,712
2011	1,075,820	99,900	128	0	85,737	0	125	64,909	2,480	72,766	1,559,731
2012	1,169,159	107,188	150	0	92,720	0	6,427	27,476	n/a	66,093	1,491,044
2013[r]	1,241,228	315,924	234	0	162,399	0	7,970	26,181	n/a	63,049	2,249,070
2014	1,343,010	509,837	201	0	223,452	0	5,242	20,320	n/a	61,447	2,377,995
Jan	1,227,908	203,755	260	12,822	88,573	0	7,971	16,973	n/a	62,992	2,524,797
Feb	1,251,821	216,539	269	0	46,029	0	7,975	14,545	n/a	62,542	2,608,266
Mar	1,268,860	341,023	279	14,251	142,189	0	6,977	11,095	n/a	63,240	2,430,060
Apr	1,272,401	325,498	229	0	148,343	0	7,826	7,659	n/a	62,715	2,514,438
May	1,280,062	276,683	186	42,904	28,894	0	7,808	5,262	n/a	64,175	2,664,829
Jun	1,282,504	456,501	146	92,420	139,299	0	5,942	11,450	n/a	64,192	2,363,424
Jul	1,286,231	266,930	140	0	127,237	0	6,565	9,496	n/a	62,060	2,690,413
Aug	1,292,915	277,169	161	0	48,664	0	6,566	7,992	n/a	64,125	2,761,889
Sep	1,290,427	410,131	159	0	158,302	0	5,243	27,067	n/a	64,112	2,537,847
Oct	1,299,978	295,564	203	219,144	117,403	0	5,260	9,058	n/a	62,597	2,519,832
Nov	1,317,568	277,262	189	334,714	108,270	0	5,248	6,839	n/a	63,626	2,416,550
Dec	1,343,010	509,837	201	0	223,452	0	5,242	20,320	n/a	61,447	2,377,995

6 Cash value of agreements, which are collateralized by U.S. Treasury securities, federal agency debt securities, and agency mortgage-backed securities.

7 Coin and paper currency held by the Treasury.

8 As of 2014, includes desposits of designated financial market utilites.

9 Required clearing balances were discontinued in July 2012.

10 In 2010, includes funds from American International Group, Inc. asset dispositions, held as agent.

n/a Not applicable.

r Revised.

Table 6B. Loans and other credit extensions, by type, year-end 1984–2014 and month-end 2014
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[12]	Central bank liquidity swaps[13]
			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[8,9]	Maiden Lane III LLC[8,10]	TALF LLC[11]		
1984	3,577	n/a	3,577	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1985	3,060	n/a	3,060	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1986	1,565	n/a	1,565	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1987	3,815	n/a	3,815	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1988	2,170	n/a	2,170	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1989	481	n/a	481	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1990	190	n/a	190	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1991	218	n/a	218	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1992	675	n/a	675	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1993	94	n/a	94	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1994	223	n/a	223	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1995	135	n/a	135	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1996	85	n/a	85	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1997	2,035	n/a	2,035	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1998	17	n/a	17	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1999	233	n/a	233	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2000	110	n/a	110	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2001	34	n/a	34	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2002	40	n/a	40	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2003	62	n/a	62	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2004	43	n/a	43	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2005	72	n/a	72	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2006	67	n/a	67	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2007	72,636	40,000	8,636	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	24,000
2008	1,605,848	450,219	93,791	37,404	23,765	n/a	38,914	334,102	0	27,023	20,117	26,785	n/a	n/a	553,728
2009	281,095	75,918	20,700	0	0	47,532	22,184	14,064	n/a	26,701	15,659	22,661	298	25,106	10,272
2010	138,311	0	221	n/a	n/a	24,703	19,953	n/a	n/a	26,967	16,198	23,143	665	26,385	75
2011	144,098	0	196	n/a	n/a	9,013	n/a	n/a	n/a	7,232	9,280	17,744	811	n/a	99,823
2012	11,867	0	70	n/a	n/a	556	n/a	n/a	n/a	1,413	61	22	856	n/a	8,889
2013	2,177	0	74	n/a	n/a	97	n/a	n/a	n/a	1,541	63	22	109	n/a	272
2014	3,351	0	145	n/a	n/a	n/a	n/a	n/a	n/a	1,678	n/a	n/a	n/a	n/a	1,528

(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[12]	Central bank liquidity swaps[13]
			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[8,9]	Maiden Lane III LLC[8,10]	TALF LLC[11]		
2014, month-end															
Jan	2,245	0	17	n/a	n/a	96	n/a	n/a	n/a	1,579	63	22	108	n/a	359
Feb	2,330	0	4	n/a	n/a	95	n/a	n/a	n/a	1,581	63	22	106	n/a	458
Mar	2,298	0	35	n/a	n/a	82	n/a	n/a	n/a	1,584	63	22	105	n/a	407
Apr	2,252	0	40	n/a	n/a	81	n/a	n/a	n/a	1,654	63	22	92	n/a	300
May	2,168	0	83	n/a	n/a	79	n/a	n/a	n/a	1,656	63	22	91	n/a	174
Jun	2,167	0	164	n/a	n/a	49	n/a	n/a	n/a	1,655	63	22	90	n/a	124
Jul	2,125	0	213	n/a	n/a	34	n/a	n/a	n/a	1,658	63	22	60	n/a	75
Aug	2,156	0	253	n/a	n/a	34	n/a	n/a	n/a	1,664	63	22	44	n/a	76
Sep	2,289	0	327	n/a	n/a	14	n/a	n/a	n/a	1,664	0	0	44	n/a	240
Oct	1,870	0	166	n/a	n/a	n/a	n/a	n/a	n/a	1,679	0	0	24	n/a	1
Nov	1,794	0	112	n/a	n/a	n/a	n/a	n/a	n/a	1,681	n/a	n/a	n/a	n/a	1
Dec	3,351	0	145	n/a	n/a	n/a	n/a	n/a	n/a	1,678	n/a	n/a	n/a	n/a	1,528

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, and the last loan repayment was received in October 2014.

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 Maiden Lane II LLC was discontinued in November 2014.

10 Maiden Lane III LLC was discontinued in November 2014.

11 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. TALF LLC was discontinued in November 2014.

12 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.

13 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.

n/a 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	n/a	1,795
1919	300	0	2,215	201	575	0	3,292	2,707	n/a	1,707
1920	287	0	2,687	119	262	0	3,355	2,639	n/a	1,709
1921	234	0	1,144	40	146	0	1,563	3,373	n/a	1,842
1922	436	0	618	78	273	0	1,405	3,642	n/a	1,958
1923	80	54	723	27	355	0	1,238	3,957	n/a	2,009
1924	536	4	320	52	390	0	1,302	4,212	n/a	2,025
1925	367	8	643	63	378	0	1,459	4,112	n/a	1,977
1926	312	3	637	45	384	0	1,381	4,205	n/a	1,991
1927	560	57	582	63	393	0	1,655	4,092	n/a	2,006
1928	197	31	1,056	24	500	0	1,809	3,854	n/a	2,012
1929	488	23	632	34	405	0	1,583	3,997	n/a	2,022
1930	686	43	251	21	372	0	1,373	4,306	n/a	2,027
1931	775	42	638	20	378	0	1,853	4,173	n/a	2,035
1932	1,851	4	235	14	41	0	2,145	4,226	n/a	2,204
1933	2,435	2	98	15	137	0	2,688	4,036	n/a	2,303
1934	2,430	0	7	5	21	0	2,463	8,238	n/a	2,511
1935	2,430	1	5	12	38	0	2,486	10,125	n/a	2,476
1936	2,430	0	3	39	28	0	2,500	11,258	n/a	2,532
1937	2,564	0	10	19	19	0	2,612	12,760	n/a	2,637
1938	2,564	0	4	17	16	0	2,601	14,512	n/a	2,798
1939	2,484	0	7	91	11	0	2,593	17,644	n/a	2,963
1940	2,184	0	3	80	8	0	2,274	21,995	n/a	3,087
1941	2,254	0	3	94	10	0	2,361	22,737	n/a	3,247
1942	6,189	0	6	471	14	0	6,679	22,726	n/a	3,648
1943	11,543	0	5	681	10	0	12,239	21,938	n/a	4,094
1944	18,846	0	80	815	4	0	19,745	20,619	n/a	4,131
1945	24,262	0	249	578	2	0	25,091	20,065	n/a	4,339
1946	23,350	0	163	580	1	0	24,093	20,529	n/a	4,562
1947	22,559	0	85	535	1	0	23,181	22,754	n/a	4,562
1948	23,333	0	223	541	1	0	24,097	24,244	n/a	4,589
1949	18,885	0	78	534	2	0	19,499	24,427	n/a	4,598
1950	20,725	53	67	1,368	3	0	22,216	22,706	n/a	4,636
1951	23,605	196	19	1,184	5	0	25,009	22,695	n/a	4,709
1952	24,034	663	156	967	4	0	25,825	23,187	n/a	4,812
1953	25,318	598	28	935	2	0	26,880	22,030	n/a	4,894
1954	24,888	44	143	808	1	0	25,885	21,713	n/a	4,985
1955	24,391	394	108	1,585	29	0	26,507	21,690	n/a	5,008
1956	24,610	305	50	1,665	70	0	26,699	21,949	n/a	5,066
1957	23,719	519	55	1,424	66	0	25,784	22,781	n/a	5,146
1958	26,252	95	64	1,296	49	0	27,755	20,534	n/a	5,234
1959	26,607	41	458	1,590	75	0	28,771	19,456	n/a	5,311
1960	26,984	400	33	1,847	74	0	29,338	17,767	n/a	5,398
1961	28,722	159	130	2,300	51	0	31,362	16,889	n/a	5,585
1962	30,478	342	38	2,903	110	0	33,871	15,978	n/a	5,567
1963	33,582	11	63	2,600	162	0	36,418	15,513	n/a	5,578
1964	36,506	538	186	2,606	94	0	39,930	15,388	n/a	5,405
1965	40,478	290	137	2,248	187	0	43,340	13,733	n/a	5,575
1966	43,655	661	173	2,495	193	0	47,177	13,159	n/a	6,317
1967	48,980	170	141	2,576	164	0	52,031	11,982	n/a	6,784

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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			
1968	52,937	0	186	3,443	58	0	56,624	10,367	n/a	6,795
1969	57,154	0	183	3,440	64	2,743	63,584	10,367	n/a	6,852
1970	62,142	0	335	4,261	57	1,123	67,918	10,732	400	7,147
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	n/a	1,585	51
1919	5,091	385	31	73	28	208	0	0	1,890	n/a	1,822	68
1920	5,325	218	57	5	18	298	0	0	1,781	n/a	n/a	n/a
1921	4,403	214	96	12	15	285	0	0	1,753	n/a	1,654	99
1922	4,530	225	11	3	26	276	0	0	1,934	n/a	n/a	n/a
1923	4,757	213	38	4	19	275	0	0	1,898	n/a	1,884	14
1924	4,760	211	51	19	20	258	0	0	2,220	n/a	2,161	59
1925	4,817	203	16	8	21	272	0	0	2,212	n/a	2,256	-44
1926	4,808	201	17	46	19	293	0	0	2,194	n/a	2,250	-56
1927	4,716	208	18	5	21	301	0	0	2,487	n/a	2,424	63
1928	4,686	202	23	6	21	348	0	0	2,389	n/a	2,430	-41
1929	4,578	216	29	6	24	393	0	0	2,355	n/a	2,428	-73
1930	4,603	211	19	6	22	375	0	0	2,471	n/a	2,375	96
1931	5,360	222	54	79	31	354	0	0	1,961	n/a	1,994	-33
1932	5,388	272	8	19	24	355	0	0	2,509	n/a	1,933	576
1933	5,519	284	3	4	128	360	0	0	2,729	n/a	1,870	859
1934	5,536	3,029	121	20	169	241	0	0	4,096	n/a	2,282	1,814
1935	5,882	2,566	544	29	226	253	0	0	5,587	n/a	2,743	2,844
1936	6,543	2,376	244	99	160	261	0	0	6,606	n/a	4,622	1,984
1937	6,550	3,619	142	172	235	263	0	0	7,027	n/a	5,815	1,212
1938	6,856	2,706	923	199	242	260	0	0	8,724	n/a	5,519	3,205
1939	7,598	2,409	634	397	256	251	0	0	11,653	n/a	6,444	5,209
1940	8,732	2,213	368	1,133	599	284	0	0	14,026	n/a	7,411	6,615
1941	11,160	2,215	867	774	586	291	0	0	12,450	n/a	9,365	3,085
1942	15,410	2,193	799	793	485	256	0	0	13,117	n/a	11,129	1,988
1943	20,449	2,303	579	1,360	356	339	0	0	12,886	n/a	11,650	1,236
1944	25,307	2,375	440	1,204	394	402	0	0	14,373	n/a	12,748	1,625
1945	28,515	2,287	977	862	446	495	0	0	15,915	n/a	14,457	1,458
1946	28,952	2,272	393	508	314	607	0	0	16,139	n/a	15,577	562
1947	28,868	1,336	870	392	569	563	0	0	17,899	n/a	16,400	1,499
1948	28,224	1,325	1123	642	547	590	0	0	20,479	n/a	19,277	1,202
1949	27,600	1,312	821	767	750	706	0	0	16,568	n/a	15,550	1,018
1950	27,741	1,293	668	895	565	714	0	0	17,681	n/a	16,509	1,172
1951	29,206	1,270	247	526	363	746	0	0	20,056	n/a	19,667	389
1952	30,433	1,270	389	550	455	777	0	0	19,950	n/a	20,520	-570
1953	30,781	761	346	423	493	839	0	0	20,160	n/a	19,397	763
1954	30,509	796	563	490	441	907	0	0	18,876	n/a	18,618	258
1955	31,158	767	394	402	554	925	0	0	19,005	n/a	18,903	102
1956	31,790	775	441	322	426	901	0	0	19,059	n/a	19,089	-30
1957	31,834	761	481	356	246	998	0	0	19,034	n/a	19,091	-57
1958	32,193	683	358	272	391	1,122	0	0	18,504	n/a	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

(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							
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
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	1,013	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.

n/a Not applicable.

Table 7. Principal assets and liabilities of insured commercial banks, by class of bank, June 30, 2014 and 2013

Millions of dollars, except as noted

Item	Total	Member banks			Nonmember banks
		Total	National	State	
2014					
Assets					
Loans and investments	9,663,697	7,782,729	6,321,060	1,461,669	1,880,968
Loans, gross	6,848,106	5,389,059	4,422,865	966,194	1,459,047
Net	6,846,847	5,388,379	4,422,393	965,986	1,458,468
Investments	2,815,591	2,393,670	1,898,195	495,475	421,921
U.S. Treasury and federal agency securities	447,347	357,408	276,851	80,557	89,939
Other	2,368,244	2,036,262	1,621,344	414,918	331,982
Cash assets, total	1,493,844	1,344,453	1,028,672	315,781	149,391
Liabilities					
Deposits, total	9,188,365	7,490,342	6,078,366	1,411,976	1,698,023
Interbank	179,462	156,755	122,672	34,083	22,707
Other transactions	1,581,682	1,306,779	926,377	380,402	274,903
Other nontransactions	7,427,221	6,026,808	5,029,317	997,491	1,400,413
Equity capital	1,571,665	1,308,480	1,078,546	229,934	263,185
Number of banks	5,713	1,935	1,109	826	3,778
2013					
Assets					
Loans and investments	9,172,509	7,391,004	6,030,012	1,360,992	1,781,505
Loans, gross	6,504,652	5,140,521	4,246,181	894,340	1,364,131
Net	6,503,474	5,139,883	4,245,745	894,138	1,363,591
Investments	2,667,857	2,250,483	1,783,831	466,652	417,374
U.S. Treasury and federal agency securities	359,076	270,899	196,797	74,102	88,177
Other	2,308,782	1,979,585	1,587,034	392,551	329,197
Cash assets, total	1,157,209	1,002,704	785,000	217,704	154,505
Liabilities					
Deposits, total	8,525,996	6,910,667	5,660,131	1,250,536	1,615,329
Interbank	165,734	142,536	117,971	24,565	23,198
Other transactions	1,319,948	1,062,065	762,819	299,246	257,883
Other nontransactions	7,040,316	5,706,067	4,779,341	926,726	1,334,249
Equity capital	1,473,317	1,227,341	1,013,073	214,268	245,976
Number of banks	5,938	2,012	1,193	819	3,926

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 2013 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	n/a	n/a
1936, Feb. 1	25–55	n/a	n/a
1936, Apr. 1	55	n/a	n/a
1937, Nov. 1	40	n/a	50
1945, Feb. 5	50	n/a	50
1945, July 5	75	n/a	75
1946, Jan. 21	100	n/a	100
1947, Feb. 1	75	n/a	75
1949, Mar. 3	50	n/a	50
1951, Jan. 17	75	n/a	75
1953, Feb. 20	50	n/a	50
1955, Jan. 4	60	n/a	60
1955, Apr. 23	70	n/a	70
1958, Jan. 16	50	n/a	50
1958, Aug. 5	70	n/a	70
1958, Oct. 16	90	n/a	90
1960, July 28	70	n/a	70
1962, July 10	50	n/a	50
1963, Nov. 6	70	n/a	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.

n/a Not applicable.

Table 9A. Statement of condition of the Federal Reserve Banks, by Bank, December 31, 2014 and 2013
Millions of dollars

Item	Total		Boston		New York		Philadelphia		Cleveland		Richmond	
	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013
Assets												
Gold certificates	11,037	11,037	352	391	4,125	3,925	338	397	464	512	824	856
Special drawing rights certificates	5,200	5,200	196	196	1,818	1,818	210	210	237	237	412	412
Coin	1,873	1,955	30	35	79	82	122	123	120	130	307	335
Loans and securities												
Primary, secondary, and seasonal loans	145	74	11	0	4	10	7	0	0	0	1	1
Term Asset-Backed Securities Loan Facility[1]	0	98	n/a	n/a	0	98	n/a	n/a	n/a	n/a	n/a	n/a
Treasury securities, bought outright[2]	2,461,363	2,208,775	49,789	57,757	1,510,695	1,224,856	58,967	63,998	53,740	56,410	137,567	137,343
Government-sponsored enterprise debt securities, bought outright[2]	38,677	57,221	782	1,496	23,739	31,731	927	1,658	844	1,461	2,162	3,558
Federal agency and government-sponsored enterprise mortgage-backed securities, bought outright[3]	1,736,833	1,490,162	35,133	38,966	1,066,005	826,356	41,609	43,176	37,921	38,057	97,073	92,659
Unamortized premiums on securities held outright[4]	206,835	208,610	4,184	5,455	126,948	115,682	4,955	6,043	4,516	5,329	11,560	12,972
Unamortized discounts on securities held outright[4]	-18,394	-12,352	-372	-323	-11,290	-6,850	-441	-357	-402	-316	-1,028	-768
Total loans and securities	4,425,459	3,952,588	89,527	103,351	2,716,101	2,191,883	106,024	114,518	96,619	100,941	247,335	245,765
Accrued interest receivable - System Open Market Account	25,644	23,493	521	616	15,715	13,007	619	685	565	605	1,446	1,474
Net portfolio holdings of consolidated variable interest entities[5]	1,811	1,926	n/a	n/a	1,811	1,926	n/a	n/a	n/a	n/a	n/a	n/a
Foreign currency denominated investments[6]	20,900	23,724	951	1,166	6,720	7,583	1,571	1,835	1,662	1,851	4,358	4,982
Central bank liquidity swaps[7]	1,528	272	70	13	491	87	115	21	122	21	319	57
Other SOMA assets	29	1	1	0	18	1	1	0	1	0	2	0
Other assets												
Items in process of collection	86	165	0	0	0	0	0	0	0	0	0	0
Bank premises	2,263	2,290	124	123	437	432	76	73	110	111	220	228
Deferred asset (accrued liability)- remittances to the Treasury	667	0	-16	0	923	0	-7	0	5	0	-28	0
All other assets[8]	1,277	1,498	66	64	341	580	43	43	45	42	244	247
Interdistrict settlement account	0	0	49,233	6,796	-187,283	166,886	-4,108	-19,721	38,162	4,138	-3,289	-32,634
Total assets	**4,497,774**	**4,024,149**	**141,055**	**112,751**	**2,561,296**	**2,388,210**	**105,004**	**98,184**	**138,112**	**108,588**	**252,150**	**221,722**
Liabilities												
Federal Reserve notes outstanding	1,469,554	1,400,977	45,956	45,182	475,290	513,592	46,452	41,983	68,649	58,552	103,087	104,492

(continued on next page)

Table 9A.—*continued*

Item	Total		Boston		New York		Philadelphia		Cleveland		Richmond	
	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013
Less: Notes held by Federal Reserve Bank	170,829	203,057	4,688	9,988	56,971	38,515	4,940	5,920	7,811	5,080	11,152	8,774
Federal Reserve notes outstanding, net	1,298,725	1,197,920	41,268	35,194	418,319	475,077	41,512	36,063	60,838	53,472	91,935	95,718
Securities sold under agreements to repurchase[9]	509,837	315,924	10,313	8,261	312,919	175,193	12,214	9,154	11,132	8,068	28,495	19,645
Deposits												
Depository institutions	2,377,996	2,249,070	86,758	66,567	1,560,513	1,518,974	47,897	48,568	61,513	42,425	118,097	94,182
Treasury, general account	223,452	162,399	n/a	n/a	223,452	162,399	n/a	n/a	n/a	n/a	n/a	n/a
Foreign, official accounts	5,242	7,970	2	2	5,214	7,943	3	3	3	3	8	8
Other[10]	20,318	26,180	2	8	20,177	26,020	25	17	0	0	92	105
Total deposits	2,627,008	2,445,619	86,762	66,577	1,809,356	1,715,336	47,925	48,588	61,516	42,428	118,197	94,295
Other liabilities												
Accrued remittances to Treasury[11]	0	4,791	0	87	0	3,328	0	84	0	84	0	192
Deferred credit items	641	1,127	0	0	3	0	0	0	0	3	0	0
Consolidated variable interest entities[12]	127	274	n/a	n/a	127	274	n/a	n/a	n/a	n/a	n/a	n/a
All other liabilities[13]	4,292	3,480	120	130	2,156	1,312	159	159	170	157	409	400
Total liabilities	**4,440,630**	**3,969,135**	**138,463**	**110,249**	**2,542,880**	**2,370,520**	**101,810**	**94,048**	**133,656**	**104,212**	**239,036**	**210,250**
Capital accounts												
Capital paid-in	28,572	27,507	1,296	1,251	9,208	8,845	1,597	2,068	2,228	2,188	6,557	5,736
Surplus (including accumulated other comprehensive loss)	28,572	27,507	1,296	1,251	9,208	8,845	1,597	2,068	2,228	2,188	6,557	5,736
Total liabilities and capital accounts	**4,497,774**	**4,024,149**	**141,055**	**112,751**	**2,561,296**	**2,388,210**	**105,004**	**98,184**	**138,112**	**108,588**	**252,150**	**221,722**

Note: Components may not sum to totals because of rounding.

1 Measured at fair value. Amounts include $0 million and $1 million in unrealized gains as of December 31, 2014 and 2013, 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 Reflects the premium or discount, which is the difference between the purchase price and the face value of the securities that has not been amortized. For U.S. Treasury and Federal agency debt securities, amortization is on a straight-line basis. For mortgage-backed securities, amortization is on an effective-interest basis.

5 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 section 6, "Table 6. Key financial data for consolidated variable interest entities."

6 Valued daily at market exchange rates.

7 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.

8 Includes furniture and equipment and depository institution overdrafts.

9 Contract amount of agreements.

10 Includes deposits of government-sponsored enterprises, the Consumer Financial Protection Bureau, international organizations, and designated financial market utilities. These deposits are primarily held by the FRBNY.

11 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.

12 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.

13 Includes accrued benefit costs and cash collateral posted by counterparties under commitments to purchase and sell federal agency and GSE MBS.

n/a Not applicable.

Table 9A. Statement of condition of the Federal Reserve Banks, by Bank, December 31, 2014 and 2013—*continued*
Millions of dollars

Item	Atlanta		Chicago		St. Louis		Minneapolis		Kansas City		Dallas		San Francisco	
	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013
Assets														
Gold certificates	1,349	1,421	706	792	278	310	173	190	291	309	880	728	1,257	1,206
Special drawing rights certificates	654	654	424	424	150	150	90	90	153	153	282	282	574	574
Coin	208	238	279	285	23	19	45	48	152	152	188	178	320	332
Loans and securities														
Primary, secondary, and seasonal loans	5	6	30	18	0	3	48	27	31	9	0	0	8	0
Term Asset-Backed Securities Loan Facility[1]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Treasury securities, bought outright[2]	136,063	146,726	100,599	119,354	30,359	35,540	15,084	20,960	32,422	41,788	74,998	85,772	261,080	218,271
Government-sponsored enterprise debt securities, bought outright[2]	2,138	3,801	1,581	3,092	477	921	237	543	510	1,083	1,179	2,222	4,103	5,655
Federal agency and government-sponsored enterprise mortgage-backed securities, bought outright[3]	96,011	98,989	70,987	80,523	21,423	23,977	10,644	14,140	22,878	28,192	52,922	57,867	184,228	147,258
Unamortized premiums on securities held outright[4]	11,434	13,858	8,454	11,273	2,551	3,355	1,268	1,980	2,725	3,947	6,302	8,101	21,939	20,614
Unamortized discounts on securities held outright[4]	-1,017	-821	-752	-668	-227	-198	-113	-117	-242	-233	-561	-479	-1,951	-1,220
Total loans and securities	244,634	262,559	180,899	213,592	54,583	63,598	27,168	37,533	58,324	74,786	134,840	153,483	469,407	390,578
Accrued interest receivable - System Open Market Account	1,418	1,560	1,047	1,267	316	377	157	222	338	444	780	910	2,723	2,325
Net portfolio holdings of consolidated variable interest entities[5]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Foreign currency denominated investments[6]	1,202	1,352	577	677	176	198	88	99	220	240	349	376	3,024	3,365
Central bank liquidity swaps[7]	88	15	42	8	13	2	6	1	16	3	26	4	221	39
Other SOMA assets	2	0	1	0	0	0	0	0	0	0	1	0	3	0
Other assets														
Items in process of collection	86	165	0	0	0	0	0	0	0	0	0	0	0	0
Bank premises	212	211	201	203	122	127	96	99	241	247	223	231	201	204
Deferred asset (accrued liability)-remittances to the Treasury	-51	0	-24	0	-12	0	14	0	-3	0	-19	0	-114	0
All other assets[8]	100	95	66	61	80	84	39	72	48	42	62	60	142	109
Interdistrict settlement account	13,938	-44,679	-923	-53,946	-4,483	-19,511	3,814	-14,795	3,760	-22,792	23,691	-31,534	67,487	61,793
Total assets	**263,840**	**223,591**	**183,295**	**163,363**	**51,246**	**45,354**	**31,690**	**23,559**	**63,540**	**53,584**	**161,303**	**124,718**	**545,245**	**460,525**
Liabilities														
Federal Reserve notes outstanding	214,198	170,140	101,373	89,177	41,433	34,459	23,220	21,614	38,323	36,847	120,243	120,857	191,329	164,081

(continued on next page)

Table 9A.—*continued*

Item	Atlanta		Chicago		St. Louis		Minneapolis		Kansas City		Dallas		San Francisco	
	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013
Less: Notes held by Federal Reserve Bank	22,254	18,059	10,427	13,399	4,734	3,161	3,077	9,275	4,537	10,308	14,760	53,146	25,476	27,431
Federal Reserve notes outstanding, net	191,944	152,081	90,946	75,778	36,699	31,298	20,143	12,339	33,786	26,539	105,483	67,711	165,853	136,650
Securities sold under agreements to repurchase[9]	28,183	20,986	20,838	17,071	6,288	5,083	3,124	2,998	6,716	5,977	15,535	12,268	54,079	31,219
Deposits														
Depository institutions	39,629	45,828	69,727	68,547	7,610	8,325	7,978	7,723	22,332	20,315	39,292	43,500	316,649	284,115
Treasury, general account	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Foreign, official accounts	2	2	1	1	0	0	0	0	0	0	1	1	6	6
Other[10]	6	10	12	13	0	0	0	0	1	1	1	3	2	3
Total deposits	39,637	45,840	69,740	68,561	7,610	8,325	7,978	7,723	22,333	20,316	39,294	43,504	316,657	284,124
Other liabilities														
Acrued remittances to Treasury[11]	0	231	0	186	0	62	0	44	0	66	0	137	0	292
Deferred credit items	556	1,009	0	0	0	0	82	118	0	0	0	0	0	0
Consolidated variable interest entities[12]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
All other liabilities[13]	268	280	237	249	117	124	123	105	103	106	167	178	264	278
Total liabilities	**260,588**	**220,427**	**181,761**	**161,845**	**50,714**	**44,892**	**31,450**	**23,327**	**62,938**	**53,004**	**160,479**	**123,798**	**536,853**	**452,563**
Capital accounts														
Capital paid-in	1,626	1,582	767	759	266	231	120	116	301	290	412	460	4,196	3,981
Surplus (including accumulated other comprehensive loss)	1,626	1,582	767	759	266	231	120	116	301	290	412	460	4,196	3,981
Total liabilities and capital accounts	**263,840**	**223,591**	**183,295**	**163,363**	**51,246**	**45,354**	**31,690**	**23,559**	**63,540**	**53,584**	**161,303**	**124,718**	**545,245**	**460,525**

Note: Components may not sum to totals because of rounding.

1 Measured at fair value. Amounts include $1 million and $4 million in unrealized gains as of December 31, 2013 and 2012, 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 Reflects the premium or discount, which is the difference between the purchase price and the face value of the securities that has not been amortized. For U.S. Treasury and Federal agency debt securities, amortization is on a straight-line basis. For mortgage-backed securities, amortization is on an effective-interest basis.

5 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 section 6, "Table 6. Key financial data for consolidated variable interest entities."

6 Valued daily at market exchange rates.

7 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.

8 Includes furniture and equipment and depository institution overdrafts.

9 Contract amount of agreements.

10 Includes deposits of government-sponsored enterprises, the Consumer Financial Protection Bureau, international organizations, and designated financial market utilities. These deposits are primarily held by the FRBNY.

11 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.

12 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.

13 Includes accrued benefit costs and cash collateral posted by counterparties under commitments to purchase and sell federal agency and GSE MBS.

n/a Not applicable.

Table 9B. Statement of condition of the Federal Reserve Banks, December 31, 2014 and 2013
Supplemental information—collateral held against Federal Reserve notes: Federal Reserve agents' accounts
Millions of dollars

Item	2014	2013
Federal Reserve notes outstanding	1,469,554	1,400,977
Less: Notes held by Federal Reserve Banks not subject to collateralization	170,829	203,057
Collateralized Federal Reserve notes	**1,298,725**	**1,197,920**
Collateral for Federal Reserve notes		
Gold certificates	11,037	11,037
Special drawing rights certificates	5,200	5,200
U.S. Treasury securities[1]	1,282,488	1,181,683
Total collateral	**1,298,725**	**1,197,920**

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, 2014

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	251	3	6	4	3	7	28	26	29	83	22	11	30
Term Asset-Backed Securities Loan Facility	1,553	n/a	1,553	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total loan interest income	1,804	3	1,559	4	3	7	28	26	29	83	22	11	30
Treasury securities	63,010,863	1,368,663	37,732,894	1,589,259	1,434,616	3,621,652	3,660,333	2,784,497	836,867	439,547	921,296	2,052,809	6,568,428
Government-sponsored enterprise debt securities, net	1,578,931	34,778	940,689	40,233	36,251	91,264	92,629	70,847	21,276	11,288	23,554	52,121	164,001
Federal agency and government-sponsored enterprise mortgage-backed securities, net	51,264,494	1,117,007	30,663,905	1,295,949	1,169,361	2,950,217	2,984,550	2,273,173	683,073	359,588	752,936	1,675,055	5,339,682
Foreign currency denominated investments, net	77,852	3,567	25,020	5,869	6,181	16,245	4,473	2,156	654	329	816	1,296	11,246
Central bank liquidity swaps[1]	1,147	53	369	87	91	239	66	32	10	5	12	19	166
Total SOMA interest income	115,933,287	2,524,068	69,362,877	2,931,397	2,646,500	6,679,617	6,742,051	5,130,705	1,541,880	810,757	1,698,614	3,781,300	12,083,523
Total interest income	115,935,091	2,524,071	69,364,436	2,931,401	2,646,503	6,679,624	6,742,079	5,130,731	1,541,909	810,840	1,698,636	3,781,311	12,083,553
Priced services	433,122	n/a	95,430	n/a	n/a	n/a	252,974	84,717	n/a	n/a	n/a	n/a	n/a
Compensation received for services provided[2]	176,758	15,802	2,160	2,564	5,621	15,660	698	23,950	2,234	61,392	31,055	7,139	8,484
Securities lending fees	7,331	160	4,383	185	167	422	427	326	98	52	108	240	763
Other income	9,210	145	6,502	165	155	386	398	302	90	49	127	219	672
Total other income	626,421	16,107	108,475	2,914	5,943	16,468	254,497	109,295	2,422	61,493	31,290	7,598	9,919
Total current income	**116,561,512**	**2,540,178**	**69,472,911**	**2,934,315**	**2,652,446**	**6,696,092**	**6,996,576**	**5,240,026**	**1,544,331**	**872,333**	**1,729,926**	**3,788,909**	**12,093,472**
Net expenses													
Personnel													
Salaries and other personnel expenses	2,122,219	130,515	496,857	99,765	91,986	321,406	155,328	163,074	117,298	100,627	141,020	108,898	195,444
Retirement and other benefits	675,590	33,504	156,794	32,991	33,484	100,347	57,781	52,494	35,585	33,477	39,540	39,009	60,584
Administrative													
Fees	188,816	4,382	42,718	10,105	6,854	73,889	17,793	7,967	8,650	3,743	2,729	2,952	7,032
Travel	88,937	3,831	12,456	3,280	5,198	13,731	8,584	9,687	5,374	3,625	7,034	5,147	10,991
Postage and other shipping costs	13,491	259	797	310	1,374	553	2,628	375	718	433	1,036	2,341	2,668
Communications	46,354	1,043	6,023	580	582	29,606	1,671	1,922	962	1,092	749	965	1,157
Materials and supplies	63,909	3,577	21,135	6,587	2,232	6,532	4,767	4,544	2,484	1,583	2,819	3,422	4,226
Building													
Taxes on real estate	47,638	6,400	14,875	999	1,824	954	3,260	3,767	739	3,641	3,372	3,769	4,038
Property depreciation	132,752	12,943	26,582	6,093	6,679	14,450	9,438	15,194	7,935	4,327	8,194	9,281	11,636
Utilities	39,953	4,151	10,380	1,756	1,467	4,439	3,116	2,239	1,969	1,990	2,246	2,871	3,329
Rent	32,271	229	2,730	936	958	23,209	320	999	1,248	187	640	592	221
Other building	61,086	5,174	9,925	5,388	3,610	6,770	4,499	6,925	2,361	2,579	2,015	6,083	5,755
Equipment/software													
Purchases	32,428	1,508	5,598	1,115	1,375	7,329	2,294	2,181	1,884	1,523	2,948	1,970	2,703
Rentals	3,355	317	1,232	187	227	270	336	616	23	64	12	28	45
Depreciation	72,858	4,633	5,531	2,624	2,086	38,939	3,282	3,549	1,829	1,543	2,068	2,649	4,128
Repairs and maintenance	66,426	5,617	5,358	2,620	2,153	26,861	5,499	3,748	1,581	1,370	2,169	3,289	6,161
Software	226,298	7,476	33,228	9,276	6,699	69,206	45,694	5,296	11,701	7,908	8,278	9,707	11,828

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Table 10.—*continued*

Item	Total	Boston	New York	Philadelphia	Cleveland	Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
Other expenses													
Compensation paid for service costs incurred[2]	176,758	n/a	38,979	n/a	n/a	n/a	126,557	11,222	n/a	n/a	n/a	n/a	n/a
Other expenses	89,395	18,181	86,860	20,836	7,616	(330,894)	26,187	62,021	87,651	26,241	17,908	25,410	41,377
Recoveries	(172,847)	(18,016)	(25,674)	(4,287)	(6,002)	(57,016)	(13,004)	(9,843)	(4,495)	(1,793)	(9,154)	(15,602)	(7,962)
Expenses capitalized[3]	(81,602)	(5,300)	(23,830)	(3,649)	(7,396)	6,047	(593)	(2,294)	(2,759)	(3,520)	(16,812)	(1,202)	(20,295)
Total operating expenses before pension expense and reimbursements	**3,926,085**	**220,424**	**928,554**	**197,512**	**163,006**	**356,628**	**465,437**	**345,683**	**282,738**	**190,640**	**218,811**	**211,579**	**345,066**
Net periodic pension expense[4]	383,113	3,142	352,130	2,294	1,523	3,917	2,904	3,797	2,926	2,717	1,949	1,760	4,054
Reimbursements	(569,638)	(46,403)	(119,696)	(44,048)	(31,582)	(50,246)	(21,762)	(6,717)	(143,587)	(32,560)	(35,049)	(19,884)	(18,104)
Operating expenses	3,739,560	177,163	1,160,988	155,758	132,947	310,299	446,579	342,763	142,077	160,797	185,711	193,455	331,016
Interest expense on securities sold under agreements to repurchase	112,179	2,357	67,969	2,762	2,504	6,363	6,367	4,781	1,440	738	1,563	3,543	11,791
Interest on reserves[5]	6,705,226	143,415	4,797,274	146,280	81,358	297,250	110,526	165,197	22,973	17,451	48,961	101,839	772,702
Interest on term deposits [6]	156,394	1,214	116,734	10,828	2,850	1,306	763	9,255	147	95	1,579	1,266	10,357
Other expenses	1,513	32	917	37	34	86	86	65	19	10	21	48	159
Net expenses	10,714,872	324,181	6,143,882	315,665	219,693	615,304	564,321	522,061	166,656	179,091	237,835	300,151	1,126,025
Current net income	105,846,640	2,215,997	63,329,029	2,618,650	2,432,753	6,080,788	6,432,255	4,717,965	1,377,675	693,242	1,492,091	3,488,758	10,967,447
Additions to (+) and deductions from (-) current net income													
Profit on sales of federal agency and government-sponsored enterprise mortgage-backed securities	80,850	1,757	48,408	2,040	1,841	4,648	4,698	3,574	1,074	564	1,183	2,635	8,427
Foreign currency translation gains (losses)	(2,907,260)	(131,729)	(935,110)	(218,304)	(231,426)	(606,061)	(167,236)	(80,154)	(24,449)	(12,298)	(30,655)	(48,728)	(421,110)
Net income from consolidated variable interest entities[7]	109,058	n/a	109,058	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Other additions	647	2	(3,180)	1	2	5	7	2	2	1	3	3,732	69
Other deductions	(1,579)	(73)	316	1	(29)	(390)	(477)	(198)	(42)	(174)	(115)	(102)	(295)
Net deductions to (-) current net income	(2,718,283)	(130,043)	(780,508)	(216,262)	(229,612)	(601,798)	(163,008)	(76,776)	(23,415)	(11,907)	(29,584)	(42,463)	(412,909)
Cost of unreimbursed Treasury services	4	n/a	4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Assessments by Board													
Board expenditures[8]	590,000	26,817	191,211	44,315	46,703	121,848	33,789	16,142	5,078	2,475	6,171	9,846	85,606
Cost of currency	710,807	33,373	151,545	33,966	42,806	65,352	101,404	61,510	21,440	14,072	22,039	55,582	107,718
Consumer Financial Protection Bureau[9]	563,000	25,562	183,187	42,120	44,427	115,728	32,196	15,330	4,934	2,351	5,897	9,417	81,852
Assessments by the Board of Governors	1,863,807	85,752	525,943	120,401	133,936	302,928	167,389	92,982	31,452	18,898	34,107	74,845	275,176
Net income before providing for remittances to the Treasury	101,264,546	2,000,202	62,022,574	2,281,987	2,069,206	5,176,062	6,101,858	4,548,208	1,322,808	662,437	1,428,400	3,371,450	10,279,362
Earnings remittances to the Treasury	96,901,695	1,881,295	59,625,435	2,624,531	1,873,601	3,974,190	5,944,747	4,481,892	1,275,656	634,403	1,392,718	3,383,408	9,809,819
Net income (loss)	4,362,851	118,907	2,397,139	(342,544)	195,605	1,201,872	157,111	66,316	47,152	28,034	35,682	(11,958)	469,543
Other comprehensive income (loss)	(1,611,569)	1,894	(1,485,591)	(10,832)	(22,830)	(26,556)	(16,594)	(12,664)	2,713	(17,329)	(6,932)	(8,251)	(8,598)

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Table 10.—*continued*

Item	Total	Boston	New York	Philadelphia	Cleveland	Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
Comprehensive income	2,751,282	120,801	911,548	(353,376)	172,775	1,175,316	140,517	53,652	49,865	10,705	28,750	(20,209)	460,945
Distribution of comprehensive income													
Dividends on capital stock	1,685,826	76,432	548,911	118,281	132,812	354,416	96,282	45,772	14,966	7,040	17,680	27,535	245,699
Transferred to/from surplus and change in accumulated other comprehensive income	1,064,952	44,370	362,635	(471,660)	39,959	820,900	44,235	7,880	34,900	3,663	11,069	(48,235)	215,236
Earnings remittances to the Treasury	96,901,695	1,881,295	59,625,435	2,624,531	1,873,601	3,974,190	5,944,747	4,481,892	1,275,656	634,403	1,392,718	3,383,408	9,809,819
Total distribution of net income	**99,652,473**	**2,002,097**	**60,536,981**	**2,271,152**	**2,046,372**	**5,149,506**	**6,085,264**	**4,535,544**	**1,325,522**	**645,106**	**1,421,467**	**3,362,708**	**10,270,754**

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 Includes expenses for labor and materials capitalized and depreciated or amortized as charges to activities in the periods benefited.

4 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 $328,466 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.

5 In October 2008, the Reserve Banks began to pay interest to depository institutions on qualifying balances held at the Federal Reserve Banks.

6 In April 2010, the Reserve Banks began to pay interest on term deposits under the Term Deposit Facility.

7 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.

8 For additional details, see the "Board of Governors Financial Statements" on page 318 in section 12.

9 The Board of Governors assesses the Reserve Banks to fund the operations of the Consumer Financial Protection Bureau. These assessments are allocated to each Reserve Bank based on each Reserve Bank's capital and surplus balances as of the most recent quarter.

n/a Not applicable.

Table 11. Income and expenses of the Federal Reserve Banks, 1914–2014

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	n/a	n/a	n/a	217	n/a	n/a	n/a	n/a
1916	5,218	2,082	-193	192	n/a	n/a	n/a	1,743	n/a	n/a	n/a	n/a
1917	16,128	4,922	-1,387	238	n/a	n/a	n/a	6,804	1,134	n/a	n/a	1,134
1918	67,584	10,577	-3,909	383	n/a	n/a	n/a	5,541	n/a	n/a	n/a	48,334
1919	102,381	18,745	-4,673	595	n/a	n/a	n/a	5,012	2,704	n/a	n/a	70,652
1920	181,297	27,549	-3,744	710	n/a	n/a	n/a	5,654	60,725	n/a	n/a	82,916
1921	122,866	33,722	-6,315	741	n/a	n/a	n/a	6,120	59,974	n/a	n/a	15,993
1922	50,499	28,837	-4,442	723	n/a	n/a	n/a	6,307	10,851	n/a	n/a	-660
1923	50,709	29,062	-8,233	703	n/a	n/a	n/a	6,553	3,613	n/a	n/a	2,546
1924	38,340	27,768	-6,191	663	n/a	n/a	n/a	6,682	114	n/a	n/a	-3,078
1925	41,801	26,819	-4,823	709	n/a	n/a	n/a	6,916	59	n/a	n/a	2,474
1926	47,600	24,914	-3,638	722	1,714	n/a	n/a	7,329	818	n/a	n/a	8,464
1927	43,024	24,894	-2,457	779	1,845	n/a	n/a	7,755	250	n/a	n/a	5,044
1928	64,053	25,401	-5,026	698	806	n/a	n/a	8,458	2,585	n/a	n/a	21,079
1929	70,955	25,810	-4,862	782	3,099	n/a	n/a	9,584	4,283	n/a	n/a	22,536
1930	36,424	25,358	-93	810	2,176	n/a	n/a	10,269	17	n/a	n/a	-2,298
1931	29,701	24,843	311	719	1,479	n/a	n/a	10,030	n/a	n/a	n/a	-7,058
1932	50,019	24,457	-1,413	729	1,106	n/a	n/a	9,282	2,011	n/a	n/a	11,021
1933	49,487	25,918	-12,307	800	2,505	n/a	n/a	8,874	n/a	n/a	n/a	-917
1934	48,903	26,844	-4,430	1,372	1,026	n/a	n/a	8,782	n/a	n/a	-60	6,510
1935	42,752	28,695	-1,737	1,406	1,477	n/a	n/a	8,505	298	n/a	28	607
1936	37,901	26,016	486	1,680	2,178	n/a	n/a	7,830	227	n/a	103	353
1937	41,233	25,295	-1,631	1,748	1,757	n/a	n/a	7,941	177	n/a	67	2,616
1938	36,261	25,557	2,232	1,725	1,630	n/a	n/a	8,019	120	n/a	-419	1,862
1939	38,501	25,669	2,390	1,621	1,356	n/a	n/a	8,110	25	n/a	-426	4,534
1940	43,538	25,951	11,488	1,704	1,511	n/a	n/a	8,215	82	n/a	-54	17,617
1941	41,380	28,536	721	1,840	2,588	n/a	n/a	8,430	141	n/a	-4	571
1942	52,663	32,051	-1,568	1,746	4,826	n/a	n/a	8,669	198	n/a	50	3,554
1943	69,306	35,794	23,768	2,416	5,336	n/a	n/a	8,911	245	n/a	135	40,327
1944	104,392	39,659	3,222	2,296	7,220	n/a	n/a	9,500	327	n/a	201	48,410
1945	142,210	41,666	-830	2,341	4,710	n/a	n/a	10,183	248	n/a	262	81,970
1946	150,385	50,493	-626	2,260	4,482	n/a	n/a	10,962	67	n/a	28	81,467
1947	158,656	58,191	1,973	2,640	4,562	n/a	n/a	11,523	36	75,284	87	8,366
1948	304,161	64,280	-34,318	3,244	5,186	n/a	n/a	11,920	n/a	166,690	n/a	18,523
1949	316,537	67,931	-12,122	3,243	6,304	n/a	n/a	12,329	n/a	193,146	n/a	21,462
1950	275,839	69,822	36,294	3,434	7,316	n/a	n/a	13,083	n/a	196,629	n/a	21,849
1951	394,656	83,793	-2,128	4,095	7,581	n/a	n/a	13,865	n/a	254,874	n/a	28,321
1952	456,060	92,051	1,584	4,122	8,521	n/a	n/a	14,682	n/a	291,935	n/a	46,334
1953	513,037	98,493	-1,059	4,100	10,922	n/a	n/a	15,558	n/a	342,568	n/a	40,337
1954	438,486	99,068	-134	4,175	6,490	n/a	n/a	16,442	n/a	276,289	n/a	35,888
1955	412,488	101,159	-265	4,194	4,707	n/a	n/a	17,712	n/a	251,741	n/a	32,710
1956	595,649	110,240	-23	5,340	5,603	n/a	n/a	18,905	n/a	401,556	n/a	53,983
1957	763,348	117,932	-7,141	7,508	6,374	n/a	n/a	20,081	n/a	542,708	n/a	61,604
1958	742,068	125,831	124	5,917	5,973	n/a	n/a	21,197	n/a	524,059	n/a	59,215
1959	886,226	131,848	98,247	6,471	6,384	n/a	n/a	22,722	n/a	910,650	n/a	-93,601
1960	1,103,385	139,894	13,875	6,534	7,455	n/a	n/a	23,948	n/a	896,816	n/a	42,613
1961	941,648	148,254	3,482	6,265	6,756	n/a	n/a	25,570	n/a	687,393	n/a	70,892

(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		
1962	1,048,508	161,451	-56	6,655	8,030	n/a	n/a	27,412	n/a	799,366	n/a	45,538
1963	1,151,120	169,638	615	7,573	10,063	n/a	n/a	28,912	n/a	879,685	n/a	55,864
1964	1,343,747	171,511	726	8,655	17,230	n/a	n/a	30,782	n/a	1,582,119	n/a	-465,823
1965	1,559,484	172,111	1,022	8,576	23,603	n/a	n/a	32,352	n/a	1,296,810	n/a	27,054
1966	1,908,500	178,212	996	9,022	20,167	n/a	n/a	33,696	n/a	1,649,455	n/a	18,944
1967	2,190,404	190,561	2,094	10,770	18,790	n/a	n/a	35,027	n/a	1,907,498	n/a	29,851
1968	2,764,446	207,678	8,520	14,198	20,474	n/a	n/a	36,959	n/a	2,463,629	n/a	30,027
1969	3,373,361	237,828	-558	15,020	22,126	n/a	n/a	39,237	n/a	3,019,161	n/a	39,432
1970	3,877,218	276,572	11,442	21,228	23,574	n/a	n/a	41,137	n/a	3,493,571	n/a	32,580
1971	3,723,370	319,608	94,266	32,634	24,943	n/a	n/a	43,488	n/a	3,356,560	n/a	40,403
1972	3,792,335	347,917	-49,616	35,234	31,455	n/a	n/a	46,184	n/a	3,231,268	n/a	50,661
1973	5,016,769	416,879	-80,653	44,412	33,826	n/a	n/a	49,140	n/a	4,340,680	n/a	51,178
1974	6,280,091	476,235	-78,487	41,117	30,190	n/a	n/a	52,580	n/a	5,549,999	n/a	51,483
1975	6,257,937	514,359	-202,370	33,577	37,130	n/a	n/a	54,610	n/a	5,382,064	n/a	33,828
1976	6,623,220	558,129	7,311	41,828	48,819	n/a	n/a	57,351	n/a	5,870,463	n/a	53,940
1977	6,891,317	568,851	-177,033	47,366	55,008	n/a	n/a	60,182	n/a	5,937,148	n/a	45,728
1978	8,455,309	592,558	-633,123	53,322	60,059	n/a	n/a	63,280	n/a	7,005,779	n/a	47,268
1979	10,310,148	625,168	-151,148	50,530	68,391	n/a	n/a	67,194	n/a	9,278,576	n/a	69,141
1980	12,802,319	718,033	-115,386	62,231	73,124	n/a	n/a	70,355	n/a	11,706,370	n/a	56,821
1981	15,508,350	814,190	-372,879	63,163	82,924	n/a	n/a	74,574	n/a	14,023,723	n/a	76,897
1982	16,517,385	926,034	-68,833	61,813	98,441	n/a	n/a	79,352	n/a	15,204,591	n/a	78,320
1983	16,068,362	1,023,678	-400,366	71,551	152,135	n/a	n/a	85,152	n/a	14,228,816	n/a	106,663
1984	18,068,821	1,102,444	-412,943	82,116	162,606	n/a	n/a	92,620	n/a	16,054,095	n/a	161,996
1985	18,131,983	1,127,744	1,301,624	77,378	173,739	n/a	n/a	103,029	n/a	17,796,464	n/a	155,253
1986	17,464,528	1,156,868	1,975,893	97,338	180,780	n/a	n/a	109,588	n/a	17,803,895	n/a	91,954
1987	17,633,012	1,146,911	1,796,594	81,870	170,675	n/a	n/a	117,499	n/a	17,738,880	n/a	173,771
1988	19,526,431	1,205,960	-516,910	84,411	164,245	n/a	n/a	125,616	n/a	17,364,319	n/a	64,971
1989	22,249,276	1,332,161	1,254,613	89,580	175,044	n/a	n/a	129,885	n/a	21,646,417	n/a	130,802
1990	23,476,604	1,349,726	2,099,328	103,752	193,007	n/a	n/a	140,758	n/a	23,608,398	n/a	180,292
1991	22,553,002	1,429,322	405,729	109,631	261,316	n/a	n/a	152,553	n/a	20,777,552	n/a	228,356
1992	20,235,028	1,474,531	-987,788	128,955	295,401	n/a	n/a	171,763	n/a	16,774,477	n/a	402,114
1993	18,914,251	1,657,800	-230,268	140,466	355,947	n/a	n/a	195,422	n/a	15,986,765	n/a	347,583
1994	20,910,742	1,795,328	2,363,862	146,866	368,187	n/a	n/a	212,090	n/a	20,470,011	n/a	282,122
1995	25,395,148	1,818,416	857,788	161,348	370,203	n/a	n/a	230,527	n/a	23,389,367	n/a	283,075
1996	25,164,303	1,947,861	-1,676,716	162,642	402,517	n/a	n/a	255,884	5,517,716	14,565,624	n/a	635,343
1997	26,917,213	1,976,453	-2,611,570	174,407	364,454	n/a	n/a	299,652	20,658,972	0	n/a	831,705
1998	28,149,477	1,833,436	1,906,037	178,009	408,544	n/a	n/a	343,014	17,785,942	8,774,994	n/a	731,575
1999	29,346,836	1,852,162	-533,557	213,790	484,959	n/a	n/a	373,579	n/a	25,409,736	n/a	479,053
2000	33,963,992	1,971,688	-1,500,027	188,067	435,838	n/a	n/a	409,614	n/a	25,343,892	n/a	4,114,865
2001	31,870,721	2,084,708	-1,117,435	295,056	338,537	n/a	n/a	428,183	n/a	27,089,222	n/a	517,580
2002	26,760,113	2,227,078	2,149,328	205,111	429,568	n/a	n/a	483,596	n/a	24,495,490	n/a	1,068,598
2003	23,792,725	2,462,658	2,481,127	297,020	508,144	n/a	n/a	517,705	n/a	22,021,528	n/a	466,796
2004	23,539,942	2,238,705	917,870	272,331	503,784	n/a	n/a	582,402	n/a	18,078,003	n/a	2,782,587
2005	30,729,357	2,889,544	-3,576,903	265,742	477,087	n/a	n/a	780,863	n/a	21,467,545	n/a	1,271,672
2006	38,410,427	3,263,844	-158,846	301,014	491,962	n/a	n/a	871,255	n/a	29,051,678	n/a	4,271,828
2007	42,576,025	3,510,206	198,417	296,125	576,306	n/a	324,481	992,353	n/a	34,598,401	n/a	3,125,533
2008	41,045,582	4,870,374	3,340,628	352,291	500,372	n/a	-3,158,808	1,189,626	n/a	31,688,688	n/a	2,626,053
2009	54,463,121	5,978,795	4,820,204	386,400	502,044	n/a	1,006,813	1,428,202	n/a	47,430,237	n/a	4,564,460
2010	79,300,937	6,270,420	9,745,562	422,200	622,846	42,286	45,881	1,582,785	n/a	79,268,124	n/a	883,724

(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		Trans-ferred to/from surplus[4]	Transferred to/from surplus and change in accumulated other compre-hensive 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		
2011	85,241,366	7,316,643	2,015,991	472,300	648,798	281,712	-1,161,848	1,577,284	n/a	75,423,597	n/a	375,175
2012	81,586,102	7,798,353	18,380,835	490,001	722,301	387,279	-52,611	1,637,934	n/a	88,417,936	n/a	460,528
2013	91,149,953	9,134,656	-1,029,750	580,000	701,522	563,200	2,288,811	1,649,277	n/a	79,633,271	n/a	147,088
2014	116,561,512	10,714,872	-2,718,283	590,000	710,807	563,000	-1,611,569	1,685,826	n/a	96,901,695	n/a	1,064,952
Total, 1914–2014	**1,302,814,240**	**108,941,575**	**38,795,400**	**8,294,117**	**13,817,007**	**1,837,477**	**-2,318,850**	**20,482,064**	**44,113,958**	**1,107,289,909**	**-4**	**34,514,187[6]**
Aggregate for each Bank, 1914–2014												
Boston	53,819,356	5,152,889	348,951	355,228	768,476	82,003	11,771	898,303	2,579,504	42,853,901	135	1,489,639
New York	540,143,032	34,754,114[7]	26,321,967	2,230,862	3,821,560	582,022	-2,370,900	5,667,302	17,307,161	488,093,173	-433	11,638,327
Philadelphia	43,873,103	4,506,426	825,524	530,923	637,581	146,761	-1,433	1,485,758	1,312,118	34,314,799	291	1,762,532
Cleveland	60,260,816	4,781,177	719,414	611,578	780,377	142,931	1,557	1,521,816	2,827,043	47,780,826	-10	2,536,048
Richmond	101,579,656	8,886,226	2,342,415	1,499,458	1,178,008	381,262	20,384	4,092,410	3,083,928	77,183,556	-72	7,637,683
Atlanta	88,544,875	11,913,938	1,742,844	578,419	1,382,817	105,127	-8,781	1,351,817	2,713,230	70,287,088	5	1,946,494
Chicago	123,547,356	9,874,255	1,896,340	640,371	1,464,942	50,516	5,422	1,298,093	4,593,811	106,341,013	12	1,186,106
St. Louis	36,705,805	3,747,243	436,682	147,266	485,613	15,597	20,273	312,790	1,833,837	30,230,573	-27	389,874
Minneapolis	19,905,883	3,791,353	430,085	192,866	267,065	13,025	-9,434	426,287	416,227	14,941,596	65	278,059
Kansas City	40,659,898	5,133,621	592,218	182,372	501,339	18,601	-9,054	363,314	1,249,703	33,371,114	-9	423,000
Dallas	54,987,689	5,447,118	1,099,565	274,094	785,660	29,729	18,787	530,402	1,510,802	46,948,010	55	579,681
San Francisco	138,786,774	10,953,212	2,039,403	1,050,683	1,743,568	269,906	2,556	2,533,773	4,686,594	114,944,259	-17	4,646,747
Total	**1,302,814,240**	**108,941,575**	**38,795,400**	**8,294,117**	**13,817,007**	**1,837,477**	**-2,318,850**	**20,482,064**	**44,113,958**	**1,107,289,909**	**-4**	**34,514,187**

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, for a two-year period beginning July 21, 2010, the 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 $34,514,187 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 $28,571,798 thousand on December 31, 2014.

7 This amount is reduced by $6,184,653 thousand for expenses of the System Retirement Plan. See note 4, "Table 10. Income and expenses of the Federal Reserve Banks, by Bank, 2014."

n/a Not applicable.

Table 12. Operations in principal departments of the Federal Reserve Banks, 2011–14

Operation	2014	2013	2012	2011
Millions of pieces				
Currency processed	33,372	33,219	31,703	32,249
Currency destroyed	5,622	5,564	4,614	4,813
Coin received	55,401	56,806	58,669	59,550
Checks handled				
U.S. government checks[1]	63	83	121	159
Postal money orders	95	101	108	113
Commercial	5,741	5,987	6,622	6,780
Securities transfers[2]	17	19	18	19
Funds transfers[3]	135	134	132	127
Automated clearinghouse transactions				
Commercial	11,620	11,143	10,665	10,349
Government	1,516	1,467	1,382	1,305
Millions of dollars				
Currency processed	638,245	638,237	581,382	576,442
Currency destroyed	198,525	206,998	105,464	81,943
Coin received	5,363	5,481	5,700	5,907
Checks handled				
U.S. government checks[1]	141,396	154,584	199,251	241,817
Postal money orders	20,902	22,262	21,927	22,220
Commercial	8,114,636	7,960,028	8,125,424	7,943,524
Securities transfers[2]	287,104,205	295,186,170	284,401,670	291,823,993
Funds transfers[3]	884,551,876	713,310,354	599,200,625	663,837,575
Automated clearinghouse transactions				
Commercial	19,891,274	19,689,431	19,293,857	17,801,549
Government	4,872,536	4,714,428	4,609,914	4,534,707

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.

Table 13. Number and annual salaries of officers and employees of the Federal Reserve Banks, December 31, 2014

Federal Reserve Bank (including branches)	President[1]	Other officers		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	367,200	71	15,545,016	929	33	92,739,181	1,034	108,651,397
New York	444,200	558	130,860,908	2,542	26	290,524,388	3,127	421,829,495
Philadelphia	379,900	65	12,015,155	805	15	68,628,859	886	81,023,914
Cleveland	358,800	61	11,260,000	849	23	69,017,034	934	80,635,834
Richmond	362,600	84	15,586,182	1,380	19	116,886,462	1,484	132,835,244
Atlanta	334,200	84	16,679,220	1,437	20	119,457,509	1,542	136,470,929
Chicago	365,100	116	23,144,019	1,330	50	126,233,827	1,497	149,742,946
St. Louis	320,900	98	18,569,400	984	36	80,512,368	1,119	99,402,668
Minneapolis	338,700	54	10,444,846	964	46	76,616,426	1,065	87,399,972
Kansas City	332,900	87	15,548,100	1,373	11	99,277,705	1,472	115,158,705
Dallas	395,700	67	12,114,101	1,088	10	81,644,283	1,166	94,154,084
San Francisco	378,500	87	19,052,263	1,514	18	147,684,358	1,620	167,115,121
Federal Reserve Information Technology	n/a	72	14,017,925	1,102	1	119,331,208	1,175	133,349,133
Office of Employee Benefits	n/a	13	3,143,645	38	0	4,173,740	51	7,317,385
Total	**4,378,700**	**1,517**	**317,980,780**	**16,335**	**308**	**1,492,727,347**	**18,172**	**1,815,086,827**

Note: Components may not sum to totals because of rounding.

1 As of January 1, 2014, the Board implemented a new compensation policy for Reserve Bank presidents and individual officer salary ranges for each Reserve Bank reflecting the cost of labor in each head-office city. The Board reviews Reserve Bank officer salary ranges annually and may adjust those ranges based on market information. Salaries for Reserve Bank officers, including presidents, are limited by compensation caps established for each Reserve Bank. The 2014 compensation caps were $461,700 for Boston, New York, and San Francisco; $428,200 for Philadelphia, Cleveland, Richmond, Atlanta, Chicago, St. Louis, Minneapolis, and Dallas; and $412,900 for Kansas City.

Under the new policy, a president's initial appointment salary normally will be set at 95 percent of the salary-range midpoint (a 95 compa-ratio), with the exception of the president of the New York Reserve Bank, whose appointment salary normally will be set at 105 compa-ratio, reflecting that position's additional responsibilities and broader scope. The Board has discretion to approve an appointment salary greater than those noted above at the request of a Reserve Bank's board of directors.

Under the new policy, all presidents will normally receive annual salary increases on January 1, based upon the Board-approved average Reserve Bank officer merit percentage for that year. In addition, each incumbent president's 2014 compensation was adjusted to reflect the transition from the previous president compensation policy, in which each president received an annual salary increase to maintain his or her compa-ratio and an additional increase triennially to his or her compa-ratio. The previous policy was suspended from 2011 through 2013 due to the Board's application of the pay freeze to Reserve Bank officers. The adjustments, which take into consideration tenure as president and position within the relevant salary range, will be phased in through 2016.

2 Annualized salary liability (excluding outside agency costs) based on salaries in effect on December 31, 2014.

n/a Not applicable.

Table 14. Acquisition costs and net book value of the premises of the Federal Reserve Banks and Branches, December 31, 2014
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	182,589	40,919	250,801	123,780	n/a
New York	68,161	529,677	103,873	701,711	436,913	n/a
Philadelphia	8,146	119,580	28,305	156,031	75,925	n/a
Cleveland	4,219	132,586	25,929	162,734	93,232	n/a
Cincinnati	3,075	29,135	16,024	48,234	16,793	n/a
Richmond	32,044	162,598	58,429	253,071	147,418	n/a
Baltimore	7,916	40,295	13,746	61,957	32,869	n/a
Charlotte	7,884	45,678	13,770	67,332	39,769	n/a
Atlanta	22,995	159,336	20,379	202,710	145,400	n/a
Birmingham	5,347	13,056	1,465	19,868	10,120	n/a
Jacksonville	1,894	23,825	5,664	31,383	16,304	n/a
New Orleans	3,785	14,457	7,416	25,658	12,527	n/a
Miami	4,254	33,648	8,437	46,339	27,423	n/a
Chicago	5,801	230,310	28,979	265,090	123,268	n/a
Detroit	12,328	74,385	11,613	98,326	78,230	n/a
St. Louis	9,377	142,188	15,913	167,478	112,580	n/a
Memphis	2,472	15,997	5,188	23,657	9,261	n/a
Minneapolis	15,522	109,555	17,323	142,400	87,431	n/a
Helena	2,890	10,327	1,516	14,733	8,318	n/a
Kansas City	38,955	201,248	26,683	266,886	227,726	n/a
Denver	3,694	9,873	5,916	19,483	7,800	n/a
Omaha	3,559	7,596	1,885	13,040	5,800	n/a
Dallas	38,100	125,740	32,541	196,381	113,046	n/a
El Paso	262	4,805	2,050	7,117	1,807	n/a
Houston	25,119	104,059	9,209	138,387	108,144	7,204
San Francisco	20,988	126,094	30,533	177,615	88,703	n/a
Los Angeles	6,306	76,826	21,306	104,438	51,538	n/a
Salt Lake City	1,294	5,406	1,710	8,410	2,594	n/a
Seattle	13,101	50,083	6,744	69,928	58,229	n/a
Total	**396,781**	**2,780,952**	**563,465**	**3,741,198**	**2,262,948**	**7,204**

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.
n/a Not applicable.

12 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 and internal controls over financial reporting are audited annually by an independent outside auditor retained by the Board's Office of Inspector General (OIG). 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 section 6, "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.

In addition, the OIG conducts audits, investigations, and other reviews relating to the Board's programs and operations as well as to Board functions delegated to the Reserve Banks. Certain aspects of 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 2014 and 2013 were audited by Deloitte & Touche LLP, independent auditors.

BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM
WASHINGTON, D.C. 20551

March 12, 2015

Management's Report on Internal Control over Financial Reporting

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, 2014, 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 by 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* (2013) 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	William L. Mitchell
Chief Operating Officer	Chief Financial Officer

Deloitte.

INDEPENDENT AUDITORS' REPORT

To the Board of Governors of the Federal Reserve System:

Report on the Financial Statements

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, 2014 and 2013, 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, 2014, based on criteria established in *Internal Control—Integrated Framework (2013)* 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) (the "PCAOB"), 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 PCAOB. 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 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 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 (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.

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, 2014 and 2013, 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, 2014, based on the criteria established in *Internal Control—Integrated Framework (2013)* 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 12, 2015 on our tests of the Board's compliance with certain provisions of laws, regulations, contracts, 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 12, 2015
Washington, DC

Board of Governors of the Federal Reserve System Balance Sheets

	As of December 31,	
	2014	2013
Assets		
Current assets:		
Cash	$ 69,243,271	$ 90,851,317
Accounts receivable – net	4,800,677	7,911,011
Prepaid expenses and other assets	7,043,863	4,621,633
Total current assets	81,087,811	103,383,961
Noncurrent assets:		
Property, equipment, and software – net	256,324,432	195,347,206
Other assets	1,484,570	1,959,389
Total noncurrent assets	257,809,002	197,306,595
Total	$338,896,813	$300,690,556
Liabilities and cumulative results of operations		
Current liabilities:		
Accounts payable and accrued liabilities	$ 27,455,677	$ 22,376,801
Accrued payroll and related taxes	22,699,129	25,105,590
Accrued annual leave	34,266,939	31,288,437
Capital lease payable	323,306	465,219
Unearned revenues and other liabilities	1,977,674	2,509,202
Total current liabilities	86,722,725	81,745,249
Long-term liabilities:		
Capital lease payable	92,204	603,897
Retirement benefit obligation	45,461,450	30,129,567
Postretirement benefit obligation	12,969,115	11,294,443
Postemployment benefit obligation	8,850,310	8,490,921
Other liabilities	40,405,247	22,060,853
Total long-term liabilities	107,778,326	72,579,681
Total liabilities	194,501,051	154,324,930
Cumulative results of operations:		
Fund balance	163,920,431	153,616,578
Accumulated other comprehensive income (loss)	(19,524,669)	(7,250,952)
Total cumulative results of operations	144,395,762	146,365,626
Total	$338,896,813	$300,690,556

See notes to financial statements.

Board of Governors of the Federal Reserve System Statements of Operations

	For the years ended December 31,	
	2014	2013
Board operating revenues:		
Assessments levied on Federal Reserve Banks for Board operating expenses and capital expenditures	$590,000,000	$580,000,000
Other revenues	17,757,157	14,888,833
Total operating revenues	607,757,157	594,888,833
Board operating expenses:		
Salaries	351,495,519	322,740,797
Retirement, insurance, and benefits	78,111,357	73,336,663
Contractual services and professional fees	56,821,474	63,094,846
Depreciation, amortization, and net gains or losses on disposals	25,411,096	24,694,987
Travel	15,467,118	14,726,855
Postage, supplies, and non-capital furniture and equipment	13,197,042	10,955,269
Utilities	10,511,203	9,330,903
Software	13,532,082	11,592,703
Rentals of space	16,518,231	14,790,457
Repairs and maintenance	6,504,496	5,866,831
Other expenses	9,883,686	9,282,383
Total operating expenses	597,453,304	560,412,694
Net income (loss)	10,303,853	34,476,139
Currency costs:		
Assessments levied or to be levied on Federal Reserve Banks for currency costs	707,402,059	705,030,765
Expenses for costs related to currency	707,402,059	705,030,765
Currency assessments over (under) expenses	–	–
Bureau of Consumer Financial Protection (Bureau):		
Assessments levied on the Federal Reserve Banks for the Bureau	563,000,000	563,200,000
Transfers to the Bureau	563,000,000	563,200,000
Bureau assessments over (under) transfers	–	–
Office of Financial Research (Office):		
Assessments transferred to the Federal Reserve Banks for the Office	1,512,822	–
Transfers from the Office	1,512,822	–
Office assessments over (under) transfers	–	–
Total net income (loss)	10,303,853	34,476,139
Other comprehensive income:		
Pension and other postretirement benefit plans:		
Amortization of prior service (credit) cost	605,483	605,684
Amortization of net actuarial (gain) loss	481,850	1,218,367
Net actuarial gain (loss) arising during the year	(13,361,050)	8,757,487
Total other comprehensive income (loss)	(12,273,717)	10,581,538
Comprehensive income (loss)	(1,969,864)	45,057,677
Cumulative results of operations – beginning of year	146,365,626	101,307,949
Cumulative results of operations – end of year	$144,395,762	$146,365,626

See notes to financial statements.

Board of Governors of the Federal Reserve System Statements of Cash Flows

	For the years ended December 31,	
	2014	2013
Cash flows from operating activities:		
Net income (loss)	$ 10,303,853	$ 34,476,139
Adjustments to reconcile results of operations to net cash provided by (used in) operating activities:		
Depreciation and amortization	25,132,858	22,804,365
Net loss (gain) on disposal of property and equipment	278,238	1,890,621
Other additional non-cash adjustments to results of operations	(308,326)	119,355
(Increase) decrease in assets:		
Accounts receivable, prepaid expenses and other assets	1,162,924	(6,455,266)
Increase (decrease) in liabilities:		
Accounts payable and accrued liabilities	(770,233)	4,260,385
Accrued payroll and related taxes	(2,406,461)	4,198,153
Accrued annual leave	2,978,502	2,069,774
Unearned revenues and other liabilities	(531,528)	1,891,415
Net retirement benefit obligation	4,326,019	4,694,408
Net postretirement benefit obligation	406,819	321,182
Net postemployment benefit obligation	359,389	(2,204,244)
Other long-term liabilities	515,365	(523,133)
Net cash provided by (used in) operating activities	41,447,419	67,543,154
Cash flows from investing activities:		
Capital expenditures	(62,703,485)	(30,200,771)
Net cash provided by (used in) investing activities	(62,703,485)	(30,200,771)
Cash flows from financing activities:		
Capital lease payments	(351,980)	(456,217)
Net cash provided by (used in) financing activities	(351,980)	(456,217)
Net increase (decrease) in cash	(21,608,046)	36,886,166
Cash balance – beginning of year	90,851,317	53,965,151
Cash balance – end of year	$ 69,243,271	$ 90,851,317

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, 2014 and 2013

(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 public 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. 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 (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 exercises general oversight of 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. banking 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 companies that are designated as such 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.

(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 — The Board assesses the Reserve Banks for the funds transferred to the Bureau 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.

Assessments for Supervision and Regulation (S&R) — The Dodd-Frank Act directs the Board to collect assessments, fees, or other charges equal to the total expenses the Board estimates are necessary or appropriate to carry out the supervisory and regulatory responsibilities of the Board for bank holding companies and savings and loan holding companies with total consolidated assets of $50 billion or more and nonbank financial companies designated for Board supervision by the FSOC. As a collecting entity, the Board does not recognize the S&R assessments as revenue nor does the Board use the collections to fund Board expenses; the funds are transferred to the Treasury. The Board collected and transferred $433,897,258 and $433,483,299 in 2014 and 2013, respectively.

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 Treasury or 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 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.

Accounts Receivable and Allowance for Doubtful Accounts — Accounts receivable are recorded when amounts are billed but not yet received and 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 $182,000 and $122,000 as of December 31, 2014 and 2013, 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 five 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.

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. Significant items subject to such estimates include useful lives of property, equipment, and software; allowance for doubtful accounts receivable; accounts payable; retirement benefit obligation; postretirement benefit obligation; postemployment obligation; and commitments and contingencies.

Benefit Obligations — The Board records annual amounts relating to its pension, postretirement, and postemployment plans based on calculations that incorporate various actuarial and other assumptions, including discount rates, mortality, compensation increases, turnover rates, and health-care cost trends rates. The Board reviews the assumptions on an annual basis and makes modifications to the assumptions based on a variety of factors. The effect of the modifications to the assumptions is recorded in accumulated other comprehensive income and amortized to net periodic cost over future periods, which is presented in the accumulated other comprehensive income (loss) footnote.

(4) Property, Equipment, and Software

The following is a summary of the components of the Board's property, equipment, and software, at cost, less accumulated depreciation and amortization as of December 31, 2014 and 2013:

	As of December 31,	
	2014	2013
Land	$ 18,640,314	$ 18,640,314
Buildings and improvements	282,596,215	217,293,649
Construction in process	12,225,222	15,436,635
Furniture and equipment	79,542,184	62,655,420
Software in use	38,309,794	33,690,483
Software in process	1,040,801	1,641,886
Vehicles	1,835,191	1,205,025
Subtotal	434,189,721	350,563,412
Less accumulated depreciation and amortization	(177,865,292)	(155,216,206)
Property, equipment, and software – net	$ 256,324,429	$ 195,347,206

The Board retired $2,942,000 and $28,331,000 of long-term assets during 2014 and 2013, respectively.

(5) Leases

Capital Leases — The Board entered into capital leases for copier equipment in 2012; the lease terms extend through 2016. In 2014, the Board terminated a portion of those leases of $313,000, which is a non-cash event excluded from the Statements of Cash Flows. Furniture and equipment includes capitalized leases of $1,258,000 and $1,853,000 as of 2014 and 2013. Accumulated depreciation includes $855,000 and $801,000 related to assets under capital leases as of 2014 and 2013, respectively. The depreciation expense for leased equipment is $339,000 and $464,000 for 2014 and 2013, 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, 2014, are as follows:

Years Ended December 31,	Amount
2015	$ 476,327
2016	133,966
Total minimum lease payments	610,293
Less amount representing maintenance	(188,525)
Net minimum lease payments	421,768
Less amount representing interest	(6,258)
Present value of net minimum lease payments	415,510
Less current maturities of capital lease payments	(323,306)
Long-term capital lease obligations	$ 92,204

Operating Leases — The Board has entered into several operating leases to secure office, training, data center, and warehouse space. Minimum annual payments under the multiyear operating leases having an initial or remaining noncancelable lease term in excess of one year at December 31, 2014, are as follows:

Years Ended December 31,	
2015	$ 24,266,047
2016	26,361,410
2017	27,168,904
2018	27,808,178
After 2018	111,856,679
	$217,461,218

Rental expenses under the multiyear operating leases were $15,854,000 and $13,978,000 for the years ended December 31, 2014 and 2013, respectively. The Board signed two letters of intent in early 2015 for additional office space. One is with one of the Reserve Banks. The estimated future minimum lease payments associated with the two letters of intent are 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 $516,000 and $508,000 in 2014 and 2013, respectively.

Deferred Rent — Other long-term liabilities include deferred rent of $40,151,000 and $21,783,000 as of the years ended December 31, 2014 and 2013, respectively. The Board recorded non-cash lease incentives of $17,829,000 and $1,322,000 for the years ended December 31, 2014 and 2013, respectively.

(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 Federal 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 years ended December 31, 2014 and 2013.

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 $480 million and $900 million during the years ended December 31, 2014 and 2013, respectively. The Board was not assessed a contribution for 2014 or 2013.

In October 2014, the Society of Actuaries released new mortality tables (RP-2014) and mortality projection scales (MP-2014) for use in valuations of benefits liabilities. The Board adopted the new mortality tables and new mortality projection scales, adjusted based on the System's recent mortality experience (which included the Board's workforce) and the recent retirement rate experience of System retirees, for the Board benefit plans that cannot be paid from the System Plan.

Benefits Equalization Plan — 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, 2014 and 2013, is summarized in the following tables:

	2014	2013
Change in projected benefit obligation:		
Benefit obligation – beginning of year	$ 12,673,892	$ 15,152,833
Service cost	1,125,134	1,361,346
Interest cost	705,339	656,007
Plan participants' contributions	–	–
Actuarial (gain) loss	6,238,231	(4,473,905)
Gross benefits paid	(15,196)	(22,389)
Benefit obligation – end of year	$ 20,727,400	$ 12,673,892
Accumulated benefit obligation – end of year	$ 2,327,825	$ 1,699,943
Weighted-average assumptions used to determine benefit obligation as of December 31:		
Discount rate	4.25 %	5.26 %
Rate of compensation increase	4.00 %	4.50 %
Change in plan assets:		
Fair value of plan assets – beginning of year	$ –	$ –
Employer contributions	15,196	22,389
Plan participants' contributions	–	–
Gross benefits paid	(15,196)	(22,389)
Fair value of plan assets – end of year	$ –	$ –
Funded status:		
Reconciliation of funded status – end of year:		
Fair value of plan assets	$ –	$ –
Benefit obligation (current)	31,281	55,061
Benefit obligation (noncurrent)	20,696,119	12,618,831
Funded status	(20,727,400)	(12,673,892)
Amount recognized – end of year	$(20,727,400)	$(12,673,892)
Amounts recognized in the balance sheets consist of:		
Asset	$ –	$ –
Liability – current	(31,281)	(55,061)
Liability – noncurrent	(20,696,119)	(12,618,831)
Net amount recognized	$(20,727,400)	$(12,673,892)
Amounts recognized in accumulated other comprehensive income consist of:		
Net actuarial loss (gain)	$ 4,769,469	$ (1,534,296)
Prior service cost (credit)	421,610	521,188
Net amount recognized	$ 5,191,079	$ (1,013,108)

Expected cash flows:	
Expected employer contributions – 2015	$ 31,281
Expected benefit payments:*	
2015	$ 31,281
2016	$ 54,155
2017	$ 75,372
2018	$ 87,034
2019	$102,247
2020–2024	$995,786

* Expected benefit payments to be made by the Board.

	2014	2013
Components of net periodic benefit cost:		
Service cost	$1,125,134	$ 1,361,346
Interest cost	705,339	656,007
Expected return on plan assets		–
Amortization:		
Actuarial (gain) loss	$ (65,534)	–
Prior service (credit) cost	99,578	99,779
Net periodic benefit cost (credit)	$1,864,517	$ 2,117,132
Weighted-average assumptions used to determine net periodic benefit cost:		
Discount rate	5.26 %	4.25 %
Rate of compensation increase	4.50 %	4.50 %
Other changes in plan assets and benefit obligations recognized in other comprehensive income:		
Current year actuarial (gain) loss	$6,238,231	$(4,473,905)
Amortization of prior service credit (cost)	(99,578)	(99,779)
Amortization of actuarial gain (loss)	65,534	0
Total recognized in other comprehensive (income) loss	$6,204,187	$(4,573,684)
Total recognized in net periodic benefit cost and other comprehensive income	$8,068,704	$(2,456,552)

Estimated amounts that will be amortized from accumulated other comprehensive income into net periodic benefit cost (credit) in 2015 are shown below:

Net actuarial (gain) loss	$234,334
Prior service (credit) cost	99,578
Total	$333,912

Pension Enhancement Plan — 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 percent above the Social Security integration level to 2.0 percent. Activity for the PEP as of December 31, 2014 and 2013, is summarized in the following tables:

	2014	2013
Change in projected benefit obligation:		
Benefit obligation – beginning of year	$ 17,593,667	$ 18,440,730
Service cost	676,722	795,619
Interest cost	961,720	821,785
Plan participants' contributions	–	–
Actuarial (gain) loss	5,824,802	(2,312,328)
Gross benefits paid	(199,423)	(152,139)
Benefit obligation – end of year	$ 24,857,488	$ 17,593,667
Accumulated benefit obligation – end of year	$ 20,463,136	$ 14,172,160
Weighted-average assumptions used to determine benefit obligation as of December 31:		
Discount rate	4.12 %	5.06 %
Rate of compensation increase	4.00 %	4 .50 %
Change in plan assets:		
Fair value of plan assets – beginning of year	$ –	$ –
Employer contributions	199,423	152,139
Plan participants' contributions	–	–
Gross benefits paid	(199,423)	(152,139)
Fair value of plan assets – end of year	$ –	$ –
Funded status:		
Reconciliation of funded status – end of year:		
Fair value of plan assets	$ –	$ –
Benefit obligation – current	279,260	240,788
Benefit obligation – noncurrent	24,578,228	17,352,879
Funded status	(24,857,488)	(17,593,667)
Amount recognized – end of year	$(24,857,488)	$(17,593,667)
Amounts recognized in the balance sheets consist of:		
Asset	$ –	$ –
Liability – current	(279,260)	(240,788)
Liability – noncurrent	(24,578,228)	(17,352,879)
Net amount recognized	$(24,857,488)	$(17,593,667)
Amounts recognized in accumulated other comprehensive income consist of:		
Net actuarial loss (gain)	$ 10,647,540	$ 5,314,468
Prior service cost (credit)	1,117,698	1,649,093
Net amount recognized	$ 11,765,238	$ 6,963,561

Expected cash flows:	
Expected employer contributions – 2015	$ 279,260
Expected benefit payments:*	
2015	$ 279,260
2016	$ 353,887
2017	$ 434,246
2018	$ 528,384
2019	$ 634,515
2020–2024	$4,767,388

* Expected benefit payments to be made by the Board.

	2014	2013
Components of net periodic benefit cost:		
Service cost	$ 676,722	$ 795,619
Interest cost	961,720	821,785
Expected return on plan assets	–	–
Amortization:		
Actuarial (gain) loss	491,730	887,744
Prior service (credit) cost	531,395	531,395
Net periodic benefit cost (credit)	$2,661,567	$ 3,036,543
Weighted-average assumptions used to determine net periodic benefit cost:		
Discount rate	5.06 %	4.00 %
Rate of compensation increase	4.50 %	4.50 %
Other changes in plan assets and benefit obligations recognized in other comprehensive income:		
Current year actuarial (gain) loss	$5,824,802	$(2,312,328)
Amortization of prior service credit (cost)	(531,395)	(531,395)
Amortization of actuarial gain (loss)	(491,730)	(887,744)
Total recognized in other comprehensive (income) loss	$4,801,677	$(3,731,467)
Total recognized in net periodic benefit cost and other comprehensive income	$7,463,244	$ (694,924)

Estimated amounts that will be amortized from accumulated other comprehensive income into net periodic benefit cost (credit) in 2015 are shown below:

Net actuarial (gain) loss	$ 870,684
Prior service (credit) cost	531,395
Total	$1,402,079

The total accumulated retirement benefit obligation includes a liability for a supplemental retirement agreement and a benefits equalization plan under the System's Thrift Plan. The total obligation as of December 31, 2014 and 2013, is summarized in the following table:

	2014	2013
Retirement benefit obligation:		
Benefit obligation – BEP	$20,727,400	$12,673,892
Benefit obligation – PEP	24,857,488	17,593,667
Additional benefit obligations	187,103	157,857
Total accumulated retirement benefit obligation	$45,771,991	$30,425,416

A relatively small number of Board employees participate in the Civil Service Retirement System or the Federal Employees' Retirement System. 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 $891,000 and $778,000 in 2014 and 2013, 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 System's Thrift Plan or Roth 401(k). Board contributions to members' accounts were $21,982,000 and $20,288,000 in 2014 and 2013, respectively.

(7) Postretirement Benefits

The Board provides certain life insurance programs for its active employees and retirees. Activity as of December 31, 2014 and 2013, is summarized in the following tables:

	2014	2013
Change in benefit obligation:		
Benefit obligation – beginning of year	$ 11,693,311	$ 13,249,648
Service cost	163,420	219,222
Interest cost	582,779	533,435
Plan participants' contributions	–	–
Actuarial (gain) loss	1,298,018	(1,971,254)
Gross benefits paid	(353,234)	(337,740)
Benefit obligation – end of year	$ 13,384,294	$ 11,693,311
Weighted-average assumptions used to determine benefit obligation as of December 31 – discount rate	4.05 %	4 .97 %
Change in plan assets:		
Fair value of plan assets – beginning of year	$ –	$ –
Employer contributions	353,234	337,740
Gross benefits paid	(353,234)	(337,740)
Fair value of plan assets – end of year	$ –	$ –
Funded status:		
Reconciliation of funded status – end of year:		
Fair value of plan assets	$ –	$ –
Benefit obligation – current	415,179	398,868
Benefit obligation – noncurrent	12,969,115	11,294,443
Funded status	(13,384,294)	(11,693,311)
Amount recognized – end of year	$(13,384,294)	$(11,693,311)
Amounts recognized in the balance sheets consist of:		
Asset	$ –	$ –
Liability – current	(415,179)	(398,868)
Liability – noncurrent	(12,969,115)	(11,294,443)
Net amount recognized	$(13,384,294)	$(11,693,311)
Amounts recognized in accumulated other comprehensive income consist of:		
Net actuarial loss (gain)	$ 2,742,925	$ 1,500,562
Prior service cost (credit)	(174,574)	(200,064)
Net amount recognized	$ 2,568,351	$ 1,300,498

Expected cash flows:	
Expected employer contributions – 2015	$ 415,179
Expected benefit payments:*	
2015	$ 415,179
2016	$ 441,775
2017	$ 464,025
2018	$ 472,883
2019	$ 497,258
2020–2024	$2,890,444

* Expected benefit payments to be made by the Board.

	2014	2013
Components of net periodic benefit cost:		
Service cost	$ 163,420	$ 219,222
Interest cost	582,779	533,435
Expected return on plan assets	–	–
Amortization:		
Actuarial (gain) loss	55,654	330,623
Prior service (credit) cost	(25,490)	(25,490)
Net periodic benefit cost (credit)	$ 776,363	$ 1,057,790
Weighted-average assumptions used to determine net periodic benefit cost – discount rate	4.97 %	4.00 %
Other changes in plan assets and benefit obligations recognized in other comprehensive income:		
Current year actuarial (gain) loss	$1,298,017	$(1,971,254)
Amortization of prior service credit (cost)	25,490	25,490
Amortization of actuarial gain (loss)	(55,654)	(330,623)
Total recognized in other comprehensive (income) loss	$1,267,853	$(2,276,387)
Total recognized in net periodic benefit cost and other comprehensive income	$2,044,216	$(1,218,597)

Estimated amounts that will be amortized from accumulated other comprehensive income into net periodic benefit cost (credit) in 2015 are shown below:

Net actuarial (gain) loss	$170,536
Prior service (credit) cost	(25,490)
Total	$145,046

(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 2.47 percent and 3.43 percent as of December 31, 2014 and 2013, respectively. The net periodic postemployment benefit cost (credit) recognized by the Board as of December 31, 2014 and 2013, was $1,448,000 and ($217,000), 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, 2014 and 2013, 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, 2013	$(14,255,604)	$(3,576,886)	$(17,832,490)
Change in accumulated other comprehensive income (loss):			
Net actuarial gain (loss) arising during the year	6,786,233	1,971,254	8,757,487
Other comprehensive income before reclassifications	6,786,233	1,971,254	8,757,487
Amortization of prior service (credit) costs[a][b]	631,174	(25,490)	605,684
Amortization of net actuarial (gain) loss[a][b]	887,744	330,623	1,218,367
Amounts reclassified from accumulated other comprehensive income	1,518,918	305,133	1,824,051
Change in accumulated other comprehensive income (loss)	8,305,151	2,276,387	10,581,538
Balance – December 31, 2013	(5,950,453)	(1,300,499)	(7,250,952)
Change in accumulated other comprehensive income (loss):			
Net actuarial gain (loss) arising during the year[a]	(12,063,033)	(1,298,017)	(13,361,050)
Other comprehensive income before reclassifications	(12,063,033)	(1,298,017)	(13,361,050)
Amortization of prior service (credit) costs[a][b]	630,973	(25,490)	605,483
Amortization of net actuarial (gain) loss[a][b]	426,196	55,654	481,850
Amounts reclassified from accumulated other comprehensive income	1,057,169	30,164	1,087,333
Change in accumulated other comprehensive income (loss)	(11,005,864)	(1,267,853)	(12,273,717)
Balance – December 31, 2014	$(16,956,317)	$(2,568,352)	$(19,524,669)

[a] These components of accumulated other comprehensive income are included in the computation of net periodic pension cost (see Notes 6 and 7 for additional details).

[b] These components of accumulated other comprehensive income are reflected in the "Retirement, insurance, and benefits" line on the Statements of Operations.

(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 operations, 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:

	2014	2013
For the years ended December 31:		
Assessments levied or to be levied on Reserve Banks for:		
Currency expenses	$ 707,402,059	$ 705,030,765
Board operations	590,000,000	580,000,000
Transfers of funds to the Bureau	563,000,000	563,200,000
Total assessments levied or to be levied on Reserve Banks	$1,860,402,059	$1,848,230,765
Funds returned from the Office and transferred to the Reserve Banks	$ 1,512,822	$ –
Board expenses charged to the Reserve Banks for data processing and office space	$ 364,165	$ 417,324
Reserve Bank expenses charged to the Board:		
Data processing and communication	$ 1,250,884	$ 861,671
Office space	468,463	1,289,714
Contingency site	1,247,766	1,262,616
Total Reserve Bank expenses charged to the Board	$ 2,967,113	$ 3,414,001
Net transactions with Reserve Banks	$1,856,286,289	$1,845,234,088
As of December 31:		
Accounts receivable due from the Reserve Banks	$ 495,018	$ 5,496,852
Accounts payable due to the Reserve Banks	$ 415,314	$ 1,000,923

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 $39,000 and $47,000 in audit services and recorded net receivables of $39,000 and $47,000 from the entities as of December 31, 2014 and 2013, respectively.

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 $2,503,000 and $2,402,000 for the years ended December 31, 2014 and 2013, 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 administrative 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:

	2014	2013
For the years ended December 31:		
Council expenses charged to the Board:		
Assessments for operating expenses	$ 154,633	$ 141,111
Assessments for examiner education	1,047,803	988,233
Central Data Repository	1,197,920	1,049,787
Home Mortgage Disclosure Act/Community Reinvestment Act	882,464	717,177
Uniform Bank Performance Report	224,797	134,977
Total Council expenses charged to the Board	$3,507,617	$3,031,285
Board expenses charged to the Council:		
Data processing related services	$4,611,282	$4,233,290
Other administrative services	245,000	223,000
Total Board expenses charged to the Council	$4,856,282	$4,456,290
As of December 31:		
Accounts receivable due from the Council	$ 221,749	$ 442,749
Accounts payable due to the Council	$ 132,125	$ 326,875

(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 $563,000,000 and $563,200,000 during calendar years 2014 and 2013, respectively. The Bureau transferred to the Board funding for the operations of the OIG of $9.3 million and $10 million in 2014 and 2013, respectively. Beginning in 2014, the Bureau's funding share of OIG operations was adjusted based on actual OIG expenses and work allocation from the previous year. The Board accrued a liability of $1.84 million as of December 31, 2013, which was applied to the Bureau transfer in 2014. The Board accrued a receivable of $1.73 million as of December 31, 2014, which will be applied to subsequent Bureau transfers.

(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. Over the two-year period, the Board provided $91,515,944 to cover the Office's expenses. In 2012, based on its review of actual expenditures and accruals through the end of the two-year period, the Office determined that $39,921,702 should be returned to the Board; the Board subsequently received and returned that amount to the Reserve Banks. At that time, the Office noted that an additional adjustment may be needed based upon the actual expenses incurred for work under the Dodd-Frank Act. In 2014, the Office performed its final review and determined that an additional $1,512,822 should be returned to the Board. That amount was returned to the Board and transferred to the Reserve Banks in September 2014.

(14) Currency

The Bureau of Engraving and Printing (BEP) is the sole supplier for currency printing and also provides currency retirement and meaningful access 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, 2014 and 2013, are reflected in the following table:

	2014	2013
Expenses related to BEP services:		
Printing	$656,810,224	$660,957,789
Retirement	3,500,408	3,081,392
Meaningful access program	808,017	–
Subtotal related to BEP services	$661,118,649	$664,039,181
Other currency expenses:		
Shipping	$ 27,460,180	$ 20,732,476
Research and development	5,096,781	5,393,220
Quality assurance services	11,690,796	11,284,687
Education services	2,035,653	3,581,201
Subtotal other currency expenses	$ 46,283,410	$ 40,991,584
Total currency expenses	$707,402,059	$705,030,765

(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 2019 and one two-year option period. The estimated Board expense to support this effort is $5 million.

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, 2014. Subsequent events were evaluated through March 12, 2015, which is the date the financial statements were available to be issued.

Deloitte.

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 auditing standards generally accepted in the United States of America, auditing standards of the Public Company Accounting Oversight Board (United States) (the "PCAOB"), 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, 2014 and 2013, 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 PCAOB, the Board's internal control over financial reporting as of December 31, 2014, based on the criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. We have issued our report on the aforementioned audits dated March 12, 2015.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Board's financial statements are free from 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 12, 2015
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, 2014 and 2013.

Deloitte.

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, 2014 and 2013, 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 combined 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, 2014 and 2013, and the results of their operations for the years then ended in accordance with the basis of accounting described in Note 3 to the combined 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 combined 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 11, 2015
Washington, DC

Federal Reserve Banks

Abbreviations

ABS	Asset-backed securities
ACH	Automated clearinghouse
AIG	American International Group, Inc.
AIGFP	American International Group, Inc. Financial Products Corp.
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
CFE	Collateralized financing entity
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
FRBC	Federal Reserve Bank of Cleveland
FRBKC	Federal Reserve Bank of Kansas City
FRBNY	Federal Reserve Bank of New York
FRBSL	Federal Reserve Bank of St. Louis
GAAP	Accounting principles generally accepted in the United States of America
GSE	Government-sponsored enterprise
IMF	International Monetary Fund
IMI	Investible Markets Index
JPMC	JPMorgan Chase & Co.
LLC	Limited liability company
MBS	Mortgage-backed securities
ML	Maiden Lane LLC
ML II	Maiden Lane II LLC
ML III	Maiden Lane III LLC
MSCI	Morgan Stanley Capital International
MTM	Mark-to-market
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
TBA	To be announced
TDF	Term Deposit Facility
TRS	Total return swap
VIE	Variable interest entity

Federal Reserve Banks Combined Statements of Condition as of December 31, 2014 and December 31, 2013
(in millions)

	2014	2013
Assets		
Gold certificates	$ 11,037	$ 11,037
Special drawing rights certificates	5,200	5,200
Coin	1,873	1,955
Loans:		
Depository institutions	145	74
Term Asset-Backed Securities Loan Facility (measured at fair value)	-	98
System Open Market Account:		
Treasury securities, net (of which $11,144 and $17,153 is lent as of December 31, 2014 and 2013, respectively)	2,596,241	2,359,434
Government-sponsored enterprise debt securities, net (of which $633 and $1,099 is lent as of December 31, 2014 and 2013, respectively)	39,990	59,122
Federal agency and government-sponsored enterprise mortgage-backed securities, net	1,789,083	1,533,860
Foreign currency denominated investments, net	20,900	23,724
Central bank liquidity swaps	1,528	272
Accrued interest receivable	25,644	23,493
Other assets	29	2
Investments held by consolidated variable interest entities (of which $1,808 and $1,774 is measured at fair value as of December 31, 2014 and 2013, respectively)	1,811	1,926
Bank premises and equipment, net	2,630	2,653
Items in process of collection	86	165
Deferred asset—remittances to the Treasury	667	-
Other assets	910	1,134
Total assets	$4,497,774	$4,024,149
Liabilities and capital		
Federal Reserve notes outstanding, net	$1,298,725	$1,197,920
System Open Market Account:		
Securities sold under agreements to repurchase	509,837	315,924
Other liabilities	830	1,331
Liabilities of consolidated variable interest entities (of which $41 and $189 is measured at fair value as of December 31, 2014 and 2013, respectively)	127	274
Deposits:		
Depository institutions	2,377,996	2,249,070
Treasury, general account	223,452	162,399
Other deposits	25,560	34,150
Interest payable to depository institutions	124	99
Accrued benefit costs	3,089	1,823
Deferred credit items	641	1,127
Accrued remittances to the Treasury	-	4,791
Other liabilities	249	227
Total liabilities	4,440,630	3,969,135
Capital paid-in	28,572	27,507
Surplus (including accumulated other comprehensive loss of $4,168 and $2,556 at December 31, 2014 and 2013, respectively)	28,572	27,507
Total capital	57,144	55,014
Total liabilities and capital	$4,497,774	$4,024,149

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, 2014 and December 31, 2013
(in millions)

	2014	2013
Interest income		
Loans:		
Term Asset-Backed Securities Loan Facility	$ 2	$ 6
System Open Market Account:		
Treasury securities, net	63,011	51,591
Government-sponsored enterprise debt securities, net	1,579	2,166
Federal agency and government-sponsored enterprise mortgage-backed securities, net	51,264	36,628
Foreign currency denominated investments, net	78	96
Central bank liquidity swaps	1	22
Investments held by consolidated variable interest entities	77	6
Total interest income	116,012	90,515
Interest expense		
System Open Market Account:		
Securities sold under agreements to repurchase	112	60
Other	2	–
Deposits:		
Depository institutions	6,705	5,212
Term Deposit Facility	156	11
Total interest expense	6,975	5,283
Net interest income	109,037	85,232
Non-interest (loss) income		
System Open Market Account:		
Federal agency and government-sponsored enterprise mortgage-backed securities gains, net	81	51
Foreign currency translation losses, net	(2,907)	(1,257)
Other	14	22
Consolidated variable interest entities gains, net	37	184
Income from services	433	441
Reimbursable services to government agencies	570	530
Other	59	54
Total non-interest (loss) income	(1,713)	25
Operating expenses		
Salaries and benefits	3,104	3,225
Occupancy	314	314
Equipment	175	169
Other	602	563
Assessments:		
Board of Governors operating expenses and currency costs	1,301	1,282
Bureau of Consumer Financial Protection	563	563
Total operating expenses	6,059	6,116
Net income before providing for remittances to the Treasury	101,265	79,141
Earnings remittances to the Treasury	96,902	79,633
Net income (loss)	4,363	(492)
Change in prior service costs related to benefit plans	97	97
Change in actuarial (losses) gains related to benefit plans	(1,709)	2,192
Total other comprehensive (loss) income	(1,612)	2,289
Comprehensive income	$ 2,751	$ 1,797

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, 2014 and December 31, 2013
(in millions, except share data)

	Capital paid-in	Surplus			Total capital
		Net income retained	Accumulated other comprehensive loss	Total surplus	
Balance at December 31, 2012 (547,195,145 shares)	$27,360	$32,205	$(4,845)	$27,360	$54,720
Net change in capital stock issued (2,941,791 shares)	147	–	–	–	147
Comprehensive income:					
Net loss	–	(492)	–	(492)	(492)
Other comprehensive income	–	–	2,289	2,289	2,289
Dividends on capital stock	–	(1,650)	–	(1,650)	(1,650)
Net change in capital	147	(2,142)	2,289	147	294
Balance at December 31, 2013 (550,136,936 shares)	$27,507	$30,063	$(2,556)	$27,507	$55,014
Net change in capital stock issued (21,299,030 shares)	1,065	–	–	–	1,065
Comprehensive income:					
Net income	–	4,363	–	4,363	4,363
Other comprehensive loss	–	–	(1,612)	(1,612)	(1,612)
Dividends on capital stock	–	(1,686)	–	(1,686)	(1,686)
Net change in capital	1,065	2,677	(1,612)	1,065	2,130
Balance at December 31, 2014 (571,435,966 shares)	$28,572	$32,740	$(4,168)	$28,572	$57,144

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 nationally-chartered 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 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, and 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 GSE debt securities that are held in the SOMA.

To be prepared 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 FRBNYto 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 FRBNY holds these securities and obligations in the SOMA. 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 in the maximum amount of $5 billion.

Because of the global character of bank funding markets, the System has at times coordinated with other central banks to provide liquidity. The FOMC authorized and directed the FRBNY to establish U.S. dollar liquidity and reciprocal foreign currency liquidity swap lines with the Bank of Canada, the Bank of England, the European Central Bank, the Bank of Japan, and the Swiss National Bank. The FRBNY holds amounts outstanding under these swap lines in the SOMA. These swap lines, which were originally established as temporary arrangements, were converted to standing arrangements on October 31, 2013, and will remain in place until further notice.

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. 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, adjusted for credit impairment, if any, the recording of all SOMA securities on a settlement-date basis, and the use of straight-line amortization for Treasury securities, GSE debt securities, and foreign currency denominated investments. Amortized cost, rather than the fair value presentation, more appropriately reflects the financial position associated with 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.

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 Bank's 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.

In 2014, the description of certain line items presented in the Combined Statements of Condition and the Combined Statements of Income and Comprehensive Income have been revised to better reflect the nature of these items. Amounts related to these line items were not changed from the prior year, only the nomenclature for the line item was revised, as further noted below:

- The line item "System Open Market Account: Other investments" has been revised in the Combined Statements of Condition to "System Open Market Account: Other assets."
- The line item "System Open Market Account: Foreign currency denominated assets, net" has been revised in the Combined Statements of Income and Com-

prehensive Income to "System Open Market Account: Foreign currency denominated investments, net."

Certain amounts relating to the prior year have been reclassified in the Combined Statements of Condition to conform to the current year presentation. $116 million and $158 million previously reported as of December 31, 2013 as "Consolidated variable interest entities: Beneficial interest in consolidated variable interest entities" and "Consolidated variable interest entities: Other liabilities," respectively, have been combined and reported in a new line titled "Liabilities of consolidated variable interest entities."

Certain amounts relating to the prior year have been reclassified in the Combined Statements of Income and Comprehensive Income to conform to the current year presentation. $22 million previously reported for the year ended December 31, 2013 as "Non-interest (loss) income: Other" has been reclassified into a new line titled "Non-interest (loss) income: System Open Market Account: Other." $183 million and $1 million previously reported for the year ended December 31, 2013 as "Non-interest (loss) income: Consolidated variable interest entities: Investments held by consolidated variable interest entities gains, net" and "Non-interest (loss) income: Consolidated variable interest entities: Beneficial interest in consolidated variable interest entities gains (losses), net," respectively, have been combined and reported in a new line titled "Non-interest (loss) income: Consolidated variable interest entities gains, net."

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 Limited Liability Company (LLC) (ML), Maiden Lane II LLC (ML II), Maiden Lane III LLC (ML III), and Term Asset-Backed Securities Loan Facility (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 LLC wholly-owned by the Bank, which was formed to own and operate the FRBNY-owned 33 Maiden Lane building.

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. The Board of Governors funds the Bureau 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 relationship to the Bureau and determined that it should not be consolidated in the Banks' combined financial statements.

b. Gold and Special Drawing Rights Certificates

The Secretary of the Treasury is authorized to issue gold 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 twelve months.

Special drawing rights (SDR) 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, 2014 and 2013.

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 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, 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. Unrealized gains (losses) on TALF loans that are recorded at fair value are reported as a component of "Non-interest income: Other" 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 "Interest Income: Term Asset-Backed Securities Loan Facility" in the Combined Statements of Income and Comprehensive Income.

Loans, other than those recorded at fair value, are impaired when current information and events indicate that it is probable that the Reserve Bank will not receive the principal and interest that are 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 typically settled through a tri-party arrangement. In a tri-party 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, Separate Trading of Registered Interest and Principal of Securities (STRIPS) Treasury securities, and Treasury Floating Rate Notes); direct obligations of several federal and GSE-related agencies, including Federal National Mortgage Association (Fannie Mae), Federal Home Loan Mortgage Corporation (Freddie Mac), and Federal Home Loan Banks; and pass-through federal agency and GSE MBS. The repurchase transactions are accounted for as financing transactions with the associated interest income recognized over the life of the transaction. These transactions are reported at their contractual amounts as "System Open Market Account: Securities purchased under agreements to resell" and the related accrued interest receivable is reported as a component of "System Open Market Account: Accrued interest receivable" in the Combined Statements of Condition.

The FRBNY may engage in sales of securities under agreements to repurchase with primary dealers and with a set of expanded counterparties that includes banks, savings associations, GSEs, and domestic money market funds (Overnight and term reverse repurchase agreements). These reverse repurchase transactions are settled through a tri-party arrangement, 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, or 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 "System Open Market Account: Other liabilities" in the Combined Statements of Condition.

Treasury securities and GSE debt securities held in the SOMA may be lent to primary dealers, typically overnight, to facilitate the effective functioning of the domestic securities markets. The amortized cost basis of securities lent continues to be reported as "System Open Market Account: Treasury securities, net" and "System Open Market Account: Government-sponsored enterprise debt securities, net," as appropriate, in the Combined Statements of Condition. Securities lending transactions are fully collateralized by Treasury securities based on the fair values of the securities lent increased by a margin determined by the FRBNY. The FRBNY charges the primary dealer a fee for borrowing securities, and these fees are reported as a component of "Non-interest (loss) income: System Open Market Account: 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 investments included in the SOMA is accrued using the straight-line method. 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, 2014 and 2013, the FRBNY executed dollar rolls to facilitate settlement of outstanding purchases of federal agency and GSE MBS. The FRBNY accounts for dollar rolls 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 these MBS transactions are reported as “Non-interest (loss) 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 investments, 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 investments are reported as “Non-interest (loss) income: System Open Market Account: Foreign currency translation losses, net” in the Combined Statements of Income and Comprehensive Income.

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.

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 investments, 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 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 (loss) 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 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 FRBNYand 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 FRBNYbased on the amount outstanding and the rate under the swap agreement. The FRBNY recognizes compensation during the term of theswap 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 amounts that the FRBNY receives are recorded as a liability.

h. Investments Held by Consolidated Variable Interest Entities

The investments held by consolidated VIEs consist primarily of short-term investments with maturities of greater than three months and less than one year, cash and cash equivalents, commercial mortgage loans, and swap contracts. Swap contracts consist of credit default swaps (CDS). 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 asset-backed securities (ABS) investments and has elected the fair value option for all eligible assets in accordance with ASC 825.

i. Bank Premises, Equipment, and Software

Reserve 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 to acquire software are capitalized based on the purchase price. Costs incurred during the application development stage to develop internal-use software are capitalized based on 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 and minor replacements 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.

j. 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 $171 billion and $203 billion at December 31, 2014 and 2013, respectively.

At December 31, 2014 and 2013, all Federal Reserve notes outstanding, reduced by the Reserve Bank's currency holdings, were fully collateralized. At December 31, 2014, all gold certificates, all special drawing rights certificates, and $1,282 billion of domestic securities held in the SOMA were pledged as collateral. At December 31, 2014, no investments denominated in foreign currencies were pledged as collateral.

k. Liabilities of Consolidated Variable Interest Entities

The liabilities of consolidated VIEs consist primarily of swap contracts, cash collateral on swap contracts, and beneficial interests. Swap contracts are recorded at fair value in accordance with ASC 815. The VIEs elected to measure all beneficial interests at fair value in accordance with ASC 825. Liabilities are reported as "Liabilities of consolidated variable interest entities" in the Combined Statements of Condition. Changes in fair value of the liabilities are recorded in "Non-interest (loss) income: Consolidated variable interest entities gains, net" in the Combined Statements of Income and Comprehensive Income.

l. Deposits

Depository Institutions

Depository institutions' deposits representthe reserve and service-related 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 Bank under the TDF at December 31, 2014 and 2013.

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 cash collateral and GSE deposits held by the Reserve Banks.

m. 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 represent amounts attributable to checks that have been deposited for collection and that, as of the balance sheet date, have not been credited to a depository institution's account.

n. 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.

o. 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.

p. Remittances to Treasury

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. Currently, remittances to the Treasury are made on a weekly basis. This amount is reported as "Earnings remittances to the Treasury" in the Combined Statements of Income and Comprehensive Income. The amount due to the Treasury is reported as "Accrued remittances to the Treasury" in the Combined Statements of Condition. See Note 13 for additional information on earnings remittances to the Treasury.

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. Accounting adjustments, including those recorded as of or near the financial statement date, can also result in suspending remittances to the Treasury and recording a deferred asset. As of December 31, 2014, such adjustments resulted in recording a deferred asset in the amount of $667 million, which is reported as "Deferred asset—remittances to the Treasury" in the Combined Statements of Condition. The deferred asset is reviewed for impairment, and as of December 31, 2014, no impairment existed.

q. 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, 2014 and 2013, the Bank was reimbursed for all services provided to the Treasury as its fiscal agent.

r. Assessments

The Board of Governors assesses the Reserve Banks to fund its operations and the operations of the Bureau. These assessments are allocated to each Reserve Bank based on each Reserve Banks' 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.

The Dodd-Frank Act requires that, after the transfer of its responsibilities to the Bureau on July 21, 2011, 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. After 2013, the amount will be adjusted annually in accordance with the provisions of the Dodd-Frank Act. The percentage of total operating expenses of the System for the years ended December 31, 2014 and 2013 was 12.22 percent ($608.4 million) and 12 percent ($597.6 million), respectively. 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.

s. 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 VIEs, 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 Banks' 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.

t. 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 $48 million for both years ended December 31, 2014 and 2013, and are reported as a component of "Operating expenses: Occupancy" in the Combined Statements of Income and Comprehensive Income.

u. 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 executes the specific actions contemplated in the plan and all criteria for financial statement recognition have been met.

In 2014, the Treasury announced plans to consolidate the provision of substantially all fiscal agent services for the U.S. Treasury at the Federal Reserve Bank of Cleveland (FRBC), the Federal Reserve Bank of Kansas City (FRBKC), the FRBNY, and the Federal Reserve Bank of St. Louis (FRBSL). The implementation plan associated with this consolidation is expected to be completed in 2018.

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 sale of certain Reserve Bank 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. Costs and liabilities associated with enhanced postretirement benefits are discussed in Note 10.

v. Recently Issued Accounting Standards

In June 2013, the FASB issued Accounting Standards Update (ASU) 2013-08, *Financial Services—Investment Companies* (Topic 946): *Amendments to the Scope, Measurement, and Disclosure Requirements*. This update changed the assessment of whether an entity is an investment company by developing a new two-tiered approach for that assessment, which requires an entity to possess certain fundamental characteristics while allowing judgment in assessing other typical characteristics. This update, which is applicable to ML II and ML III, was effective for the Reserve Banks for the year ended December 31, 2014 and did not have a material effect on the Reserve Banks' combined financial statements.

In April 2014, the FASB issued ASU 2014-08, *Presentation of Financial Statements* (Topic 205) *and Property, Plant, and Equipment* (Topic 360): *Reporting Discontinued Operations and Disclosures of Disposals of Components of an Entity*. This update changes the requirements for reporting discontinued operations, which may include a component of an entity or a group of components of an entity, or a business or nonprofit activity. This update is effective for the Reserve Banks for the year ending December 31, 2015, and is not expected to have a material effect on the Reserve Banks' combined financial statements.

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers* (Topic 606). This update was issued to create common revenue recognition guidance for U.S. GAAP and International Financial Reporting Standards. The guidance is applicable to all contracts for the transfer of goods or services regardless of industry or type of transaction. This update requires recognition of revenue in a manner that reflects the consideration that the entity expects to receive in return for the transfer of goods or services to customers. This update is effective for the Reserve Banks for the year ending December 31, 2018, and is not expected to have a material effect on the Reserve Banks' combined financial statements.

In June 2014, the FASB issued ASU 2014-11, *Transfer and Servicing* (Topic 860): *Repurchase-to-Maturity Transactions, Repurchase Financings, and Disclosures.* This update requires changes in the accounting for repurchase-to-maturity transactions and repurchase financing transactions. Additionally, this update provides guidance for the disclosures for certain transfers of financial assets accounted for as sales, where the transferor retains substantially all of the exposure to economic return on the transferred financial asset; and repurchase agreements, securities lending transactions, and repurchase to maturity transactions that are accounted for as secured borrowings. This update is effective for the Reserve Banks for the year ending December 31, 2015, and is not expected to have a material effect on the Reserve Banks' combined financial statements.

In August 2014, the FASB issued ASU 2014-13, *Consolidation* (Topic 810): *Measuring the Financial Assets and the Financial Liabilities of a Consolidated Collateralized Financing Entity*. This update provides guidance for the measurement of the financial assets and financial liabilities of a collateralized financing entity (CFE). A reporting entity that consolidates a CFE may elect to measure the financial assets and financial liabilities of that CFE using either the fair value or a measurement alternative as prescribed in the accounting pronouncement. This update is effective for the Reserve Banks for the year ending December 31, 2016, 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 usingthe 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; 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 the 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. 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, 2014 and 2013, was as follows (in millions):

	Within 15 days	16 days to 90 days	Total
December 31, 2014	$140	$5	$145
December 31, 2013	$ 69	$5	$ 74

At December 31, 2014 and 2013, the Reserve Banks did not have any loans that were impaired, restructured, 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, 2014 and 2013.

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 were 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.

The TALF loans were extended on a nonrecourse basis. If the borrower did not repay the loan, the FRBNY would have enforced its rights in the collateral and might have sold the collateral to TALF LLC, a Delaware LLC, established for the purpose of purchasing such assets. Pursuant to a put agreement with the FRBNY, TALF LLC had 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 collateral.

On October 29, 2014, the final outstanding TALF loan was repaid in full. Over the life of the program, all TALF loans were repaid in full at or before their respective maturity dates, and as such, the FRBNY did not incur a loss on any TALF loan. Subsequent to the repayment of the final outstanding TALF loan, the FRBNY terminated the put agreement with TALF LLC. Refer to Note 6 for additional information related to TALF LLC

At December 31, 2013, the aggregate remaining principal amount outstanding on TALF loans was $97 million. No TALF loans were over 90 days past due or on nonaccrual status and all TALF loans were classified within Level 2 of the valuation hierarchy.

(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, 2014 and 2013, 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 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 this reinvestment policy. 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. In December 2012, the FOMC announced that the Federal Reserve would also purchase longer-term Treasury securities initially at a pace of $45 billion per month after its program to extend the average maturity of its holdings of Treasury securities was completed in 2012. In December 2013, the FOMC announced that it would slow the pace of its additional asset purchases. In October 2014, the FOMC concluded its asset purchase program while maintaining its existing policy of reinvesting principal payments from its holdings of GSE debt securities and federal agency and GSE MBS and of rolling over maturing Treasury securities at auction.

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):

	2014			
	Par	Unamortized premiums	Unaccreted discounts	Total amortized cost
Notes	$1,634,949	$ 27,670	$ (7,718)	$1,654,901
Bonds	826,414	124,621	(9,695)	941,340
Total Treasury securities	$2,461,363	$152,291	$(17,413)	$2,596,241
GSE debt securities	$ 38,677	$ 1,313	$ -	$ 39,990
Federal agency and GSE MBS	$1,736,833	$ 53,231	$ (981)	$1,789,083

	2013			
	Par	Unamortized premiums	Unaccreted discounts	Total amortized cost
Notes	$1,467,427	$ 33,385	$ (5,697)	$1,495,115
Bonds	741,348	128,541	(5,570)	864,319
Total Treasury securities	$2,208,775	$161,926	$(11,267)	$2,359,434
GSE debt securities	$ 57,221	$ 1,903	$ (2)	$ 59,122
Federal agency and GSE MBS	$1,490,162	$ 44,781	$ (1,083)	$1,533,860

The FRBNY enters into transactions for the purchase of securities under agreements to resell and transactions to sell securities under agreements to repurchase as part of its monetary policy activities. These operations are for the purpose of further assessing the appropriate structure of such operations in supporting the implementation of monetary policy during normalization. In addition, transactions to sell securities under agreements to repurchase are entered into 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, 2014 and 2013. Financial information related to securities sold under agreements to repurchase for the years ended December 31 was as follows (in millions):

	2014	2013
Overnight and term reverse repurchase agreements:		
Contract amount outstanding, end of year	$396,705	$197,755
Average daily amount outstanding, during the year	130,281	4,161
Maximum balance outstanding, during the year	396,705	197,755
Securities pledged (par value), end of year	365,235	188,028
Securities pledged (market value), end of year	398,540	196,726
Foreign official and international accounts:		
Contract amount outstanding, end of year	$113,132	$118,169
Average daily amount outstanding, during the year	102,968	95,520
Maximum balance outstanding, during the year	122,232	118,169
Securities pledged (par value), end of year	108,355	122,424
Securities pledged (market value), end of year	113,132	118,175
Total contract amount outstanding, end of year	$509,837	$315,924

Securities pledged as collateral, at December 31, 2014 and 2013, consisted solely of Treasury securities.

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, 2014 and 2013 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, 2014:							
Treasury securities (par value)	$ -	$ 4	$3,516	$1,112,927	$686,627	$ 658,289	$2,461,363
GSE debt securities (par value)	1,089	711	3,933	30,597	-	2,347	38,677
Federal agency and GSE MBS (par value)[1]	-	-	-	13	6,453	1,730,367	1,736,833
Securities sold under agreements to repurchase (contract amount)	509,837	-	-	-	-	-	509,837
December 31, 2013:							
Treasury securities (par value)	$ -	$ 298	$ 176	$ 763,329	$864,700	$ 580,272	$2,208,775
GSE debt securities (par value)	2,310	7,568	8,666	36,268	62	2,347	57,221
Federal agency and GSE MBS (par value)[1]	-	-	-	5	2,549	1,487,608	1,490,162
Securities sold under agreements to repurchase (contract amount)	315,924	-	-	-	-	-	315,924

[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 5.7 and 6.5 years as of December 31, 2014 and 2013, respectively.

The amortized cost and par value of Treasury securities and GSE debt securities that were loaned from the SOMA under securities lending agreements, at December 31 were as follows (in millions):

	2014	2013
Treasury securities (amortized costs)	$11,144	$17,153
Treasury securities (par value)	10,105	15,447
GSE debt securities (amortized cost)	633	1,099
GSE debt securities (par value)	616	1,055

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, 2014, 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, 2014, the total purchase price of the federal agency and GSE MBS under outstanding purchase commitments was $28,692 million, none of which was related to dollar rolls. As of December 31, 2014, there were no outstanding sales commitments for federal agency and GSE MBS. These commitments, which had contractual settlement dates extending through January 2015, are principally 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 MBS commitments as part of its risk management practices used to mitigate the counterparty credit risk.

Other assets consists primarily of cash and short-term investments related to the federal agency and GSE MBS portfolio. Other liabilities, which are primarily 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 MBS 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 obligation to pay for the securities when delivered. The amount of other assets and other liabilities held in the SOMA at December 31 was as follows (in millions):

	2014	2013
Other assets:		
MBS portfolio related cash and short term investments	$ 28	$ 1
Other	1	1
Total other assets	$ 29	$ 2
Other liabilities:		
Cash margin	$793	$1,320
Obligations from MBS transaction fails	30	11
Other	7	-
Total other liabilities	$830	$1,331

Accrued interest receivable on domestic securities holdings was $25,561 million and $23,405 million as of December 31, 2014 and 2013, respectively. These amounts are reported as a component of "System Open Market Account: Accrued interest receivable" in the Combined Statements of Condition.

Information about transactions related to Treasury securities, GSE debt securities, and federal agency and GSE MBS during the years ended December 31, 2014 and 2013, is summarized as follows (in millions):

	Total SOMA				
	Notes	Bonds	Total Treasury securities	GSE debt securities	Federal agency and GSE MBS
Balance December 31, 2012	$1,142,219	$666,969	$1,809,188	$ 79,479	$ 950,321
Purchases[1]	358,656	206,208	564,864	-	864,538
Sales[1]	-	-	-	-	-
Realized gains, net[2]	-	-	-	-	-
Principal payments and maturities	(21)	-	(21)	(19,562)	(273,991)
Amortization of premiums and accretion of discounts, net	(6,024)	(9,503)	(15,527)	(795)	(7,008)
Inflation adjustment on inflation-indexed securities	285	645	930	-	-
Balance December 31, 2013	1,495,115	864,319	2,359,434	59,122	1,533,860
Purchases[1]	165,306	85,826	251,132	-	466,384
Sales[1]	-	-	-	-	(29)
Realized gains, net[2]	-	-	-	-	-
Principal payments and maturities	(475)	-	(475)	(18,544)	(203,933)
Amortization of premiums and accretion of discounts, net	(5,545)	(10,132)	(15,677)	(588)	(7,199)
Inflation adjustment on inflation-indexed securities	500	1,327	1,827	-	-
Balance December 31, 2014	$1,654,901	$941,340	$2,596,241	$ 39,990	$1,789,083
Year-ended December 31, 2013					
Supplemental information – par value of transactions:					
Purchases[3]	$ 356,766	$184,956	$ 541,722	$ -	$ 837,490
Sales	-	-	-	-	-
Year-ended December 31, 2014					
Supplemental information – par value of transactions:					
Purchases[3]	$ 167,497	$ 83,739	$ 251,236	$ -	$ 450,633
Sales	-	-	-	-	(29)

[1] Purchases and sales 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 Investments

The FRBNY conducts foreign currency operations and, on behalf of the Reserve Banks, holds the resulting foreign currency denominated investments 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 backed by the full faith and credit of 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, which are backed by the full faith and credit of those issuing governments.

Information about foreign currency denominated investments valued at amortized cost and foreign currency market exchange rates at December 31 was as follows (in millions):

	Total SOMA	
	2014	2013
Euro:		
Foreign currency deposits	$ 6,936	$ 7,530
Securities purchased under agreements to resell	-	2,549
German government debt instruments	2,494	2,397
French government debt instruments	3,687	2,397
Japanese yen:		
Foreign currency deposits	2,576	2,926
Japanese government debt instruments	5,207	5,925
Total	$20,900	$23,724

Accrued interest receivable on foreign currency denominated investments was $83 million and $88 million as of December 31, 2014 and 2013, respectively. These amounts are reported as a component of "System Open Market Account: Accrued interest receivable" in the Combined Statements of Condition.

The remaining maturity distribution of foreign currency denominated investments at December 31, 2014 and 2013, 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, 2014:					
Euro	$ 3,635	$2,809	$1,644	$5,029	$13,117
Japanese yen	2,755	392	1,540	3,096	7,783
Total	$ 6,390	$3,201	$3,184	$8,125	$20,900
December 31, 2013:					
Euro	$ 7,037	$1,803	$2,161	$3,872	$14,873
Japanese yen	3,116	380	1,870	3,485	8,851
Total	$10,153	$2,183	$4,031	$7,357	$23,724

There were no foreign exchange contracts related to open market operations outstanding as of December 31, 2014.

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, 2014, there were $137 million of outstanding commitments to purchase foreign government debt instruments. These securities settled on January 5, 2015, and replaced Euro-denominated government debt instruments held in the SOMA that matured on that date. During 2014, there were purchases and maturities of foreign government debt instruments of $5,494 million and $3,337 million, respectively. There were no sales of foreign government debt instruments in 2014.

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 monitoring procedures.

At December 31, 2014 and 2013, there was no balance outstanding under the authorized warehousing facility.

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, 2014 and 2013.

Foreign currency working balances held and foreign exchange contracts executed by the Bank 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, 2014 and 2013.

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, 2014 and 2013, was $1,528 million and $272 million, respectively.

The remaining maturity distribution of U.S. dollar liquidity swaps that were allocated to the Bank at December 31 was as follows (in millions):

	2014	2013		
	Within 15 days	Within 15 days	16 days to 90 days	Total
Euro	$ -	$113	$159	$272
Japanese yen	1,528	-	-	-
Total	$1,528	$113	$159	$272

Foreign Currency Liquidity Swaps

At December 31, 2014 and 2013, there was no balance outstanding related to foreign currency liquidity swaps.

d. Fair Value of SOMA Assets and Liabilities

The fair value amounts below are presented 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. Because SOMA securities are recorded at amortized cost, cumulative unrealized gains (losses) are not recognized in the Combined Statements of Condition and the changes in cumulative unrealized gains (losses) are not recognized in the Combined Statements of Income and Comprehensive Income.

The fair value of the 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 also affected by currency risk. Based on evaluations performed as of December 31, 2014, there are no credit impairments of SOMA securities holdings.

The following table presents the amortized cost, fair value, and cumulative unrealized gains (losses) on the Treasury securities, GSE debt securities, and federal agency and GSE MBS held in the SOMA at December 31 (in millions):

	2014			2013		
	Amortized cost	Fair value	Cumulative unrealized gains (losses)	Amortized cost	Fair value	Cumulative unrealized gains (losses)
Treasury securities:						
Notes	$1,654,901	$1,683,377	$ 28,476	$1,495,115	$1,499,000	$ 3,885
Bonds	941,340	1,052,916	111,576	864,319	842,336	(21,983)
Total Treasury securities	2,596,241	2,736,293	140,052	2,359,434	2,341,336	(18,098)
GSE debt securities	39,990	42,499	2,509	59,122	62,236	3,114
Federal agency and GSE MBS	1,789,083	1,820,544	31,461	1,533,860	1,495,572	(38,288)
Total domestic SOMA portfolio securities holdings	$4,425,314	$4,599,336	$174,022	$3,952,416	$3,899,144	$(53,272)
Memorandum–Commitments for:						
Purchases of Treasury securities	$ -	$ -	$ -	$ -	$ -	$ -
Purchases of Federal agency and GSE MBS	28,692	28,803	111	59,350	59,129	(221)
Sales of Federal agency and GSE MBS	-	-	-	-	-	-

The fair value of Treasury securities and GSE debt securities 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 securities purchased under agreements to resell, securities sold under agreements to repurchase, and other investments held in the SOMA domestic portfolio approximate fair value.

At December 31, 2014 and 2013, the fair value of foreign currency denominated investments was $20,996 million and $23,802 million, respectively. The fair value of 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 foreign currency deposits and securities purchased under agreements to resell was determined by reference to market interest rates.

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	2014		2013	
	Amortized cost	Fair value	Amortized cost	Fair value
2.0%	$ 12,788	$ 12,618	$ 14,191	$ 13,529
2.5%	114,609	113,468	123,832	118,458
3.0%	513,289	506,280	521,809	484,275
3.5%	481,305	489,390	349,689	338,357
4.0%	428,047	441,204	230,256	231,113
4.5%	155,867	167,844	185,825	195,481
5.0%	65,544	70,719	83,290	87,968
5.5%	15,232	16,414	21,496	22,718
6.0%	2,110	2,287	3,051	3,225
6.5%	292	320	421	448
Total	$1,789,083	$1,820,544	$1,533,860	$1,495,572

The following tables present the realized gains and the change in the cumulative unrealized gains (losses) related to SOMA domestic securities holdings during the years ended December 31, 2014 and 2013 (in millions):

	2014		2013	
	Realized gains[1]	Change in cumulative unrealized gains (losses)[2]	Total portfolio holdings realized gains[1]	Fair value changes unrealized losses[2]
Treasury securities	$ -	$158,150	$ -	$(183,225)
GSE debt securities	-	(605)	-	(2,411)
Federal agency and GSE MBS	81	69,749	51	(81,957)
Total	$81	$227,294	$51	$(267,593)

1 Realized gains are reported in "Non-interest (loss) 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.

2 Because SOMA securities are recorded at amortized cost, the change in the cumulative unrealized gains (losses) is not reported in the Combined Statements of Income and Comprehensive Income.

The amount of change in cumulative unrealized gains (losses) position, net, related to foreign currency denominated investments was a gain of $18 million and a loss of $90 million for the years ended December 31, 2014 and 2013, respectively.

Treasury securities, GSE debt securities, federal agency and GSE MBS, and foreign government debt instruments are classified as Level 2 within the ASC 820 hierarchy because the fair values are based on indicative quotes and other observable inputs obtained from independent pricing services. The fair value hierarchy level of SOMA financial assets is 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 classification of significant assets and liabilities of the consolidated VIEs at December 31, 2014 and 2013 was as follows (in millions):

	2014	2013				
	ML	ML	ML II	ML III	TALF LLC	Total
Assets:						
Short-term investments	$1,399	$ 530	$ -	$ -	$ -	$ 530
Commercial mortgage loans	-	507	-	-	-	507
Swap contracts	124	158	-	-	-	158
Other investments[1]	11	10	-	-	-	10
Subtotal	1,534	1,205	-	-	-	1,205
Cash, cash equivalents, accrued interest receivable, and other receivables	277	527	63	22	109	721
Total investments held by consolidated VIEs	$1,811	$1,732	$63	$22	$109	$1,926
Liabilities:						
Beneficial interest in consolidated VIEs	$ -	$ -	$11	$ 7	$ 98	$ 116
Swap contracts[2]	41	73	-	-	-	73
Cash collateral on swap contracts[2]	85	82	-	-	-	82
Other liabilities[2]	1	3	-	-	-	3
Total liabilities of consolidated VIEs	$ 127	$ 158	$11	$ 7	$ 98	$ 274

1 Investments with a fair value of $8 million as of December 31, 2013 were recategorized from "Non-agency RMBS" to "Other investments" to conform to the current year presentation.

2 Liabilities with a value of $155 million as of December 31, 2013 were recategorized from "Other liabilities" to two new line items labeled "Swap contracts" and "Cash collateral on swap contracts," to conform to the current year presentation.

The FRBNY's approximate maximum exposure to loss at December 31, 2014 and 2013, was $1,534 million and $1,089 million, respectively. These estimates incorporate potential losses associated with the investments recorded on the FRBNY's balance sheet, net of the fair value of subordinated interests (beneficial interest in consolidated VIEs). Additionally, information concerning the notional exposure on swap contracts is contained in the ML credit risk section of this Note.

The net income attributable to ML, ML II, ML III, and TALF LLC for the year ended December 31, 2014, was as follows (in millions):

	ML	ML II	ML III	TALF LLC	Total
Interest income: Investments held by consolidated VIEs	$ 77	$ -	$ -	$ -	$ 77
Non-interest income:					
Realized portfolio holdings gains, net	1	-	-	-	1
Unrealized portfolio holdings gains, net	36	-	-	-	36
Realized losses on beneficial interest in consolidated VIEs	-	(11)	(7)	(98)	(116)
Unrealized gains on beneficial interest in consolidated VIEs	-	11	7	98	116
Non-interest (loss) income: Consolidated VIEs gains, net	37	-	-	-	37
Total net interest income and non-interest income (loss)	114	-	-	-	114
Less: Professional fees	4	-	-	-	4
Net income attributable to consolidated VIEs	$110	$ -	$ -	$ -	$ 110

The net income attributable to ML, ML II, ML III, and TALF LLC for the year ended December 31, 2013, was as follows (in millions):

	ML	ML II	ML III	TALF LLC	Total
Interest income: Investments held by consolidated VIEs	$ 2	$ 4	$-	$ -	$ 6
Non-interest income:					
Realized portfolio holdings gains, net[1]	130	-	-	-	130
Unrealized portfolio holdings gains, net[1]	53	-	-	-	53
Realized losses on beneficial interest in consolidated VIEs	-	-	-	(573)	(573)
Unrealized gains (losses) on beneficial interest in consolidated VIEs	-	(1)	-	574	573
Non-interest (loss) income: Consolidated VIEs gains (losses), net	183	(1)	-	1	183
Total net interest income and non-interest income	185	3	-	1	189
Less: Professional fees	6	1	-	1	8
Net income attributable to consolidated VIEs	$179	$ 2	$-	$ -	$ 181

1 Portfolio holdings gains for ML with a value of $183 million for the year ended December 31, 2013 were recategorized from "Portfolio holdings gains, net" to two new line items labeled "Realized portfolio holding gains (losses), net" and "Unrealized portfolio holding gains (losses), net" to conform to the current year presentation.

The following is a summary of the consolidated VIEs' subordinated financial interest for the years ended December 31, 2014 and 2013 (in millions):

	ML II deferred purchase price	ML III equity contribution	TALF financial interest	Total
Fair value, December 31, 2012	$ 10	$ 7	$ 786	$ 803
Realized loss	-	-	573	573
Unrealized (gain)/loss	1	-	(574)	(573)
Payments[1]	-	-	(687)	(687)
Fair value, December 31, 2013	11	7	98	116
Realized loss	11	7	98	116
Unrealized gain	(11)	(7)	(98)	(116)
Payments[2]	(11)	(7)	(98)	(116)
Fair value, at December 31, 2014	$ -	$ -	$ -	$ -

1 TALF LLC includes payments of $100 million of principal, $13 million of interest, and $574 million of contingent interest.

2 ML II includes payments of $11 million of variable deferred purchase price. ML III includes payments of $7 million of excess amounts. TALF LLC includes payments of $98 million of contingent interest.

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 LLC formed by the FRBNY to acquire certain assets of Bear Stearns and to manage those assets. 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 residential mortgage-back securities (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, both of which were repaid in full plus interest in 2012. The FRBNY has continued and 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.

The following is a description of the significant holdings at December 31, 2014, 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, 2014 and 2013, ML's short-term instruments consisted of U.S. Treasury bills.

Other investments are primarily comprised of non-agency RMBS and commercial mortgage-backed securities (CMBS).

ii. 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 CDS primarily on CMBS and RMBS, with various market participants, including JPMC.

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 and cash equivalents include cash collateral associated with the TRS of $128 million and $149 million as of December 31, 2014 and 2013, respectively. In addition, ML has pledged $87 million and $124 million of U.S. Treasury bills to JPMC as of December 31, 2014 and 2013, 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.

ML has entered into an International Swaps and Derivatives Association, Inc. master netting agreement with JPMC in connection with the TRS. This agreement provides ML with the right to liquidate securities held as collateral and to offset receivables and payables with JPMC in the event of default. This agreement also establishes the method for determining the net amount of receivables and payables that ML is entitled to receive from or owes to each counterparty to the swaps that underlie the TRS based upon the fair value of the relevant CDS.

For the derivative balances reported in the Combined Statements of Condition, ML offsets its asset and liability positions held with the same counterparty. In addition, ML offsets the cash collateral held with JPMC against any net liabilities of JPMC with ML under the TRS. As of December 31, 2014 and 2013, there were no amounts subject to an enforceable master netting agreement that were not offset in the Combined Statements of Condition.

The following table summarizes the fair value and notional amounts of derivative instruments by contract type on a gross basis as of December 31, 2014 and 2013, which is reported as a component of "Investments held by consolidated variable interest entities" in the Combined Statements of Condition (in millions, except contract data):

	2014			2013		
	Gross derivative assets	Gross derivative liabilities	Notional amounts[3]	Gross derivative assets	Gross derivative liabilities	Notional amounts[3]
Credit derivatives:						
CDS[1,2]	$240	$(115)	$632	$ 345	$(193)	$899
Amounts offset in the Combined Statements of Condition:						
Counterparty netting	(74)	74		(120)	120	
Cash collateral	(42)	-		(67)	-	
Net amounts in the Combined Statements of Condition	$124	$ (41)		$ 158	$ (73)	

1 CDS fair values as of December 31, 2014 for assets and liabilities include interest receivables of $1 million and payables of $4 million. CDS fair values as of December 31, 2013 for assets and liabilities includes interest receivables of $15 million and payables of $2 million.

2 There were 210 and 269 CDS contracts outstanding as of December 31, 2014 and 2013, respectively.

3 Represents 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, 2014.

The table below summarizes certain information regarding protection bought and protection sold through CDS as of December 31 (in millions):

Credit ratings of the reference obligation	Maximum potential payout/notional						Fair value	
	2014					2013	2014	2013
	Years to maturity				Total	Total	Asset/ (liability)	Asset/ (liability)
	1 year or less	After 1 year through 3 years	After 3 years through 5 years	After 5 years				
Credit protection bought:								
Investment grade (AAA to BBB-)	$-	$ -	$5	$ 22	$ 27	$ 56	$ -	$ 2
Non-investment grade (BB+ or lower)	-	8	-	378	386	537	239	327
Total credit protection bought	$-	$8	$5	$ 400	$ 413	$ 593	$ 239	$ 329
Credit protection sold:								
Investment grade (AAA to BBB-)	$-	$ -	$ -	$ (4)	$ (4)	$ (13)	$ -	$ (3)
Non-investment grade (BB+ or lower)	-	-	-	(215)	(215)	(293)	(111)	(188)
Total credit protection sold	$-	$ -	$ -	$(219)	$(219)	$(306)	$(111)	$(191)

Currency Risk

Currency risk is the risk of financial loss resulting from exposure to changes in exchange rates between two currencies. Previously, under the terms of the TRS, JPMC was allowed to post cash collateral in the form of either U.S. dollar or Euro-denominated currencies to cover the net MTM variation in the swap portfolio. When JPMC posted collateral in Euro currency, this risk was 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. In

November 2014, the terms of the TRS were amended such that JPMC is no longer allowed to post cash collateral in Euro currency.

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

The FRBNY extended credit to ML II, a Delaware LLC formed to purchase non-agency RMBS from the reinvestment pool of the securities lending portfolios of several regulated U.S. insurance subsidiaries of American International Group, Inc. (AIG). ML II purchased from the AIG subsidiaries non-agency RMBS with an approximate fair value of $20.8 billion as of October 31, 2008. ML II financed this purchase by borrowing $19.5 billion from the FRBNY and through the deferral of $1.0 billion of the purchase price payable to the AIG subsidiaries. Both the loan and the fixed deferred purchase price were paid in full plus interest in 2012.

On March 19, 2012, ML II was dissolved and the FRBNY began the process of winding up in accordance with and as required by Delaware law and the agreements governing ML II. As part of that process, during the year ended December 31, 2014, after paying expenses, ML II distributed its remaining assets to the FRBNY and to AIG and its subsidiaries in accordance with the agreement. Distributions were made to the Bank in the form of contingent interest totaling $53 million and to AIG and its subsidiaries in the form of variable deferred purchase price totaling $11 million during the year ended December 31, 2014. On November 12, 2014, a certificate of cancellation was filed in the office of the Delaware Secretary of State, thereby terminating the legal existence of ML II.

d. Maiden Lane III LLC

The FRBNY extended credit to ML III, a Delaware LLC formed to purchase ABS collateralized debt obligations (CDOs) from certain third-party counterparties of AIG Financial Products Corp (AIGFP). ML III borrowed approximately $24.3 billion from the FRBNY, and AIG provided an equity contribution of $5.0 billion to ML III. The proceeds were used to purchase ABS CDOs with a fair value of $29.6 billion as of October 31, 2008. The counterparties received $26.8 billion net of principal and interest received and finance charges paid on the ABS CDOs. The LLC also made a payment to AIGFP of $2.5 billion representing the over collateralization previously posted by AIGFP and retained by counterparties in respect of terminated CDS as compared to the LLC's fair value acquisition prices calculated as of October 31, 2008. The aggregate amount of principal and interest proceeds from CDOs received after the announcement date, but prior to the settlement dates, net of financing costs, amounted to approximately $0.3 billion and therefore reduced the amount of funding required at settlement by $0.3 billion, from $29.6 billion to $29.3 billion. Both the loan and the equity contribution were repaid in full plus interest in 2012.

On September 10, 2012, ML III was dissolved, and the FRBNY began the process of winding up in accordance with and as required by Delaware law and the agreements governing ML III. As part of that process, during the year ended December 31, 2014, after paying expenses, ML III distributed its remaining assets to the FRBNY and to AIG in accordance with the agreement. Distributions were made to the Bank in the form of contingent interest totaling $14 million and to AIG in the form of excess amounts totaling $7 million during the year ended December 31, 2014. On November 12, 2014, a certificate of cancellation was filed in the office of the Delaware Secretary of State, thereby terminating the legal existence of ML III.

e. TALF LLC

As discussed in Note 4, TALF LLC was formed in connection with the implementation of the TALF. TALF LLC was established for the limited purpose of purchasing any ABS that might be surrendered to the FRBNY by borrowers under the TALF or, in certain limited circumstances, TALF loans. Funding for TALF LLC's purchases of these securities was derived first through the fees received by TALF LLC from the FRBNY for this commitment and any interest earned on its investments. If that funding had proved insufficient for the purchases TALF LLC had committed to make under the put agreement, the Treasury and the FRBNY had committed to lend to TALF LLC. On March 25, 2009, the Treasury provided initial funding to TALF LLC of $100 million. On January 15, 2013, the Treasury and the FRBNY agreed to eliminate their funding commitments to TALF LLC. Pursuant to this agreement on February 6, 2013, TALF LLC repaid in full the outstanding principal and accrued interest on the Treasury loan.

On October 31, 2014, TALF LLC was dissolved and the FRBNY began the process of winding up in accordance with and as required by Delaware law and the agreements governing TALF LLC. As part of that process, during the year ended December 31, 2014, after paying expenses, TALF LLC distributed its remaining assets to the Treasury and to the FRBNY in accordance with the agreement. Distributions were made in the form of contingent interest to the Treasury totaling $98 million and $573 million and to the FRBNY totaling $11 million and $64 million during the years ended December 31, 2014 and 2013, respectively. On November 26, 2014, a certificate of cancellation was filed in the office of the Delaware Secretary of State, thereby terminating the legal existence of TALF LLC.

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 mortgage loans 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 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 and cash equivalents on the basis of last available bid prices or current market quotations provided by dealers or pricing services selected under the supervision of the FRBNY's designated investment manager. To determine the value of a particular investment, pricing services may use certain information with respect to market transactions in such investments or comparable investments, various relationships observed in the market between investments, quotations from dealers, and pricing metrics and calculated yield measures based on valuation methodologies commonly employed in the market for such investments. The fair value of swap contracts is provided by JPMC as calculation agent and is reviewed by the investment manager.

Market quotations may not represent fair value in certain instances in which the investment manager and the VIEs believe that facts and circumstances applicable to an issuer, a seller, a purchaser, or the market for a particular investment cause such market quotations to not reflect the fair value of an investment. In such cases or when market quotations are unavailable, the investment manager applies proprietary valuation models that use collateral performance scenarios and pricing metrics derived from the reported performance of investments with similar characteristics as well as available market data to determine fair value.

Due to 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 from the values that may ultimately be realized and paid.

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 trading activity for particular investments or current market quotations are not available or reflective of the fair value of an instrument, the valuation is based on models that use inputs, estimates, and assumptions that market participants would use in pricing the investments. To the extent that such inputs, estimates, and assumptions are not observable, the investments are classified within Level 3 of the valuation hierarchy. For instance, in valuing certain debt securities and whole mortgage loans, the determination of fair value is based on proprietary valuation models when external price information is not available. 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.

For the swap contracts, 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).

iii. 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 Level 3 assets and liabilities as of December 31, 2014 (in millions, except for input values):

Investment	Fair value	Principal valuation technique	Unobservable inputs	Range of input values	Weighted average[2]
Swap contracts, net	$125	Discounted cash flows	Credit spreads[1]	2,893 bps–12,683 bps	9,023 bps
			Discount rate	5%–25%	17%
			Constant prepayment rate	0%–8%	1%
			Constant default rate	0%–99%	6%
			Loss severity	40%–95%	52%

1 Implied spread on closing market prices for index positions.
2 Weighted averages are calculated based on the fair value of the respective instruments.

The following table presents the valuation techniques and ranges of significant unobservable inputs generally used to determine the fair values of Level 3 assets and liabilities as of December 31, 2013 (in millions, except for input values):

Investment	Fair value	Principal valuation technique	Unobservable inputs	Range of input values	Weighted average[2]
Commercial mortgage loans	$507	Discounted cash flows	Discount rate	4%–13%	12%
			Property capitalization rate	7%	7%
			Net operating income growth rate	3%–5%	4%
Swap contracts, net	$152	Discounted cash flows	Credit spreads[1]	2,259 bps–8,870 bps	6,299 bps
			Discount rate	5%–25%	15%
			Constant prepayment rate	0%–17%	3%
			Constant default rate	0%–30%	6%
			Loss severity	40%–95%	54%

1 Implied spread on closing market prices for index positions.
2 Weighted averages are calculated based on the fair value of the respective instruments.

iv. Sensitivity of 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. Commercial mortgage loans

In general, an increase in isolation in either the discount rate or the property capitalization rate, which is the ratio of net operating income produced by an asset to 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. Swap contracts

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 have a different impact on the fair value measurement of an individual CDS based on the structure, payment status, and other relevant contractual details of its underlying reference obligation. 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, 2014 by ASC 820 hierarchy (in millions):

	Level 1[1]	Level 2[1]	Level 3	Netting[2]	Total fair value
Assets:					
Short-term investments	$1,399	$ -	$ -	$ -	$1,399
Cash equivalents [3]	274	-	-	-	274
Swap contracts	-	-	240	(116)	124
Other investments	-	6	5	-	11
Total assets	$1,673	$6	$245	$(116)	$1,808
Liabilities:					
Swap contracts	$ -	$ -	$115	$ (74)	$ 41

[1] There were no transfers between Level 1 and Level 2 during the year ended December 31, 2014.

[2] Derivative receivables and payables and the related cash collateral received and paid are shown net when a master netting agreement exists.

[3] Cash equivalents consist primarily of money market funds.

The following tables present the financial instruments recorded in VIEs at fair value as of December 31, 2013 by ASC 820 hierarchy (in millions):

	Level 1[1]	Level 2[1]	Level 3	Netting[2]	Total fair value
Assets:					
Short-term investments	$ 530	$ -	$ -	$ -	$ 530
Cash equivalents[3]	569	-	-	-	569
Commercial mortgage loans	-	-	507	-	507
Swap contracts	-	-	345	(187)	158
Other investments[4]	-	2	8	-	10
Total assets	$1,099	$ 2	$860	$(187)	$1,774
Liabilities:					
Beneficial interest in consolidated VIEs	$ -	$116	$ -	$ -	$ 116
Swap contracts	-	-	193	(120)	73
Total liabilities	$ -	$116	$193	$(120)	$ 189

1 There were no transfers between Level 1 and Level 2 during the year ended December 31, 2013.

2 Derivative receivables and payables and the related cash collateral received and paid are shown net when a master netting agreement exists.

3 Cash equivalents consist primarily of money market funds.

4 Investments with a fair value of $2 million and $6 million that were classified as Level 2 and Level 3 instruments respectively, as of December 31, 2013 were recategorized from "Non-agency RMBS" to "Other investments" to conform to the current year presentation.

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, 2014 (in millions). Unrealized gains and losses related to those assets still held at December 31, 2014 are reported as a component of "Investments held by consolidated variable interest entities, net" in the Combined Statements of Condition.

	Fair value December 31, 2013	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, 2014	Change in unrealized gains (losses) related to financial instruments held at December 31, 2014
Assets:							
Commercial mortgage loans	$507	$(523)	$16	$-	$ -	$ -	$ -
Other investments	8	4	(4)	-	(3)	5	(4)
Total assets	$515	$(519)	$12	$-	$(3)	$ 5	$ (4)
Swap contracts, net	$152	$ (48)	$21	$-	$ -	$125	$13

1 The amount of transfers is based on the fair values of the transferred assets at the beginning of the reporting period.

2 Other investments, with a December 31, 2013 fair value of $3 million, were transferred from Level 3 to Level 2 because they are valued at December 31, 2014 based on quoted prices for identical or similar assets in non-active markets or model-based techniques for which all significant inputs are observable (Level 2). These investments were valued in the prior year based on non-observable inputs (Level 3).

The following table presents the gross components of purchases, sales, issuances, and settlements, net, shown for the year ended December 31, 2014 (in millions):

	Purchases	Sales	Issuances	Settlements[1]	Purchases, sales, issuances, and settlements, net
Assets:					
Commercial mortgage loans	$ -	$ -	-	(523)	(523)
Other investments	1	-	-	3	4
Total assets	$1	$ -	$-	$(520)	$(519)
Swap contracts, net	$ -	$(24)	$-	$ (24)	$ (48)

[1] 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, 2013 (in millions). Unrealized gains and losses related to those assets still held at December 31, 2013 are reported as a component of "Investments held by consolidated variable interest entities, net" in the Combined Statements of Condition.

	Fair value December 31, 2012	Purchases, sales, and settlements, net	Net realized/ unrealized gains (losses)	Gross transfers in[1,2]	Gross transfers out[1,2]	Fair value December 31, 2013	Change in unrealized gains (losses) related to financial instruments held at December 31, 2013
Assets:							
Commercial mortgage loans	$466	$(163)	$204	$ -	$-	$507	$183
Other investments[3]	55	(69)	18	4	-	8	(4)
Total assets	$521	$(232)	$222	$4	$-	$515	$179
Swap contracts, net	$473	$(268)	$ (53)	$ -	$-	$152	$ (53)

[1] The amount of transfers is based on the fair values of the transferred assets at the beginning of the reporting period.

[2] Other investments, with a December 31, 2012 fair value of $4 million, were transferred from Level 2 to Level 3 because they are valued at December 31, 2013 based on non-observable inputs (Level 3). These investments were valued in the prior year based on quoted prices for identical or similar assets in non-active markets or model-based techniques for which all significant inputs are observable (Level 2).

[3] Investments with a fair value of $6 million and $0 million as of December 31, 2013 were recategorized from "Non-agency RMBS" and "CDOs," respectively, to "Other investments" to conform to the current year presentation. All other associated activity for those same asset classes was also recategorized to the "Other investments" line.

The following table presents the gross components of purchases, sales, issuances, and settlements, net, shown for the year ended December 31, 2013 (in millions):

	Purchases	Sales	Issuances	Settlements[1]	Purchases, sales, issuances, and settlements, net
Assets:					
Commercial mortgage loans	$ -	$ (88)	$ -	$ (75)	$(163)
Other investments[2]	7	(79)	-	3	(69)
Total assets	$7	$(167)	$ -	$ (72)	$(232)
Swap contracts, net	$ -	$(153)	$ -	$(115)	$(268)

1 Includes paydowns.

2 Investments with net activity of $4 million and $0 million for the year ended December 31, 2013 were recategorized from "Non-agency RMBS" and "CDOs," respectively, to "Other investments" to conform to the current year presentation. All other activity for those same asset classes was also recategorized to the "Other investments" line.

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 "Operating Expenses: Other" 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):

	2014	2013
Bank premises and equipment:		
Land and land improvements	$ 397	$ 395
Buildings	2,748	2,693
Building machinery and equipment	564	554
Construction in progress	33	37
Furniture and equipment	1,032	1,006
Subtotal	4,774	4,685
Accumulated depreciation	(2,144)	(2,032)
Bank premises and equipment, net	$ 2,630	$ 2,653
Depreciation expense, for the years ended December 31	$ 206	$ 202

Bank premises and equipment at December 31 included the following amounts for capitalized leases (in millions):

	2014	2013
Leased premises and equipment under capital leases	$ 26	$ 27
Accumulated depreciation	(20)	(18)
Leased premises and equipment under capital leases, net	$ 6	$ 9
Depreciation expense related to leased premises and equipment under capital leases, for the years ended December 31	$ 6	$ 6

The Reserve Banks lease space to outside tenants with remaining lease terms of up to 11 years. Rental income from such leases was $37 million and $35 million for the years ended December 31, 2014 and 2013, respectively, and is reported as a component of "Non-interest (loss) 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, 2014, are as follows (in millions):

2015	$ 33
2016	29
2017	25
2018	22
2019	21
Thereafter	64
Total	$194

The Reserve Banks had capitalized software assets, net of amortization, of $376 million and $356 million at December 31, 2014 and 2013, respectively. Amortization expense was $117 million and $73 million for the years ended December 31, 2014 and 2013, 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.

Software assets related to a multiyear ACH technology initiative were impaired and written off due to the suspension of development efforts. The resulting asset impairment loss of $23 million for the year ended December 31, 2014 is reported as a component of "Operating expenses: Other" in the Combined Statements of Income and Comprehensive Income. The Reserve Banks had no impairment losses in 2013.

As result of the FRBC's restructuring plan discussed in Note 12, the FRBC sold its Pittsburgh facility during the third quarter of 2013. This sale resulted in a $1.9 million loss, of which $0.2 million is reflected in "Operating Expense: Occupancy" and $1.7 million is reflected in "Operating Expense: 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, 2014, the Reserve Banks were obligated under noncancelable leases for premises and equipment with remaining terms ranging from 1 to approximately 14 years. These leases provide for increased lease 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 $13 million and $17 million for the years ended December 31, 2014 and 2013, respectively.

Future minimum lease payments under noncancelable operating leases, net of sublease rentals, with remaining terms of one year or more, at December 31, 2014, are as follows (in millions):

2015	$ 8
2016	6
2017	6
2018	6
2019	5
Thereafter	17
Future minimum lease payments	$48

At December 31, 2014, the Reserve Banks had unrecorded unconditional purchase commitments and long-term obligations extending through the year 2022 with a remaining fixed commitment of $191 million. These commitments are for maintenance of currency processing machines and have variable and/or fixed components. Purchases of $44 million and $37 million were made against these commitments during 2014 and 2013, respectively. 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):

2015	$ 7
2016	25
2017	26
2018	26
2019	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 counsel, the legal actions and claims will be resolved without material adverse effect on the financial position or results of operations of the Reserve Bank.

Other Commitments

In support of financial market stability activities, the FRBNY may enter into commitments to provide financial assistance to financial institutions. There were no remaining unfunded contractual commitments related to commercial mortgage loans in ML at December 31, 2014. The FRBNY had remaining unfunded contractual commitments related to commercial mortgage loans in ML of $40 million at December 31, 2013.

(9) Retirement and Thrift Plans

Retirement Plans

The Reserve Banks currently offer three defined benefit retirement plans to its 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 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. 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 FRBNY, on behalf of the System, recognizes the net asset or net liability and costs associated with the System Plan in its consolidated financial statements. During the years ended December 31, 2014 and 2013, 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):

	2014	2013
Estimated actuarial present value of projected benefit obligation at January 1	$10,476	$11,468
Service cost-benefits earned during the period	355	407
Interest cost on projected benefit obligation	530	472
Actuarial loss (gain)	2,630	(1,527)
Contributions by plan participants	5	5
Special termination benefits	15	6
Benefits paid	(370)	(355)
Estimated actuarial present value of projected benefit obligation at December 31	$13,641	$10,476

In October 2014, the Society of Actuaries released new mortality tables (RP-2014) and mortality projection scales (MP-2014) for use in the valuation of benefits liabilities. The adoption of these new mortality tables and new mortality projection scales, adjusted for the System's recent mortality experience and the retirement rates of System retirees, resulted in a net increase of the System Plan projected benefit obligation of approximately $935 million.

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):

	2014	2013
Estimated plan assets at January 1 (of which $10,687 and $9,440 is measured at fair value as of January 1, 2014 and 2013, respectively)	$10,808	$ 9,566
Actual return on plan assets	1,734	683
Contributions by the employer	492	909
Contributions by plan participants	5	5
Benefits paid	(370)	(355)
Estimated plan assets at December 31 (of which $12,608 and $10,687 is measured at fair value as of December 31, 2014 and 2013, respectively)	$12,669	$10,808
Funded status and accrued pension benefit costs	$ (972)	$ 332
Amounts included in accumulated other comprehensive loss are shown below:		
Prior service cost	$ (356)	$ (456)
Net actuarial loss	(3,484)	(1,928)
Total accumulated other comprehensive loss	$ (3,840)	$ (2,384)

The FRBNY, on behalf of the System, funded $480 million and $900 million during the years ended December 31, 2014 and 2013, 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 2014 and 2013, the Bureau funded contributions of $12 million and $9 million, respectively.

Accrued pension benefit costs are reported as a component of "Other Assets" if the funded status is a net asset or "Accrued benefit costs" if the funded status is a net liability 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 $11,985 million and $9,308 million at December 31, 2014 and 2013, respectively.

The weighted-average assumptions used in developing the accumulated pension benefit obligation for the System Plan as of December 31 were as follows:

	2014	2013
Discount rate	4.05%	4.92%
Rate of compensation increase	4.00%	4.50%

Net periodic benefit expenses for the years ended December 31, 2014 and 2013, 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:

	2014	2013
Discount rate	4.92%	4.00%
Expected asset return	7.00%	6.50%
Rate of compensation increase	4.50%	4.50%

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 and for various asset classes; 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):

	2014	2013
Service cost-benefits earned during the period	$ 355	$ 407
Interest cost on projected benefit obligation	530	472
Amortization of prior service cost	100	103
Amortization of net loss	101	284
Expected return on plan assets	(759)	(638)
Net periodic pension benefit expense	327	628
Special termination benefits	15	6
Bureau of Consumer Financial Protection contributions	(12)	(9)
Total periodic pension benefit expense	$ 330	$ 625

Estimated amounts that will be amortized from accumulated other comprehensive loss into net periodic pension benefit expense in 2015 are shown below (in millions):

Prior service cost	$ 93
Net actuarial loss	205
Total	$298

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):

2015	$ 418
2016	442
2017	469
2018	499
2019	530
2020–2024	3,126
Total	$5,484

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. At December 31, 2014, the System Plan's assets were held in ten investment vehicles: three actively-managed long-duration fixed income portfolios, a passively-managed long-duration fixed income portfolio, an indexed U.S. equity fund, an indexed non-U.S. developed-markets equity fund, an indexed emerging-markets equity fund, a private equity limited partnership, a private equity separate account, and a money market fund.

The diversification of the System Plan's investments is designed to limit concentration of risk and the risk of loss related to an individual asset class. The three actively-managed 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. This custom benchmark was selected as a proxy to match the liabilities of the Plan and the guidelines for these portfolios are designed to limit portfolio deviations from the benchmark. The passively-managed 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) World ex-US Investible Markets Index (IMI), which includes stocks from 23 markets deemed by MSCI to be "developed markets." The indexed emerging-markets equity fund is intended to track the MSCI Emerging Markets IMI Index, which includes stocks from 21 markets deemed by MSCI to be "emerging markets." The three indexed equity funds include stocks from across the market capitalization spectrum (i.e., large-, mid- and small-cap stocks). The private equity limited partnership invests globally across various private equity strategies and the private equity separate account invests in other private equity limited partnerships globally across various strategies. The private equity separate account invests in various private equity funds and coinvestment opportunities globally in private companies and targets returns in excess of public markets over a complete market cycle. Finally, the money market fund, which invests in short term Treasury and agency debt and repurchase agreements backed by Treasury and agency debt, 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 the passively-managed long-duration fixed income portfolio) or the investment guidelines (for the remaining investments). 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	
		2014	2013
U.S. equities	26.3%	25.8%	29.7%
International equities	18.5%	17.6%	18.3%
Emerging market equities	5.2%	4.9%	1.9%
Fixed income	50.0%	51.2%	49.4%
Cash	0.0%	0.5%	0.7%
Total	100.0%	100.0%	100.0%

In June 2013, the CIP approved a change in the allocation and benchmarks for the System Plan's public equity portfolio. The new benchmark is the MSCI All Country World Investible Markets Index. This benchmark change has reduced the System Plan's holdings in U.S. equities, increased the System Plan's holdings of developed markets international equities, and added an investment in emerging market equities. The CIP approved a phased six-month implementation period for these changes, commencing in September 2013 for developed market equities and November 2013 for emerging market equities.

Employer contributions to the System Plan may be determined using different assumptions than those required for financial reporting. The System Plan's anticipated funding level for 2015 is $480 million. In 2015, the FRBNY plans to make monthly contributions of $40 million and will reevaluate the monthly contributions upon completion of the 2015 actuarial valuation. The Bank's projected benefit obligation, funded status, and net pension expenses for the BEP and the SERP at December 31, 2014 and 2013, and for the years then ended, were not material.

Determination of Fair Value

The System Plan's publicly available 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	2014			
	Level 1[1]	Level 2[1]	Level 3	Total
Short-term investments[2]	$ 27	$ 94	$ -	$ 121
Treasury and Federal agency securities	111	2,179	-	2,290
Corporate bonds	-	2,109	-	2,109
Other fixed income securities	-	443	-	443
Commingled funds	-	7,598	-	7,598
Private Equity	-	-	47	47
Total	$138	$12,423	$47	$12,608

1 There were no transfers between Level 1 and Level 2 during the year.
2 Short-term investments includes cash equivalents of $63 million.

Description	2013			
	Level 1[1]	Level 2[1]	Level 3	Total
Short-term investments[2]	$14	$ 126	$ -	$ 140
Treasury and Federal agency securities	38	1,565	-	1,603
Corporate bonds	-	1,773	-	1,773
Other fixed income securities	-	362	-	362
Commingled funds	-	6,795	-	6,795
Private equity	-	-	14	14
Total	$52	$10,621	$14	$10,687

1 There were no transfers between Level 1 and Level 2 during the year.
2 Short-term investments includes cash equivalents of $78 million.

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, 2014 and 2013, a portion of short-term investments was available for futures trading. There were $1 million and $8 million of Treasury securities pledged as collateral for the years ended December 31, 2014 and 2013, 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 match 100 percent of the first 6 percent of employee contributions from the date of hire and provides an automatic employer contribution of 1 percent of eligible pay. The Reserve Banks' Thrift Plan contributions totaled $113 million and $108 million for the years ended December 31, 2014 and 2013, 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):

	2014	2013
Accumulated postretirement benefit obligation at January 1	$1,538	$1,755
Service cost-benefits earned during the period	63	75
Interest cost on accumulated benefit obligation	75	67
Net actuarial loss (gain)	164	(290)
Curtailment gain	(2)	-
Special termination benefits loss	-	1
Contributions by plan participants	25	24
Benefits paid	(92)	(93)
Medicare Part D subsidies	5	5
Plan amendments	(7)	(6)
Accumulated postretirement benefit obligation at December 31	$1,769	$1,538

At December 31, 2014 and 2013, the weighted-average discount rate assumptions used in developing the postretirement benefit obligation were 3.96 percent and 4.79 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. The System Plan discount rate assumption setting convention uses an unrounded rate.

Following is a reconciliation of the beginning and ending balance of the plan assets, and the unfunded postretirement benefit obligation and accrued postretirement benefit costs (in millions):

	2014	2013
Fair value of plan assets at January 1	$ -	$ -
Contributions by the employer	62	64
Contributions by plan participants	25	24
Benefits paid	(92)	(93)
Medicare Part D subsidies	5	5
Fair value of plan assets at December 31	$ -	$ -
Unfunded obligation and accrued postretirement benefit cost	$1,769	$1,538
Amounts included in accumulated other comprehensive loss are shown below:		
Prior service cost	$ 26	$ 29
Net actuarial loss	(355)	(201)
Deferred curtailment gain	1	-
Total accumulated other comprehensive loss	$ (328)	$ (172)

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:

	2014	2013
Health-care cost trend rate assumed for next year	6.60%	7.00%
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	4.75%	5.00%
Year that the rate reaches the ultimate trend rate	2019	2019

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, 2014 (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	$ 27	$ (22)
Effect on accumulated postretirement benefit obligation	240	(202)

The following is a summary of the components of net periodic postretirement benefit expense for the years ended December 31 (in millions):

	2014	2013
Service cost-benefits earned during the period	$ 63	$ 75
Interest cost on accumulated benefit obligation	75	67
Amortization of prior service cost	(10)	(11)
Amortization of net actuarial loss	10	46
Total periodic expense	138	177
Special termination benefits loss	-	1
Net periodic postretirement benefit expense	$138	$178

Estimated amounts that will be amortized from accumulated other comprehensive loss into net periodic postretirement benefit expense in 2015 are shown below:

Prior service cost	$(10)
Net actuarial loss	23
Total	$ 13

Net postretirement benefit costs are actuarially determined using a January 1 measurement date. At January 1, 2014 and 2013, the weighted-average discount rate assumptions used to determine net periodic postretirement benefit costs were 4.79 percent and 3.75 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.

Special termination benefits in 2014 are immaterial and the recognition of special termination benefit losses in 2013 is primarily the result of enhanced retirement benefits provided to employees during the restructuring described in Note 12. A curtailment gain associated with restructuring programs that are described in Note 12 was recognized in net income in the year ended December 31, 2014, related to employees who terminated employment during 2014. A deferred curtailment gain was recorded in 2014 as a component of accumulated other comprehensive loss; the gain will be recognized in net income in 2015 and future years when the related employees terminate employment.

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 provided 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 $5 million and $4 million in the years ended December 31, 2014 and 2013, respectively. Expected receipts in 2015, related to benefits paid in the years ended December 31, 2014 and 2013, are $2 million.

Following is a summary of expected postretirement benefit payments (in millions):

	Without subsidy	With subsidy
2015	$ 77	$ 72
2016	80	75
2017	84	78
2018	88	81
2019	92	85
2020–2024	526	482
Total	$947	$873

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, 2014 and 2013, were $156 million and $148 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 2014 and 2013 operating expenses were $29 million and $7 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 loss as of December 31 (in millions):

	2014			2013		
	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	$(2,384)	$(172)	$(2,556)	$(4,343)	$(502)	$(4,845)
Change in funded status of benefit plans:						
Prior service costs arising during the year	-	7	7	-	5	5
Amortization of prior service cost	100[1]	(10)[2]	90	103[1]	(11)[2]	92
Change in prior service costs related to benefit plans	100	(3)	97	103	(6)	97
Net actuarial (loss) gain arising during the year	(1,657)	(164)	(1,821)	1,572	290	1,862
Deferred curtailment gain	-	1	1	-	-	-
Amortization of net actuarial loss	101[1]	10[2]	111	284[1]	46[2]	330
Change in actuarial (losses) gains related to benefit plans	(1,556)	(153)	(1,709)	1,856	336	2,192
Change in funded status of benefit plans–other comprehensive (loss) income	(1,456)	(156)	(1,612)	1,959	330	2,289
Balance at December 31	$(3,840)	$(328)	$(4,168)	$(2,384)	$(172)	$(2,556)

1 Reclassification is reported as a component of "Operating Expenses: Net periodic pension expense" in the Combined Statements of Income and Comprehensive Income.

2 Reclassification is reported as a component of "Operating Expenses: Salaries and benefits" in the Combined Statements of Income and Comprehensive Income.

Additional detail regarding the classification of accumulated other comprehensive loss is included in Note 9 and 10.

(12) Business Restructuring Charges

In 2014, the Treasury announced a plan to reduce the number of Reserve Banks providing fiscal agent services to the Treasury. The new infrastructure will involve consolidation of substantially all operations to the FRBC, the FRBKC, FRBNY, and the FRBSL.

The Reserve Banks had no material business restructuring charges in 2013.

In years prior to 2012, the U.S. Treasury announced a restructuring initiative to consolidate the Treasury Retail Securities. As a result of this initiative, Treasury Retail Securities operations performed by the FRBC were consolidated into the Federal Reserve Bank of Minneapolis. The remaining liability as of December 31, 2014 and 2013 related to the FRBC's Treasury Retail Securities restructuring initiative was immaterial.

Following is a summary of financial information related to the restructuring plans (in millions):

	2014 restructuring plans
Information related to restructuring plans as of December 31, 2014:	
Total expected costs related to restructuring activity	$ 21
Estimated future costs related to restructuring activity	5
Expected completion date	2018
Reconciliation of liability balances:	
Balance at December 31, 2013	$ -
Employee separation costs	14
Other costs	1
Adjustments	1
Balance at December 31, 2014	$ 16

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.

Other costs include retention pay and are shown 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 Reserve Bank assets, including software, buildings, leasehold improvements, furniture, and equipment, are discussed in Note 7. Costs associated with enhanced pension benefits for all Reserve Banks are recorded on the books of the FRBNY as discussed in Note 9. Costs associated with enhanced postretirement benefits are disclosed in Note 10.

(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 earnings remittances to the Treasury. 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):

	2014	2013
Dividends on capital stock	$ 1,686	$ 1,650
Transfer to surplus–amount required to equate surplus with capital paid-in	1,065	147
Earnings on remittances to Treasury	96,902	79,633
Total distribution	$99,653	$81,430

(14) Subsequent Events

There were no subsequent events that require adjustments to or disclosures in the combined financial statements as of December 31, 2014. Subsequent events were evaluated through March 11, 2015, which is the date that the combined financial statements were available to be 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 (CFPB), 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 2014, the OIG issued 25 audit, inspection, and evaluation reports (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 three arrests, 33 indictments, and eight convictions, as well as $27,181,728 in criminal fines and restitution. Twenty-two investigations were opened, and 24 investigations were closed during the year. The OIG also issued its first listing of major management challenges facing the Board, as well as a listing for the CFPB. Further, the OIG issued two *Semiannual Reports to Congress* and performed approximately 60 reviews of legislation and regulations related to the operations of the Board, the CFPB, or the OIG.

For more information and to obtain copies of OIG reports, visit the OIG website at http://oig.federalreserve.gov/. Specific details about the OIG's body of work also may be found in the OIG's *Work Plan* and *Semiannual Report to Congress*.

Table 1. OIG audit, inspection, and evaluation reports issued in 2014

Report title	Month issued
Audit of the CFPB's Civil Penalty Fund	January
Audit of the Board's Data Center Relocation	February
Opportunities Exist to Achieve Operational Efficiencies in the Board's Management of Information Technology Services	February
Board of Governors of the Federal Reserve System Financial Statements as of and for the Years Ended December 31, 2013 and 2012, and Independent Auditors' Reports	March
Federal Financial Institutions Examination Council Financial Statements as of and for the Years Ended December 31, 2013 and 2012, and Independent Auditors' Reports	March
Transfer of Office of Thrift Supervision Functions Is Completed	March
The CFPB Can Improve the Efficiency and Effectiveness of Its Supervisory Activities	March
The Board's Law Enforcement Unit Could Benefit From Enhanced Oversight and Controls to Ensure Compliance With Applicable Regulations and Policies	March
Opportunities Exist for the Board to Improve Recordkeeping, Cost Estimation, and Cost Management Processes for the Martin Building Construction and Renovation Project	March
The CFPB Has Established Effective GPRA Processes, but Opportunities Exist for Further Enhancement	June
Response to the January 29, 2014, Congressional Request Regarding the CFPB's Headquarters Renovation Project	June
The Board Should Enhance Its Policies and Procedures Related to Conference Activities	June
Security Control Review of the CFPB's Cloud Computing–Based General Support System (internal report)	July
Enforcement Actions and Professional Liability Claims Against Institution-Affiliated Parties and Individuals Associated with Failed Institutions	July
Security Control Review of the Board's E2 Solutions Travel Management System (internal report)	August
The CFPB Complies With Section 1100G of the Dodd-Frank Act, but Opportunities Exist for the CFPB to Enhance Its Process	September
Audit of the CFPB's Acquisition and Contract Management of Select Cloud Computing Services	September
Opportunities Exist to Enhance the Onsite Reviews of the Reserve Banks' Wholesale Financial Services	September
Opportunities Exist to Enhance the Board's Oversight of Future Complex Enforcement Actions	September
The Board Should Enhance Its Supervisory Processes as a Result of Lessons Learned From the Federal Reserve's Supervision of JPMorgan Chase & Company's Chief Investment Office (internal report)	October
The Board Can Better Coordinate Its Contingency Planning and Continuity of Operations Program	October
2014 Audit of the Board's Information Security Program	November
2014 Audit of the CFPB's Information Security Program	November
Opportunities Exist to Improve the Operational Efficiency and Effectiveness of the Board's Information Security Life Cycle	December
Fiscal Year 2014 Risk Assessment of the CFPB's Purchase Card and Travel Card Programs	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 the GAO to conduct additional audits with respect to these operations. In 2014, the GAO completed 21 projects that involved the Federal Reserve (table 1). Fifteen projects were ongoing as of December 31, 2013 (table 2).

Table 1. Reports completed during 2014

Report title	Report number	Month issued (2014)
Dodd-Frank Regulations: Regulators' Analytical and Coordination Efforts	GAO-15-81	December
Bank Capital Reforms: Initial Effects of Basel III on Capital, Credit, and International Competitiveness	GAO-15-67	November
Financial Stability Oversight Council: Further Actions Could Improve the Nonbank Designation Process	GAO-15-51	November
Housing Finance System: A Framework for Assessing Potential Changes	GAO-15-131	October
U.S. Currency: Reader Program Should Be Evaluated While Other Accessibility Features for Visually Impaired Persons Are Developed	GAO-14-823	September
Consumer Financial Protection Bureau: Some Privacy and Security Procedures for Data Collections Should Continue Being Enhanced	GAO-14-758	September
Federal Rulemaking: Agencies Included Key Elements of Cost-Benefit Analysis, but Explanations of Regulations' Significance Could Be More Transparent	GAO-14-714	September
Older Americans: Inability to Repay Student Loans May Affect Financial Security of a Small Percentage of Retirees	GAO-14-866T	September
Troubled Asset Relief: Government's Exposure to Ally Financial Lessens as Treasury's Ownership Share Declines	GAO-14-698	August
Large Bank Holding Companies: Expectations of Government Support	GAO-14-621	July
Small Business Administration: Office of Advocacy Needs to Improve Controls over Research, Regulatory, and Workforce Planning Activities	GAO-14-525	July
Virtual Currencies: Emerging Regulatory, Law Enforcement, and Consumer Protection Challenges	GAO-14-496	June
Debt Management: Floating Rate Notes Can Help Treasury Meet Borrowing Goals, but Additional Actions Are Needed to Help Manage Risk	GAO-14-535	June
Foreclosure Review: Regulators Could Strengthen Oversight and Improve Transparency of the Process	GAO-14-376	April
International Financial Reforms: U.S. and Other Jurisdictions' Efforts to Develop and Implement Reforms	GAO-14-261	April
Puerto Rico: Information on How Statehood Would Potentially Affect Selected Federal Programs and Revenue Sources	GAO-14-31	March
Credit Cards: Marketing to College Students Appears to Have Declined	GAO-14-225	February
College Debit Cards: Actions Needed to Address ATM Access, Student Choice, and Transparency	GAO-14-91	February
Troubled Asset Relief Program: More Efforts Needed on Fair Lending Controls and Access for Non-English Speakers in Housing Programs	GAO-14-117*	February
Servicemembers Civil Relief Act: Information on Mortgage Protections and Related Education Efforts	GAO-14-221	January
Information Security: Agency Responses to Breaches of Personally Identifiable Information Need to Be More Consistent	GAO-14-34	January

Note: In September 2014, the GAO terminated an engagement concerning the effect of low interest rates on seniors without issuing a formal report.

* A Spanish language summary of GAO-14-117 is available as GAO-14-457.

Table 2. Projects active at year-end 2014

Subject of project	Month initiated	Status
Regulatory actions and banking-related financial crises	May 2013	Open
Mortgage reforms	January 2014	Open
Duplication in the U.S. financial regulatory system	February 2014	Open
Financial audit of the fiscal year 2014 schedule of federal debt	February 2014	Open*
Cyber threats to banks	April 2014	Open
Lender-placed insurance	April 2014	Open
Effect of delays in raising the debt limit	July 2014	Open
International insurance capital standards	July 2014	Open
Status update on the bankruptcy of financial companies	August 2014	Open
Securities and Exchange Commission's oversight of national securities associations	August 2014	Open
Federal Reserve's payments system operations	October 2014	Open
Remittance service providers	October 2014	Open
International remittances update	November 2014	Open
Resolution plans for large financial institutions	November 2014	Open
Federal Reserve stress tests	December 2014	Open

Note: In February 2015, the GAO advised that the Federal Reserve was removed as an agency participant for the engagement on studen loan repayment programs.

* GAO-15-157, published on November 20, 2014, relates to this engagement.

13 Federal Reserve System Budgets

The Federal Reserve Board of Governors and the Federal Reserve Banks prepare annual budgets as part of their efforts to ensure appropriate stewardship and accountability. This section presents information on the 2014 budget performance of the Board and Reserve Banks, as well as their 2015 budgets, budgeting processes, and trends in expenses and employment.[1] This section also presents information on the costs of new currency.[2]

System Budgets Overview

Tables 1 and 2 summarize the Federal Reserve Board of Governors' and Federal Reserve Banks' 2014 budgeted and actual and 2015 budgeted operating expenses and employment.[3]

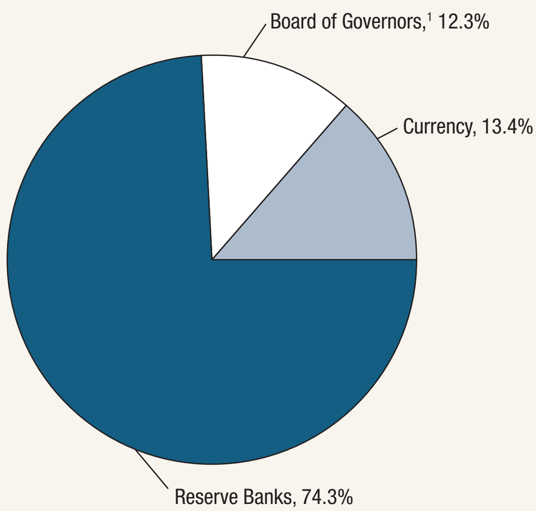
2014 Budget Performance

In carrying out its responsibilities in 2014, the Federal Reserve System incurred $4.0 billion in net expenses. Total spending of $5,050.4 million was offset by $1,005.5 million in revenue from priced services, claims for reimbursement, and other income. Total 2014 expenses were $183.0 million, or 3.5 percent, less than the amount budgeted for 2014.

2015 Operating Expense Budget

Budgeted 2015 operating expenses, net of revenue and reimbursements, are $256.5 million, or 6.3 percent, higher than 2014 actual expenses. The Reserve Bank budgets comprise almost three-quarters of the System budget (figure 1). Budgeted 2015 revenue from priced services is 4.3 percent lower than 2014 revenue, largely because of continued declines in check volume as customers shift to other payment methods. Claims for reimbursements are expected to increase 9.9 percent in 2015, reflecting increased expenses for several Treasury Department initiatives and as a result of transition costs related to the Treasury fiscal agent consolidation.[4]

Figure 1. Distribution of budgeted expenses of the Federal Reserve System, 2015



1. Includes expenses of the Office of Inspector General (OIG).

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1 Each budget covers one calendar year.

2 Before 2013, information about the budgeted expenses of the Board and Reserve Banks was presented in a separate report titled *Annual Report: Budget Review*. Copies of that report are available at www.federalreserve.gov/publications/budget-review/default.htm.

3 Substantially all employees of the Board and Reserve Banks participate in the Retirement Plan for Employees of the Federal Reserve System (System Plan). Reserve Bank employees at certain compensation levels participate in the Benefit Equalization Plan, and certain Reserve Bank officers participate in the Supplemental Retirement Plan for Select Officers of the Reserve Banks. The operating expenses of the Reserve Banks presented in this section do not include expenses related to the retirement plans; additional information about these expenses can be found in section 11, "Statistical Tables" (see "Table 10. Income and expenses of the Federal Reserve Banks, by Bank").

Board employees also participate in the Benefit Equalization Plan, and Board officers participate in the Pension Enhancement Plan for Officers of the Board of Governors of the Federal Reserve System (PEP). The operating expenses of the Board presented in this section include expenses related to Board participants in the Benefit Equalization Plan and PEP, but do not include expenses related to the System Plan.

4 In April 2014, the Treasury announced the consolidation of the fiscal agent services provided by the Federal Reserve Banks as

Table 1. Total operating expenses of the Federal Reserve System, net of receipts and claims for reimbursement, 2014–15
Millions of dollars, except as noted

Item	2014 budget	2014 actual	Variance 2014 actual to 2014 budget		2015 budget	Variance 2015 budget to 2014 actual	
			Amount	Percent		Amount	Percent
Board	584.2	565.3	-18.9	-3.2	629.3	64.0	11.3
OIG	26.9	25.4	-1.5	-5.6	29.0	3.6	14.2
Reserve Banks[1]	3,795.7	3,752.3	-43.3	-1.1	3,968.7	216.3	5.8
Currency	826.7	707.4	-119.3	-14.4	717.9	10.5	1.5
Total System operating expenses[2]	5,233.5	5,050.4	-183.0	-3.5	5,344.9	294.4	5.8
Revenue from priced services	423.6	433.1	9.5	2.3	414.4	-18.7	-4.3
Claims for reimbursement[3]	569.1	569.6	0.5	0.1	626.1	56.4	9.9
Other income[4]	2.7	2.7	0.0	0.5	2.9	0.2	6.7
Revenue and claims for reimbursement[5]	995.4	1,005.5	10.1	1.0	1,043.4	37.9	3.8
Total System operating expenses, net of revenue and claims for reimbursement	**4,238.1**	**4,045.0**	**-193.1**	**-4.6**	**4,301.5**	**256.5**	**6.3**

Note: Here and in subsequent tables, components may not sum to totals and may not yield percentages shown because of rounding.

1 Excludes Reserve Bank capital outlays as well as assessments by the Board of Governors for costs related to currency and the operations of the Board of Governors and the Consumer Financial Protection Bureau (CFPB).

2 Includes total operating expenses of the Federal Reserve Information Technology (FRIT) support function and the System's Office of Employee Benefits (OEB), the majority of which are in the Reserve Banks.

3 Reimbursable claims include the expenses of fiscal agency and depository services provided to the U.S. Treasury, other government agencies, and other fiscal principals.

4 Fees that depository institutions pay for the settlement component of the Fedwire Securities Service transactions for Treasury securities transfers.

5 Excludes annual assessments for the supervision of large financial companies pursuant to Regulation TT, which are not recognized as revenue or used to fund Board expenses. (See section 4, "Supervision and Regulation," for more information.)

Trends in Expenses and Employment

From the actual 2005 level to the budgeted 2015 amount, the total expenses of the Federal Reserve System have increased an average of 4.7 percent per year (figure 2). Over the same period, nondefense discretionary spending by the federal government has increased an average of 1.7 percent per year (figure 3). From 2005 through 2010, Federal Reserve System employment declined. It has subsequently increased because of requirements of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank Act) and responses to the financial crisis (figure 4).

Growth in supervision expenses over the past 10 years has been driven by additional supervisory

part of the federal government's effort to increase operational efficiency and effectiveness. Although the Treasury anticipates long-term savings, expenses increased in 2014 as select business lines prepared to transition to other Reserve Banks. Expenses are projected to increase in 2015 as services are consolidated from ten sites to four over the next several years. Increased expenses are primarily for severance and retention payments in exiting Banks.

Table 2. Employment in the Federal Reserve System, 2014–15

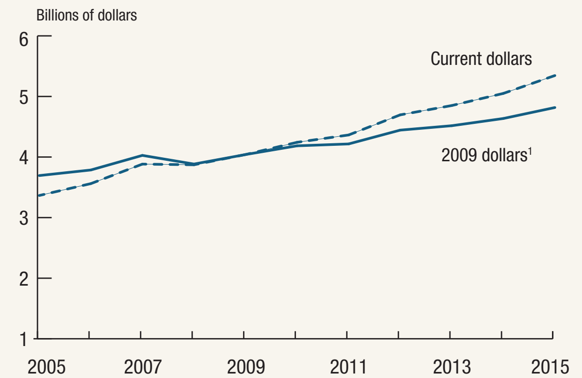
Item	2014 budget	2014 actual	Variance 2014 actual to 2014 budget		2015 budget	Variance 2015 budget to 2014 actual	
			Amount	Percent		Amount	Percent
Board[1]	2,620	2,625	5	0.2	2,673	48	1.8
OIG[1]	120	120	0	0.0	125	5	4.2
Reserve Banks[2]	18,979	18,744	-236	-1.2	19,295	552	2.9
Total System employment	**21,719**	**21,489**	**-231**	**-1.1**	**22,093**	**605**	**2.8**

Note: Employment numbers presented include authorized position counts for the Board and average number of personnel (ANP) for the Reserve Banks. ANP is the average number of employees expressed in terms of full-time positions for the period and includes outside agency help.

1 Budget represents authorized position count at the beginning of the year and actual represents authorized position count at year-end.

2 Includes employment of the FRIT support function and the OEB.

Figure 2. Total expenses of the Federal Reserve System, 2005–15

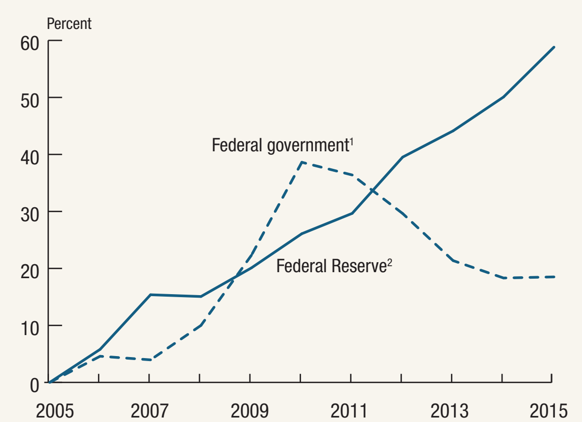


Note: For 2015, budgeted. Includes expenses of the OIG.

1. Calculated with the GDP price deflator.

resources needed to respond to the financial crisis, to continue to implement expanded supervisory responsibilities mandated by the Dodd-Frank Act, and to maintain appropriate coverage following growth in the number of supervised state member banks. Expense growth in the monetary policy area during the financial crisis has been followed by a focus on enhancing financial stability monitoring and dedicating additional resources to regional economic research.

Figure 3. Cumulative change in Federal Reserve System expenses and federal government expenses, 2005–15

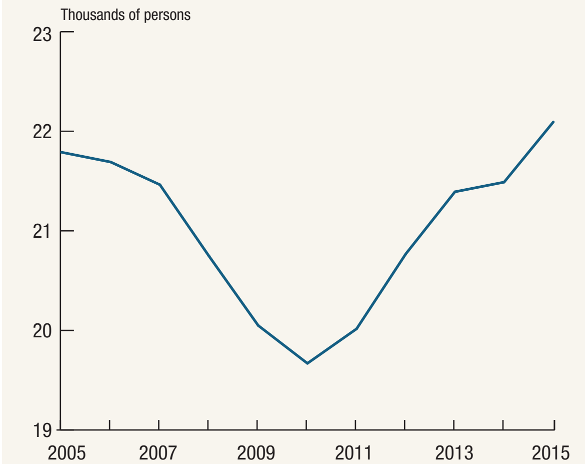


Note: For 2015, budgeted. Federal government expenses are reported on a fiscal-year basis beginning October 1; the Federal Reserve System expenses are reported on a calendar-year basis.

1. Discretionary spending less expenditures on defense. Source: *Budget of the United States Government, Fiscal Year 2014: Historical Tables,* Table 8.1. Outlays by Budget Enforcement Act Category, 1962–2019.

2. Includes expenses of the OIG.

Figure 4. Employment in the Federal Reserve System, 2005–15



Note: For 2015, budgeted. Employment numbers presented include position counts for the Board and average number of personnel (ANP) for the Reserve Banks.

Expenses in the cash area have increased as a result of a multiyear effort to modernize the cash-processing and inventory-tracking infrastructure. Expenses for services provided to the Treasury have grown to meet that agency's evolving needs, including the automation of the Treasury's collection and payment services, the addition of Treasury applications to the Treasury Web Application Infrastructure, and other requested projects. These increases have been partially offset by substantial expense and staffing decreases related to efficiencies from automation or organizational changes in electronic check-processing, fiscal agency, cash, and support functions. They have also been partially offset by the continued decline of paper check volume.

2015 Capital Budgets

The capital budgets for the Board and Reserve Banks total \$76.6 million and \$454.0 million, respectively.[5] As in previous years, the 2015 capital budgets include funding for projects that support the strategic direction outlined by the Board and each Reserve Bank. These strategic goals emphasize investments that continue to improve operational efficiencies, enhance services to Bank customers, and ensure a safe and productive work environment.

5 The capital budget reported for the Board includes the amount budgeted for the Office of Inspector General (OIG). The capital budget reported for the Reserve Banks includes the amounts budgeted for the Federal Reserve Information Technology (FRIT) support function and the Office of Employee Benefits (OEB).

Board of Governors Budgets

The Board's budget is grounded in the direction set by its *Strategic Framework 2012–15* (www.federalreserve.gov/publications/gpra/files/2012-2015-strategic-framework.pdf).[6] The budget is structured by division, office, or special account.

The Board's budget process is as follows:

- At the start of the budget process, the chief operating officer (COO) and chief financial officer (CFO) meet with the Committee on Board Affairs (CBA) and recommend a specific growth target for the Board's operating budget.
- The recommendation is based on a growth projection that includes known changes in the Board's base budget (personnel expenses as well as goods and services), positions and funding clearly defined in the framework, and additional initiatives.
- The projection also incorporates the full-year impact of positions added during the prior year as well as proposed changes to the Board's compensation and benefit programs and historic spending trends in goods and services.
- Staff reviews initial budget requests submitted by divisions and offices, including proposed initiatives and potential savings, and work collaboratively with all divisions and offices to refine budget submissions and bring the proposed operating budget in line with the growth target.
- The COO and CFO subsequently meet with the Executive Committee and the CBA to further review and refine the budget submissions.
- Staff submits the proposed budget to the CBA for review.
- The administrative governor submits the budget to the full Board for review and final action.
- Expenses are monitored throughout the year. Variances are analyzed and reported.

The Board's Office of Inspector General (OIG), in keeping with its statutory independence, prepares its proposed budget apart from the Board's budget. The OIG presents its budget directly to the Board for approval; thus, information on the OIG's budget is also provided in the discussion that follows.

[6] The document identified and framed six overarching themes for the Board to address over the four-year planning horizon, along with recommended resource investments in terms of personnel and facilities.

Tables 3 and 4 summarize the Board's 2014 budgeted and actual expenditures, as well as its 2015 budgeted expenditures by division, office, or special account and by account classification, respectively. Table 5 summarizes the Board's budgeted and actual authorized position count for 2014 and 2015. Each table also includes a line item for the OIG.

2014 Budget Performance

Board of Governors

Total expenses for Board operations were $565.3 million, which was $18.9 million, or 3.2 percent, less than the approved 2014 budget of $584.2 million. The Board's 2014 single-year capital spending was also less than budgeted by $2.2 million, or 44.3 percent, and multiyear capital projects remained within their projects budgets with actual spending less than budgeted by $37.1 million, or 31.1 percent.

The 2014 operational underrun was primarily driven by lower-than-planned goods and services expenses. Personnel services were $8.8 million over the 2014 budget primarily due to the ability of divisions to hire faster than projected, unplanned overtime, and revisions to the variable pay program. Goods and services were $27.7 million less than budgeted because divisions and offices spent less than anticipated for contractual professional services for automation projects, software, furniture and equipment, and for the Martin Building renovation and Data Center relocation projects.

Office of Inspector General

Total expenses for OIG operations were $25.4 million, or $1.5 million less than the approved 2014 operating budget. Personnel services were $1.0 million more than budgeted, largely because hiring was earlier than anticipated. Goods and services were $2.6 million less than budgeted, mainly due to costs related to project delays.

2015 Operating Expense Budget

Board of Governors

The 2015 budget for Board operations is $629.3 million, which is $64.0 million, or 11.3 percent, higher than 2014 actual expenses. The operating budget includes amounts to fund the Board's ongoing operations and to support the strategic themes identified in the Board's 2012–15 strategic framework. This is the third budget since the Board approved the framework in June 2012.

Table 3. Operating expenses of the Board of Governors, by division, office, or special account, 2014–15
Millions of dollars, except as noted

Division, office, or special account	2014 budget[1]	2014 actual	Variance 2014 actual to 2014 budget		2015 budget	Variance 2015 budget to 2014 actual	
			Amount	Percent		Amount	Percent
Board Members	26.5	25.5	-1.0	-3.8	27.3	1.8	7.1
Secretary	9.7	9.6	-0.1	-1.0	10.0	0.4	4.2
Research and Statistics	61.7	62.5	0.8	1.3	66.2	3.7	5.9
International Finance	27.0	25.0	-2.0	-7.4	28.6	3.6	14.4
Monetary Affairs	32.3	30.4	-1.9	-5.9	34.0	3.6	11.8
Office of Financial Stability Policy and Research	7.0	6.5	-0.5	-7.1	7.6	1.1	16.9
Bank Supervision and Regulation	106.5	113.2	6.7	6.3	122.4	9.2	8.1
Consumer and Community Affairs	24.5	25.0	0.5	2.0	27.3	2.3	9.2
Legal	24.3	25.4	1.1	4.5	25.9	0.5	2.0
Chief Operating Officer	10.2	9.3	-0.9	-8.8	14.0	4.7	50.5
Financial Management	10.3	10.6	0.3	2.9	11.1	0.5	4.7
Reserve Bank Operations and Payment Systems	34.7	34.5	-0.2	-0.6	39.6	5.1	14.8
Information Technology	93.5	83.7	-9.8	-10.5	94.8	11.1	13.3
Management	111.7	108.1	-3.6	-3.2	114.0	5.9	5.5
Data processing income	-36.7	-39.8	-3.1	8.4	-44.0	-4.2	10.6
Residual retirement	9.9	9.5	-0.4	-4.0	9.8	0.3	3.2
Special projects	13.6	16.8	3.2	23.5	14.7	-2.1	-12.5
Savings and reallocations	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Extraordinary items	17.8	9.4	-8.4	-47.2	26.0	16.6	176.6
Total, Board operations	**584.2**	**565.3**	**-18.9**	**-3.2**	**629.3**	**64.0**	**11.3**
Office of Inspector General	26.9	25.4	-1.5	-5.6	29.0	3.6	14.2

1 2014 budget figures do not reflect internal transfers between divisions during the year.

For 2015, authorized positions for Board operations total 2,673, an increase of 48 positions, or 1.8 percent, from 2014 actual levels. The positions are aligned with the strategic framework themes and will primarily support the Board's financial stability and supervisory mandate under the Dodd-Frank Act and new regulatory responsibilities. The budget reflects the full authorization of all 192 positions identified in the strategic framework.

Office of Inspector General

The 2015 budget for OIG operations is $29.0 million, which is $3.6 million, or 14.2 percent, higher than 2014 actual expenses. This includes an increase of 5 positions, for a total of 125 positions. The additional funding and positions will assist the OIG in achieving its objectives laid out in its strategic plan, including delivering timely, high-quality products and services that promote agency improvement; increasing employee engagement and leadership development; and enhancing the capacity of the OIG to accomplish expanded oversight of the Board's and the Consumer Financial Protection Bureau's core mission areas related to supervision and regulation while improving operational effectiveness.

Risks in the 2015 Budget

When the Board approved the 2012–15 strategic framework, the governors considered the resources necessary to implement the strategic themes, as well as budgetary growth targets to manage costs. The 2014 operating budget took an initial step to better align the personnel services budget with actual hiring patterns. Additional steps taken for 2015 in budgeting for personnel expenses, as well as in goods and services, should bring the entire operating budget much closer to actual historic spending patterns. Better alignment between the budget and spending trends will demonstrate continued commitment to the framework's goal for fiscal responsibility, while providing necessary resources for the Board to achieve its goals and objectives.

During the budget process, several divisions identified potential future staffing needs to help finish implementing requirements stemming from the Dodd-Frank Act and to meet new requests from Board members while continuing to achieve ongoing operational requirements. Projected increases in staffing will impact support functions, including placing additional demands on available office space.

Table 4. Operating expenses of the Board of Governors, by account classification, 2014–15
Millions of dollars, except as noted

Account classification	2014 budget[1]	2014 actual	Variance 2014 actual to 2014 budget		2015 budget	Variance 2015 budget to 2014 actual	
			Amount	Percent		Amount	Percent
Personnel services							
Salaries	328.0	335.9	7.9	2.4	362.5	26.6	7.9
Retirement/thrift plans[2]	42.2	42.3	0.1	0.2	44.8	2.5	5.9
Employee insurance	28.6	29.4	0.8	2.8	31.3	1.9	6.5
Subtotal, personnel services	398.7	407.5	8.8	2.2	438.6	31.1	7.6
Goods and services							
Postage and shipping	0.5	0.3	-0.2	-40.0	0.8	0.5	166.7
Travel	15.1	14.9	-0.2	-1.3	14.7	-0.2	-1.3
Telecommunications	7.9	7.0	-0.9	-11.4	6.8	-0.2	-2.9
Printing and binding	2.2	1.3	-0.9	-40.9	1.8	0.5	38.5
Publications	0.6	0.5	-0.1	-16.7	0.5	0.0	0.0
Stationery and supplies	2.3	1.6	-0.7	-30.4	1.5	-0.1	-6.3
Software	17.1	13.4	-3.7	-21.6	15.3	1.9	14.2
Furniture and equipment	14.3	9.8	-4.5	-31.5	7.5	-2.3	-23.5
Rentals	16.2	14.3	-1.9	-11.7	22.9	8.6	60.1
Books and subscriptions	1.3	2.0	0.7	53.8	15.0	13.0	650.0
Utilities	3.6	3.4	-0.2	-5.6	2.9	-0.5	-14.7
Repairs and alterations bldg.	3.0	2.4	-0.6	-20.0	2.9	0.5	20.8
Repairs and maintenance F&E	3.3	4.1	0.8	24.2	5.2	1.1	26.8
Contingency processing center	1.3	1.2	-0.1	-7.7	1.3	0.1	8.3
Contractual professional services	64.5	55.4	-9.1	-14.1	51.6	-3.8	-6.9
Interest expense	*	*	0.0	0.0	*	0.0	0.0
Tuition	5.1	3.8	-1.3	-25.5	4.6	0.8	21.1
Subsidies and contributions	0.8	0.8	0.0	0.0	0.8	0.0	0.0
Depreciation/amortization	27.7	24.4	-3.3	-11.9	36.9	12.5	51.2
All other[3]	-1.3	-2.9	-1.6	123.1	-2.2	0.7	-24.1
Subtotal, goods and services	185.5	157.8	-27.7	-14.9	190.8	33.0	20.9
Total, Board operations	**584.2**	**565.3**	**-18.9**	**-3.2**	**629.3**	**64.0**	**11.3**
Office of Inspector General							
Personnel services	18.3	19.3	1.0	5.5	21.1	1.8	9.3
Goods and services	8.7	6.1	-2.6	-29.9	7.9	1.8	29.5
Total, OIG operations	**26.9**	**25.4**	**-1.5**	**-5.6**	**29.0**	**3.6**	**14.2**

1 2014 budget figures do not reflect internal transfers between divisions during the year.
2 Includes expenses related to Board participants in the Benefit Equalization Retirement Plan and Pension Enhancement Plan.
3 *All other* includes, among other items, income from outside agencies for data processing services, rental income, and transportation subsidy benefits for employees.
* Less than $500 thousand.

Other budget risks stem from uncertainty about the rising expenses associated with the Board's data needs and the infrastructure necessary to support effective data management. As part of the strategic framework, the Board approved its two largest capital projects in recent years: the renovation of the Martin Building and the relocation of the Data Center. The Board has retained consultants to assist in these efforts and has capable staff who have experience dealing with complex projects, and both initiatives continue to receive careful monitoring given the size of their budgets and critical importance. The Board has also begun developing a strategic plan to guide its operations over the 2016–19 horizon, which will help inform future budget requests.

2015 Capital Budget

Table 6 summarizes the Board's and the OIG's budgeted and actual capital outlays for 2014 and 2015.

Board of Governors

The Board's 2015 capital budget totals $11.1 million for single-year capital, which represents an increase

Table 5. Positions authorized by the Board of Governors, by division, office, or special account, 2014–15

Division, office, or special account	2014 budget	2014 actual	Variance 2014 actual to 2014 budget		2015 budget	Variance 2015 budget to 2014 actual	
			Amount	Percent		Amount	Percent
Board Members	117	118	1	0.9	118	0	0.0
Secretary	53	53	0	0.0	53	0	0.0
Research and Statistics	336	336	0	0.0	343	7	2.1
International Finance	145	144	-1	-0.7	150	6	4.2
Monetary Affairs	151	151	0	0.0	157	6	4.0
Office of Financial Stability Policy and Research	37	37	0	0.0	42	5	13.5
Bank Supervision and Regulation	423	428	5	1.2	441	13	3.0
Consumer and Community Affairs	103	103	0	0.0	107	4	3.9
Legal	110	110	0	0.0	115	5	4.5
Chief Operating Officer	59	59	0	0.0	59	0	0.0
Financial Management	69	69	0	0.0	69	0	0.0
Reserve Bank Operations and Payment Systems	168	168	0	0.0	170	2	1.2
Information Technology	409	409	0	0.0	409	0	0.0
Management	440	440	0	0.0	440	0	0.0
Total, Board operations[1]	**2,620**	**2,625**	**5**	**0.2**	**2,673**	**48**	**1.8**
Office of Inspector General	120	120	0	0.0	125	5	4.2

[1] Budget represents authorized position count at the beginning of the year and actual represents authorized position count at year-end.

over 2014 actuals that is primarily driven by technology infrastructure projects, including general network systems, statistics function upgrades, and infrastructure growth. The Board's multiyear capital budget totals $437.5 million, which includes 2015 expected cash outlays of $64.3 million. The two largest components of the Board's multiyear capital budget are the Martin Building renovation and Data Center relocation projects. The Martin Building renovation project includes a complete building renovation, construction of a visitor screening and conference center, and leased space to accommodate employees relocated during construction. The Data Center relocation project includes build out, along with software and hardware acquisitions needed to support a network infrastructure that can accommodate the increased demand for data.

Office of Inspector General

The OIG's 2015 capital budget totals $0.2 million for single-year capital and $1.0 million for multiyear capital outlays. The OIG's single-year capital budget

Table 6. Capital outlays of the Board of Governors, by capital type, 2014–15
Millions of dollars, except as noted

Item	2014 budget	2014 actual	Variance 2014 actual to 2014 budget		2015 budget	Variance 2015 budget to 2014 actual	
			Amount	Percent		Amount	Percent
Board							
Single-year capital outlays	5.0	2.8	-2.2	-44.3	11.1	8.3	299.4
Multiyear capital outlays	119.5	82.4	-37.1	-31.1	64.3	-18.1	-21.9
Total capital outlays	124.5	85.2	-39.3	-31.6	75.4	-9.7	-11.4
OIG							
Single-year capital outlays	0.1	0.0	0.0	-61.5	0.2	0.1	502.6
Multiyear capital outlays	3.2	1.4	-1.9	-57.7	1.0	-0.3	-24.6
Total capital outlays	3.3	1.4	-1.9	-57.7	1.2	-0.2	-14.6
Combined total capital outlays	**127.8**	**86.6**	**-41.2**	**-32.3**	**76.6**	**-9.9**	**-11.5**

Note: The amount reported for the multiyear capital budget represents the expected expenditure for the budget year.

is primarily driven by information technology (IT) equipment that will enhance the data storage capabilities within its IT operating environment. The multiyear capital budget includes the continued build out of its regional offices; no new funding was requested for the OIG's multiyear capital budget.

Federal Reserve Banks Budgets

Each Reserve Bank establishes major operating goals for the coming year, devises strategies for attaining those goals, estimates required resources, and monitors results. The Reserve Banks' budgets are structured by functional area, with attributable support and overhead charged to each area. In addition to the budget approval process, the Reserve Banks must submit proposals for major capital expenditures to the Board for further review and approval.

The Reserve Bank budget process is as follows:

- Reserve Bank and Board governance bodies provide budget guidance for major functional areas for the upcoming budget year.
- The Reserve Banks develop budgets that incorporate this guidance, which are reviewed by senior leadership in the Reserve Banks for alignment with Reserve Bank and System priorities.
- The Reserve Banks submit preliminary budget information to the Board for review, including documentation to support the budget request.
- Board staff analyzes the Banks' budgets, both individually and in the context of System initiatives.
- The Board's Committee on Federal Reserve Bank Affairs (BAC) reviews the Bank budgets.
- The Reserve Banks make any requested or needed changes, and the BAC chair submits the revised budgets to Board members for review and final action.
- Throughout the year, Reserve Bank and Board staffs monitor actual performance and compare it with approved budgets and forecasts.

Tables 7, 8, and 9 summarize the Reserve Banks' 2014 budgeted and actual expenses and 2015 budgeted expenses by Reserve Bank, functional area, and account classification.[7] In addition, table 10 shows the Reserve Banks' budgeted and actual employment for 2014 and budgeted employment for 2015.

[7] Additional information about the operating expenses of each of the Reserve Banks can be found in section 11, "Statistical Tables" (see "Table 10. Income and expenses of the Federal Reserve Banks, by Bank").

Table 7. Operating expenses of the Federal Reserve Banks, by district, 2014–15
Millions of dollars, except as noted

District	2014 budget	2014 actual	Variance 2014 actual to 2014 budget		2015 budget	Variance 2015 budget to 2014 actual	
			Amount	Percent		Amount	Percent
Boston	220.1	220.6	0.4	0.2	231.6	11.0	5.0
New York	908.9	889.7	-19.2	-2.1	938.3	48.6	5.5
Philadelphia	202.6	197.6	-5.0	-2.5	200.8	3.2	1.6
Cleveland	176.2	163.2	-13.1	-7.4	173.5	10.3	6.3
Richmond	361.0	357.3	-3.6	-1.0	359.7	2.4	0.7
Atlanta	319.0	339.4	20.5	6.4	323.0	-16.4	-4.8
Chicago	340.7	334.7	-6.0	-1.8	356.6	21.9	6.6
St. Louis	285.8	282.8	-3.0	-1.0	335.4	52.6	18.6
Minneapolis	199.8	190.8	-9.0	-4.5	214.5	23.7	12.4
Kansas City	222.4	218.9	-3.4	-1.5	255.3	36.4	16.6
Dallas	212.2	211.7	-0.5	-0.3	223.3	11.6	5.5
San Francisco	347.0	345.6	-1.4	-0.4	356.7	11.1	3.2
Total Reserve Bank operating expenses	**3,795.7**	**3,752.3**	**-43.3**	**-1.1**	**3,968.7**	**216.3**	**5.8**

Note: Includes expenses of the FRIT support function and the OEB, and reflects all redistributions for support and allocation for overhead. Excludes Reserve Bank capital outlays as well as assessments by the Board of Governors for costs related to currency and the operations of the Board of Governors and the CFPB.

Table 8. Operating expenses of the Federal Reserve Banks, by operating area, 2014–15
Millions of dollars, except as noted

Operating area	2014 budget	2014 actual	Variance 2014 actual to 2014 budget		2015 budget	Variance 2015 budget to 2014 actual	
			Amount	Percent		Amount	Percent
Monetary and economic policy	614.1	609.2	-4.9	-0.8	636.8	27.5	4.5
Services to the U.S. Treasury and other government agencies	550.2	531.7	-18.5	-3.4	579.9	48.2	9.1
Services to financial institutions and the public	1,048.5	1,032.7	-15.9	-1.5	1,073.6	40.9	4.0
Supervision and regulation	1,189.4	1,168.5	-20.9	-1.8	1,260.2	91.7	7.8
Fee-based services to financial institutions	393.4	410.3	16.9	4.3	418.2	7.9	1.9
Total Reserve Bank operating expenses[1]	**3,795.7**	**3,752.3**	**-43.3**	**-1.1**	**3,968.7**	**216.3**	**5.8**

[1] Operating expenses exclude pension costs, Board-related expenses, and reimbursements.

2014 Budget Performance

Total 2014 operating expenses for the Reserve Banks were $3,752.3 million, which is $43.3 million, or 1.1 percent, less than the approved 2014 budget of $3,795.7 million. The actual average number of personnel (ANP) is less than the 2014 budget, largely because of turnover and hiring delays.

Supervision and regulation operating expenses are less than budget because of increased turnover, delays in hiring budgeted staff, and a System initiative to reduce travel. In the services to financial institutions and the public, cash expenses were lower than anticipated because of updated plans for the CashForward project, cash-processing equipment delays, and higher-than-expected recoveries for cross-shipping fees.[8] Decreasing volumes and program changes for several Treasury initiatives, including those related to the Treasury Web Application Infrastructure, were partially offset by transition expenses related to the fiscal agent consolidation. Increased expenses in the fee-based services area include the

[8] The CashForward initiative will replace legacy software applications, automate business processes, and employ technologies to meet current and future needs for the cash function. Phase 1 was completed in 2010 and Phase 2 was completed in July 2012. The project's planned completion date is 2017.

Table 9. Operating expenses of the Federal Reserve Banks, by account classification, 2014–15
Millions of dollars, except as noted

Account classification	2014 budget	2014 actual	Variance 2014 actual to 2014 budget		2015 budget	Variance 2015 budget to 2014 actual	
			Amount	Percent		Amount	Percent
Personnel[1]	2,787.4	2,784.6	-2.8	-0.1	2,938.8	154.2	5.5
Building	320.3	315.2	-5.1	-1.6	326.6	11.4	3.6
Equipment	197.3	177.8	-19.6	-9.9	195.8	18.1	10.2
Software costs	211.9	227.1	15.2	7.2	224.8	-2.3	-1.0
Travel	96.2	89.3	-6.9	-7.2	95.1	5.8	6.5
Materials and supplies	70.1	64.1	-6.1	-8.6	69.1	5.0	7.8
Communications	49.2	46.4	-2.8	-5.7	47.3	0.9	1.9
Shipping	15.5	13.9	-1.6	-10.6	15.5	1.6	11.7
All other[2]	47.6	34.0	-13.6	-28.6	55.7	21.7	63.8
Total Reserve Bank operating expenses	**3,795.7**	**3,752.3**	**-43.3**	**-1.1**	**3,968.7**	**216.3**	**5.8**

[1] *Personnel* includes salaries, other personnel expense, and retirement and other employment benefit expenses. It does not include pension expenses related to all the participants in the Retirement Plan for Employees of the Federal Reserve System and the Reserve Bank participants in the Benefit Equalization Plan and the Supplemental Retirement Plan for Select Officers of the Federal Reserve Banks. These expenses are recorded as a separate line item in the financial statements; see "Table 10. Income and expenses of the Federal Reserve Banks, by Bank" in section 11, "Statistical Tables."

[2] Includes outside fees, recoveries, and the transfer of expenses for capitalizable software development efforts.

Table 10. Employment at the Federal Reserve Banks, by District, and at FRIT and OEB, 2014–15

District	2014 budget	2014 actual	Variance 2014 actual to 2014 budget		2015 budget	Variance 2015 budget to 2014 actual	
			Amount	Percent		Amount	Percent
Boston	1,097	1,071	-26	-2.3	1,109	38	3.5
New York	3,247	3,214	-33	-1.0	3,294	80	2.5
Philadelphia	946	937	-8	-0.9	921	-16	-1.8
Cleveland	968	943	-26	-2.7	990	47	5.0
Richmond	1,586	1,559	-28	-1.7	1,546	-13	-0.8
Atlanta	1,627	1,581	-46	-2.9	1,594	14	0.9
Chicago	1,512	1,496	-16	-1.0	1,529	33	2.2
St. Louis	1,145	1,141	-4	-0.3	1,246	104	9.1
Minneapolis	1,133	1,088	-45	-4.0	1,114	26	2.4
Kansas City	1,512	1,515	2	0.1	1,688	173	11.4
Dallas	1,217	1,234	17	1.4	1,267	33	2.7
San Francisco	1,671	1,663	-8	-0.5	1,700	37	2.2
Total, all Districts	**17,662**	**17,442**	**-220**	**-1.2**	**17,998**	**556**	**3.2**
Federal Reserve Information Technology (FRIT)	1,265	1,252	-14	-1.1	1,244	-7	-0.6
Office of Employee Benefits (OEB)	52	50	-2	-3.7	53	3	5.3
Total	**18,979**	**18,744**	**-236**	**-1.2**	**19,295**	**552**	**2.9**

disposition of the FedACH Technology Transition program asset.[9]

Total 2014 actual employment of 18,744 ANP represents an underrun of 236 ANP, or 1.2 percent, from 2014 budgeted levels of 18,979 ANP. Increased turnover and hiring delays in the supervision function are large drivers of the underrun. In Treasury services, program resource reductions in several Treasury initiatives in response to volume declines are partially offset by temporary staff additions to support the fiscal agent consolidation. Staffing delays in monetary policy and public programs and resource changes, primarily in support and overhead areas, also contribute to the reduction.

2015 Operating Expense Budget

The 2015 operating budgets of the Reserve Banks total $3,968.7 million, which is $216.3 million, or 5.8 percent, higher than 2014 actual expenses. The largest increase is in the supervision and regulation function, which is adding resources to support expanded supervisory responsibilities, primarily for large financial institutions and national supervision initiatives. In the monetary and economic policy function, several Reserve Banks are adding resources to meet policy, research, and outreach demands, including investments in analytical capacity.

Budgeted expenses for services to the Treasury, which are fully reimbursable, are increasing to support the expansion of the Treasury Web Application Infrastructure ($17.7 million) and as a result of transition costs related to the Treasury fiscal agent consolidation ($9.6 million). In addition, the Reserve Banks will provide increased support for technology modernization for several Treasury initiatives.

Increases in services to financial institutions and the public include the completion of development work and the start of quality assurance testing for the CashForward project as well as increased law enforcement and video surveillance systems support. In addition, the budget includes funding for “Strategies for Improving the U.S. Payment System,” a multifaceted plan for collaborating with payment system stakeholders to enhance the speed, safety, and efficiency of the U.S. payment system. Expenses related to fee-based services are increasing for the Fedwire Modernization program initiative, offset by the one-

[9] The Reserve Banks have been engaged in a multiyear technology initiative to modernize the FedACH processing platform by migrating the service from a mainframe system to a distributed computing environment. In late 2013, the Reserve Banks conducted an assessment focused on the viability and cost-effectiveness of the program. As a result, the Reserve Banks suspended the program in 2014 and began to investigate the use of other technology solutions.

time disposition of the FedACH Technology Transition program asset in 2014.[10]

The Reserve Bank 2015 budgets include $1,331.2 million in expenses and 4,991 ANP for IT. These resources support application development, information security, infrastructure, and end-user services and are allocated to all operating areas listed in table 8.

Total 2015 budgeted employment for the Reserve Banks, FRIT, and OEB is 19,295 ANP, an increase of 552 ANP, or 2.9 percent, from 2014 actual staff levels. The increase is primarily driven by the needs of the supervision, Treasury, and IT operating areas. Supervision ANP is increasing as resources are added to support expanded supervisory responsibilities, primarily for large financial institutions. In the Treasury operating area, personnel are being added for planning and knowledge transfer as part of the fiscal agent consolidation and for ongoing projects.

IT staff is increasing to support application development projects, primarily for the Supervision and Treasury operating areas, offset by a reduction in development work for the CashForward project. Additional IT increases are for information security efforts. Staff is also increasing to support monetary policy and public programs, for the Fedwire modernization program, and for other support areas across the System.

Reserve Bank officer and staff personnel expenses for 2015 total $2,938.8 million, an increase of $154.2 million, or 5.5 percent, from 2014 actual expenses. The increase reflects expenses associated with additional staff and budgeted salary adjustments, including merit increases, equity adjustments, promotions, and funding for variable pay.

The 2015 Reserve Bank budgets include a 3.0 percent merit program for eligible officers, senior professionals, and staff totaling $53.1 million. Equity adjustments and promotions total $8.5 million for officers and senior professionals and $22.8 million for staff. Funding for variable pay programs for officers, senior professionals, and staff totals $170.7 million.

Risks in the 2015 Budget

The most-significant risks in the 2015 budget are related to personnel. Changes in assumptions and updated demographic information that are used to determine benefit expense would affect Reserve Bank budgets. Additionally, Banks are concerned about their ability to hire and retain staff. A number of Reserve Banks have aggressive hiring plans, and some Banks may experience difficulty meeting schedules for hiring staff with specialized skills and experience, particularly in supervision and IT. The primary risks in supervision relate to the implementation of key supervisory responsibilities under the Dodd-Frank Act that still require final rulemaking and changing supervisory programs. The Treasury's fiscal agent consolidation effort will continue to affect projects over a longer-term planning horizon as the future vision for collections, payments, and cash management systems is refined.

2015 Capital Budget

Table 11 shows the Reserve Banks' budgeted and actual capital outlays for 2014 and budgeted capital for 2015.

The 2015 capital budgets submitted by the Reserve Banks, FRIT, and OEB total $454.0 million. The increase in the 2015 capital budget is $118.9 million, or 35.5 percent, above the 2014 actual levels of $335.1 million, largely reflecting ongoing multiyear building and infrastructure and automation projects. New initiatives in the 2015 capital budget support workplace renovations and optimization projects, conference facilities, and expansion of the Treasury Web Application Infrastructure. In support of the Reserve Bank strategies, the 2015 budget includes three major categories of capital initiatives: Reserve Bank automation/IT projects, building and infrastructure, and Treasury initiatives.

Automation/IT

The Reserve Banks, FRIT, and OEB included $193.0 million in 2015 funding for major IT initiatives and Reserve Bank automation projects. About 25 percent of the automation capital outlays, or $50.1 million, supports the System's computing and network infrastructure. Multiyear projects currently under way to migrate major applications off the mainframe account for $19.1 million of the 2015 capital budget. Cash automation initiatives include $39.3 million for the CashForward project and $5.1 million for cash sensor upgrades. Investments in analytical, technological, and operational tools are proposed for monetary policy and to support new and ongoing supervisory responsibilities. Other automation investments include enhanced functionality

[10] The Fedwire Modernization initiative involves the transition of the Fedwire Funds and Fedwire Securities applications from the legacy mainframe environment to a distributed platform.

Table 11. Capital outlays of the Federal Reserve Banks, by District, and of FRIT and OEB, 2014–15
Millions of dollars, except as noted

District	2014 budget	2014 actual	Variance 2014 actual to 2014 budget		2015 budget	Variance 2015 budget to 2014 actual	
			Amount	Percent		Amount	Percent
Boston	41.9	23.8	-18.2	-43.3	28.5	4.8	20.0
New York	115.0	71.8	-43.1	-37.5	115.9	44.0	61.3
Philadelphia	21.2	15.5	-5.7	-26.8	20.5	5.0	32.3
Cleveland	22.0	14.5	-7.6	-34.3	17.0	2.5	17.6
Richmond	15.7	12.7	-3.1	-19.4	15.2	2.6	20.2
Atlanta	16.7	26.9	10.2	60.9	16.1	-10.8	-40.0
Chicago	38.1	17.7	-20.4	-53.4	26.5	8.8	49.4
St. Louis	13.5	8.8	-4.8	-35.2	14.3	5.6	63.3
Minneapolis	13.5	5.9	-7.7	-56.6	4.7	-1.2	-20.7
Kansas City	15.6	14.2	-1.3	-8.6	25.8	11.6	81.1
Dallas	18.1	10.5	-7.6	-42.0	17.3	6.8	65.2
San Francisco	65.1	53.3	-11.8	-18.1	60.5	7.1	13.4
Total, all Districts	**396.5**	**275.6**	**-120.9**	**-30.5**	**362.4**	**86.8**	**31.5**
Federal Reserve Information Technology (FRIT)	78.4	59.1	-19.4	-24.7	91.1	32.0	54.1
Office of Employee Benefits (OEB)	0.5	0.4	-0.1	-14.8	0.6	0.2	37.7
Total	**475.4**	**335.1**	**-140.3**	**-29.5**	**454.0**	**118.9**	**35.5**

for applications that support the Federal Reserve financial services, information security projects, and scheduled software and equipment upgrades.

Building and Infrastructure

Building and infrastructure projects account for $183.2 million of the 2015 capital budget. Renovations to reconfigure and optimize existing building space are included for the Federal Reserve Banks of New York, Cleveland, Richmond, Kansas City, and Chicago. The Federal Reserve Bank of Kansas City will build an addition to its parking garage to accommodate staffing growth. The Federal Reserve Banks of Dallas and San Francisco will continue their space renovation programs, the Federal Reserve Bank of Chicago will continue its building security project and cash reconfiguration project, and the Federal Reserve Bank of Cleveland plans to invest in conference facilities. The remaining outlays in this category fund other ongoing safety and maintenance needs and facility improvements.

Treasury

The capital budget includes $77.8 million for Treasury initiatives, including additional space to accommodate staff at the Federal Reserve Bank of St. Louis for expanded Treasury operations, support for Treasury Web Application Infrastructure, and application-development efforts supporting multiple projects.

Currency Budget

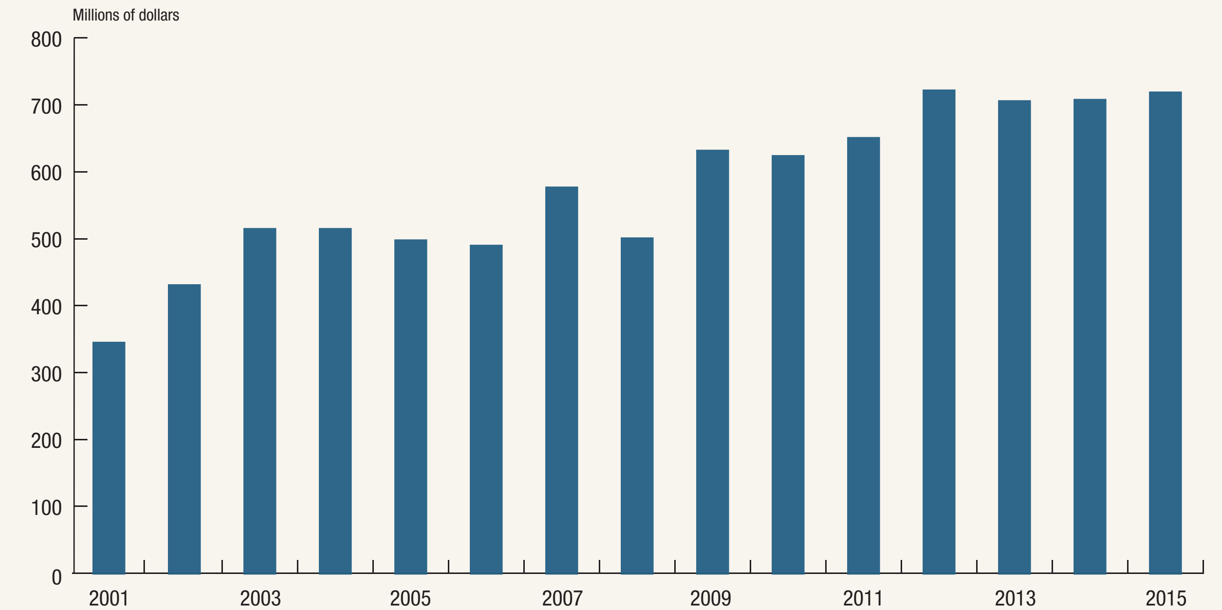
Board staff monitors payments of currency to and receipts of currency from circulation and the number of unfit notes destroyed at the Reserve Banks. Staff estimates the number of notes the Board will order from the Bureau of Engraving and Printing (BEP) to meet demand based on monthly monitoring, forecasts of growth rates for payments of currency to circulation and receipts of currency from circulation, operational factors, and other policy considerations. The Board reimburses the BEP for all costs related to the production of currency.[11] Historically, more than 90 percent of the notes that the Board orders each year replace unfit currency that Reserve Banks receive from circulation.

The annual currency budget process is as follows:

- Each August, based on Board staff's assessment of currency demand, the director of the Division of Reserve Bank Operations and Payment Systems

[11] The BEP does not receive federal appropriations; all operations of the BEP are financed by a revolving fund that is reimbursed through product sales, virtually all of which are sales of Federal Reserve notes to the Board to fulfill its annual print order. Customer billings are the BEP's only means of recovering costs of operations and generating funds necessary for capital investment. Section 16 of the Federal Reserve Act requires all costs incurred for the issuing of notes shall be paid for by the Board and included in its assessments to Reserve Banks.

Figure 5. Federal Reserve costs for new currency, 2001–15



Note: For 2015, budgeted.

submits a fiscal year (FY) print order for currency to the director of the BEP.

- Each December, Board staff estimates expenses for the calendar year currency budget, including printing expenses (based on estimated production costs provided by the BEP); certain other BEP costs; and expenses for the currency education program, currency transportation, and counterfeit-deterrence research.
- The BAC reviews the proposed currency budget.
- The BAC chair submits the proposed currency budget to the Board for final action.

2014 Budget Performance

The Board's total 2014 actual expenses for new currency were $707.4 million, which represents a decrease of $119.3 million, or 14.4 percent, from the 2014 budget. The budget underrun is primarily attributable to lower printing costs resulting from a smaller order for Federal Reserve notes, as well as lower-than-projected costs for the currency reader program and transporting new and fit notes. The 2014 budget included costs to print nearly 2.2 billion $100 notes because the issuance plan for the new-design $100 note was based on an aggressive replacement rate of the over nine billion $100 notes in circulation. Board staff planned for high demand for the new $100 note to avoid the risk of stock-outs and potential concerns in domestic and international markets that the Reserve Banks would not be able to meet demand. The initial FY 2014 order for $100 notes was based on payments that exceeded the record-high gross payments in 2012 by 40 percent. Although actual demand in 2014 has been about 4 percent higher than the 2012 level, it was far less than the worst-case demand scenario upon which the order was based. As a result, the FY 2014 print order for new $100 notes was lowered, which resulted in a $116.4 million reduction in budgeted variable printing costs. Some of this reduction was offset, however, by higher-than-budgeted production of lower-denomination ($1, $5, $10, and $20) notes during the fourth quarter.[12]

2015 Budget

The 2015 new currency budget of $717.9 million is $10.5 million, or 1.5 percent, higher than 2014 actual expenditures (figure 5). Printing costs for Federal Reserve notes make up about 90 percent of the new currency budget. Expenses for currency transporta-

[12] Because the BEP operates on a fiscal year that begins on October 1 and ends September 30, the Board's calendar-year budget for new currency excludes the cost of notes that the BEP will produce in the first quarter of its fiscal year and includes the estimated costs of notes the BEP is projected to produce in the fourth quarter of the calendar year.

Table 12. Federal Reserve budget for new currency, 2014 and 2015
Thousands of dollars, except as noted

Item	2014 budget	2014 actual	Variance 2014 actual to 2014 budget		2015 budget	Variance 2015 budget to 2014 actual	
			Amount	Percent		Amount	Percent
BEP-related expenses							
Printing Federal Reserve notes	745,387	656,810	-88,577.0	-11.9	642,527	-14,283	-2.2
Currency reader	19,384	808	-18,576.0	-95.8	17,120	16,312	2018.8
Other	3,225	3,500	275.0	8.5	3,674	174	5.0
Board expenses							
Currency transportation	33,222	27,460	-5,762.0	-17.3	29,235	1,775	6.5
Currency quality assurance and counterfeit deterrence	21,091	16,788	-4,303.0	-20.4	20,993	4,205	25.0
Currency education program	4,357	2,036	-2,321.0	-53.3	4,390	2,354	115.6
Total cost of new currency	**826,665**	**707,402**	**-119,263.0**	**-14.4**	**717,939**	**10,537**	**1.5**

BEP Bureau of Engraving and Printing.

tion, the currency reader program, the currency quality assurance (CQA) program and counterfeit-deterrence research, and the currency education program (CEP) constitute the remaining 10 percent (table 12).

Printing of Federal Reserve Notes

The currency budget includes $642.5 million in printing costs for 2015, which represents a decrease of 13.8 percent from the 2014 budget and 2.2 percent from 2014 actual expenses. The decrease is primarily because the BEP agreed to reduce the amount of its working capital fund by $40 million to $90 million, to better align it with the BEP's expected expenses and obligations.

Currency Reader Program

The 2015 currency reader budget is $17.1 million, which is approximately $16.3 million higher than 2014 expenses and $2.3 million lower than the 2014 budget. Lower reader orders in 2014 resulted in the majority of 2014 budgeted expenses being moved into 2015. The budget includes $15.0 million to purchase and distribute more than 250,000 currency readers to qualified individuals who are blind or visually impaired at no cost to the user.[13] In addition, the budget includes $1.8 million to reimburse the Library of Congress for administering the program through the existing infrastructure of its book reader program, which is managed by the National Library Service. The BEP will continue to bill the Board quarterly based on actual expenses, rather than including an estimated cost for the program in its billing rates.

Other Reimbursements to the Bureau of Engraving and Printing

The 2015 budget includes $3.7 million to reimburse the BEP for expenses incurred by its Destruction Standards and Compliance Division of the Office of Compliance (OC) and Mutilated Currency Division (MCD) of the Office of Financial Management. The OC develops standards for cancellation and destruction of unfit currency and for note accountability at the Reserve Banks, and reviews Reserve Banks' cash operations for compliance with its standards. As a public service, the MCD also processes claims for the redemption of damaged or mutilated currency.

Currency Transportation

The 2015 currency transportation budget is $29.2 million, which is nearly $1.8 million, or 6.5 percent, higher than 2014 expenses. The budget includes the cost of shipping new currency from the BEP to Reserve Banks, of intra-System shipments of fit and unprocessed currency, and of returning currency pallets from the Reserve Banks to the BEP. More notes are projected to be shipped in 2015 than in 2014 because the 2015 budget includes nearly 6.0 percent more notes than the 2014 estimate.

Currency Quality Assurance

The 2015 budget for the CQA program is $13.9 million. The budget will allow the CQA consultants to continue facilitating the implementation of the new quality system at the BEP; support the research, tech-

[13] The BEP estimates that it may distribute up to 500,000 readers over a three-year period.

nology, and product development required for the next design family of Federal Reserve notes; and continue providing temporary resources to the BEP to sustain critical programs that have been implemented for the quality system.

Counterfeit Deterrence

The 2015 budget for counterfeit-deterrence research is $7.1 million. The budget includes $5.0 million for membership in the Central Bank Counterfeit Deterrence Group (CBCDG). The CBCDG operates under the auspices of the G-10 central bank governors to combat digital counterfeiting and includes 34 central banks.

Currency Education Program

The 2015 CEP budget is $4.4 million, which represents an increase of nearly $2.4 million from 2014 expenses but is nearly equivalent to the 2014 budget. The CEP program protects and maintains confidence in U.S. currency worldwide by providing educational information on all circulating designs of Federal Reserve notes to the global public and key stakeholder groups.

In 2015, the CEP will continue to use in-house resources and, when possible, capitalize on existing Reserve Bank, United States Secret Service, State Department, and BEP partnerships in order to minimize expenses. Tasks that either cannot be or would be too resource-intensive to be sourced internally will be contracted; these tasks account for more than 90 percent of the 2015 CEP budget. The major expense drivers for the 2015 budget include the fulfillment of educational materials in 30 languages, international outreach to businesses and retailers, and hosting and developing the NewMoney.gov educational website. New initiatives in 2015 include the development of a tailored education program for the U.S. retail sector and the development of a new, comprehensive educational guide for consumers and businesses.

14 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 Chair and the Vice Chairman of the Board are also named by the President from among the members and are confirmed by the Senate. This section lists Board members who served in 2014. For a full listing of Board members from 1914 through the present, visit www.federalreserve.gov/aboutthefed/bios/board/boardmembership.htm.

Janet L. Yellen
Chair (*as of February 2014; previously, Vice Chair*)

Ben S. Bernanke
Chairman (*through January 2014*)

Stanley Fischer
Vice Chairman (*as of June 2014; previously, Member*)

Daniel K. Tarullo

Sarah Bloom Raskin
(*resigned as of March 2014*)

Jeremy C. Stein
(*resigned as of May 2014*)

Jerome H. Powell

Lael Brainard (*as of June 2014*)

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Fifteen divisions support and carry out the mission of the Board of Governors, which is based in Washington, D.C.

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Assistant Director

Suzanne L. Williams
Assistant Director

Sarkis D. Yoghourtdjian
Assistant Director

Norah M. Barger
Senior Adviser

David S. Jones
Senior Adviser

John Beebe
Adviser

Keith A. Ligon
Adviser

Molly E. Mahar
Adviser

William F. Treacy
Adviser

Division of Consumer and Community Affairs

Eric S. Belsky
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

Kenneth D. Buckley
Associate Director

Gregory L. Evans
Associate Director

Michael J. Lambert
Associate Director

Paul W. Bettge
Associate Director

Lisa K. Hoskins
Deputy Associate Director

Jennifer A. Lucier
Deputy Associate Director

Stuart E. Sperry
Deputy Associate Director

Shaun E. Ferrari
Assistant Director

Timothy W. Maas
Assistant Director

David C. Mills
Assistant Director

Lawrence E. Mize
Assistant Director

Lorelei W. Pagano
Assistant Director

Jeffrey D. Walker
Assistant Director

Office of the Chief Operating Officer

Donald V. Hammond
Chief Operating Officer

Micheline M. Casey
Chief Data Officer

Michael Kraemer
Deputy Chief Data Officer

Sheila Clark
Diversity and Inclusion Programs Director

Jeff Monica
Assistant Director

Division of Financial Management

William L. Mitchell
Director and Chief Financial Officer

Patrick J. McClanahan
Deputy Director and Controller

Christine M. Fields
Associate Director

Jeffrey R. Peirce
Deputy Associate Director

Christopher J. Suma
Assistant Director

Karen L. Vassallo
Assistant Director

Management Division

Michell C. Clark
Director

David J. Capp
Deputy Director

David J. Harmon
Deputy Director

Marie S. Savoy
Senior Associate Director

Tara Tinsley-Pelitere
Associate Director

Keith F. Bates
Assistant Director

Curtis B. Eldridge
Assistant Director and Chief

Jeffrey A. Martin
Assistant Director

Reginald V. Roach
Assistant Director

Carol A. Sanders
Assistant Director

Theresa A. Trimble
Assistant Director

Todd A. Glissman
Senior Adviser

Division of Information Technology

Sharon L. Mowry
Director

Wayne A. Edmondson
Deputy Director

Lisa M. Bell
Associate Director

Raymond Romero
Associate Director

Kofi A. Sapong
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

Can Xuan Nguyen
Assistant Director

Theresa C. Palya
Assistant Director

Virginia M. Wall
Assistant Director

Edgar Wang
Assistant Director

Charles B. Young II
Assistant Director

Tillena G. Clark
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

Melissa M. Heist
Associate Inspector General

Andrew Patchan Jr.
Associate Inspector General

Lawrence K. Valett
Associate Inspector General

Alberto Rivera-Fournier
Assistant 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 eleven Federal Reserve Bank presidents, who serve one-year terms on a rotating basis. During 2014, the Federal Open Market Committee held eight regularly scheduled meetings and one unscheduled meeting (see section 9, "Minutes of Federal Open Market Committee Meetings").

Members

Janet L. Yellen
Chair (as of February 2014; previously, Member), Board of Governors

Ben S. Bernanke
Chairman, Board of Governors (*through January 2014*)

William C. Dudley
Vice Chairman, President, Federal Reserve Bank of New York

Lael Brainard
Member, Board of Governors (*as of June 2014*)

James Bullard
President, Federal Reserve Bank of St. Louis

Stanley Fischer
Member, Board of Governors (*as of May 2014*)

Esther L. George
President, Federal Reserve Bank of Kansas City

Loretta J. Mester
President (*as of June 2014; previously, Associate Economist*), Federal Reserve Bank of Cleveland

Sandra Pianalto
President, Federal Reserve Bank of Cleveland (*through May 2014*)

Jerome H. Powell
Member, Board of Governors

Sarah Bloom Raskin
Member, Board of Governors (*resigned March 13, 2014*)

Eric Rosengren
President, Federal Reserve Bank of Boston

Jeremy C. Stein
Member, Board of Governors (*resigned May 28, 2014*)

Daniel K. Tarullo
Member, Board of Governors

Alternate Members

Christine M. Cumming
First Vice President, Federal Reserve Bank of New York

Charles L. Evans
President, Federal Reserve Bank of Chicago

Jeffrey M. Lacker
President, Federal Reserve Bank of Richmond

Dennis P. Lockhart
President, Federal Reserve Bank of Atlanta

John C. Williams
President, Federal Reserve Bank of San Francisco

Officers

William B. English
Secretary and Economist

Matthew M. Luecke
Deputy 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

James A. Clouse
Associate Economist

Thomas A. Connors
Associate Economist

Evan F. Koenig
Associate Economist

Thomas Laubach
Associate Economist

Michael P. Leahy
Associate Economist

Loretta J. Mester
Associate Economist (*through May 2014*)

Paolo A. Pesenti
Associate Economist

Samuel Schulhofer-Wohl
Associate Economist

Mark E. Schweitzer
Associate Economist

William Wascher
Associate Economist

Simon Potter
Manager, System Open Market Account

Lorie K. Logan
Deputy Manager, System Open Market Account

Board of Governors Advisory Councils

The Federal Reserve Board uses advisory committees in carrying out its varied responsibilities. 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. Two members of the council serve as its president and vice president. The Federal Reserve Act requires the council to meet in Washington, D.C., at least four times a year. In 2014, the council met on February 6–7, May 8–9, September 18–19, and December 4–5. The council met with the Board on February 7, May 9, September 19, and December 5, 2014.

Members

District 1

Richard E. Holbrook
Chairman and Chief Executive Officer, Eastern Bank Corporation, Boston, MA

District 2

James P. Gorman
Chairman and Chief Executive Officer, Morgan Stanley, New York, NY

District 3

Scott V. Fainor
President and Chief Executive Officer, National Penn Bancshares, Inc., Allentown, PA

District 4

Paul G. Greig
Chairman, President, and Chief Executive Officer, FirstMerit Corporation, Akron, OH

District 5

Kelly S. King
Chairman and Chief Executive Officer, BB&T Corporation,Winston-Salem, NC

District 6

O.B. Grayson Hall Jr.
Chairman, President, and Chief Executive Officer, Regions Financial Corporation, Birmingham, AL

District 7

David W. Nelms
Chairman and Chief Executive Officer, Discover Financial Services, Riverwoods, IL

District 8

Ronald J. Kruszewski
Chairman, President, and Chief Executive Officer, Stifel Financial Corp., St. Louis, MO

District 9

Patrick J. Donovan
President and Chief Executive Officer, Bremer Financial Corporation, St. Paul, MN

District 10

Jonathan M. Kemper
Chairman and Chief Executive Officer, Commerce Bank, N.A. (Kansas City), Kansas City, MO

District 11

Ralph W. Babb Jr.
Chairman and Chief Executive Officer, Comerica Inc. and Comerica Bank, Dallas, TX

District 12

J. Michael Shepherd
Chairman and Chief Executive Officer, Bank of the West and BancWest Corporation, San Francisco, CA

Officers

J. Michael Shepherd
President

David W. Nelms
Vice President

Community Depository Institutions Advisory Council

The Community Depository Institutions Advisory Council advises the Board of Governors on the economy, leading conditions, and other issues of interest to community depository institutions. Members are selected from among representatives of banks, thrift institutions, and credit unions who are 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. Two members of the council serve as its president and vice president. The council usually meets with the Board twice a year in Washington, D.C. In 2014, the council met on April 4 and November 7.

Members

District 1
Chandler J. Howard
President and Chief Executive Officer, Liberty Bank, Middletown, CT

District 2
Michael J. Castellana
President and Chief Executive Officer, SEFCU, Albany, NY

District 3
Dennis D. Cirucci
President and Chief Executive Officer, Alliance Bank, Broomall, PA

District 4
Eddie L. Steiner
President and Chief Executive Officer, The Commercial and Savings Bank of Millersburg, Ohio, Millersburg, OH

District 5
Jan Roche
President and Chief Executive Officer, State Department FCU, Alexandria, VA

District 6
Douglas L. Williams
President and Chief Executive Officer, Atlantic Capital Bank, Atlanta, GA

District 7
Timothy G. Marshall
President and Chief Executive Officer, Bank of Ann Arbor, Ann Arbor, MI

District 8
Glenn D. Barks
President and Chief Executive Officer, First Community Credit Union, Chesterfield, MO

District 9
Brian L. Johnson
Chief Executive Officer, Choice Financial Group, Grand Forks, ND

District 10
John B. Dicus
Chairman, President, and Chief Executive Officer, Capitol Federal Savings Bank, Topeka, KS

District 11
Drake Mills
President and Chief Executive Officer, Community Trust Bank, Ruston, LA

District 12
John V. Evans Jr.
Chief Executive Officer, D.L. Evans Bank, Burley, ID

Officers

Drake Mills
President

John B. Dicus
Vice 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

Allan Timmermann, *Chair* (*as of August 2014; previously, Member*)
Professor, University of California at San Diego

Mark Flannery, *Chair*
Professor, University of Florida (*resigned July 2014*)

Peter Christoffersen
Professor, University of Toronto

Philippe Jorion
Professor, University of California at Irvine

Chester Spatt
Professor, Carnegie Mellon University

Philip Strahan
Professor, Boston College (*as of October 2014*)

Nancy Wallace
Professor, University of California at Berkeley

Federal Reserve Banks and 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. The majority of Reserve Banks also have at least one Branch.

Reserve Bank and Branch Directors

As required by the Federal Reserve Act, each Federal Reserve Bank is supervised by a nine-member board with three different classes of three directors each: Class A directors, who are nominated and elected by the member banks in that District to represent the stockholding banks; Class B directors, who are nominated and elected by the member banks to represent the public; and 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. Each Federal Reserve Bank Branch also has a board with either five or seven directors. A majority of the directors on each Branch board are appointed by the Federal Reserve Bank, with the remaining directors appointed by the Board of Governors.

For more information on Reserve Bank and Branch directors, see www.federalreserve.gov/aboutthefed/directors/about.htm.

Reserve Bank and Branch directors are listed below. For each director, the class of directorship, the director's principal place of business, and the expiration date of the director's current term are shown.

District 1–Boston

Class A

Kathryn G. Underwood, 2014
President and Chief Executive Officer, Ledyard National Bank, Hanover, NH

Peter L. Judkins, 2015
President and Chief Executive Officer, Franklin Savings Bank, Farmington, ME

Joseph L. Hooley, 2016
Chairman and Chief Executive Officer, State Street Corporation, Boston, MA

Class B

Gary L. Gottlieb, 2014
President and Chief Executive Officer, Partners HealthCare System, Inc., Boston, MA

Roger S. Berkowitz, 2015
President and Chief Executive Officer, Legal Sea Foods, LLC, Boston, MA

Laura J. Sen, 2016
President and Chief Executive Officer, BJ's Wholesale Club, Inc., Westborough, MA

Class C

William D. Nordhaus, 2014
Sterling Professor of Economics, Yale University, New Haven, CT

Catherine D'Amato, 2015
President and Chief Executive Officer, The Greater Boston Food Bank, Boston, MA

John F. Fish, 2016
Chairman and Chief Executive Officer, Suffolk Construction Company, Inc., Boston, MA

District 2–New York

Class A

Paul P. Mello, 2014
President and Chief Executive Officer, Solvay Bank, Solvay, NY

Richard L. Carrión, 2015
Chairman and Chief Executive Officer, Popular, Inc., San Juan, PR

Gerald H. Lipkin, 2016
Chairman, President, and Chief Executive Officer, Valley National Bank, Wayne, NJ

Class B

Terry J. Lundgren, 2014
Chairman and Chief Executive Officer, Macy's, Inc., New York, NY

Glenn H. Hutchins, 2015
Co-Founder, Silver Lake, New York, NY

David M. Cote, 2016
Chairman and Chief Executive Officer, Honeywell International Inc., Morristown, NJ

Class C

Emily K. Rafferty, 2014
President, The Metropolitan Museum of Art, New York, NY

Sara Horowitz, 2015
Executive Director, Freelancers Union, Brooklyn, NY

Marc Tessier-Lavigne, 2016
President, The Rockefeller University, New York, NY

District 3–Philadelphia

Class A

Frederick C. Peters II, 2014
Chairman and Chief Executive Officer, Bryn Mawr Trust Company, Bryn Mawr, PA

David R. Hunsicker, 2015
Chairman, President, and Chief Executive Officer, New Tripoli Bank, New Tripoli, PA

William S. Aichele, 2016
Chairman, Univest Corporation of Pennsylvania, Souderton, PA

Class B

Patrick T. Harker, 2014
President, University of Delaware, Newark, DE

Rosemary Turner, 2015
President, UPS–North California District, Oakland, CA

Edward J. Graham, 2016
Chairman and Chief Executive Officer, South Jersey Industries, Folsom, NJ

Class C

Michael J. Angelakis, 2014
Vice Chairman and Chief Financial Officer, Comcast Corporation, Philadelphia, PA

James E. Nevels, 2015
Founder and Chairman, The Swarthmore Group, Philadelphia, PA

Brian McNeill, 2016
President and Chief Executive Officer, TouchPoint, Inc., Concordville, PA

District 4–Cleveland

Class A

Todd A. Mason, 2014
President and Chief Executive Officer, First National Bank of Pandora, Pandora, OH

Claude E. Davis, 2015
Chairman and Chief Executive Officer, First Financial Bancorp, Cincinnati, OH

Kevin T. Kabat, 2016
Vice Chairman and Chief Executive Officer, Fifth Third Bancorp, Cincinnati, OH

Class B

Tilmon F. Brown, 2014
Chief Executive Officer, New Horizons Baking Company, Norwalk, OH

Susan Tomasky, 2015
Energy Consultant and Former President, AEP Transmission, Columbus, OH

Hal Keller, 2016
President, Ohio Capital Corporation for Housing, Columbus, OH

Class C

John P. Surma, 2014
Retired Chairman and Chief Executive Officer, United States Steel Corporation, Pittsburgh, PA

Richard K. Smucker, 2015
Chief Executive Officer, The J.M. Smucker Company, Orrville, OH

Christopher M. Connor, 2016
Chairman and Chief Executive Officer, The Sherwin-Williams Company, Cleveland, OH

Cincinnati Branch

Appointed by the Federal Reserve Bank

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

Donald E. Bloomer, 2015
President and Chief Executive Officer, Citizens National Bank, Somerset, KY

Austin W. Keyser, 2016
Midwest Regional Director, AFL-CIO, Columbus, OH

Appointed by the Board of Governors

Deborah A. Feldman, 2014
President and Chief Executive Officer, Dayton Children's Hospital, Dayton, OH

Charles H. Brown, 2015
Vice President and Secretary, Toyota Motor Engineering and Manufacturing, North America, Erlanger, KY

Valarie L. Sheppard, 2016
Senior Vice President, Comptroller, and Treasurer, The Procter & Gamble Company, Cincinnati, OH

Pittsburgh Branch

Appointed by the Federal Reserve Bank

Petra Mitchell, 2014
President, Catalyst Connection, Pittsburgh, PA

Sean McDonald, 2014
President and Chief Executive Officer, Precision Therapeutics, Inc., Pittsburgh, PA

Grant Oliphant, 2015
President, The Heinz Endowments, Pittsburgh, PA

Robert P. Oeler, 2016
President and Chief Executive Officer, Dollar Bank, Pittsburgh, PA

Appointed by the Board of Governors

Charles L. Hammel III, 2014
President, PITT OHIO, Pittsburgh, PA

Dawne S. Hickton, 2015
Vice Chair, President, and Chief Executive Officer, RTI International Metals, Inc., Pittsburgh, PA

Doris Carson Williams, 2016
President and Chief Executive Officer, African American Chamber of Commerce, Western Pennsylvania, Pittsburgh, PA

District 5–Richmond

Class A

Edward L. Willingham IV, 2014
Chief Operating Officer, First Citizens Bank and First Citizens BancShares, Inc., Raleigh, NC

Brad E. Schwartz, 2015
Chief Executive Officer, Monarch Bank and Monarch Financial Holdings, Inc., Chesapeake, VA

C. Richard Miller Jr., 2016
President and Chief Executive Officer, Woodsboro Bank, Woodsboro, MD

Class B

Marshall O. Larsen, 2014
Retired Chairman, President, and Chief Executive Officer, Goodrich Corporation, Charlotte, NC

Wilbur E. Johnson, 2015
Managing Partner, Young Clement Rivers, LLP, Charleston, SC

Charles R. Patton, 2016
President and Chief Operating Officer, Appalachian Power Company, Charleston, WV

Class C

Linda D. Rabbitt, 2014
Chairman and Chief Executive Officer, Rand Construction Corporation, Washington, DC

Russell C. Lindner, 2015
Chairman and Chief Executive Officer, The Forge Company, Washington, DC

Margaret G. Lewis, 2016
Retired President, HCA Capital Division, Richmond, VA

Baltimore Branch

Appointed by the Federal Reserve Bank

Richard Bernstein, 2014
President and Chief Executive Officer, LWRC International, LLC, Cambridge, MD

Anita G. Newcomb, 2015
President, A. G. Newcomb & Co., Columbia, MD

Christopher J. Estes, 2015
President and Chief Executive Officer, National Housing Conference, Washington, DC

Mary Ann Scully, 2016
Chairman, President, and Chief Executive Officer, Howard Bancorp, Ellicott City, MD

Appointed by the Board of Governors

Jenny G. Morgan, 2014
President and Chief Executive Officer, basys, inc., Linthicum, MD

Stephen R. Sleigh, 2015
Fund Director, IAM National Pension Fund, Washington, DC

Samuel L. Ross, 2016
Chief Executive Officer, Bon Secours Baltimore Health System, Baltimore, MD

Charlotte Branch

Appointed by the Federal Reserve Bank

Paul E. Szurek, 2014
Chief Financial Officer, Biltmore Farms, LLC, Asheville, NC

John S. Kreighbaum, 2015
Former President and Chief Executive Officer, Carolina Premier Bank and Premara Financial, Inc., Charlotte, NC

Lucia Z. Griffith, 2015
Chief Executive Officer and Principal, METRO Landmarks, Charlotte, NC

Robert R. Hill Jr., 2016
Chief Executive Officer, South State Bank and South State Corporation, Columbia, SC

Appointed by the Board of Governors

Claude Z. Demby, 2014
Vice President of Business Development, Cree, Inc., Durham, NC

Laura Y. Clark, 2015
Executive Director, Renaissance West Community Initiative, Charlotte, NC

Elizabeth A. Fleming, 2016
President, Converse College, Spartanburg, SC

District 6–Atlanta

Class A

William H. Rogers Jr., 2014
Chairman and Chief Executive Officer, SunTrust Banks, Inc., Atlanta, GA

Gerard R. Host, 2015
President and Chief Executive Officer, Trustmark Corporation, Jackson, MS

T. Anthony Humphries, 2016
President and Chief Executive Officer, NobleBank & Trust, Anniston, AL

Class B

Renée Lewis Glover, 2014
Former President and Chief Executive Officer, Atlanta Housing Authority, Atlanta, GA

Clarence Otis Jr., 2015
Former Chairman and Chief Executive Officer, Darden Restaurants, Inc., Orlando, FL

José S. Suquet, 2016
Chairman, President, and Chief Executive Officer, Pan-American Life Insurance Group, New Orleans, LA

Class C

Thomas I. Barkin, 2014
Director, McKinsey & Company, Atlanta, GA

Thomas A. Fanning, 2015
Chairman, President, and Chief Executive Officer, Southern Company, Atlanta, GA

Michael J. Jackson, 2016
Chairman and Chief Executive Officer, AutoNation, Inc., Ft. Lauderdale, FL

Birmingham Branch

Appointed by the Federal Reserve Bank

Macke B. Mauldin, 2014
President, Bank Independent, Sheffield, AL

John A. Langloh, 2015
President and Chief Executive Officer, United Way of Central Alabama, Birmingham, AL

James K. Lyons, 2015
Director and Chief Executive Officer, Alabama State Port Authority, Mobile, AL

Robert W. Dumas, 2016
President and Chief Executive Officer, AuburnBank, Auburn, AL

Appointed by the Board of Governors

Thomas R. Stanton, 2014
Chairman and Chief Executive Officer, ADTRAN, Inc., Huntsville, AL

Pamela B. Hudson, MD, 2015
Chief Executive Officer, Crestwood Medical Center, Huntsville, AL

Brandon W. Bishop, 2016
International Representative, Southern Region, International Union of Operating Engineers, Birmingham, AL

Jacksonville Branch

Appointed by the Federal Reserve Bank

Hugh F. Dailey, 2014
President and Chief Executive Officer, Community Bank & Trust of Florida, Ocala, FL

Oscar J. Horton, 2015
President and Chief Executive Officer, Sun State International Trucks, LLC, Tampa, FL

D. Kevin Jones, 2015
President and Chief Executive Officer, MIDFLORIDA Credit Union, Lakeland, FL

Michael J. Grebe, 2016
Chairman and Chief Executive Officer, Interline Brands, Inc., Jacksonville, FL

Appointed by the Board of Governors

Lynda L. Weatherman, 2014
President and Chief Executive Officer, Economic Development Commission of Florida's Space Coast, Rockledge, FL

Harold Mills, 2015
Chief Executive Officer, ZeroChaos, Orlando, FL

Carolyn M. Fennell, 2016
Director of Public Affairs, Greater Orlando Aviation Authority, Orlando International Airport, Orlando, FL

Miami Branch

Appointed by the Federal Reserve Bank

Carol C. Lang, 2014
President, HealthLink Enterprises, Inc., Miami Beach, FL

Facundo L. Bacardi, 2014
Chairman, Bacardi Limited, Coral Gables, FL

Millar Wilson, 2015
Vice Chairman and Chief Executive Officer, Mercantil Commercebank, Coral Gables, FL

Gary L. Tice, 2016
Chairman and Chief Executive Officer, First Florida Integrity Bank, Naples, FL

Appointed by the Board of Governors

Thomas W. Hurley, 2014
Chairman and Chief Executive Officer, Becker Holding Corporation, Vero Beach, FL

Alberto Dosal, 2015
Chairman and Chief Executive Officer, Dosal Capital, LLC, Doral, FL

Rolando Montoya, 2016
Provost, Miami Dade College, Miami, FL

Nashville Branch

Appointed by the Federal Reserve Bank

Dan W. Hogan, 2014
Chief Operating Officer, CapStar Bank, Nashville, TN

Kent M. Adams, 2015
President and Chief Executive Officer, Caterpillar Financial Services Corporation, *Vice President*, Caterpillar Inc., Nashville, TN

Jennifer S. Banner, 2015
Chief Executive Officer, Schaad Companies, LLC, Knoxville, TN

William Y. Carroll Jr., 2016
President and Chief Executive Officer, SmartBank, Pigeon Forge, TN

Appointed by the Board of Governors

Scott McWilliams, 2014
Executive Chairman and Chief Customer Officer, OHL, Brentwood, TN

William J. Krueger, 2015
Chairman, JATCO Americas, Franklin, TN

Kathleen Calligan, 2016
Chief Executive Officer, Better Business Bureau Middle Tennessee, Nashville, TN

New Orleans Branch

Appointed by the Federal Reserve Bank

Carl J. Chaney, 2014
President and Chief Executive Officer, Hancock Holding Company, New Orleans, LA

Phillip R. May, 2015
President and Chief Executive Officer, Entergy Louisiana, LLC and Entergy Gulf States Louisiana, L.L.C., Jefferson, LA

Suzanne T. Mestayer, 2015
Managing Principal, ThirtyNorth Investments, LLC, New Orleans, LA

Elizabeth A. Ardoin, 2016
Senior Executive Vice President – Director of Communications, IBERIABANK, Lafayette, LA

Appointed by the Board of Governors

T. Lee Robinson Jr., 2014
President, OHC, Inc., Mobile, AL

Kevin P. Reilly Jr., 2015
President and Chairman of the Board, Lamar Advertising Company, Baton Rouge, LA

Terrie P. Sterling, 2016
Executive Vice President and Chief Operating Officer, Our Lady of the Lake Regional Medical Center, Baton Rouge, LA

District 7–Chicago

Class A

Frederick H. Waddell, 2014
Chairman and Chief Executive Officer, Northern Trust Corporation and The Northern Trust Company, Chicago, IL

William M. Farrow III, 2015
President and Chief Executive Officer, Urban Partnership Bank, Chicago, IL

Abram A. Tubbs, 2016
Chairman and Chief Executive Officer, Ohnward Bank & Trust, Cascade, IA

Class B

Nelda J. Connors, 2014
Chairwoman and Chief Executive Officer, Pine Grove Holdings, LLC, Chicago, IL

Terry Mazany, 2015
President and Chief Executive Officer, The Chicago Community Trust, Chicago, IL

Jorge Ramirez, 2016
President, Chicago Federation of Labor, Chicago, IL

Class C

Jeffrey A. Joerres, 2014
Executive Chairman, ManpowerGroup, Milwaukee, WI

Greg Brown, 2015
Chairman and Chief Executive Officer, Motorola Solutions, Inc., Schaumburg, IL

Anne R. Pramaggiore, 2016
President and Chief Executive Officer, ComEd, Chicago, IL

Detroit Branch

Appointed by the Federal Reserve Bank

Susan M. Collins, 2014
Joan and Sanford Weill Dean of Public Policy, University of Michigan, Ann Arbor, MI

Fernando Ruiz, 2014
Corporate Vice President and Treasurer, The Dow Chemical Company, Midland, MI

Sheilah P. Clay, 2015
President and Chief Executive Officer, Neighborhood Service Organization, Detroit, MI

Nancy M. Schlichting, 2016
Chief Executive Officer, Henry Ford Health System, Detroit, MI

Appointed by the Board of Governors

Michael E. Bannister, 2014
Retired Chairman and Chief Executive Officer, Ford Motor Credit Company, Dearborn, MI

Lou Anna K. Simon, 2015
President, Michigan State University, East Lansing, MI

Douglas W. Stotlar, 2016
President and Chief Executive Officer, Con-way Inc., Ann Arbor, MI

District 8–St. Louis

Class A

Susan S. Stephenson, 2014
Co-Chairman and President, Independent Bank, Memphis, TN

William E. Chappel, 2015
President and Chief Executive Officer, The First National Bank, Vandalia, IL

D. Bryan Jordan, 2016
Chairman, President, and Chief Executive Officer, First Horizon National Corporation, Memphis, TN

Class B

Gregory M. Duckett, 2014
Senior Vice President and Chief Legal Officer, Baptist Memorial Health Care Corporation, Memphis, TN

Sonja Yates Hubbard, 2015
Chief Executive Officer, E-Z Mart Stores, Inc., Texarkana, TX

Cal McCastlain, 2016
Partner, Dover Dixon Horne PLLC, Little Rock, AR

Class C

Rakesh Sachdev, 2014
President and Chief Executive Officer, Sigma-Aldrich Corp., St. Louis, MO

George Paz, 2015
Chairman and Chief Executive Officer, Express Scripts, St. Louis, MO

Sharon D. Fiehler, 2016
Retired Executive Vice President, Office of the Chief Executive Officer, Peabody Energy, St. Louis, MO

Little Rock Branch

Appointed by the Federal Reserve Bank

Keith Glover, 2014
President and Chief Executive Officer, Producers Rice Mill, Inc., Stuttgart, AR

John T. Womack, 2014
Chairman and Chief Executive Officer, Arvest Bank - Central Arkansas, Little Rock, AR

Ronald B. Jackson, 2015
Community Chairman, Simmons First National Bank of Pine Bluff, Russellville, AR

Michael A. Cook, 2016
Senior Vice President and Assistant Treasurer, Wal-Mart Stores, Inc., Bentonville, AR

Appointed by the Board of Governors

Ray C. Dillon, 2014
President and Chief Executive Officer, Deltic Timber Corporation, El Dorado, AR

Robert Martinez, 2015
Owner, Rancho La Esperanza, DeQueen, AR

P. Mark White, 2016
President and Chief Executive Officer, Arkansas Blue Cross and Blue Shield, Little Rock, AR

Louisville Branch

Appointed by the Federal Reserve Bank

Malcolm Bryant, 2014
President, The Malcolm Bryant Corporation, Owensboro, KY

Kevin Shurn, 2014
President and Owner, Superior Maintenance Co., Elizabethtown, KY

Jon A. Lawson, 2015
President, Chief Executive Officer, and Chairman, Bank of Ohio County, Beaver Dam, KY

David P. Heintzman, 2016
Chairman and Chief Executive Officer, Stock Yards Bank & Trust Company, Louisville, KY

Appointed by the Board of Governors

Gerald R. Martin, 2014
Vice President, River Hill Capital, LLC, Louisville, KY

Susan E. Parsons, 2015
Chief Financial Officer, Secretary, and Treasurer, Koch Enterprises, Inc., Evansville, IN

Randy W. Schumaker, 2016
President and Chief Management Officer, Logan Aluminum, Inc., Russellville, KY

Memphis Branch

Appointed by the Federal Reserve Bank

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

Lisa McDaniel Hawkins, 2015
President, Room to Room Inc., Tupelo, MS

J. Brice Fletcher, 2016
Chairman and Chief Executive Officer, First National Bank of Eastern Arkansas, Forrest City, AR

Appointed by the Board of Governors

Lawrence C. Long, 2014
Partner, St. Rest Planting Co., Indianola, MS

Charlie E. Thomas III, 2015
Regional Director of External & Legislative Affairs, AT&T Tennessee, Memphis, TN

Carolyn Chism Hardy, 2016
President and Chief Executive Officer, Chism Hardy Investments, LLC and Hardy Logistics Solutions, LLC, Collierville, TN

District 9–Minneapolis

Class A

Kenneth A. Palmer, 2014
Chairman, President, and Chief Executive Officer, Range Financial Corporation & Range Bank, NA, Marquette, MI

Randy L. Newman, 2015
Chairman and Chief Executive Officer, Alerus Financial, NA and Alerus Financial Corp., Grand Forks, ND

Catherine T. Kelly, 2016
President and Chief Executive Officer, Minnesota Bank & Trust, Edina, MN

Class B

Howard A. Dahl, 2014
President and Chief Executive Officer, Amity Technology LLC, Fargo, ND

Christine Hamilton, 2015
Managing Partner, Christiansen Land and Cattle, Ltd., Kimball, SD

Lawrence R. Simkins, 2016
President and Chief Executive Officer, The Washington Companies, Missoula, MT

Class C

MayKao Y. Hang, 2014
President and Chief Executive Officer, Amherst H. Wilder Foundation, St. Paul, MN

Randall J. Hogan, 2015
Chairman and Chief Executive Officer, Pentair, Minneapolis, MN

Kendall J. Powell, 2016
Chairman and Chief Executive Officer, General Mills, Minneapolis, MN

Helena Branch

Appointed by the Federal Reserve Bank

Duane Kurokawa, 2014
President, Western Bank of Wolf Point, Wolf Point, MT

Barbara Stiffarm, 2015
Executive Director, Opportunity Link, Inc., Havre, MT

Thomas R. Swenson, 2016
President and Chief Executive Officer, Bank of Montana and Bancorp of Montana Holding Company, Missoula, MT

Appointed by the Board of Governors

David B. Solberg, 2014
Owner, Seven Blackfoot Ranch Company, Billings, MT

Marsha Goetting, 2015
Professor and Extension Family Economics Specialist, Montana State University, Bozeman, MT

District 10–Kansas City

Class A

Paul J. Thompson, 2014
President and Chief Executive Officer, Country Club Bank, Kansas City, MO

David W. Brownback, 2015
President and Chief Executive Officer, Citizens State Bank & Trust Co., Ellsworth, KS

Max T. Wake, 2016
President, Jones National Bank & Trust Co., Seward, NE

Class B

Richard K. Ratcliffe, 2014
Chairman, Ratcliffe's Inc., Weatherford, OK

John T. Stout Jr., 2015
Chief Executive Officer, Plaza Belmont Management Group LLC, Shawnee Mission, KS

Len C. Rodman, 2016
Former Chairman, President, and Chief Executive Officer, Black & Veatch, Olathe, KS

Class C

Barbara Mowry, 2014
Chief Executive Officer, GoreCreek Advisors, Greenwood Village, CO

Steve Maestas, 2015
Chief Executive Officer, Maestas Development Group, Albuquerque, NM

Rose Washington, 2016
Executive Director, Tulsa Economic Development Corporation, Tulsa, OK

Denver Branch

Appointed by the Federal Reserve Bank

Brian R. Wilkinson, 2014
President, Steele Street Bank & Trust, Denver, CO

Lilly Marks, 2015
Vice President for Health Affairs and Executive Vice Chancellor, University of Colorado and Anschutz Medical Campus, Aurora, CO

Anne Haines Yatskowitz, 2015
President and Chief Executive Officer, ACCION New Mexico–Arizona–Colorado–Nevada, Albuquerque, NM

Mark A. Zaback, 2016
President and Chief Executive Officer, Jonah Bank of Wyoming, Casper, WY

Appointed by the Board of Governors

Larissa Herda, 2014
Chair, Chief Executive Officer, and President, tw telecom inc., Littleton, CO

Richard L. Lewis, 2015
President and Chief Executive Officer, RTL Networks Inc., Denver, CO

Margaret M. Kelly, 2016
Chief Executive Officer, RE/MAX, LLC, Denver, CO

Oklahoma City Branch

Appointed by the Federal Reserve Bank

Linda Capps, 2014
Vice Chairman, Citizen Potawatomi Nation, Shawnee, OK

Michael C. Coffman, 2015
President and Chief Executive Officer, Panhandle Oil and Gas, Inc., Oklahoma City, OK

Charles R. Hall, 2016
Chairman and Chief Executive Officer, Exchange Bank and Trust Company, Perry, OK

Jane Haskin, 2016
President and Chief Executive Officer, First Bethany Bank & Trust, Bethany, OK

Appointed by the Board of Governors

James D. Dunn, 2014
Chair, Mill Creek Lumber & Supply Co., Tulsa, OK

Peter B. Delaney, 2015
Chairman and Chief Executive Officer, OGE Energy Corp., Oklahoma City, OK

Clint D. Abernathy, 2016
President, Abernathy Farms, Inc., Altus, OK

Omaha Branch

Appointed by the Federal Reserve Bank

Jeff W. Krejci, 2014
President and Director, Cornerstone Bank, York, NE

Brian D. Esch, 2015
President and Chief Executive Officer, McCook National Bank, McCook, NE

James L. Thom, 2015
Vice President, T-L Irrigation Co., Hastings, NE

Anne Hindery, 2016
Chief Executive Officer, Nonprofit Association of the Midlands, Omaha, NE

Appointed by the Board of Governors

Jim Farrell, 2014
President and Chief Executive Officer, Farmers National Company, Omaha, NE

G. Richard Russell, 2015
President and Chief Executive Officer, Millard Lumber Inc., Omaha, NE

John F. Bourne, 2016
International Representative, International Brotherhood of Electrical Workers, Omaha, NE

District 11–Dallas

Class A

George F. Jones Jr., 2014
Retired Chief Executive Officer, Texas Capital Bank, Dallas, TX

Allan James "Jimmy" Rasmussen, 2015
President and Chief Executive Officer, HomeTown Bank, N.A., Galveston, TX

Russell Shannon, 2016
Chairman and Chief Executive Officer, National Bank of Andrews, Andrews, TX

Class B

Jorge A. Bermudez, 2014
President and Chief Executive Officer, Byebrook Group, College Station, TX

Ann B. Stern, 2015
President and Chief Executive Officer, Houston Endowment, Inc., Houston, TX

Curtis V. Anastasio, 2016
Retired President and Chief Executive Officer, NuStar Energy L.P., San Antonio, TX

Class C

Renu Khator, 2014
Chancellor and President, University of Houston, Houston, TX

Myron E. Ullman III, 2015
Chief Executive Officer, J.C. Penney Company, Inc., Plano, TX

Matthew K. Rose, 2016
Executive Chairman, BNSF Railway Company, Fort Worth, TX

El Paso Branch

Appointed by the Federal Reserve Bank

Jerry Pacheco, 2014
President, Global Perspectives Integrated, Inc., Santa Teresa, NM

Laura M. Conniff, 2014
Qualifying Broker, Mathers Realty, Inc., Las Cruces, NM

Robert Nachtmann, 2015
Dean and Professor of Finance, College of Business Administration, The University of Texas at El Paso, El Paso, TX

Paul L. Foster, 2016
Executive Chairman, Western Refining, Inc., El Paso, TX

Appointed by the Board of Governors

Robert E. McKnight Jr., 2014
Owner, McKnight Ranch Company, Fort Davis, TX

Renard U. Johnson, 2015
President and Chief Executive Officer, Management & Engineering Technologies International Inc. (METI), El Paso, TX

J. Eric Evans, 2016
Chief Executive Officer, Providence Memorial Hospital and Sierra Medical Center, El Paso, TX

Houston Branch

Appointed by the Federal Reserve Bank

Marcus A. Watts, 2014
President, The Friedkin Group, Houston, TX

Kirk S. Hachigian, 2014
President and Chief Executive Officer, JELD-WEN, Houston, TX

Paul B. Murphy Jr., 2015
President and Chief Executive Officer, Cadence Bank, Houston, TX

Gerald B. Smith, 2016
Chairman and Chief Executive Officer, Smith, Graham & Company Investment Advisors, L.P., Houston, TX

Appointed by the Board of Governors

Paul W. Hobby, 2014
Chairman and Founding Partner, Genesis Park, LP, Houston, TX

Ellen Ochoa, 2015
Director, NASA Johnson Space Center, Houston, TX

Greg L. Armstrong, 2016
Chairman and Chief Executive Officer, Plains All American Pipeline, L.P., Houston, TX

San Antonio Branch

Appointed by the Federal Reserve Bank

Janie Barrera, 2014
President and Chief Executive Officer, Accion Texas, Inc., San Antonio, TX

Ygnacio D. Garza, 2014
Partner, Long Chilton LLP, Brownsville, TX

Manoj Saxena, 2015
Managing Director, The Entrepreneurs' Fund, Austin, TX

Josue Robles Jr., 2016
President and Chief Executive Officer, USAA, San Antonio, TX

Appointed by the Board of Governors

Thomas E. Dobson, 2014
Chairman and Chief Executive Officer, Whataburger Restaurants, L.P., San Antonio, TX

Catherine M. Burzik, 2015
President and Chief Executive Officer, CFB Interests, LLC, San Antonio, TX

James "Rad" Conrad Weaver, 2016
Chief Executive Officer, McCombs Partners, San Antonio, TX

District 12–San Francisco

Class A

Megan F. Clubb, 2014
Chief Executive Officer and Chairman of the Board, Baker Boyer National Bank, Walla Walla, WA

Peter S. Ho, 2015
Chairman, President, and Chief Executive Officer, Bank of Hawaii and Bank of Hawaii Corporation, Honolulu, HI

Steven R. Gardner, 2016
President and Chief Executive Officer, Pacific Premier Bank, Irvine, CA

Class B

Richard A. Galanti, 2014
Executive Vice President and Chief Financial Officer, Costco Wholesale Corporation, Issaquah, WA

Steven E. Bochner, 2015
Partner, Wilson, Sonsini, Goodrich, & Rosati, P.C., Palo Alto, CA

Nicole C. Taylor, 2016
President and Chief Executive Officer, Thrive Foundation for Youth, Menlo Park, CA

Class C

Roy A. Vallee, 2014
Retired Executive Chairman and Chief Executive Officer, Avnet, Inc., Phoenix, AZ

Alexander R. Mehran, 2015
Chairman and Chief Executive Officer, Sunset Development Company, San Ramon, CA

Patricia E. Yarrington, 2016
Vice President and Chief Financial Officer, Chevron Corporation, San Ramon, CA

Los Angeles Branch

Appointed by the Federal Reserve Bank

Peggy Tsiang Cherng, 2014
Co-Chair of the Board and Co-Chief Executive Officer, Panda Restaurant Group, Inc., Rosemead, CA

James A. Hughes, 2015
Chief Executive Officer, First Solar, Inc., Tempe, AZ

John C. Molina, 2015
Chief Financial Officer, Molina Healthcare, Inc., Long Beach, CA

David I. Rainer, 2016
Chairman and Chief Executive Officer, California United Bank, Encino, CA

Appointed by the Board of Governors

Keith E. Smith, 2014
President and Chief Executive Officer, Boyd Gaming Corporation, Las Vegas, NV

Gina Marie Lindsey, 2015
Executive Director, Los Angeles World Airports, Los Angeles, CA

Vacancy, 2016

Portland Branch

Appointed by the Federal Reserve Bank

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

S. Randolph Compton, 2015
President, Chief Executive Officer, and Co-Chairperson of the Board, Pioneer Trust Bank, N.A., Salem, OR

Brian K. Rice, 2016
Executive Vice President and President of Wealth Management, Aequitas Capital Management, Lake Oswego, OR

Appointed by the Board of Governors

Roderick C. Wendt, 2014
Vice Chairman, JELD-WEN, inc., Klamath Falls, OR

Román D. Hernández, 2015
Shareholder, Schwabe, Williamson & Wyatt, P.C., Portland, OR

Joseph E. Robertson Jr., MD, 2016
President, Oregon Health & Science University, Portland, OR

Salt Lake City Branch

Appointed by the Federal Reserve Bank

Josh England, 2014
President and Chief Financial Officer, C.R. England, Inc., Salt Lake City, UT

Vacancy, 2014

Susan D. Mooney Johnson, 2015
President, Futura Industries, Clearfield, UT

Albert T. Wada, 2016
Chairman, Wada Farms, Inc., Pingree, ID

Appointed by the Board of Governors

Vacancy, 2014

Bradley J. Wiskirchen, 2015
Chief Executive Officer, Keynetics, Inc., Boise, ID

Peter R. Metcalf, 2016
Lead Founder and Chief Executive Officer, Black Diamond, Inc., Salt Lake City, UT

Seattle Branch

Appointed by the Federal Reserve Bank

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

Greg C. Leeds, 2015
President and Chief Executive Officer, Wizards of the Coast, Hasbro, Inc., Renton, WA

Nicole W. Piasecki, 2016
Vice President and General Manager, Propulsion Systems Division, Boeing Commercial Airplanes, Everett, WA

Appointed by the Board of Governors

Ada M. Healey, 2014
Vice President, Real Estate, Vulcan Inc., Seattle, WA

Mary O. McWilliams, 2015
Retired Executive Director, Washington Health Alliance, Seattle, WA

Vacancy, 2016

Reserve Bank and Branch Leadership

Each year, the Board of Governors designates one Class C director to serve as chair, and one Class C director to serve as deputy chair, of each Reserve Bank board. Reserve Banks also have a president and first vice president who are appointed by the Bank's Class C, and certain Class B, directors, subject to approval by the Board of Governors. Each Reserve Bank selects a chair for every Branch in its District from among the directors on the Branch board who were appointed by the Board of Governors. For each Branch, an officer from its Reserve Bank is also charged with the oversight of Branch operations.

Boston

William D. Nordhaus, *Chair*

John F. Fish, *Deputy Chair*

Eric S. Rosengren, *President and Chief Executive Officer*

Kenneth C. Montgomery, *First Vice President and Chief Operating Officer*

New York

Emily K. Rafferty, *Chair*

Sara Horowitz, *Deputy Chair*

William C. Dudley, *President*

Christine M. Cumming, *First Vice President*

Additional office at East Rutherford, NJ

Philadelphia

James E. Nevels, *Chair*

Michael J. Angelakis, *Deputy Chair*

Charles I. Plosser, *President*

D. Blake Prichard, *First Vice President*

Cleveland

Richard K. Smucker, *Chair*

Christopher M. Connor, *Deputy Chair*

Loretta J. Mester, *President*

Gregory Stefani, *First Vice President*

Cincinnati

Charles H. Brown, *Chair*

LaVaughn M. Henry, *Senior Regional Officer*

Pittsburgh

Dawne S. Hickton, *Chair*

Guhan Venkatu, *Senior Regional Officer*

Richmond

Linda D. Rabbitt, *Chair*

Russell C. Lindner, *Deputy Chair*

Jeffrey M. Lacker, *President*

Mark L. Mullinix, *First Vice President*

Baltimore

Jenny G. Morgan, *Chair*

David E. Beck, *Senior Vice President and Baltimore Regional Executive*

Charlotte

Claude Z. Demby, *Chair*

Matthew A. Martin, *Senior Vice President and Charlotte Regional Executive*

Atlanta

Thomas I. Barkin, *Chair*

Thomas A. Fanning, *Deputy Chair*

Dennis P. Lockhart, *President*

Marie C. Gooding, *First Vice President*

Birmingham

Thomas R. Stanton, *Chair*

Lesley McClure, *Vice President and Regional Executive*

Jacksonville

Lynda L. Weatherman, *Chair*

Christopher L. Oakley, *Vice President and Regional Executive*

Miami

Thomas W. Hurley, *Chair*

Karen Gilmore, *Vice President and Regional Executive*

Nashville

Scott McWilliams, *Chair*

Lee C. Jones, *Vice President and Regional Executive*

New Orleans

Terrie P. Sterling, *Chair*

Adrienne C. Slack, *Vice President and Regional Executive*

Chicago

Jeffrey A. Joerres, *Chair*

Greg Brown, *Deputy Chair*

Charles L. Evans, *President*

Gordon Werkema, *First Vice President*

Additional office at Des Moines, IA

Detroit

Lou Anna K. Simon, *Chair*

Robert Wiley, *Officer in Charge*

St. Louis

Sharon D. Fiehler, *Chair*

George Paz, *Deputy Chair*

James Bullard, *President*

David A. Sapenaro, *First Vice President*

Little Rock

Ray C. Dillon, *Chair*

Robert A. Hopkins, *Regional Executive*

Louisville

Gerald R. Martin, *Chair*

Maria Gerwing Hampton, *Regional Executive*

Memphis

Charlie E. Thomas III, *Chair*

Martha Perine Beard, *Regional Executive*

Minneapolis

Randall J. Hogan, *Chair*

MayKao Y. Hang, *Deputy Chair*

Narayana R. Kocherlakota, *President*

James M. Lyon, *First Vice President*

Helena

Marsha Goetting, *Chair*

Susan Woodrow, *Assistant Vice President and Branch Executive*

Kansas City

Barbara Mowry, *Chair*

Steve Maestas, *Deputy Chair*

Esther L. George, *President*

Kelly J. Dubbert, *First Vice President*

Denver

Larissa Herda, *Chair*

Alison Felix, *Officer in Charge*

Oklahoma City

James D. Dunn, *Chair*

Chad R. Wilkerson, *Officer in Charge*

Omaha

Jim Farrell, *Chair*

Nathan Kauffman, *Officer in Charge*

Dallas

Myron E. Ullman III, *Chair*

Renu Khator, *Deputy Chair*

Richard W. Fisher, *President*

Helen E. Holcomb, *First Vice President*

El Paso

Robert E. McKnight Jr., *Chair*

Roberto A. Coronado, *Officer in Charge*

Houston

Greg L. Armstrong, *Chair*

Daron D. Peschel, *Officer in Charge*

San Antonio

Thomas E. Dobson, *Chair*

Blake Hastings, *Officer in Charge*

San Francisco

Patricia E. Yarrington, *Chair*

Roy A. Vallee, *Deputy Chair*

John C. Williams, *President*

Mark A. Gould, *First Vice President*

Additional office at Phoenix, AZ

Los Angeles

Keith E. Smith, *Chair*

Roger W. Replogle, *Officer in Charge*

Portland

Roderick C. Wendt, *Chair*

Steven H. Walker, *Officer in Charge*

Salt Lake City

Bradley J. Wiskirchen, *Chair*

Robin A. Rockwood, *Officer in Charge*

Seattle

Ada M. Healey, *Chair*

Susan A. Sutherland, *Officer in Charge*

Leadership Conferences

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 27 and 28 and November 4 and 5, 2014. The conference's executive committee members for 2014 are listed below.[1]

Conference of Chairs Executive Committee–2014

Jeffrey A. Joerres, *Chair*,

Federal Reserve Bank of Chicago

Sharon D. Fiehler, *Vice Chair*,

Federal Reserve Bank of St. Louis

Emily K. Rafferty, *Member*,

Federal Reserve Bank of New York

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. The chief executive officer of each Reserve Bank was originally labeled governor and did not receive the title of president until the passage of the Banking Act of 1935. Consequently, when the Conference was first established in 1914 it was known as the Conference of Governors. Conference officers for 2014 are listed below.[2]

Conference of Presidents–2014

Charles I. Plosser, *Chair*,
Federal Reserve Bank of Philadelphia

Dennis P. Lockhart, *Vice Chair*,
Federal Reserve Bank of Atlanta

Frank J. Doto, *Secretary*,
Federal Reserve Bank of Philadelphia

Maria R. Smith,
Assistant Secretary,
Federal Reserve Bank of Atlanta

[1] On November 5, 2014, the Conference of Chairs elected Emily K. Rafferty, chair of the Federal Reserve Bank of New York, as chair of the conference's executive committee for 2015. The conference also elected Roy A. Vallee, chair of the Federal Reserve Bank of San Francisco for 2015, as vice chair, and Thomas A. Fanning, chair of the Federal Reserve Bank of Atlanta for 2015, as the executive committee's third member.

[2] On December 4, 2014, the Conference elected Dennis P. Lockhart as chair for 2015–16 and Eric S. Rosengren, president of the Federal Reserve Bank of Boston, as vice chair. The conference also elected Maria R. Smith as secretary for 2015–16 and Joel Werkema, Federal Reserve Bank of Boston, 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 2014 are listed below.

Conference of First Vice Presidents–2014

Kenneth C. Montgomery, *Chair*,

Federal Reserve Bank of Boston

Gregory Stefani, *Vice Chair*,

Federal Reserve Bank of Cleveland

Jeanne MacNevin, *Secretary*,

Federal Reserve Bank of Boston

Terri Bialowas, *Assistant Secretary*,

Federal Reserve Bank of Cleveland

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