95th Annual Report 2008

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 2009

The Speaker of the House of Representatives:

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

This report covers operations of the Board during calendar year 2008.

Sincerely,

Ben Bernanke
Chairman

Overview of the Federal Reserve

As the nation's central bank, the Federal Reserve System has numerous, varied responsibilities:

- conducting the nation's monetary policy by influencing monetary and credit conditions in the economy
- supervising and regulating banking institutions, to ensure the safety and soundness of the nation's banking and financial system and to protect the credit rights of consumers
- maintaining the stability of the financial system and containing systemic risk that may arise in financial markets
- providing financial services to depository institutions, the U.S. government, and foreign official institutions

The Federal Reserve 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., is made up of seven members appointed by the President of the United States and supported by a staff of about 2,100. In addition to 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 the U.S. banking system and administers most of the nation's laws regarding consumer credit protection. It also has broad oversight responsibility for the nation's payments system and the operations and activities of the Federal Reserve Banks.

The Federal Reserve Banks, which combine public and private elements, are the operating arms of the central banking system. They carry out a variety of System functions, including operating a nationwide payments system; distributing the nation's currency and coin; under authority delegated by the Board of Governors, supervising and regulating bank holding companies and state-chartered banks that are members of the System; 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.

A major component of the Federal Reserve System is the Federal Open Market Committee (FOMC), which is made up of the members of the Board of Governors, the president of the Federal Reserve Bank of New York, and presidents of four other Federal Reserve Banks, who serve on a rotating basis. The FOMC establishes monetary policy and oversees open market operations, the Federal Reserve's main tool for influencing overall monetary and credit conditions. The FOMC sets the federal funds rate, but the Board has sole authority over changes in reserve requirements and must approve any change in the discount rate initiated by a Reserve Bank.

Two other groups play roles in the functioning of the Federal Reserve: depository institutions, through which monetary policy operates, and advisory councils, which make recommendations to the Board and the Reserve Banks regarding System responsibilities.

All federally chartered banks are, by law, members of the Federal Reserve System. State-chartered banks may become members if they meet Board requirements. ■

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Monetary Policy and Economic Developments

Monetary Policy Report of February 2009

Part 1
Overview: Monetary Policy and the Economic Outlook

The U.S. economy weakened markedly in the second half of 2008 as the turmoil in financial markets intensified, credit conditions tightened further, and asset values continued to slump. Conditions in the labor market worsened significantly after early autumn, and nearly all major sectors of the economy registered steep declines in activity late last year. Meanwhile, inflation pressures diminished appreciably as prices of energy and other commodities dropped sharply, the margin of resource slack in the economy widened, and the foreign exchange value of the dollar strengthened.

The second half of 2008 saw an intensification of the financial and economic strains that had initially been triggered by the end of the housing boom in the United States and other countries and the associated problems in mortgage markets. The ensuing turmoil in global credit markets affected asset values, credit conditions, and business and consumer confidence around the world. Over the summer, a weakening U.S. economy and continued financial turbulence led to a broad loss of confidence in the financial sector. In September, the government-sponsored enterprises Fannie Mae and Freddie Mac were placed into conservatorship by their regulator, and Lehman Brothers Holdings filed for bankruptcy. The insurance company American International Group, Inc., or AIG, also came under severe pressure, and the Federal Reserve, with the full support of the Treasury, agreed to provide substantial liquidity to the company. In addition, a number of other financial institutions failed or were acquired by competitors. As a result of the Lehman Brothers bankruptcy, a prominent money market mutual fund suffered capital losses, which prompted investors to withdraw large amounts from such funds. The resulting massive outflows undermined the stability of short-term funding markets, particularly the commercial paper market, upon which corporations rely heavily to meet their short-term borrowing needs. Against this backdrop, investors pulled back broadly from risk-taking in September and October, liquidity in short-term funding markets vanished for a time, and prices plunged across asset classes. Securitization markets, with the exception of those for government-supported mortgages, essentially shut down.

Reflecting in part the adverse developments in financial markets, economic activity dropped sharply in late 2008 and has continued to contract so far in 2009. In the labor market, the pace of job losses quickened considerably be-

NOTE: Included in this chapter are the text, tables, and selected figures from the Monetary Policy Report submitted to Congress on February 24, 2009, pursuant to section 2B of the Federal Reserve Act. The figures included here have been renumbered, and therefore the figure numbers in this report differ from the figure numbers in the Monetary Policy Report. The complete set of figures is available on the Board's website, at www.federalreserve.gov/boarddocs/hh.

Other materials in this annual report related to the conduct of monetary policy include the minutes of the 2008 meetings of the Federal Open Market Committee (see the "Records" section) and statistical tables 1–4 (at the back of this report).

ginning last autumn, the unemployment rate has risen to its highest level since the early 1990s, and other measures of labor market conditions—for example, the number of persons working part time because full-time jobs are not available—have worsened noticeably. The deteriorating job market, along with the sizable losses of equity and housing wealth and the tightening of credit conditions, has depressed consumer sentiment and spending; these factors have also contributed to the continued steep decline in housing activity. In addition, businesses have instituted widespread cutbacks in capital spending in response to the weakening outlook for sales and production as well as the difficult credit environment. And in contrast to the first half of the year—when robust demand for U.S. exports provided some offset to the softness in domestic demand—exports slumped in the second half as economic activity abroad fell. In all, real gross domestic product (GDP) in the United States declined slightly in the third quarter of 2008 and is currently estimated by the Bureau of Economic Analysis to have dropped at an annual rate of 3¾ percent in the fourth quarter; real GDP seems headed for another considerable decrease in the first quarter of 2009.

The downturn in sales and production, along with steep declines in the prices of energy and other commodities and a strengthening in the exchange value of the dollar, has contributed to a substantial lessening of inflation pressures in the past several months. Indeed, overall inflation, as measured by the price index for personal consumption expenditures, turned negative in the fourth quarter of 2008; over the first three quarters of the year, overall inflation had averaged nearly 4½ percent at an annual rate, largely because of sharp increases in food and energy prices. Core inflation—which excludes the direct effects of movements in food and energy prices—also slowed significantly late last year and entered 2009 at a subdued pace. Mirroring the drop in headline inflation, survey measures of near-term inflation expectations have fallen to very low levels in recent months, while the latest readings on longer-term inflation expectations are similar to those in 2007 and early 2008.

The Federal Reserve has responded forcefully to the crisis since its emergence in the summer of 2007. By the middle of last year, the Federal Open Market Committee (FOMC) had lowered the federal funds rate 325 basis points.[1] And as indications of economic weakness proliferated and the financial turbulence intensified in the second half, the FOMC continued to ease monetary policy aggressively; at its December meeting, the Committee established a target range for the federal funds rate of 0 to ¼ percent and indicated that economic conditions are likely to warrant exceptionally low levels of the federal funds rate for some time.

In addition, the Federal Reserve took a number of measures during the second half of 2008 to shore up financial markets and support the flow of credit to businesses and households. (See the appendix for descriptions of these programs.) In response to intensified stresses in dollar funding markets, the Federal Reserve announced extensions of its Term Auction Facility and significantly expanded its network of liquidity swap lines with foreign central banks. To support the functioning of the commercial paper market in the aftermath of the Lehman Brothers bankruptcy, the Federal Reserve established the Asset-Backed Commercial Paper Money Mar-

1. A list of abbreviations is available at the end of this chapter.

ket Mutual Fund Liquidity Facility in September as well as the Commercial Paper Funding Facility and Money Market Investor Funding Facility in October. In an effort to restart certain securitization markets and support extensions of credit to consumers, the Federal Reserve in November announced the Term Asset-Backed Securities Loan Facility, which is scheduled to begin operation in coming weeks. To support the mortgage and housing markets and the economy more broadly and to encourage better functioning in the market for agency securities, the Federal Reserve announced programs in November to purchase agency-guaranteed mortgage-backed securities and agency debt. These initiatives have resulted in a notable expansion of the Federal Reserve's balance sheet, and the FOMC has indicated that it expects the size of the balance sheet to remain at a high level for some time as a result of open market operations and other measures to support financial markets and to provide additional stimulus to the economy in an environment of very low short-term interest rates.

Other U.S. government entities and foreign governments also implemented a variety of policy measures in response to the intensification of financial strains over the course of the fall and winter. The Treasury announced a temporary guarantee of the share prices of money market mutual funds and, beginning in October, used authority granted under the Emergency Economic Stabilization Act to purchase preferred shares in a large number of depository institutions. That same month, the Federal Deposit Insurance Corporation (FDIC) introduced a Temporary Liquidity Guarantee Program under which it offers guarantees for selected senior unsecured obligations of participating insured depository institutions and many of their parent holding companies as well as for all balances in non-interest-bearing transaction deposit accounts at participating insured depository institutions. In November, Citigroup came under significant financial pressure. In response, the FDIC, the Treasury, and the Federal Reserve provided a package of loans and guarantees to bolster Citigroup's financial condition; a similar package was arranged for Bank of America in January. Since October, governments in many advanced economies have announced support plans for their banking systems. These programs have included large-scale capital injections, expansions of deposit insurance, and guarantees of some forms of bank debt.

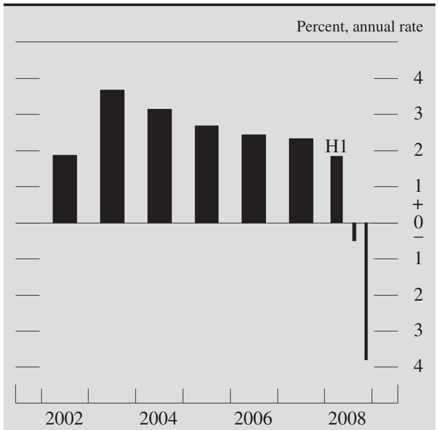
The measures taken by the Federal Reserve, other U.S. government entities, and foreign governments have helped restore a degree of stability to some financial markets. In particular, strains in short-term funding markets have eased noticeably since the fall, some corporate risk spreads have declined modestly, and measures of volatility have generally retreated. Nevertheless, significant stress persists in most markets, and financial institutions remain under considerable pressure; as a result, the flow of credit to households and businesses continues to be impaired.

In conjunction with the January 2009 FOMC meeting, the members of the Board of Governors of the Federal Reserve System and presidents of the Federal Reserve Banks, all of whom participate in FOMC meetings, provided projections for economic growth, unemployment, and inflation; these projections are presented in part 4 of this report. Given the strength of the forces weighing on the economy, FOMC participants viewed the outlook as having weakened significantly in recent months. Participants generally expected economic activity to contract sharply in the near term and then to move onto a path of gradual recovery, bolstered by monetary easing, government efforts to stabilize financial markets, and fiscal stimulus. Participants expected total and core inflation to be lower in 2009 than over the four quarters of 2008, in large measure because of the recent declines in commodity prices and rising slack in resource utilization; inflation was forecast to remain low in 2010 and 2011. Participants generally judged that the degree of uncertainty surrounding the outlook for both economic activity and inflation was greater than historical norms. Most participants viewed the risks to growth as skewed to the downside, and nearly all saw the risks to the inflation outlook as either balanced or tilted to the downside. Participants also reported their assessments of the rates to which macroeconomic variables would be expected to converge over the longer run under appropriate monetary policy and in the absence of further shocks to the economy. The central tendencies of these longer-run projections were 2.5 percent to 2.7 percent for real GDP growth, 4.8 percent to 5.0 percent for the unemployment rate, and 1.7 percent to 2.0 percent for the inflation rate.

Part 2
Recent Financial and Economic Developments

The downturn in economic activity that has been unfolding since late 2007 steepened appreciably in the second half of 2008 as the strains in financial markets intensified. After the financial difficulties experienced by Fannie Mae and Freddie Mac during the summer and the bankruptcy of Lehman Brothers Holdings in mid-September, short-term funding markets were severely disrupted, risk spreads shot up, equity

1. Change in Real Gross Domestic Product, 2002–08

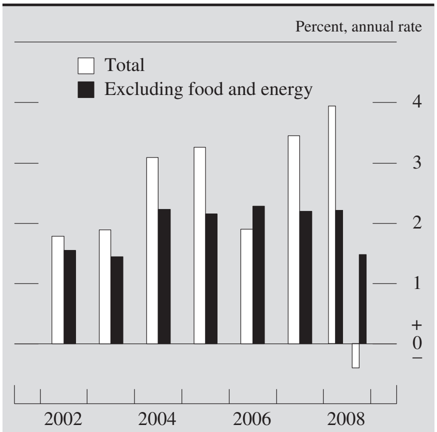


NOTE: Here and in subsequent figures, except as noted, change for a given period is measured to its final quarter from the final quarter of the preceding period.

SOURCE: Department of Commerce, Bureau of Economic Analysis.

prices plunged, and markets for private asset-backed securities remained largely shut down. As a result, pressures on the already strained balance sheets of financial institutions increased, thereby threatening the viability of some institutions and impinging on the flow of credit to households and businesses. In part reflecting the cascading effects of these developments throughout the wider economy, conditions in the labor market deteriorated markedly. Moreover, industrial production contracted sharply as manufacturers responded aggressively to declines in both domestic and foreign demand. According to the advance estimate from the Bureau of Economic Analysis, real gross domestic product (GDP) fell at an annual rate of 3¾ percent in the fourth quarter, and it seems headed for another sizable decrease in the first quarter of 2009 (figure 1). Meanwhile, inflation pressures have diminished as prices of energy and other commodities have plum-

2. Change in the Chain-Type Price Index for Personal Consumption Expenditures, 2002–08



SOURCE: Department of Commerce, Bureau of Economic Analysis.

meted, the margin of resource slack has widened, and the foreign exchange value of the dollar has strengthened (figure 2).

In response to the extraordinary financial strains, the Federal Reserve implemented a number of unprecedented policy initiatives to support financial stability and promote economic growth. These initiatives included lowering the target for the federal funds rate to a range of 0 to ¼ percent, beginning direct purchases of agency debt and agency mortgage-backed securities, broadening liquidity programs to financial intermediaries and other central banks, and initiating programs in support of systemically important market segments. Other U.S. government entities also undertook extraordinary initiatives to support the financial sector by injecting capital into the banking system and providing guarantees on selected liabilities of depository institutions. Many foreign central banks and governments took similar steps. Although these actions have helped restore a measure of stability to some markets, financial conditions remain quite stressed, and aggregate credit conditions continue to be impaired as a result.

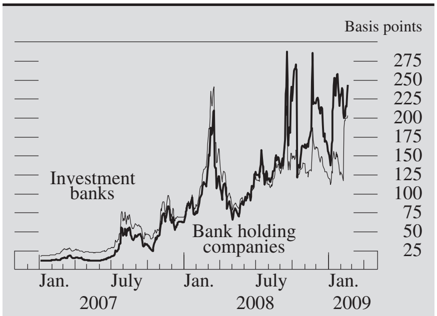
Financial Stability Developments

Evolution of the Financial Turmoil

The current period of pronounced turmoil in financial markets began in the summer of 2007 after a rapid deterioration in the performance of subprime mortgages caused largely by a downturn in house prices in some parts of the country. Investors pulled back from risk-taking, and liquidity diminished sharply in the markets for interbank funding and structured credit products more generally. House prices continued to fall rapidly in the first part of 2008, mortgage delinquencies and defaults continued to climb, and concerns about credit risk mounted. The increased financial strains led to a liquidity crisis in March at The Bear Stearns Companies, Inc., a major investment bank, and to its acquisition by JPMorgan Chase & Co. Subsequent aggressive monetary policy easing and measures taken by the Federal Reserve to bolster the liquidity of financial institutions contributed to some recovery in financial markets during the spring.

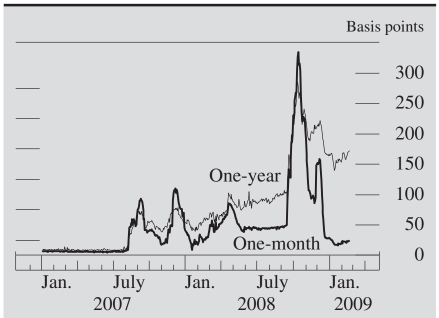
Nevertheless, strains in financial conditions intensified going into the second half of the year. In particular, amid worries that the capital of Fannie Mae and Freddie Mac would be insufficient to absorb mounting losses on their mortgage portfolios, the stock prices of the two government-sponsored enterprises (GSEs) began to decline significantly in June, and their credit default swap (CDS) spreads—which reflect inves-

3. Spreads on Credit Default Swaps for Selected U.S. Financial Companies, 2007–09



NOTE: The data are daily and extend through February 18, 2009. Median spreads for six bank holding companies and nine investment banks.
SOURCE: Markit.

4. Libor Minus Overnight Index Swap Rate, 2007–09



NOTE: The data are daily and extend through February 19, 2009. An overnight index swap (OIS) is an interest rate swap with the floating rate tied to an index of daily overnight rates, such as the effective federal funds rate. At maturity, two parties exchange, on the basis of the agreed notional amount, the difference between interest accrued at the fixed rate and interest accrued by averaging the floating, or index, rate. Libor is the London interbank offered rate.
SOURCE: For Libor, British Bankers' Association; for the OIS rate, Prebon.

tors' assessments of the likelihood of the GSEs defaulting on their debt obligations—rose sharply. Market anxiety eased somewhat in the second half of July after the Treasury proposed statutory changes, subsequently approved by the Congress, under which it could lend and provide capital to the GSEs. Nevertheless, pressures on these enterprises continued over the course of the summer; as a result, option-adjusted spreads on agency-guaranteed mortgage-backed securities (MBS) widened and interest rates on residential mortgages rose further.

Meanwhile, investor unease about the outlook for the broader banking sector reemerged. In July, the failure of IndyMac Federal Bank, a large thrift institution, raised further concerns about the profitability and asset quality of many financial institutions. Over the summer, CDS spreads for major investment and commercial banks rose, several large institutions announced sharp declines in earnings, and anecdotal reports suggested that the ability of most financial firms to raise new capital was limited (figure 3). With banks reluctant to lend to one another, conditions in short-term funding markets continued to be strained during the summer. The relative cost of borrowing in the interbank market—as exemplified by the London interbank offered rate (Libor), a reference rate for a wide variety of contracts, including floating-rate mortgages—increased sharply (figure 4).[2] In addition, required margins of collateral (known as haircuts) and bid-asked spreads widened in the markets for repurchase agreements (repos) backed by many types of securities, including agency securities that previously were considered very safe and liquid.

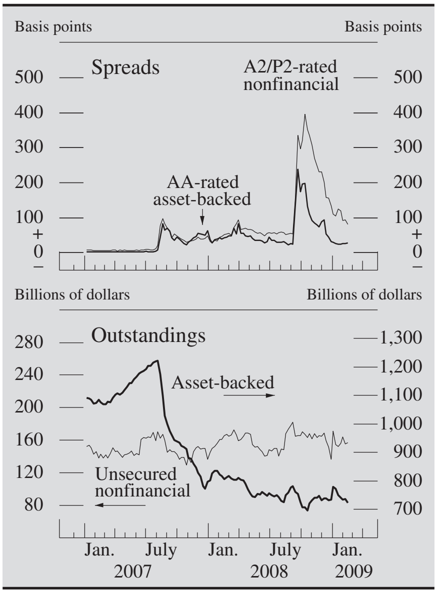
On September 7, the Treasury and the Federal Housing Finance Agency announced that Fannie Mae and Freddie Mac had been placed into conservatorship. To maintain the GSEs' ability to

2. Typically, the relative cost is measured by comparing the Libor rate with the rate on comparable-maturity overnight index swaps.

purchase home mortgages, the Treasury announced plans to establish a backstop lending facility for the GSEs, to purchase up to $100 billion of preferred stock in each of the two firms, and to initiate a program to purchase agency MBS. After the announcement, interest rate spreads on GSE debt narrowed as investors became confident that the Treasury would support the obligations of the GSEs. Option-adjusted interest rate spreads on MBS issued by the GSEs fell, and rates and spreads on new conforming fixed-rate mortgages declined. Nevertheless, other financial institutions continued to face difficulties in obtaining liquidity and capital as investors remained anxious about their solvency and, more broadly, about the implications of worsening financial conditions for the availability of credit to households and businesses and so for the economic outlook.

Amid this broad downturn in investor confidence, and after large mortgage-related losses in the third quarter, Lehman Brothers came under pressure as counterparties refused to provide short-term funding to the investment bank, even on a secured basis. Eventually, with no other firm willing to acquire it and with its borrowing capacity limited by a lack of collateral, Lehman Brothers filed for bankruptcy on September 15.[3] Over the previous weekend, Bank of America announced its intention to acquire Merrill Lynch, which had also come under severe funding pressures. In large part because of losses on Lehman Brothers' debt, the net asset value of a major money market mutual fund fell below $1 per share—also known as "breaking the buck," an event that had not occurred in many years—thereby prompting rapid and widespread investor withdrawals from prime funds (that is, money market mutual funds that hold primarily private assets). Prime funds responded to the surge in redemptions by reducing their purchases of short-term assets, including commercial paper—which many businesses use to obtain working capital—and by shortening the maturity of those instruments that they did purchase, leading to a deterioration of the commercial paper market (figure 5). Meanwhile, investors increasingly demanded safe assets, and funds that hold only Treasury securities

5. Commercial Paper, 2007–09



NOTE: The data are weekly and extend through February 18, 2009. Commercial paper yield spreads are for an overnight maturity and are expressed relative to the AA nonfinancial rate. Outstandings are seasonally adjusted.

SOURCE: Depository Trust and Clearing Corporation.

3. The bankruptcy of Lehman Brothers and the conservatorship of Fannie Mae and Freddie Mac constituted credit events of unprecedented scale for the CDS market. Nevertheless, settlement of the outstanding CDS contracts on these entities proceeded smoothly over the subsequent weeks, apparently due in part to the increased margins demanded by holders of CDS protection in the period leading up to early September.

experienced a sharp increase in inflows, which caused yields on Treasury bills to plummet. Intense demands among investors to hold Treasury securities, coupled with increased concerns about counterparty credit risk, reportedly led to a substantial scaling back of activity among traditional securities lenders in the Treasury market. The decreased activity contributed, in turn, to disruptions in the Treasury repo and cash markets that were evidenced by a very high volume of fails-to-deliver. Redemptions from prime funds slowed after the Treasury and the Federal Reserve took actions in September and October to support these funds (see the appendix).

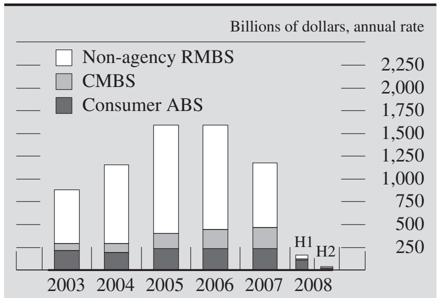
Around the same time that the difficulties at Lehman Brothers emerged, the financial condition of American International Group, Inc., or AIG—a large, complex insurance conglomerate—deteriorated rapidly, and the company found short-term funding, upon which it was heavily reliant, increasingly difficult to obtain. In view of the likely spillover effects to other financial institutions of a disorderly failure of AIG and the potential for significant pass-through effects to the broader economy, the Federal Reserve Board on September 16, with the full support of the Treasury, authorized the Federal Reserve Bank of New York to lend up to $85 billion to the firm to assist it in meeting its obligations and to facilitate the orderly sale of some of its businesses. (AIG, the Treasury, and the Federal Reserve later modified the terms of this arrangement, as described in the appendix.) Meanwhile, CDS spreads for other insurance companies rose, and their equity prices fell, amid concerns regarding their profitability and declines in the values of their investment portfolios.

Investor anxiety about investment banks, which had escalated rapidly in the wake of Lehman Brothers' collapse, abated somewhat after Morgan Stanley and Goldman Sachs were granted bank holding company charters by the Federal Reserve. However, on September 25 the resolution of another failing financial institution, Washington Mutual, imposed significant losses on senior and subordinated debt holders as well as on shareholders. As a consequence, investors marked down their expectations regarding likely government support for the unsecured nondeposit liabilities of financial institutions, which further inhibited the ability of some banking organizations to obtain funding. Among these institutions was Wachovia Corp., the parent company of the fourth-largest U.S. bank by asset size at the time, which was ultimately acquired by Wells Fargo in early October.

Against this backdrop, investors pulled back from risk-taking even further, funding markets for terms beyond overnight largely ceased to function, and a wide variety of financial firms experienced increasing difficulty in obtaining funds and raising capital. Libor rates rose at all maturities while comparable-maturity overnight index swap (OIS) rates fell, leaving spreads at record levels. Strains were also evident in the federal funds market, in which overnight funds traded over an unusually wide range and activity in term funds dropped sharply. Conditions in repo markets worsened further, as haircuts and bid-asked spreads on non-Treasury collateral increased, and the overnight rate on general Treasury collateral traded near zero. Despite substantial new issuance, yields on short-dated Treasury bills also traded near zero. Fails-to-deliver in the Treasury market and overnight lending of securities from the portfolio of the System Open Market Account soared to record highs. Spreads on asset-backed commercial paper (ABCP) and on lower-rated unsecured commercial paper issued by nonfinancial firms widened significantly.

Conditions in other financial markets also deteriorated sharply in September and October. CDS spreads on corporate debt surged, and the rates on investment-grade and high-yield bonds rose dramatically relative to comparable-maturity Treasury yields. Secondary-market bid prices for leveraged loans dropped to record-low levels as institutional investors pulled back from the market, and the implied spread on an index of loan credit default swaps (the LCDX) widened to record levels. Bid-asked spreads on high-yield corporate bonds and leveraged loans increased significantly, and liquidity and price discovery in the CDS market remained impaired, especially for contracts involving financial firms. Spreads on commercial mortgage-backed securities (CMBS) and consumer asset-backed securities (ABS) also widened dramatically, as securitizations other than government-supported MBS came to a standstill (figure 6). The turmoil affected even the Treasury market, in which interest rate spreads between yields on the most recently issued Treasury securities and yields on comparable-maturity off-the-run securities (that is, those securities that were previously issued)—an indicator of the liquidity in this market—surged from already elevated levels. Foreign financial markets experienced many of the same disturbances as domestic markets (see the section "International Developments"). Price movements in all of these markets were likely exacerbated by sales of securities by hedge funds and other leveraged market participants in an attempt to meet mounting redemption requests on the part of their investors and other funding needs.

6. Gross Issuance of Selected Mortgage- and Asset-Backed Securities, 2003–08

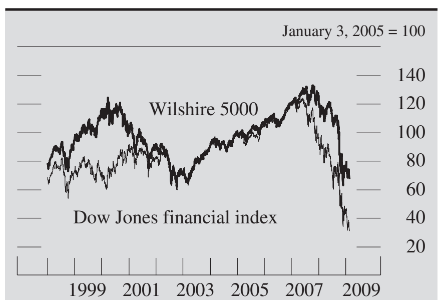


NOTE: Non-agency RMBS are residential mortgage-backed securities issued by institutions other than Fannie Mae, Freddie Mac, and Ginnie Mae; CMBS are commercial mortgage-backed securities; consumer ABS (asset-backed securities) are securities backed by credit card loans, nonrevolving consumer loans, and auto loans.

SOURCE: For RMBS and ABS, *Inside MBS & ABS* and Merrill Lynch; for CMBS, Commercial Mortgage Alert.

In the stock market, prices tumbled and volatility soared to record levels during the autumn as investors grew more concerned about the prospects of financial firms and about the likelihood of a deep and prolonged recession (figure 7). Equity-price declines were particularly pronounced among financial

7. Stock Price Indexes, 1998–2009



NOTE: The data are daily and extend through February 18, 2009.

SOURCE: Dow Jones Indexes.

and energy firms, but they were generally widespread across sectors and were accompanied by substantial net outflows from equity mutual funds. During this period, the premium that investors demanded for holding equity shares—gauged roughly by the gap between the earnings-price ratio and the yield on Treasury securities—shot up, reflecting the heightened risk aversion that prevailed in financial markets.

Policy Actions and the Market Response

To strengthen confidence in the U.S. financial system, during the autumn the Federal Reserve, at times acting in concert with foreign central banks, expanded its existing liquidity facilities and announced several additional initiatives, including programs to support short-term funding markets and to purchase agency debt obligations and MBS. (These initiatives are discussed in more detail in the appendix.) Because of the sharply diminished availability of market funding, several Federal Reserve facilities were used heavily throughout the remainder of the year.

In addition, the Treasury announced a temporary guarantee program for money market mutual funds and proposed the Troubled Asset Relief Program (TARP) to use government funds to help stabilize the financial system; on October 3, the Congress approved and provided funding for this program as part of the Emergency Economic Stabilization Act. Using funds from the TARP, the Treasury established a voluntary capital purchase plan under which the U.S. government would buy preferred shares from eligible institutions. Additionally, under the Temporary Liquidity Guarantee Program (TLGP), the Federal Deposit Insurance Corporation (FDIC) provided a temporary guarantee for selected senior unsecured obligations of participating insured depository institutions and many of their parent holding companies as well as for all balances in non-interest-bearing transaction deposit accounts at participating insured depository institutions.

After these actions and the announcements of similar programs in a number of other countries, stresses in financial markets eased somewhat, though conditions remained strained. In the interbank funding market, Libor fixings at most maturities declined noticeably and spreads over comparable-maturity OIS rates narrowed. Meanwhile, spreads on highly rated unsecured commercial paper and ABCP narrowed after the Federal Reserve announced measures in support of this market, and issuance rebounded somewhat from its lows in September and October. Conditions in global short-term dollar funding markets also improved significantly after the Federal Reserve substantially expanded its program of liquidity swaps with foreign central banks, which increased the amount of dollar funding auctioned in foreign markets, and a number of foreign governments took measures to strengthen and stabilize their banking systems.

Despite these improvements, investors remained concerned about the soundness of financial institutions. Spreads on CDS for U.S. banks widened further in November, which raised the prospect of significant increases in banks' costs of raising the funds they needed for lending. Citigroup, in particular, saw its CDS spread widen dramatically after it announced that it would take large losses on its securities portfolio. To support market stability, the U.S. government on November 23 entered into an agreement with Citigroup to provide a package of capital, guarantees, and liquidity access. Subsequently, CDS spreads for financial institutions reversed a portion of their earlier widening, and some nonfinancial risk spreads also narrowed.

Conditions in debt markets continued to ease after the passing of year-end, although most of these markets remain much less liquid than normal. Yields and spreads on corporate bonds and commercial paper have decreased noticeably in recent weeks, but activity in the leveraged loan market continues to be very weak. Equity prices for financial firms have continued to trend downward, and CDS spreads for such firms have fluctuated around extremely elevated levels. Investors expressed renewed concern over financial institutions in January after a number of firms, most notably Bank of America Corporation, reported large net losses for the fourth quarter. The Treasury, the FDIC, and the Federal Reserve announced on January 16 that they had entered into an agreement with Bank of America to provide a package of capital, guarantees, and liquidity access (see the appendix). Although markets responded favorably to this action, the uncertain prospects of the financial sector continue to weigh heavily on market sentiment.

Banking Institutions and the Availability of Credit

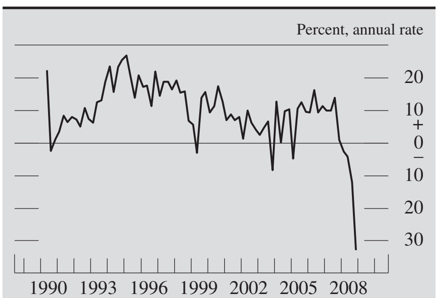
Commercial bank credit grew moderately over 2008 as a whole as both businesses and households at times drew heavily on existing lending commitments, but it contracted noticeably toward the end of the year and in early 2009. In the face of the severe financial market disruptions, some companies turned to already committed lines of credit with banks, which caused the growth of commercial and industrial (C&I) loans to spike in September and October. However, C&I lending declined over the past few months as some businesses reportedly paid down outstanding loans and stepped up their issuance in the corporate bond market. In addition, banks continued to report decreased demand for credit late last year in response to slowing business investment and reduced merger and acquisition activity. Most banks continued to tighten standards and terms on C&I loans to firms of all sizes. Issuance of leveraged loans by banks, which had already been very low through the first half of last year, was essentially nil in the second half, largely because of a drop in mergers and leveraged buyouts, which these loans are often used to finance. Commercial real estate (CRE) loans on banks' books expanded over 2008 as a whole. However, with the commercial mortgage securitization market essentially closed by mid-year, the rate of growth of this loan category stepped down significantly in the second half—a decrease consistent with the reported tightening of standards and a drop-off in demand for these loans.

Bank loans to households also declined over the second half of 2008 and early 2009, led by a sharp contraction in residential mortgage loans on banks' books, as demand weakened further and banks sold such loans to the GSEs. However, loans drawn under existing revolving home equity lines of credit continued to rise briskly during the second half of the year, an increase likely influenced by a drop in the prime rate, on which the rates on such loans are often based. Growth of consumer loans originated by banks expanded at a solid pace through October but weakened considerably in November and December. However, the amount of such loans held on banks' books generally continued to expand late in the year, as banks had difficulty selling these loans because of ongoing disruptions in securitization markets. Recently, consumer loan growth has also reportedly been buoyed by banks' decisions to build inventory in anticipation of issuance into the Term Asset-Backed Securities Loan Facility (TALF).

In the Senior Loan Officer Opinion Survey on Bank Lending Practices conducted in both October 2008 and January 2009, very large net fractions of banks reported having tightened lending standards for all major loan types. Significant net fractions of respondents also reported a widespread weakening of loan demand. In line with the nearly 33 percent drop (annual rate) in total unused loan commitments reported in fourth-quarter Call Reports, many banks indicated in the January survey that they had cut the size of existing credit lines to businesses and households (figure 8).

Earnings growth at depository institutions slowed markedly in 2008, and profitability as measured by return on assets and return on equity dropped dramatically; indeed, commercial banks posted an aggregate loss in the fourth quarter. These developments in part reflected write-downs on securities holdings and increases in loan-loss provisioning in response to deteriorating asset quality. In the fourth quarter, the overall loan delinquency rate at commercial banks increased to more than 4½ percent, its highest level since the early 1990s, and the total charge-off rate rose to more than 1¾ percent, surpassing its peaks in the previous two recessions. The ratio of loan-loss reserves to net charge-offs—an indicator of reserve adequacy—dropped below its previous nadir reached in the early 1990s.

8. Change in Unused Bank Loan Commitments to Businesses and Households, 1990:Q2–2008:Q4



NOTE: The data, which are not seasonally adjusted, are quarterly and extend through 2008:Q4.

SOURCE: Federal Financial Institutions Examination Council, Consolidated Reports of Condition and Income (Call Report).

Depository institutions' access to funding has improved as a result of the various Federal Reserve liquidity programs and the TLGP, under which eligible firms have issued $169 billion of FDIC-guaranteed bonds to date. In addition, the capital of banking organizations has been boosted by more than $200 billion of preferred stock purchases under the TARP. Still, the recent downward trend in the equity prices of most banks and the elevated level of their CDS spreads suggest that market participants remain concerned about the long-term profitability and potential insolvency of some depository institutions.

The financial turmoil has led to significant changes in the structure of the broad banking industry, with two large investment banks and one large finance company recently converting to bank holding companies to obtain better access to government funding programs; a handful of large insurance firms, motivated partly by their desire to apply for TARP funding, have likewise converted to thrift holding companies. In addition, several failures and mergers of large financial institutions resulted in increased concentrations of industry assets and deposits in 2008.

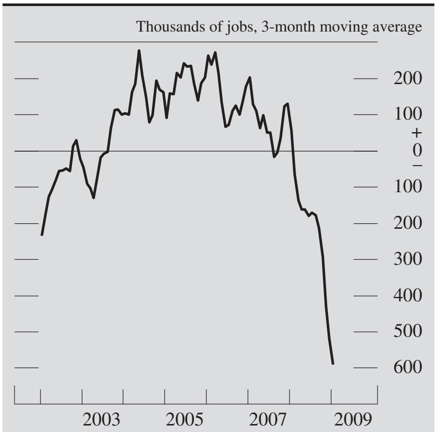
Domestic Developments

In part reflecting the intensifying deterioration in financial conditions, nearly all major sectors of the U.S. economy recorded sizable declines in activity in late 2008, and the weakness has extended into early 2009. Conditions in the labor market have worsened substantially since early autumn as employment has fallen rapidly, the unemployment rate has climbed, and firms continue to announce more layoffs. Housing remains on a steep downward trend, and both consumer spending and business investment have contracted significantly. In addition, demand for U.S. exports has slumped in response to the decline in foreign economic activity. Meanwhile, overall consumer price inflation turned negative in late 2008 as energy prices tumbled, and core inflation slowed noticeably.

The Labor Market

Conditions in the labor market deteriorated throughout 2008, but they worsened markedly in the autumn as job losses accelerated and the unemployment rate jumped. In total, private payrolls fell 3¾ million between the onset of the recession in December 2007 and January 2009, with roughly half of the reduction occurring during the past three months (figure 9). Indeed, since November, private payroll employment has fallen 600,000 per month, compared with average monthly job losses of 340,000 in September and October and 160,000 over the first eight months of 2008. The civilian unemployment rate, which stood at 4.9 percent in December 2007, has marched steadily upward over the past year, and it reached 7.6 percent in January 2009, its highest level since 1992 (figure 10). Moreover, private surveys and news reports indicate that firms plan on continuing to lay off workers in the near term.

9. Net Change in Private Payroll Employment, 2002–09

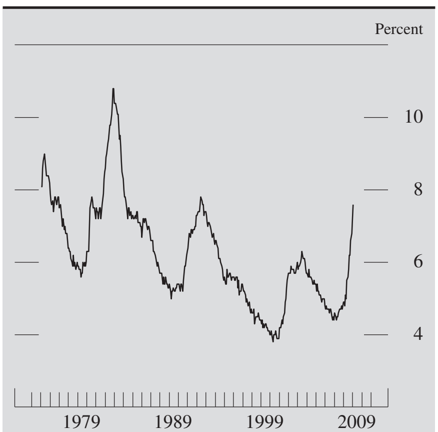


Note: Nonfarm business sector. The data are monthly and extend through January 2009.

Source: Department of Labor, Bureau of Labor Statistics.

Virtually all major industries have experienced considerable job losses recently. Manufacturing employment

10. Civilian Unemployment Rate, 1975–2009



Note: The data are monthly and extend through January 2009.

Source: Department of Labor, Bureau of Labor Statistics.

has fallen nearly 500,000 over the past three months and has dropped more than 1 million since December 2007. Layoffs in truck transportation and wholesale trade, which are closely related to activity in the manufacturing sector, show a similar pattern. The decline in construction employment, which began in early 2007, has also sped up, in part because the ongoing contraction in homebuilding has been accompanied more recently by weakness in nonresidential building. In the service-producing sector, job losses have mounted at retail establishments, providers of financial services, and professional and business services firms, all of which have been adversely affected by the downturn in economic activity. A noticeable exception has been the continued brisk hiring by providers of health services.

The increase in joblessness has been widespread across demographic, educational, and occupational groups. In January 2009, the unemployment rate for men aged 25 years and older was 3 percentage points above its average level in the fourth quarter of 2007, while the rate for women aged 25 years and older was up 2 percentage points; as typically occurs during recessions, unemployment rates for teenagers and young adults showed even larger increases. Among the major racial and ethnic groups, unemployment rates for blacks and Hispanics have risen somewhat more than those for whites, a differential also typical of periods when labor market conditions weaken. Moreover, the number of workers who are working part time for economic reasons—a group that includes individuals whose hours have been cut back by their employers as well as those who want full-time jobs but are unable to find them—has soared to nearly 8 million, more than 3 million above its level at the start of the recession. The increase in involuntary part-time work has been widespread across industries.

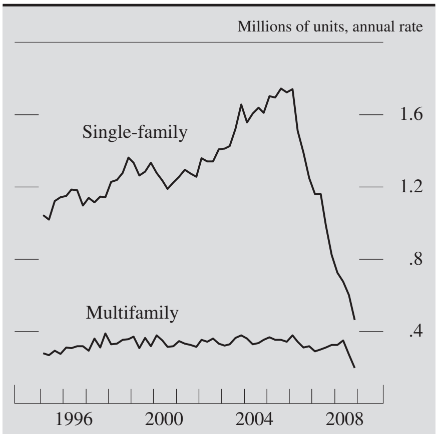
The labor force participation rate, which typically falls during periods of labor market weakness, has decreased of late. The decline has probably been damped somewhat by the availability of extended unemployment insurance benefits, which may have encouraged some workers who would have otherwise discontinued their job search efforts to continue looking for work.[4] In addition, the reduction in household wealth over the past couple of years may have prompted some individuals who would have otherwise dropped out of the labor force to remain in, and it may have caused some who would not have entered the labor force to do so.

Broad measures of nominal hourly compensation, which includes both wages and benefits, posted moderate increases in 2008. For example, compensation per hour in the nonfarm business sector—a measure derived from the compensation data in the national income and product accounts (NIPA)—rose 3½ percent in nominal terms in 2008, similar to the increases over the preceding few years.

4. Under legislation enacted in June 2008, the Emergency Unemployment Compensation (EUC) program began to provide an additional 13 weeks of benefits to workers who exhaust their regular benefits (typically 26 weeks). In November, the program was expanded to provide additional benefits to workers who exhaust the previously available 13 weeks of EUC benefits (an additional 7 weeks for all eligible individuals and a further 13 weeks for individuals in states with high unemployment rates—defined as a state unemployment rate of 6 percent or above). This expansion, as well as the original EUC program, was scheduled to expire in March 2009, but the American Recovery and Reinvestment Act of 2009 extended it through December 2009; the act also increased payments to recipients of unemployment compensation by $25 per week.

The wage component of hourly compensation also rose moderately in nominal terms in 2008, and because consumer price inflation over the year as a whole was low, much of the gain in nominal wages was reflected in higher real wages. For example, over the four quarters of last year, average hourly earnings, a measure of hourly wages for production and nonsupervisory workers, increased nearly 4 percent in nominal terms—and rose 2 percent after accounting for the rise in the price index for overall personal consumption expenditures (PCE). However, because of sharp cutbacks in hours worked, real average weekly earnings were up just 1 percent. Moreover, for many workers, real weekly earnings actually declined: In manufacturing, real average weekly earnings fell 1 percent last year, while in retail trade, this measure of real weekly earnings fell more than 2 percent.

11. Private Housing Starts, 1995–2008



Note: The data are quarterly and extend through 2008:Q4.
Source: Department of Commerce, Bureau of the Census.

The Household Sector

Residential Investment and Housing Finance

Housing activity remained on a steep downward trend in the second half of 2008. Home sales and prices slumped further, and homebuilders continued to curtail new construction in response to weak demand and elevated backlogs of unsold new homes. In the single-family sector, new units were started at an average annual rate of just 460,000 units in the fourth quarter of 2008—roughly 75 percent below the quarterly high reached in mid-2005 (figure 11). Starts in the multifamily sector averaged just 200,000 units in the fourth quarter; for 2008 as a whole, multifamily starts totaled 285,000, the lowest level in more than a decade. In all, the decline in residential investment, as measured in the NIPA, subtracted ¾ percentage point from the annual rate of change in GDP in the second half of 2008, about as much as in the first half. The further drop in housing starts and residential building permits in January suggests that housing will continue to exert a substantial drag on the change in real GDP in early 2009.

The further contraction in housing demand in the second half of 2008 partly reflected the bleaker picture for household income and wealth. Potential homebuyers may also have been deterred by concerns about the likelihood of additional declines in house prices and fears of buying into a falling market. And while individuals who qualified for fixed-rate conforming mortgages were able to take advantage of historically low interest rates, many potential homebuyers with blemished credit histories or who were in a position to make only small down payments found it difficult to obtain loans. In the market for new single-family homes, sales fell nearly 30 percent (not at an annual rate) between the second and fourth quarters, which brought the total decline in sales since their peak in mid-2005 to 70 percent. The slippage in sales has continued to hamper builders' efforts to gain control of their inventories. Although the stock of unsold new homes fell considerably in the second half of 2008, it did not fall as much as sales; thus, the months' supply of unsold new homes continued to move up, reaching a level nearly three times that recorded during the first half of the decade. In the market for existing single-family homes, the decline insales in recent quarters has been less pronounced than for new homes, but this situation could reflect the fact that these sales figures include some transactions involving foreclosed homes and other distressed properties, which tend to sell at heavily discounted prices. Existing home sales ended the year more than 30 percent below the highs of a few years earlier.

House prices fell sharply in the second half of 2008, with the latest 12-month readings in major nationwide indexes showing prices of existing homes down between 9 percent and 19 percent. One such measure, the LoanPerformance repeat-sales price index, fell 11 percent over the 12 months ending in December and stood 19 percent below its peak in early 2006. Declines in home prices have been especially steep in Arizona, California, Florida, and Nevada. These states, which had experienced some of the largest increases in home prices earlier in the decade, have generally seen the largest increases in delinquency rates and foreclosure actions initiated by lenders.

The drop in home prices is contributing to worsening payment problems among mortgage borrowers. Traditionally, some homeowners have coped with job loss and other life events by refinancing their homes and extracting equity or by selling the properties. However, the considerable declines in housing equity, along with tighter lending standards, mean that even prime loans are more difficult to refinance, and weak housing demand has made selling difficult. As a consequence, borrowers have increasingly fallen behind in their monthly obligations. Indeed, in November 2008, 25 percent of subprime mortgages were seriously delinquent (the latest available data).[5] As of December 2008, 3¾ percent of prime mortgages were seriously delinquent—much lower than the level of serious delinquency for nonprime loans, but still almost twice the level of a year earlier.

Foreclosures also have risen appreciably of late. Indeed, available data suggest that more than 2 million homes entered the foreclosure process in 2008, compared with foreclosure starts of 1½ million in 2007 and 1 million or less in each of the preceding four years. As with delinquencies, declining house prices have been a key contributor to the rise in foreclosures. At the same time, rising foreclosures have exacerbated the decline in house prices by increasing the number of heavily discounted properties on the market and thus exerting downward pressure on prices of otherwise comparable occupied homes. Lenders and public policy makers have taken steps to limit the number of avoidable foreclosures by modifying mortgages and putting in place programs such as Hope for Homeowners, established by the Federal Housing Administration (FHA).

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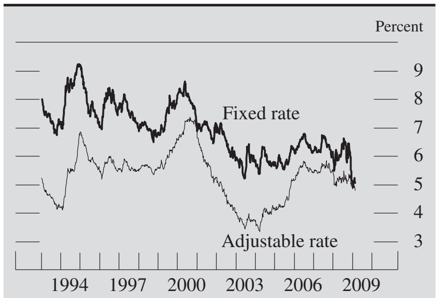
5. A mortgage is defined as seriously delinquent if the borrower is 90 days or more behind in payments or the property is in foreclosure.

In an environment of generally weak housing demand, falling home prices, tighter lending standards, and rising foreclosures, total household mortgage debt appears to have posted an outright decline in 2008—the first in the history of the series, which extends back to the 1950s. In secondary mortgage markets, securitization of mortgages by Fannie Mae and Freddie Mac has fallen in recent months, and gross issuance of GSE-backed MBS has lately just outpaced maturing issues so that levels outstanding have only inched up since the summer. Issuance of Ginnie Mae securities backed by FHA loans has continued to be strong, but the nonagency MBS market remains closed. The FHA has offered an alternative source of mortgage financing for some nonprime and near-prime borrowers, and such lending has picked up lately; still, it has replaced only part of the reduction in credit from other sources, largely because of the FHA's relatively strict lending standards and higher costs.

Interest rates on 30-year fixed-rate conforming mortgages have fallen about 100 basis points, on net, since the November 25 announcement of the Federal Reserve's program to purchase MBS issued by the housing GSEs and Ginnie Mae, and they currently stand at 5 percent (figure 12). However, interest rates for nonconforming jumbo fixed-rate loans have declined by less than those for conforming mortgages in recent months, which has caused the extraordinarily wide spread between the two rates to widen further.[6] The high level of this spread reflects, in part, the absence of functioning securitization markets for jumbo mortgages as well as an increased aversion by banks to making potentially risky loans.

12. Mortgage Rates, 1993–2009



NOTE: The data, which are weekly and extend through February 18, 2009, are contract rates on 30-year mortgages.

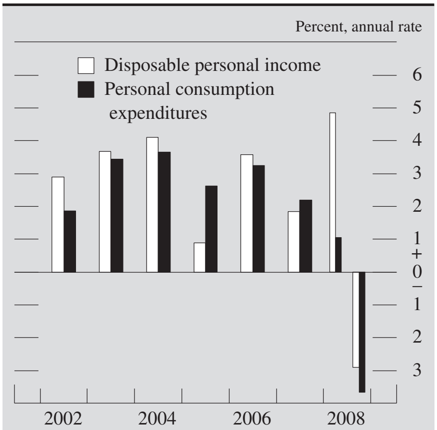
SOURCE: Federal Home Loan Mortgage Corporation.

Consumer Spending and Household Finance

Consumer spending held up reasonably well in the first part of 2008. However, spending slackened noticeably toward the end of the second quarter despite the boost to household income from the tax rebates authorized by the Economic Stimulus Act of 2008, and consumer outlays entered the second half of the year on a downward trajectory. Against a backdrop of sizable job losses, decreases in household net worth, and difficulties in obtaining credit, real PCE declined at an annual rate of more than 3½ percent in the second half of 2008 (figure 13).

6. Conforming mortgages are those eligible for purchase by Fannie Mae and Freddie Mac; they must be equivalent in risk to a prime mortgage with an 80 percent loan-to-value ratio, and they cannot exceed the conforming loan limit. The conforming loan limit for a first mortgage on a single-family home in the contiguous United States is currently equal to the greater of $417,000 or 115 percent of an area's median house price; it cannot exceed $625,500. Jumbo mortgages are those that exceed the maximum size of a conforming loan; they are typically extended to borrowers with relatively strong credit histories.

13. Change in Real Income and Consumption, 2002–08



SOURCE: Department of Commerce, Bureau of Economic Analysis.

The downshift in consumer spending reflected both a sharp pullback in purchases of goods and a marked deceleration in expenditures on services. Outlays for new light motor vehicles (cars, sport utility vehicles, and pickup trucks) were especially hard hit. Indeed, at an annual rate of just 10¼ million units, sales of light vehicles in the fourth quarter were nearly 4 million units below the already reduced pace during the first nine months of the year; they fell further in January 2009 despite relatively low gasoline prices and a substantial increase in sales incentives in recent months.

Real disposable personal income (DPI)—that is, after-tax income adjusted for inflation—rose just 1¼ percent in 2008. Some of the weakness in real DPI reflected softness in aggregate wage and salary income, which fell slightly in real terms. As noted earlier, hourly wages posted a solid increase in real terms last year, but the effect of this increase on aggregate wages and salaries was outweighed by the negative effects of the contraction in employment and the decrease in hours worked by those who retained jobs. Apart from transfer payments, most types of nonwage income performed poorly as well. Measured on a per capita basis, average real after-tax income was essentially unchanged last year, compared with an average increase of nearly 2 percent during the preceding five years.

In addition to the weakness in income, consumer spending has been restrained in recent quarters by a sizable decrease in household net worth. This source of restraint on spending likely reflects not only the most recent drops in equity and house prices but also the lagged effects of the appreciable decline in wealth during 2007 and the first half of 2008. The loss of wealth, along with heightened concerns about the prospects for jobs and income, helped push consumer sentiment to very low levels. These factors also contributed to a noticeable upturn in the personal saving rate, which rose to nearly 3 percent in the fourth quarter of 2008 after fluctuating between 0 and 1 percent for most of the period since 2005.

Nonmortgage consumer debt outstanding appears to have fallen, on net, in the second half of 2008 after having increased at an annual rate of 4 percent in the first half. Part of the drop in borrowing was likely due to weaker demand for loans, but the available evidence also suggests that lenders tightened the supply significantly. Indeed, results from the Senior Loan Officer Opinion Survey released in October 2008 and January 2009 revealed that many banks tightened standards and terms for consumer loans, actions that included lowering credit limits on existing credit card accounts. Lenders also reportedly continued to tighten underwriting standards on non-government-guaranteed student loans, and some major providers of these loans exited the market.

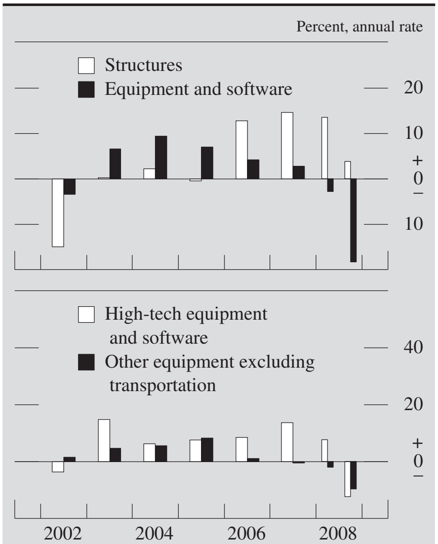
Part of the tightening of lending standards and terms no doubt reflects lenders' concerns about the credit quality of households. Indeed, the performance of consumer loans has continued to worsen in recent months, albeit less starkly than that of mortgages. Delinquency rates for most types of consumer lending—credit cards, auto loans, and nonrevolving loans—rose significantly, on net, over the course of 2008, and most such rates now stand at or above the levels seen during the 2001 recession. Household bankruptcy rates also increased sharply in 2008.

The pullback in consumer credit also likely reflects, in part, the difficulties in the market for asset-backed securities. Until the first half of 2008, a substantial fraction of consumer credit had been funded with ABS, but since the third quarter, issuance of credit card, automobile, and student loan ABS has slowed to a trickle. As noted earlier, to facilitate renewed issuance of consumer and small business ABS and thus support economic activity, the Federal Reserve announced in November plans for the Term Asset-Backed Securities Loan Facility, which will begin operations in the coming weeks.[7] Spreads on AAA-rated ABS rose through most of last year but have declined lately, reportedly in anticipation of the opening of the TALF.

Against this backdrop, interest rates on auto loans generally rose somewhat during the second half of 2008, and those on most other types of consumer loans were little changed, despite a substantial decrease in rates on comparable-maturity Treasury securities. Although some consumer interest rates appear to have fallen slightly in early 2009, their spreads to Treasury rates remain quite elevated.

7. A description of the TALF is in the appendix.

14. Change in Real Business Fixed Investment, 2002–08



NOTE: High-tech equipment consists of computers and peripheral equipment and communications equipment.

SOURCE: Department of Commerce, Bureau of Economic Analysis.

The Business Sector

Fixed Investment

After having posted small gains in the first half of 2008, real business fixed investment edged down in the third quarter and fell sharply in the fourth quarter (figure 14). The retrenchment in investment reflected both a steep drop in outlays on equipment and software (E&S) and a sharp deceleration in spending on nonresidential construction after 2½ years of robust gains. Investment demand appears to have been depressed by the downturn in sales, production, and profitability as well as by the reduced availability and higher cost of credit from securities markets, banks, and other lenders.

Real spending for E&S fell at annual rates of 7½ percent in the third quarter and 28 percent in the fourth quarter. Business outlays on motor vehicles, which had fallen sharply in the first half of the year, continued to plunge in the second half. Outlays for other major components of E&S also recorded sizable declines. Real investment in information technology equipment—which had risen moderately in the first half of the year—fell at a 12½ percent annual rate, on average, in the second half as business demand for computers, software, and communications equipment dropped appreciably. Real spending on equipment other than information technology and transportation, which had been moving essentially sideways since the end of 2005, held up through the third quarter. However, it fell at an annual rate of about 20 percent in the fourth quarter, and the slow pace of orders lately, along with the downbeat tone in recent surveys of business conditions, points to further declines in this broad category of spending in early 2009.

On net, real outlays for nonresidential construction posted a small increase in the second half of 2008. However, gains were concentrated in energy-related sectors—drilling and mining structures, petroleum refineries, and transmission and distribution facilities—and likely reflected the earlier run-up in the price of crude oil. Outside the energy-related sectors, spending turned down in the second half of last year as construction of office buildings softened and spending on nonoffice commercial buildings (a category that includes retail, wholesale, and some warehouse space) fell sharply. The decline was related to the rise in vacancy rates over the past few quarters, which was driven, in part, by the weakening in aggregate output and employment. In addition, recent reports from bank lending officers suggest that financing for new construction projects has become even more difficult to obtain.

Inventory Investment

One hallmark of the economic landscape over the past year has been the prompt response of producers to the slowing in final sales. For much of 2008, the production adjustments resulted in a rapid pace of inventory liquidation and were sufficient to prevent the emergence of widespread stock imbalances. In the fourth quarter, however, the precipitous drop in final demand left many firms holding inventories in excess of desired levels—a view expressed by respondents to a variety of business surveys at the turn of the year. Accordingly, available data suggest that producers continued to pare back output in January 2009.

The inventory overhang at year-end was especially acute in the motor vehicle sector. Although automakers slashed production during the fourth quarter, the collapse in sales last autumn pushed up dealers' stocks, and the days' supply of cars and light trucks soared to nearly 100 days—well above industry norms. In response, motor vehicle manufacturers instituted even larger cuts in production in early 2009. These cuts should help ease the pressure on dealers' stocks, though further progress will require continued restraint on production, a meaningful pickup in sales, or both.

Corporate Profits and Business Finance

Operating earnings per share for S&P 500 firms fell an estimated 17 percent in 2008. Losses were especially pronounced for financial firms. In the nonfinancial sector, earnings at firms other than oil and gas companies generally slowed over the course of 2008 and declined outright in the fourth quarter. In addition, in light of the deterioration in the economy, analysts significantly marked down their projections for earnings in 2009.

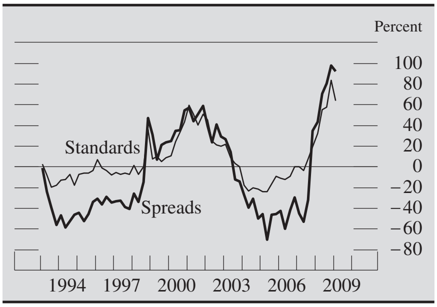
Borrowing by domestic nonfinancial businesses—primarily through the corporate bond market, the commercial paper market, and bank loans—slowed markedly in the second half of 2008. The deceleration reflected not only a reduced desire of businesses to borrow and invest in response to the worsening economic outlook but also a reduced willingness of potential lenders to provide funding for risky projects. In the corporate bond market, issuance of investment-grade securities by nonfinancial firms was solid throughout the year; in contrast, speculative-grade issuance has been scant in recent months. After moving up in the first half of the year, the cost of longer-term financing rose further as interest rates on both investment- and speculative-grade corporate bonds soared in the fall. While corporate bond rates were climbing, Treasury yields dropped, pushing interest rate spreads on corporate bonds well above previous record highs. The increases in spreads appeared to derive from both the anticipation of an increase in defaults and a further reduction in investors' willingness to take risk. In the commercial paper market, short-term borrowing by highly rated nonfinancial firms has increased since the summer; the rise reflects importantly the Federal Reserve programs supporting issuance by stronger firms. Indeed, rates on highly rated paper with maturities of less than 30 days have averaged around 20 basis points since late November, compared with nearly 200 basis points in September and October. Rates on lower-grade nonfinancial paper have also decreased in recent months, but their spreads to highly rated paper remain elevated by historical standards.

Bank lending to businesses expanded in September and October as firms reportedly drew on existing lines of credit. More recently, however, loans to commercial and industrial borrowers have registered significant declines. In addition, the growth of commercial real estate loans—which are often used to finance construction and land development—slowed substantially in the second half of the year. Given the deteriorating economic outlook, tighter credit standards, and businesses' decisions to scale back new investment, both C&I and CRE lending seem likely to fall further in the first part of 2009 (figure 15).

In the equity market, initial offerings by nonfinancial corporations were very sparse through the second half of 2008, and seasoned offerings (excluding firms in the energy sector) were also weak. Equity retirements—which often occur as a result of share repurchases that are associated with cash-financed mergers—continued to outpace the combined amount of private and public issuance, a development due, in part, to the completion of a few large mergers. However, share repurchases are estimated to have moderated a bit in recent months, and announcements of future cash-financed mergers have slowed significantly, likely because of the weaker economic outlook and tighter lending conditions.

The credit quality of nonfinancial firms deteriorated in the second half of the year. The aggregate ratio of debt to assets climbed further, and the aggregate ratio of liquid assets to total assets declined notably. Ratings downgrades

15. Net Percentage of Domestic Banks Tightening Standards and Increasing Spreads on Commercial and Industrial Loans to Large and Medium-Sized Borrowers, 1993–2009



NOTE: The data are drawn from a survey generally conducted four times per year; the last observation is from the January 2009 survey, which covers 2008:Q4. Net percentage is the percentage of banks reporting a tightening of standards or an increase in spreads less the percentage reporting an easing or a decrease. Spreads are measured as the loan rate less the bank's cost of funds. The definition for firm size suggested for, and generally used by, survey respondents is that large and medium-sized firms have annual sales of $50 million or more.

SOURCE: Federal Reserve Board, Senior Loan Officer Opinion Survey on Bank Lending Practices.

on nonfinancial corporate bonds picked up and outpaced upgrades, and the share of corporate bonds rated B3 or below by Moody's increased to about 6½ percent. Delinquency rates on C&I loans increased noticeably in the fourth quarter, and delinquency rates on CRE loans rose further, mainly because of continued rapid weakening in the performance of residential and commercial construction loans.

The Government Sector

Federal Government

The deficit in the federal unified budget is in the midst of a massive widening. Mainly reflecting the deceleration in economic activity and the provisions of the Economic Stimulus Act of 2008, the deficit rose to $455 billion in fiscal year 2008, nearly $300 billion higher than in fiscal 2007 and equal to more than 3 percent of nominal GDP. So far in fiscal 2009, the deficit has increased substantially further, mostly because of outlays under the Troubled Asset Relief Program and the effects of the weak economy on revenues and spending.[8] In January, the Congressional Budget Office estimated that the deficit for fiscal 2009 as a whole would total more than $1 trillion under the spending and taxation policies in place at that time, a figure that excludes the budgetary impact of the American Recovery and Reinvestment Act of 2009.

Federal receipts fell nearly 2 percent in nominal terms in fiscal 2008 and stood at 17¾ percent of nominal GDP; they dropped further during the first four months of fiscal 2009. The decline has been most pronounced in corporate receipts, which have fallen at double-digit rates as corporate profits have dropped and as firms have presumably adjusted payments to take advantage of the bonus depreciation provisions contained in the Economic Stimulus Act. Excluding the rebates provided to most households under the act, individual income tax receipts rose moderately in fiscal 2008. However, so far in fiscal

8. In the Monthly Treasury Statements, equity purchases under the TARP and the GSE conservatorship are treated on a cash-flow basis, which means that the outlays are recorded as they occur; a flow of receipts will be recorded in future years to reflect any dividends on the shares of equity and the proceeds from the eventual sale of the shares. In contrast, the Congressional Budget Office (CBO) treats these transactions on an accrual basis and thus records outlays as the net present value cost of the equity purchases, rather than the entire amount that is disbursed; under the CBO approach, there is no offsetting flow of receipts in future years. According to the Treasury, the unified budget deficit for the first four months of fiscal 2009 totaled $569 billion; under the CBO approach, the year-to-date deficit would be $361 billion.

2009, individual receipts have been running below year-earlier levels, likely because of the weakness in nominal personal income and reduced capital gains realizations.

Excluding financial transactions, nominal federal outlays increased 8 percent in fiscal 2008 after having risen just 3 percent in fiscal 2007. Defense outlays rose 12 percent in fiscal 2008 as the rapid run-up in budget authority over the past three years continued to bolster spending; increases in defense funding in recent years have been substantial not only for operations in Iraq and Afghanistan but also for activities not directly related to those conflicts. Federal spending also rose sharply in fiscal 2008 for programs that provide support to lower-income households. So far in fiscal 2009, federal outlays for defense and low-income support programs have continued to rise rapidly. Also, spending for Medicare has picked up lately, and outlays for Social Security have been lifted by the large cost-of-living adjustment that took place in January. As for the part of federal spending that is a direct component of GDP, real federal expenditures for consumption and gross investment rose at an annual rate of 10 percent, on average, in the second half of calendar year 2008, mostly because of the sizable increase in defense spending.

State and Local Government

Aggregate real expenditures on consumption and gross investment by state and local governments were little changed, on net, in the second half of 2008 after posting a small increase in the first half. In part reflecting the mounting pressures on the sector's budgets, state and local employment has been about flat since mid-2008, while real construction spending has essentially moved sideways.

The financial positions of most states—with the exceptions of Arizona, California, Michigan, and a few others—were fairly solid at the end of fiscal year 2008.[9] However, so far in fiscal 2009, revenues have been running significantly below expected levels because of the softness in personal and corporate incomes and the weakness in retail sales. States' initial plans to address the widening budget gaps have included cuts in spending on education and other programs, hiring freezes and furloughs, and some tapping of rainy day funds; in coming quarters, however, the dominant influence on state budgets will be the infusion of grants-in-aid under the 2009 federal stimulus package, which will help cushion the effects of the economic downturn on states' budgets. At the local level, property tax receipts continued to be propped up in 2008 by the lagged effects of the dramatic increases in house prices over the first half of the decade.[10] Nevertheless, the sharp fall in house prices over the past two years is likely to put substantial downward pressure on local revenues before long. Moreover, many state and local governments will need to set aside money in coming years to rebuild their employee pension funds after the losses experienced in 2008 and to fund their ongoing obligations to provide health care to their retired employees.

9. State government fiscal years end on June 30 in all but four states.

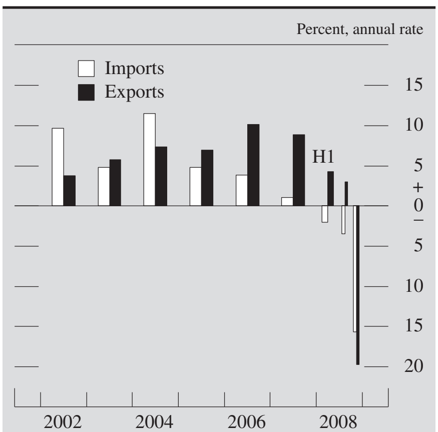
10. The lag between changes in house prices and changes in property tax revenue likely occurs because many localities are subject to state limits on the annual increases in total property tax payments and property value assessments. Thus, increases in market prices for houses may not be reflected in property tax bills until well after the fact.

The External Sector

In contrast to the first half of 2008—when robust exports provided some offset to the softness in domestic demand—the external sector provided little support to economic activity in the second half of the year. After decelerating in the third quarter, real exports declined sharply in the fourth quarter, as economic activity abroad contracted. Real imports, which had been declining earlier in 2008, also dropped considerably in the fourth quarter, dragged down by deteriorating U.S. demand (figure 16). The declines in trade flows in late 2008 were widespread across major types of products and U.S. trading partners. In addition, exports were depressed by production disruptions at Boeing.

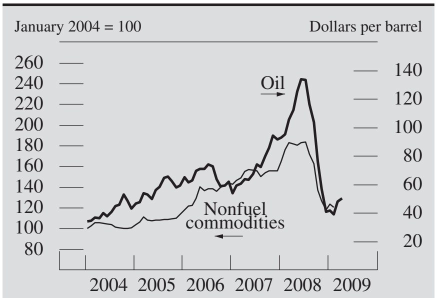
The U.S. trade deficit narrowed considerably at the end of 2008, which largely reflected a sharp decline in the price of imported oil. The trade deficit was $555 billion at an annual rate in the fourth quarter of 2008, or about 4 percent of nominal GDP, compared with a deficit of 5 percent of nominal GDP a year earlier.

16. Change in Real Imports and Exports of Goods and Services, 2002–08



SOURCE: Department of Commerce, Bureau of Economic Analysis.

17. Prices of Oil and Nonfuel Commodities, 2004–09



NOTE: The data are monthly. The oil price is the spot price of West Texas intermediate crude oil, and the last observation is the average for February 1–18, 2009. The price of nonfuel commodities is an index of 45 primary-commodity prices and extends through January 2009.

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

The price of crude oil in world markets was extremely volatile in 2008. After ending 2007 at about $95 per barrel, the spot price of West Texas intermediate (WTI) crude oil surged to more than $145 by mid-July amid both surprisingly robust oil demand, especially from emerging market economies, and continued restraint in near-term supply (figure 17). Since mid-July, the financial market turmoil and the resulting sharp downturn in global economic activity have dragged down oil demand. Despite attempts by OPEC to rein in production, the rapid drop in demand and concerns about future prospects for the global economy led to a collapse in oil prices. The spot price of WTI fell about 75 percent from its peak to near $40 per barrel in January of this year. Far-dated futures prices for crude oil have fallen somewhat less, which likely reflects the view that OPEC actions will eventually reduce supply and that global oil demand will rebound in the medium term.

Import prices rose rapidly in the first half of 2008, but the increase was reversed in the second half. That pattern primarily reflected the sharp swing in oil prices, but it was also influenced by a marked slowing in nonoil import price inflation from its rapid pace in the first half of the year. Even excluding oil, prices of imported goods declined in the fourth quarter of 2008, driven by both the sharp fall in non-oil commodity prices and the appreciation of the dollar that occurred in the latter half of the year.

National Saving

Total net national saving—that is, the saving of households, businesses, and governments excluding depreciation charges—fell further in 2008. After having ticked up to 3 percent of nominal GDP in 2006, net national saving dropped steadily over the subsequent two years as the federal budget deficit widened, the fiscal positions of state and local governments deteriorated, and private saving remained low; in the third quarter of 2008, net national saving stood at negative 1¾ percent of GDP. National saving will likely remain low this year in light of the weak economy and the recently enacted federal fiscal stimulus package. Nonetheless, if not boosted over the longer run, persistent low levels of national saving will likely be associated with both low rates of capital formation and heavy borrowing from abroad, which would limit the rise in the standard of living of U.S. residents over time and hamper the ability of the nation to meet the retirement needs of an aging population.

Prices and Labor Productivity

Prices

Although inflation pressures were elevated during the first half of 2008 and into the summer, they diminished appreciably toward year-end as prices of energy and other commodities dropped and the degree of slack in the economy increased. The chain-type price index for total personal consumption expenditures fell at an annual rate of 5½ percent in the fourth quarter after rising rapidly over the first three quarters of the year. The core PCE price index—which excludes food and energy items—rose at an annual rate of just ½ percent in the fourth quarter after increases of 2¼ percent, on average, over the first three quarters of the year. Over 2008 as a whole, core PCE prices increased 1¾ percent. Data for PCE prices in January 2009 are not yet available, but information from the consumer price index (CPI) and other sources suggests that both the total and core PCE price indexes posted modest increases in that month.

Since peaking in July, consumer energy prices have fallen dramatically, with most of the decline coming during the last three months of 2008. Largely reflecting the drop in crude oil prices, the price of gasoline fell from around $4 per gallon, on average, in July to less than $2 per gallon in December; in mid-February, it was in the neighborhood of $2 per gallon. Prices of natural gas, which typically move roughly in line with crude oil prices over periods of several months, also fell sharply in the second half of 2008 after a substantial run-up in the first half of the year. Consumer prices for electricity continued to move up through the end of the year—likely because of higher prices earlier in the year for fossil fuel inputs to electricity generation—though increases appear to have slowed in early 2009.

In contrast, consumer food prices continued to rise rapidly into the autumn. Increases were substantial both for food consumed at home and for purchased meals and beverages, which typically are influenced more by labor and other business costs than by farm prices. Since November, however, increases in consumer food prices have been quite modest. Farm prices, which had soared between 2006 and mid-2008 as a consequence of strong world demand and the increased use of corn for the production of ethanol, fell sharply in the second half of last year as prospects for domestic and foreign demand for food weakened and the demand for ethanol eased. Typically, changes in farm prices start to show through fairly quickly to consumer food prices, and the small increases in the CPI for food in the past couple of months suggest that a noticeable moderation in consumer food price inflation is under way.

The slowdown in core inflation in late 2008 was widespread, although it was particularly steep for motor vehicles, apparel, and other consumer goods that were heavily discounted by retailers in an environment of weak demand and excess inventories. In addition, the cost pressures that seemed to be boosting core inflation earlier in the year ebbed as pass-throughs of the previous large increases in the prices of energy and materials ran their course and the effects of recent declines in these prices started to show through to consumer prices. The strengthening in the exchange value of the dollar and the deceleration of import prices also helped ease the upward pressure on core inflation.

Survey-based measures of near-term inflation expectations have receded as actual inflation has come down, while indicators of longer-term inflation expectations have been steadier. According to the Reuters/University of Michigan Surveys of Consumers, median one-year inflation expectations, which had moved above 5 percent last spring and early summer, fell throughout the second half of last year; since December, they have fluctuated around 2 percent. As for longer-term inflation expectations, the Reuters/University of Michigan survey measure of median 5- to 10-year inflation expectations was about 3 percent in January and early February of this year, similar to the readings during 2007 and the early part of 2008.

Productivity and Unit Labor Costs

Labor productivity has held up surprisingly well in the past year. Although productivity growth has often stalled during previous recessions, output per hour in the nonfarm business sector rose 2¾ percent over the course of 2008, the same rate as in 2007. The continued rise in productivity during the second half of last year, at a time when output was contracting, likely reflects the aggressive downsizing undertaken by firms in response to their worsening sales prospects. Moreover, although estimates of the underlying pace of productivity growth are quite uncertain, the buoyancy of productivity in recent quarters suggests that the fundamental forces supporting a solid underlying trend—for example, the rapid pace of technological change and the ongoing efforts by firms to use information technology to improve the efficiency of their operations—remain in place.

Reflecting the solid gain in labor productivity, along with the subdued increase in nominal hourly compensation noted earlier, unit labor costs in the nonfarm business sector rose just ¾ percent in 2008. The increase in unit labor costs was about the same as that recorded in 2007.

Monetary Policy Expectations and Treasury Rates

The current target range for the federal funds rate, 0 to ¼ percent, is substantially below the level that investors expected at the end of June 2008; policy expectations were steadily revised downward over the second half of the year as the financial and economic outlook worsened. Toward the end of the year, readings on interest rate expectations from money market futures and options were complicated by persistent trading of federal funds below the target rate, which resulted from the large increase in reserve balances accompanying the expansion of the Federal Reserve's liquidity programs. Nevertheless, investors clearly anticipated that the federal funds rate would remain low for quite some time amid increasing concerns about the health of financial institutions, weakness in the real economy, and a moderation in inflation pressures. Futures quotes currently suggest that investors expect the federal funds rate to remain around its current level throughout the first half of this year and then to rise gradually through the end of 2010. However, uncertainty about the size of term premiums and potential distortions created by the zero lower bound for the federal funds rate make it difficult to obtain from futures prices a definitive reading on the policy expectations of market participants. Options prices suggested that investor uncertainty about the future path for policy was increasing considerably through October, as strains in financial markets intensified, but these measures of uncertainty have subsequently trended downward.

As the economic outlook worsened during the second half of the year and inflation pressures ebbed, yields on longer-maturity Treasury securities de-

18. Interest Rates on Selected Treasury Securities, 2004–09

NOTE: The data are daily and extend through February 18, 2009.
SOURCE: Department of the Treasury.

clined substantially (figure 18). In addition, the generally negative market sentiment and speculation that the Federal Reserve might begin purchasing large quantities of longer-maturity Treasury securities contributed at times to downward pressure on Treasury yields. Offsetting these factors to some degree were market expectations that the Treasury's issuance of long-term debt, which rose notably over the course of 2008, would pick up further in 2009. On net, yields on 2- and 10-year notes fell about 200 and 140 basis points, respectively, during the second half of 2008.

In contrast to yields on their nominal counterparts, yields on Treasury inflation-protected securities (TIPS) rose over the second half of 2008, which resulted in a noticeable reduction in measured inflation compensation—the difference between comparable-maturity nominal and TIPS yields. Some of this reduction was reversed in the early part of 2009. Inferences about inflation expectations based on TIPS yields have been difficult to make recently because these yields appear to have been affected to a degree by movements in liquidity premiums and because special factors have buffeted yields on nominal Treasury issues.

Federal Borrowing

Federal debt soared in the second half of 2008. The more than $1 trillion of Treasury borrowing since the summer reflects importantly the need to finance the Treasury's purchases of agency MBS and equity; the TARP, under which the Treasury has purchased preferred shares in a number of financial institutions; and the Supplementary Financing Program, under which the Treasury has increased deposits at the Federal Reserve to help fund the expansion of the Federal Reserve's balance sheet. The ratio of federal debt held by the public to nominal GDP surged to almost 45 percent at the end of calendar year 2008 and seems certain to increase again in the first part of 2009, as borrowing is expected to remain strong with the weak economy and budgetary initiatives.

Despite the heavy issuance of Treasury securities in the second half of the year, the rapid growth of federally guaranteed debt issued by banking institutions under the Temporary Liquidity Guarantee Program, and continued issuance of GSE securities, demand at most Treasury auctions was solid, as investors sought the safety of Treasury securities. Demand for Treasury bills was extremely strong, and yields in secondary markets sometimes fell close to zero (and even below zero at times), even as the supply of bills increased markedly. Foreign custody holdings of Treasury securities at the Federal Reserve Bank of New York grew nearly 40 percent over 2008, although the proportion of nominal coupon securities purchased at auctions by foreign investors generally remained in the 10 percent to 30 percent range observed over the past several years.

State and Local Government Borrowing

On net, borrowing by state and local governments in the market for municipal securities was subdued in the second half of 2008. The issuance of short-term municipal debt was robust, boosted in part by the need to fund operating expenditures at a time of weak revenues. However, issuance of long-term debt, which is generally used to fund capital spending projects or to refund existing long-term debt, slowed significantly. Interest rates on long-term debt climbed sharply across the maturity spectrum in the second half of 2008 in the face of considerable strain on the budgets of many state and local governments and sharp deteriorations in market functioning. More recently, however, municipal bond rates have dropped markedly, in part because market participants appeared to view the federal stimulus package as likely to improve the financial condition of state and local governments.

Monetary Aggregates

The M2 monetary aggregate increased at a 10 percent annual rate during the second half of 2008 and 8½ percent for the year as a whole.[11] The rapid growth

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

reflected in part a marked decrease in some market interest rates relative to the rates offered on M2 assets, as well as increased demand for safe and liquid assets during the financial turmoil. During the second half of the year, the significant slowdown in the growth of retail money market mutual funds was offset by a rapid increase in small time deposits, as banks bid aggressively for these deposits to buttress their funding. The currency component of the money stock also increased briskly, an indication of solid demand for U.S. banknotes from both foreign and domestic sources. Flows into demand deposits were significant after the introduction of the Temporary Liquidity Guarantee Program, which apparently drew funds out of other money market instruments.

The monetary base—essentially the sum of currency in the hands of the public and bank reserves—has increased rapidly in recent months, primarily owing to heavy use of the Federal Reserve's liquidity programs. Credit extended through these programs caused the balance sheet of the Federal Reserve to expand considerably over the course of 2008, and this growth was financed largely by the creation of reserve balances. The increase in reserve balances almost entirely represented an increase in excess reserves rather than an increase in required reserves. In early 2009, the size of the balance sheet has decreased somewhat, which reflects a runoff in credit extended through the Commercial Paper Funding Facility and a decrease in draws on liquidity swap lines with foreign central banks.

than $100,000) less individual retirement account (IRA) and Keogh balances at depository institutions; and (7) balances in retail money market mutual funds less IRA and Keogh balances at money market mutual funds.

International Developments

International Financial Markets

Although foreign banks continued to report losses over the summer and funding conditions remained strained, global financial markets were relatively calm in July and August of 2008. This situation changed abruptly in September, as global interbank and other funding markets seized up and lending came to a near standstill. These developments were followed by the collapse of several prominent foreign financial institutions. In late September, the banks Bradford and Bingley, Fortis, and Dexia were partially or fully nationalized, and Hypo Real Estate Holding AG received a large capital injection from the German government.

The deepening of the crisis led many foreign governments to announce unprecedented measures to restore credit market functioning, including large-scale capital injections into the banking system, expansions of deposit insurance programs, and guarantees of some forms of bank debt. Most major central banks cut policy rates sharply as the financial crisis led to a dramatic deterioration in the outlook for economic activity and inflation; in October, coordinated policy rate cuts were made by the Federal Reserve and five other central banks. To address global dollar funding pressures, the Federal Reserve greatly expanded its program of liquidity swaps with foreign central banks by increasing the dollar amounts extended as well as the number of countries with which it has swap agreements. (The central banks with swap arrangements are discussed in the appendix.) These concerted global measures seem to have soothed conditions and had restored some measure of stability to markets by the end of the year, although credit markets abroad are still impaired.

Stock markets in the advanced foreign economies were nearly flat over July and August of 2008 but fell sharply beginning in late September; market volatility rose to record levels with the deepening of the financial crisis. On net, broad equity price indexes in Europe, Japan, and Canada fell 20 percent to 40 percent over the second half of last year and have continued to decline this year. Long-term sovereign bond yields fell sharply in Europe and Canada in the latter part of 2008, which reflected both the easing of monetary policy and diminished growth prospects, but have risen somewhat, on balance, in early 2009. In contrast, yields on inflation-protected long-term securities rose in many countries, and inflation compensation (the difference between yields on nominal securities and those on inflation-protected securities) fell sharply. As in the United States, measures of inflation compensation were quite volatile, however, as the liquidity of inflation-protected securities fell markedly.

Although in early 2008 the emerging market economies looked as if they might escape the most serious consequences of the financial crisis, the intensification of financial strains in September 2008 led to sharp and sudden capital outflows from many emerging markets as investors in the advanced economies sought to repatriate funds. Downdrafts in financial markets were reinforced by concerns over the effects of declining exports to the advanced economies and, for commodity exporters, plummeting commodity prices. Most stock markets in the emerging economies fell 20 percent to 40 percent, on net, over the second half of the year, and risk spreads on emerging market debt rose sharply.

The Federal Reserve's broadest measure of the nominal trade-weighted foreign exchange value of the dollar rose about 12 percent, on net, over the second half of 2008 (figure 19). Much of this rise reflected gains against major foreign currencies. The dollar appreciated 13 percent against the euro, 20 percent against the Canadian dollar, and 36 percent against sterling. The dollar's strength was attributable to several factors, including the realization by many investors that foreign growth would slow much more sharply than had been earlier anticipated as well as an increase in demand for the relative safety of U.S. assets such as Treasury securities. In contrast to its strength against other major currencies, the dollar depreciated 14 percent against the yen, as market volatility led many Japanese investors to sell foreign assets.

19. U.S. Dollar Nominal Exchange Rate, Broad Index, 2005–09

NOTE: The data, which are in foreign currency units per dollar, are daily. The last observation for the series is February 18, 2009. The broad index is a weighted average of the foreign exchange values of the U.S. dollar against the currencies of a large group of the most important U.S. trading partners. The index weights, which change over time, are derived from U.S. export shares and from U.S. and foreign import shares.

SOURCE: Federal Reserve Board.

The dollar also rose against the currencies of most emerging market economies, including appreciation of more than 30 percent against both the Mexican peso and the Brazilian *real.* The dollar appreciated much less against most emerging Asian currencies, although it did rise more than 20 percent against the Korean won. In response to these pressures, many central banks in both Latin America and Asia intervened in support of their currencies.

The Financial Account

Although the current account deficit is estimated to have narrowed in 2008, it remains sizable. Turbulence in global financial markets has noticeably changed the composition of the associated financial flows. Before the turmoil, financial inflows were primarily in the form of net purchases of U.S. securities by foreign private investors and somewhat smaller net purchases by foreign official institutions. Since late 2007, however, foreign private net purchases of U.S. securities have dropped sharply, leaving foreign official inflows to play a much larger role. Furthermore, whereas before the turmoil private foreign investors purchased large sums of U.S. assets issued by private entities, since then foreign investments—both official and private—have been dominated by a "flight to safety" to U.S. Treasury securities. Finally, in the third quarter of 2008, reductions in holdings of foreign assets by private U.S. residents played an unusual role, which added significantly to net private inflows.

Overall, inflows from foreign private acquisitions of U.S. securities in 2008 were just one-fifth of the flows obtained in the previous two years, on average. Although purchases of U.S. Treasury securities rose considerably, there were unprecedented net sales in other U.S. securities in 2008. Foreign demand was particularly weak for U.S. agency and corporate bonds, with the weakness especially pronounced in the second half of the year.

Foreign official net purchases of U.S. assets remained relatively steady in 2008, at a pace slightly above that of 2007. However, the composition of official net purchases in the third and fourth quarters moved sharply away from U.S. agency securities and was concentrated almost exclusively in U.S. Treasury securities. Foreign official acquisitions continued to be dominated by Asian institutions in 2008.

Prior to the turmoil, U.S. investors' net purchases of foreign securities typically generated a financial outflow. These purchases slowed following the turmoil and more recently have turned to sizable net sales—generating a financial inflow—as U.S. investors have pulled out of foreign investments. In addition, U.S. residents considerably reduced their deposits in foreign banks in 2008.

The turmoil also led to unusual flows from the banking sector and from official transactions in the form of the Federal Reserve's liquidity swap arrangements with foreign central banks. Net flows reported by banking offices in the United States are typically small. Since the onset of the turmoil through mid-2008, however, banks have generated unusually large outflows, in part reflecting a response to heightened demand resulting from interbank funding pressures in European markets. As central banks acted to address these concerns with the expansion of the swap arrangements in September 2008, the private banking outflows slowed to a halt. Foreign central banks eased dollar pressures abroad by lending to their domestic banks the dollar liquidity acquired from the Federal Reserve. Further drawings on the swap lines in October and December contributed to a strong reversal of banking flows (back toward the United States, on net) in the fourth quarter.

Advanced Foreign Economies

Economic performance in the major advanced foreign economies weakened sharply in the second half of 2008, as global financial market turbulence, shrinking world trade, and collapsing business and consumer confidence weighed on activity. Across the advanced foreign economies, credit conditions and lending standards tightened considerably, industrial production declined, and retail sales slowed. Housing markets weakened everywhere and performed particularly poorly in countries that earlier had experienced housing booms, such as Ireland, Spain, and the United Kingdom. By the third quarter of last year, both Japan and the euro area had entered recessions, and output fell sharply in all the major advanced foreign economies in the fourth quarter, with most countries experiencing especially severe declines in exports and private investment.

After surging in response to accelerating commodity prices in the first half of last year, headline rates of inflation fell noticeably as a result of collapsing commodity prices and worsening economic conditions. The 12-month change in consumer prices peaked in the third quarter of 2008 for all the major economies, and the peak values ranged from a high of 5¼ percent in the United Kingdom to 2¼ percent in Japan. The most recent figures are substantially lower and range from 3 percent in the United Kingdom to below 1 percent in Japan. Excluding food and energy prices, the swings in consumer price inflation have been more subdued. After moving up somewhat during most of 2008, core inflation is now declining in most advanced foreign economies.

Official monetary policy rates have been lowered significantly since the beginning of 2008 in response to severe financial market turbulence, decelerating economic activity, and waning inflation. After some easing early last year by the Bank of England and the Bank of Canada, rapidly rising food and energy costs led these central banks to pause, and, in the case of the European Central Bank (ECB), raise rates in the summer. However, in the fall, as financial conditions deteriorated and commodity prices fell, policymakers in the major industrial economies cut rates sharply, including a coordinated move in October. In total, the Bank of England has lowered its policy rate from 5½ percent in January of 2008 to 1 percent. The Bank of Canada and the ECB have also dropped rates to 1 percent and 2 percent, respectively. In Japan, interest rates were lowered to near zero in December. In addition to substantial reductions in policy rates, central banks in the major advanced economies have taken a number of extraordinary measures to improve liquidity in financial markets, including the large-scale provision of term funding in local currency and dollar markets and the significant expansion of allowable collateral for central bank funding. Some foreign central banks are turning to or contemplating other measures to support activity, such as purchases of private-sector assets. Governments in the major industrial economies have also announced fiscal packages to bolster activity.

Emerging Market Economies

Economic performance weakened dramatically in emerging market countries in the second half of 2008. In the first half of the year, growth in many emerging market economies was relatively robust, and as food and energy prices soared, policymakers focused on containing inflationary pressure. However, in the second half, weaker demand from the advanced economies weighed on the export sectors of these countries, global financial turmoil led to tighter credit conditions, and in some cases, plunging commodity prices contributed to economic difficulties. By the end of the year, output in emerging market economies was dropping sharply, and inflationary pressures were moderating. These developments prompted policymakers in many countries to shift their focus to more stimulative monetary and fiscal policies to mitigate the effects of the economic downturn.

In China, the pace of activity slowed substantially in 2008, and concerns regarding high inflation and an overheating economy receded and gave way to efforts to bolster activity. Since September, Chinese authorities have lowered benchmark lending and deposit rates as well as bank reserve requirements several times. In November, a large fiscal stimulus plan that focused on infrastructure investment was announced, and Chinese authorities also enacted other policies designed to support the export sector, the real estate market, and small and medium-sized enterprises. After appreciating significantly in the first half of the year, the exchange value of the renminbi vis-à-vis the dollar was relatively stable in the second half of 2008.

Elsewhere in emerging Asia, the downturn in activity has been dramatic. Hong Kong, Singapore, South Korea, and Taiwan all posted substantial contractions in real GDP at the end of last year. Demand for these countries' goods from the advanced economies and China plunged in the second half of 2008, and authorities across emerging Asia have introduced more stimulative monetary and fiscal policies to bolster their economies.

In Mexico, growth was anemic in the first half of last year, but it improved in the third quarter, largely because of strong activity in the agricultural and service sectors. However, output is estimated to have declined sharply in the fourth quarter, as weakness in the U.S. manufacturing sector and financial stress have begun to weigh on the Mexican economy. In Brazil, economic activity remained firm through much of the year, but indicators suggest that output fell sharply in the fourth quarter.

Russia's economy and financial system experienced considerable stress over the second half of the year because of the steep drop in oil and other commodity prices, the turmoil in global financial markets, and geopolitical tensions resulting from the conflict with Georgia. Russian international reserves fell substantially, largely because of interventions to support the currency and the financial and corporate sectors more broadly. Several countries in emerging Europe also came under significant financial pressures in the fourth quarter of 2008, which reflected the aftermath of a period of very high rates of credit expansion as well as large current account deficits and external financing needs. Hungary, Latvia, Serbia, and Ukraine received official assistance from the International Monetary Fund.

Part 3
Monetary Policy in 2008 and Early 2009

After easing the stance of monetary policy 225 basis points over the first half of 2008, the Federal Open Market Committee (FOMC) lowered the target federal funds rate further in the second half, ultimately bringing it to a range of 0 to ¼ percent.[12] The Federal Reserve also took a number of additional actions to increase liquidity and improve market functioning. Some of these measures resulted in a substantial increase in the size of the Federal Reserve's balance sheet; further, the FOMC announced at its December meeting that the focus of policy going forward would be to support the functioning of financial markets and stimulate the economy through open market operations and other measures that would sustain the size of the Federal Reserve's balance sheet at a high level.

Information available last summer indicated that residential construction remained on a downward trend, the labor market had weakened further, and industrial production had declined. Although aggregate output was reported to have expanded in the second quarter, financial market developments suggested that the economy would likely come under considerable stress in the near future—in particular, tight credit conditions, the ongoing housing contraction, and the rise in energy prices were expected to weigh on economic growth over the subsequent few quarters. Core consumer price inflation remained relatively stable, but headline inflation was elevated as a result of large increases in food and energy prices.

12. Members of the FOMC in 2008 consisted of members of the Board of Governors of the Federal Reserve System plus the presidents of the Federal Reserve Banks of Cleveland, Dallas, Minneapolis, New York, and Philadelphia; in 2009, FOMC members consist of members of the Board of Governors plus the presidents of the Federal Reserve Banks of Atlanta, Chicago, New York, Richmond, and San Francisco. Participants at FOMC meetings consist of members of the Board of Governors and all Reserve Bank presidents.

With these considerations in mind, the FOMC kept the target federal funds rate unchanged at 2 percent at its August meeting. The accompanying policy statement indicated that, although downside risks to growth remained, the upside risks to inflation were also of significant concern to the Committee. This risk assessment, which many market participants reportedly interpreted as essentially balanced, was in line with expectations at the time. Accordingly, the expected path for policy was little changed in the wake of the announcement, and the response in broader financial markets was minimal.

By the time of the meeting on September 16, the outlook for inflation had moderated as a result of substantial declines in the prices of oil and other commodities as well as weakening aggregate demand. Various measures of inflation expectations declined between the two meetings, nominal wage increases continued to be moderate, and productivity growth remained solid. In addition, declining employment and softening final sales contributed to a weaker outlook for near-term economic activity. Still, some firms reportedly were continuing to pass through to their customers previous increases in the costs of energy and raw materials, and readings on core and headline inflation remained elevated. In this environment, the Committee was concerned that high inflation might become embedded in expectations and thereby impart considerable momentum to overall inflation. Financial strains had increased over the intermeeting period, although the consequences of the bankruptcy of Lehman Brothers Holdings on September 15 were not yet clear at the time of the meeting. Indeed, the substantial easing of monetary policy over the previous year, combined with ongoing measures to foster market liquidity, was seen as likely to support activity going forward. Thus, members agreed that keeping the federal funds target rate unchanged at 2 percent at the September meeting was appropriate.

Over the following weeks, stresses in financial markets continued to mount. Interest rate spreads in interbank funding markets widened markedly, corporate and municipal bond yields rose, and equity prices dropped sharply. The decline in the net asset value of a major money market mutual fund below $1 per share sparked a flight out of prime money market funds and caused a severe impairment of the functioning of the commercial paper market. In response to the extraordinary stresses in financial markets, the Federal Reserve, together with U.S. government entities and many foreign central banks and governments, implemented a number of unprecedented policy initiatives. Measures taken by the Federal Reserve around this time, discussed in detail in the appendix, included the establishment of the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility, Commercial Paper Funding Facility, and Money Market Investor Funding Facility, which were intended to improve the liquidity in short-term debt markets and ease the strains in credit markets more broadly. In addition, to address the sizable demand for dollar funding in foreign jurisdictions, the FOMC authorized increases in its existing liquidity swap lines with foreign central banks and established lines with additional central banks. In domestic markets, the Federal Reserve raised the regular auction amounts of the 28- and 84-day maturity Term Auction Facility (TAF) auctions and announced two forward TAF auctions to provide funding over year-end.

The expansion of existing liquidity facilities and the creation of new facilities contributed to a substantial increase in the size of the Federal Reserve's balance sheet. Two initiatives were introduced to help manage the expansion of the balance sheet and promote control of the federal funds rate. First, on September 17, the Treasury announced a temporary Supplementary Financing Program at the request of the Federal Reserve. Under this program, the Treasury issues short-term bills over and above its regular borrowing program, with the proceeds deposited at the Federal Reserve. Second, using authority granted under the Emergency Economic Stabilization Act, the Federal Reserve announced on October 6 that it would begin paying interest on required and excess reserve balances. The payment of interest on excess reserves was intended to assist in maintaining the federal funds rate close to the target set by the Committee by creating a floor on interbank market rates. Initially, the interest rate paid on required reserve balances was set as a spread below the average targeted federal funds rate established by the FOMC over each reserve maintenance period, and the rate paid on excess balances was set as a spread below the lowest targeted federal funds rate for each reserve maintenance period. Subsequently, with the federal funds rate trading consistently below the target rate, the spreads were eliminated.

In late September and into October, macroeconomic conditions deteriorated in both the United States and Europe, prices of crude oil and other commodities dropped substantially, and some measures of expected inflation declined. In light of these developments and the extraordinary turmoil in financial markets, the Committee members agreed that downside risks to economic growth had increased and that upside risks to inflation had diminished; at an unscheduled meeting in early October, the FOMC cut its target to 1½ percent in an unprecedented coordinated policy action with five other major central banks. This action, along with the accompanying statement, led investors to mark down further the expected path for the federal funds rate.

At its October 28-29 meeting, the FOMC lowered its target for the federal funds rate an additional 50 basis points, to 1 percent. The Committee's statement noted that economic activity appeared to have slowed markedly, a development due importantly to weakening consumer and business spending and softening demand from many foreign economies. Moreover, the intensification of financial market turmoil was likely to exert additional restraint on spending by further tightening credit conditions for households and businesses. The Committee noted that, in light of the declines in the prices of energy and other commodities and the weaker prospects for economic activity, it expected inflation to moderate in coming quarters to levels consistent with price stability. With risks to economic activity to the downside, the Committee indicated that it would monitor economic and financial developments carefully and act as needed to promote sustainable economic growth and price stability.

The decision of the FOMC at its October meeting was broadly in line with market expectations and elicited only a modest reaction in financial markets. However, subsequent economic data releases suggested that economic activity was weaker and inflation lower than had been earlier anticipated. Those readings, along with continued strains in financial markets that weighed on investor sentiment, contributed to a sharp downward revision in the expected path of policy over the following weeks. Reflecting investor concerns about the condition of financial institutions, spreads on credit default swaps for U.S. banks widened sharply, and those for insurance companies remained very elevated.

Available evidence also suggested further tightening in consumer and small business credit conditions; in view of this tightening, the Federal Reserve announced on November 25 plans for the Term Asset-Backed Securities Loan Facility (TALF) to support lending to these borrowers. The Federal Reserve also announced on November 25 that, to help reduce the cost and increase the availability of residential mortgage credit, it would initiate a program to purchase up to $100 billion in direct obligations of housing-related government-sponsored enterprises and up to $500 billion in mortgage-backed securities (MBS) backed by Fannie Mae, Freddie Mac, and Ginnie Mae. The announcement and implementation of the agency purchase program appeared to reduce spreads on agency debt; conditions for high-quality borrowers in the primary residential mortgage market subsequently recovered somewhat.

Although some financial markets exhibited signs of improved functioning ahead of the December meeting, financial conditions generally remained very strained. Credit conditions had continued to tighten for both households and businesses, and ongoing declines in equity and house prices further reduced household wealth. Against this backdrop, indicators of aggregate economic activity continued to worsen. The Committee expected economic activity to contract sharply in the fourth quarter of 2008 and in early 2009; it noted that the uncertainty surrounding the outlook was considerable and that the downside risk to even this dour trajectory for economic activity was a serious concern. Inflation pressures had diminished appreciably as energy and other commodity prices dropped and economic activity slumped. Looking forward, members agreed that inflation pressures appeared set to moderate further in coming quarters, and some saw risks that inflation could drop below rates they viewed as most consistent over time with the Federal Reserve's dual mandate for maximum employment and price stability.

With the federal funds rate already trading at very low levels as a result of the large volume of excess reserves associated with the Federal Reserve's liquidity operations, participants agreed that the Committee would soon need to use other tools to impart additional monetary stimulus to the economy. The Federal Reserve had already adopted a series of programs that were providing liquidity support to a range of institutions and markets, and a continued focus on the quantity and the composition of Federal Reserve assets appeared to be necessary and desirable. Participants agreed that maintenance of a low level of short-term interest rates for some time and reliance on the use of balance sheet policies and communications about monetary policy could be effective and appropriate, in light of the sharp deterioration in the economic outlook and the appreciable easing of inflationary pressures.

Accordingly, the Committee announced a target range for the federal funds rate of 0 to ¼ percent and indicated that weak economic conditions were likely to warrant exceptionally low levels of the federal funds rate for some time. The statement also noted that the size of the Federal Reserve's balance sheet would be maintained at a high level through open market operations and other measures to support financial markets and stimulate the economy. In addition, the statement indicated that the Committee stood ready to expand purchases of agency debt and agency MBS and that it was evaluating the potential benefits of purchasing longer-term Treasury securities. The FOMC members emphasized that their expectation about the path of the federal funds rate was conditioned on their view of the likely path of economic activity. The interest rates on required reserve balances and excess reserve balances were both set at 25 basis points. These monetary policy decisions apparently were more aggressive than investors had been expecting. Market participants were somewhat surprised both by the size of the reduction in the target federal funds rate and by the statements that policy rates would likely remain low for some time and that the FOMC might engage in additional nontraditional policy actions such as the purchase of longer-term Treasury securities.

Incoming data over the following weeks indicated a continued sharp contraction in economic activity. The housing market remained on a steep downward trend, consumer spending continued its significant decline, the slowdown in business equipment investment intensified, and foreign demand weakened. Conditions in the labor market continued to deteriorate rapidly, and the drop in industrial production accelerated. Headline consumer prices fell in November and December, which reflected declines in consumer energy prices; core consumer prices were about flat in those months. Credit conditions generally remained tight, with financial markets fragile and some parts of the banking sector under substantial stress. However, modest signs of improvement were evident in some financial markets—particularly those that were receiving support from Federal Reserve liquidity facilities and other government actions.

At the meeting in January 2009, participants anticipated that a gradual recovery in U.S. economic activity would begin in the second half of the year in response to monetary easing, another dose of fiscal stimulus, relatively low energy prices, and continued efforts by the government to stabilize the financial sector and increase the availability of credit. As of late January, however, with financial conditions strained and the near-term economic outlook weak, most participants agreed that the Committee should continue to focus on supporting the functioning of financial markets and stimulating the economy through purchases of agency debt and MBS and other measures—including the implementation of the TALF—that will keep the size of the Federal Reserve's balance sheet at a high level for some time. Committee members agreed that keeping the target range for the federal funds rate at 0 to ¼ percent would be appropriate. They also agreed to continue using liquidity and asset-purchase programs to support the functioning of financial markets and to stimulate the economy.

In its January statement, the FOMC reemphasized that the Federal Reserve will use all available tools to promote the resumption of sustainable economic growth and to preserve price stability. The Committee also stated that, in addition to the purchases of agency debt and MBS already under way, it was prepared to purchase longer-term Treasury securities if evolving circumstances indicated that such transactions would be particularly effective in improving conditions in private credit markets. The Committee will continue to monitor carefully the size and composition of the Federal Reserve's balance sheet in light of evolving financial market developments. It will also continue to assess whether expansions of, or modifications to, lending facilities would serve to further support credit markets and economic activity and help preserve price stability.

Part 4
Summary of Economic Projections

The following material appeared as an addendum to the minutes of the January 27–28, 2009, meeting of the Federal Open Market Committee.

In conjunction with the January 27-28, 2009 FOMC meeting, the members of the Board of Governors and the presidents of the Federal Reserve Banks, all of whom participate in deliberations of the FOMC, provided projections for economic growth, unemployment, and inflation in 2009, 2010, 2011, and over the longer run. Projections were based on information available through the conclusion of the meeting, on each participant's assumptions regarding a range of factors likely to affect economic outcomes, and on his or her assessment of appropriate monetary policy. "Appropriate monetary policy" is defined as the future policy that, based on current information, is deemed most likely to foster outcomes for economic activity and inflation that best satisfy the participant's interpretation of the Federal Reserve's dual objectives of maximum employment and price stability. 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.

FOMC participants viewed the outlook for economic activity and inflation as having weakened significantly since last October, when their last projections were made. As indicated in Table 1 and depicted in Figure 1, participants projected that real GDP would contract this year, that the unemployment rate would increase substantially, and that consumer price inflation would be significantly lower than in recent years. Given the strength of the forces currently weighing on the economy, participants generally expected that the recovery would be unusually gradual and prolonged: All participants anticipated that unemployment would remain substantially above its longer-run sustainable rate at the end of 2011, even absent further economic shocks; a few indicated that more than five to six years would be needed for the economy to converge to a longer-run path characterized by sustainable rates of output growth and unemployment and by an appropriate rate of inflation. Participants generally judged that their projections for both economic activity and inflation were subject to a degree of uncertainty exceeding historical norms. Nearly all participants viewed the risks to the growth outlook as skewed to the downside, and all participants saw the risks to the inflation outlook as either balanced or tilted to the downside.

The Outlook

Participants' projections for the change in real GDP in 2009 had a central tendency of –1.3 to –0.5 percent, compared with the central tendency of –0.2 to 1.1 percent for their projections last October. In explaining these downward revisions, participants referred to the further intensification of the financial crisis and its effect on credit and wealth, the waning of consumer and business confidence, the marked deceleration in global economic activity, and the weak-

Table 1. Economic Projections of Federal Reserve Governors and Reserve Bank Presidents, January 2009

Percent

Variable	Central tendency[1]				Range[2]			
	2009	2010	2011	Longer Run	2009	2010	2011	Longer Run
Change in real GDP	–1.3 to –0.5	2.5 to 3.3	3.8 to 5.0	2.5 to 2.7	–2.5 to 0.2	1.5 to 4.5	2.3 to 5.5	2.4 to 3.0
October projection	–0.2 to 1.1	2.3 to 3.2	2.8 to 3.6	n.a.	–1.0 to 1.8	1.5 to 4.5	2.0 to 5.0	n.a.
Unemployment rate	8.5 to 8.8	8.0 to 8.3	6.7 to 7.5	4.8 to 5.0	8.0 to 9.2	7.0 to 9.2	5.5 to 8.0	4.5 to 5.5
October projection	7.1 to 7.6	6.5 to 7.3	5.5 to 6.6	n.a.	6.6 to 8.0	5.5 to 8.0	4.9 to 7.3	n.a.
PCE inflation	0.3 to 1.0	1.0 to 1.5	0.9 to 1.7	1.7 to 2.0	–0.5 to 1.5	0.7 to 1.8	0.2 to 2.1	1.5 to 2.0
October projection	1.3 to 2.0	1.4 to 1.8	1.4 to 1.7	n.a.	1.0 to 2.2	1.1 to 1.9	0.8 to 1.8	n.a.
Core PCE inflation[3]	0.9 to 1.1	0.8 to 1.5	0.7 to 1.5		0.6 to 1.5	0.4 to 1.7	0.0 to 1.8	
October projection	1.5 to 2.0	1.3 to 1.8	1.3 to 1.7		1.3 to 2.1	1.1 to 1.9	0.8 to 1.8	

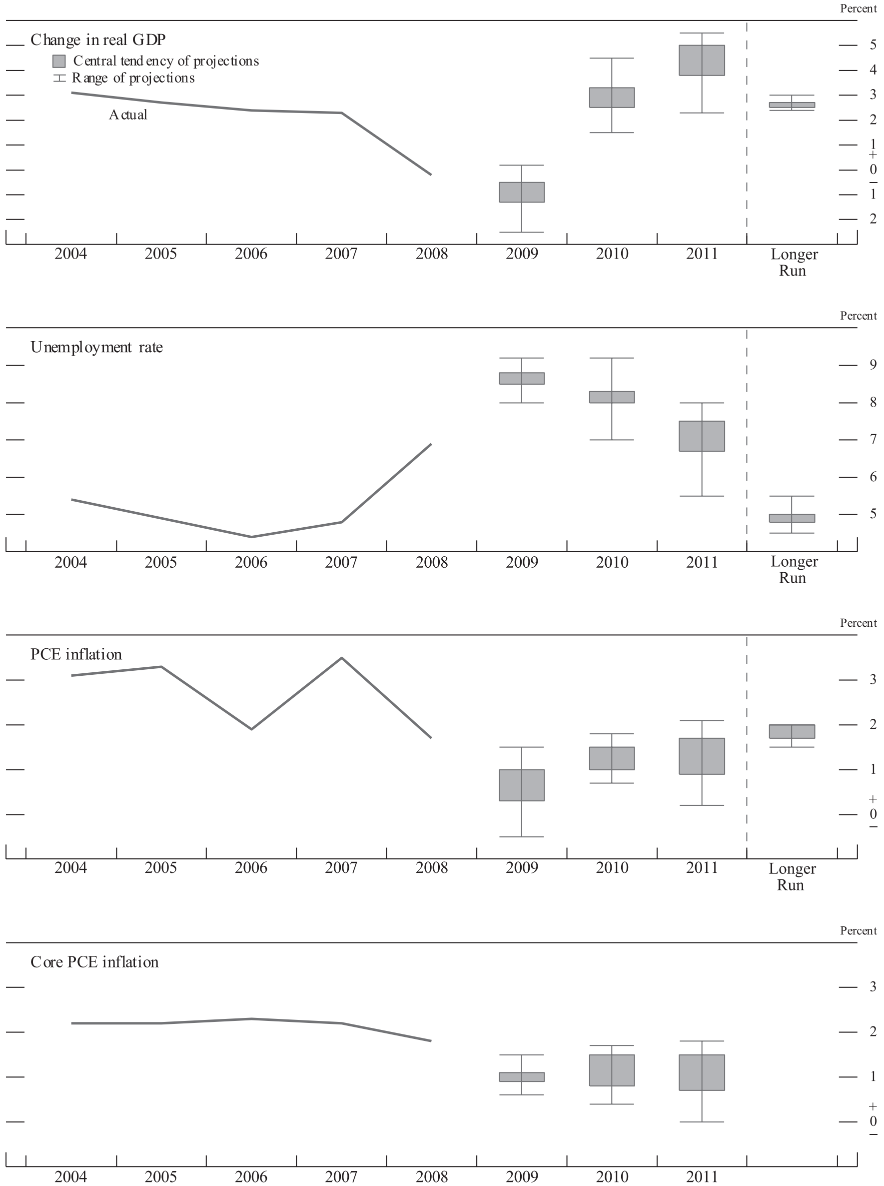
NOTE: Projections of change in real gross domestic product (GDP) and of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The October projections were made in conjunction with the FOMC meeting on October 28–29, 2008.

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, 2009–11 and over the Longer Run



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

ness of incoming data on spending and employment. Participants anticipated a broad-based decline in aggregate output during the first half of this year; they noted that consumer spending would likely be damped by the deterioration in labor markets, the tightness of credit conditions, the continuing decline in house prices, and the recent sharp reduction in stock market wealth, and they saw reductions in consumer demand contributing to further weakness in business investment. However, participants expected that the economy would begin to recover—albeit gradually—during the second half of the year, mainly reflecting the effects of fiscal stimulus and of Federal Reserve measures providing support to credit markets.

Looking further ahead, participants' growth projections had a central tendency of 2.5 to 3.3 percent for 2010 and 3.8 to 5.0 percent for 2011. Participants generally expected that strains in financial markets would ebb only slowly and hence that the pace of recovery in 2010 would be damped. Nonetheless, participants generally anticipated that real GDP growth would gain further momentum in 2011, reaching a pace that would temporarily exceed their estimates of the longer-run sustainable rate of economic growth and would thereby help reduce the slack in resource utilization. Most participants expected that, absent further shocks, economic growth would eventually converge to a rate of 2.5 to 2.7 percent, reflecting longer-term trends in the growth of productivity and the labor force.

Participants anticipated that labor market conditions would deteriorate substantially further over the course of this year, and nearly all expected that unemployment would still be well above its longer-run sustainable rate at the end of 2011. Participants' projections for the average unemployment rate during the fourth quarter of 2009 had a central tendency of 8.5 to 8.8 percent, markedly higher than last December's actual unemployment rate of 7.2 percent the latest available figure at the time of the January FOMC meeting. Nearly all participants' projections were more than a percentage point higher than their previous forecasts made last October, reflecting the sharp rise in actual unemployment that occurred during the final months of 2008 as well as participants' weaker outlook for economic activity this year. Most participants anticipated that output growth in 2010 would not be substantially above its longer-run trend rate and hence that unemployment would decline only modestly next year. With economic activity and job creation generally projected to accelerate in 2011, participants anticipated that joblessness would decline more appreciably that year, as is evident from the central tendency of 6.7 to 7.5 percent for their unemployment rate projections. Participants expected that the unemployment rate would decline further after 2011, and most saw it settling in at a rate of 4.8 to 5.0 percent over time.

The central tendency of participants' projections for total PCE inflation this year was 0.3 to 1.0 percent, about a percentage point lower than the central tendency of their projections last October. Many participants noted that recent readings on inflation had been surprisingly low, and some anticipated that the unexpected declines in the prices of energy and other commodities that had occurred in the latter part of 2008 would continue to hold down inflation at the consumer level in 2009. Participants also marked down their projections for core PCE inflation this year in light of their views about the indirect effects of lower energy prices and the influence of increased resource slack.

Looking beyond this year, participants' projections for total PCE inflation had a central tendency of 1.0 to 1.5 percent for 2010, 0.9 to 1.7 percent for 2011, and 1.7 to 2.0 percent over the longer run. Participants' longer-run projections for total PCE inflation reflected their individual assessments of the measured rates of inflation consistent with the Federal Reserve's dual mandate for promoting price stability and maximum employment. Most participants judged that a longer-run PCE inflation rate of 2 percent would be consistent with the dual mandate; others indicated that 1½ or 1¾ percent inflation would be appropriate. Modestly positive longer-run inflation would allow the Committee to stimulate economic activity and support employment by setting the federal funds rate temporarily below the inflation rate when the economy is buffeted by a large negative shock to demands for goods and services. Participants generally expected that core and overall inflation would converge over time, and that persistent economic slack would continue to weigh on inflation outcomes for the next few years and hence that total PCE inflation in 2011 would still be below their assessments of the appropriate inflation rate for the longer run.

Risks to the Outlook

Participants continued to view uncertainty about the outlook for economic activity as higher than normal.[13] The risks to their projections for real GDP growth were judged as being skewed to the downside and the associated risks to their projections for the unemployment rate were tilted to the upside. Participants highlighted the considerable degree of uncertainty about the future course of the financial crisis and its impact on the real economy; for example, rising unemployment and weaker growth could exacerbate delinquencies on household and business loans, leading to higher losses for financial firms and so to a further tightening of credit conditions that would in turn put further downward pressure on spending to a greater degree than currently foreseen. In addition, some participants noted that a substantial degree of uncertainty was associated with gauging the stimulative effects of nontraditional monetary policy tools that are now being employed given that conventional policy easing was limited by the zero lower bound on nominal interest rates. Others referred to uncertainties regarding the size, composition, and effectiveness of the fiscal

Table 2. Average Historical Projection Error Ranges

Percentage points

Variable	2009	2010	2011
Change in real GDP[1]	±1.2	±1.4	±1.4
Unemployment rate[1]	±0.5	±0.8	±1.0
Total consumer prices[2]	±0.9	±1.0	±0.9

NOTE: Error ranges shown are measured as plus or minus the root mean squared error of projections that were released in the winter from 1987 through 2007 for the current and following two years by various private and government forecasters. As described in the box "Forecast Uncertainty," under certain assumptions, there is about a 70 percent probability that actual outcomes for real GDP, unemployment, and consumer prices will be in ranges implied by the average size of projection errors made in the past. Further information is in David Reifschneider and Peter Tulip (2007), "Gauging the Uncertainty of the Economic Outlook from Historical Forecasting Errors," Finance and Economics Discussion Series 2007-60 (Board of Governors of the Federal Reserve System, November).

1. For definitions, refer to general note in table 1.

2. Measure is the overall consumer price index, the price measure that has been most widely used in government and private economic forecasts. Projection is percent change, fourth quarter of the previous year to the fourth quarter of the year indicated. The slightly narrower estimated width of the confidence interval for inflation in the third year compared with that for the second year is likely the result of using a limited sample period for computing these statistics.

13. Table 2 provides estimates of forecast uncertainty for the change in real GDP, the unemployment rate, and total consumer price inflation over the period from 1987 to 2007. At the end of this summary, the box "Forecast Uncertainty" discusses the sources and interpretation of uncertainty in economic forecasts and explains the approach used to assess the uncertainty and risks attending participants' projections.

stimulus package—which was still under consideration at the time of the FOMC meeting—and of further measures to stabilize the banking system.

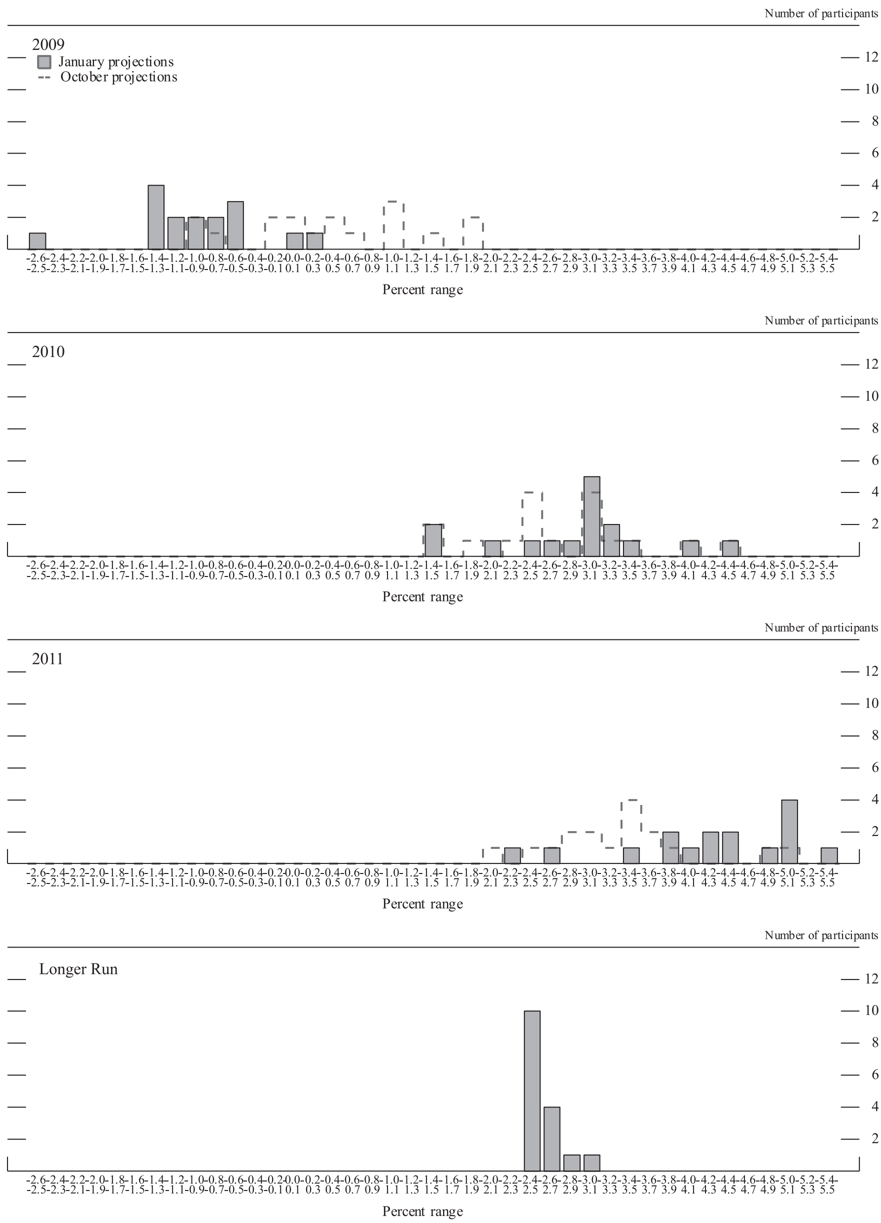
As in October, most participants continued to view the uncertainty surrounding their inflation projections as higher than historical norms. A slight majority of participants judged the risks to the inflation outlook as roughly balanced, while the rest viewed these risks as skewed to the downside. Participants indicated that elevated uncertainty about global growth was clouding the outlook for prices of energy and other commodities and hence contributing to greater uncertainty in their inflation projections. Many participants stated that their assessments regarding the level of uncertainty and balance of risks to the inflation outlook were closely linked to their judgments about the uncertainty and risks to the outlook for economic activity. Some participants noted the risk that inflation expectations might become unanchored and drift downward in response to persistently low inflation outcomes, while others pointed to the possibility of an upward shift if investors became concerned that stimulative policy measures might not be unwound in a timely fashion once the economy begins to recover.

Diversity of Views

Figures 2.A and 2.B provide further details on the diversity of participants' views regarding likely outcomes for real GDP growth and the unemployment rate, respectively. For 2009 to 2011, the dispersion in participants' projections for each variable was roughly the same as for their projections last October. This dispersion mainly indicated the diversity of participants' assessments regarding the stimulative effects of fiscal policy, the pace of recovery in financial markets, and the evolution of households' desired saving rates. The dispersion in participants' longer-run projections reflected differences in their estimates regarding the sustainable rates of output growth and unemployment to which the economy would converge under appropriate policy and in the absence of any further shocks.

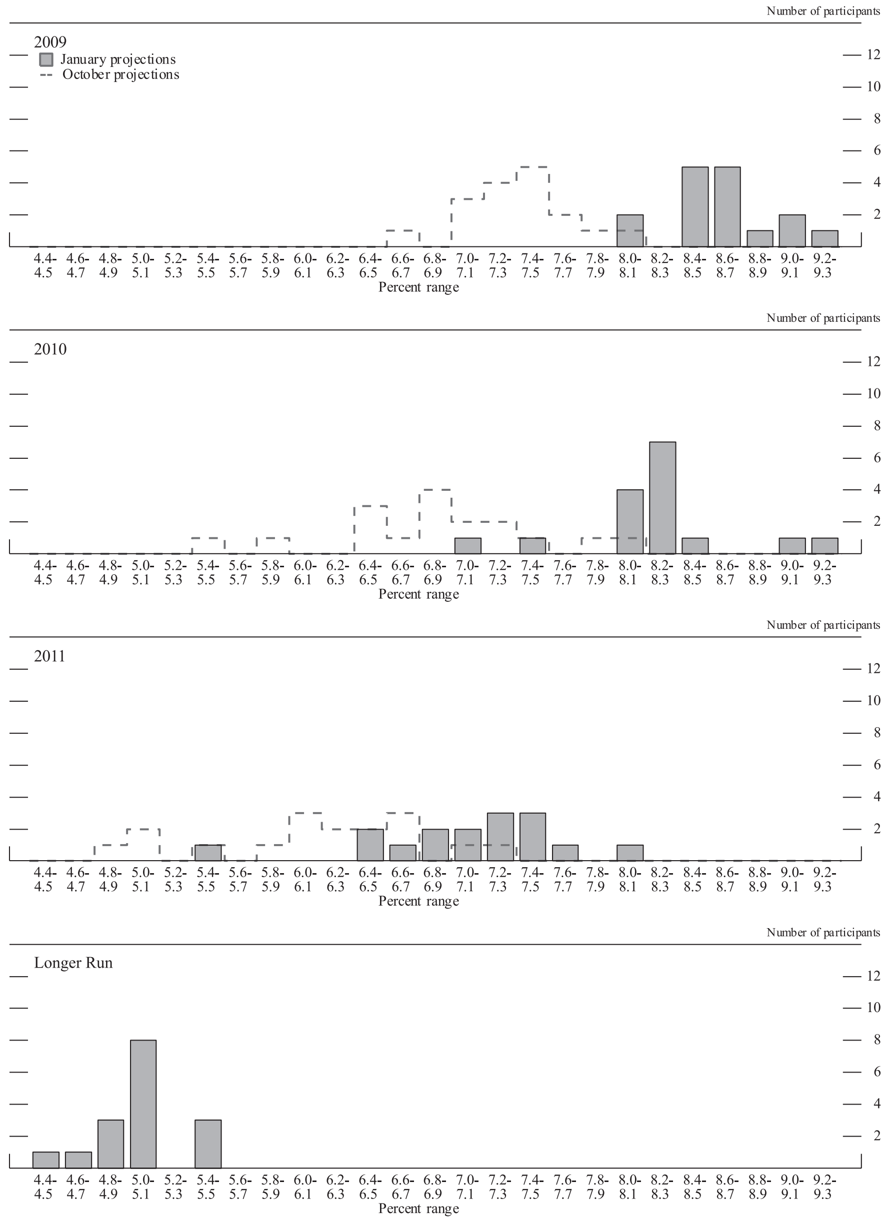
Figures 2.C and 2.D provide corresponding information regarding the diversity of participants' views regarding the inflation outlook. The dispersion in participants' projections for total PCE inflation in 2009 was substantially greater than for their projections made last October, due to increased diversity of participants' views regarding the near-term evolution of prices of energy and raw materials and the extent to which changes in those prices would be likely to pass through into overall inflation. The dispersion in participants' projections for core PCE inflation in 2009 was noticeably lower than last October, but the dispersion in their projections for core inflation in 2010 and 2011 was markedly wider, reflecting varying assessments about the timing and pace of economic recovery, the sensitivity of inflation to slack in resource utilization, the prevalence of downward nominal wage rigidity, and the likelihood that inflation expectations will remain firmly anchored. A few participants anticipated that inflation in 2011 would be close to their longer-run projections. However, most participants' projections for total PCE inflation in 2011 were below their longer-run projections, primarily reflecting the anticipated effects of substantial slack over the next three years; this inflation gap was about ¼ to ½ percentage point for some participants but exceeded a full percentage point for others.

Figure 2.A. Distribution of Participants' Projections for the Change in Real GDP, 2009–11 and over the Longer Run



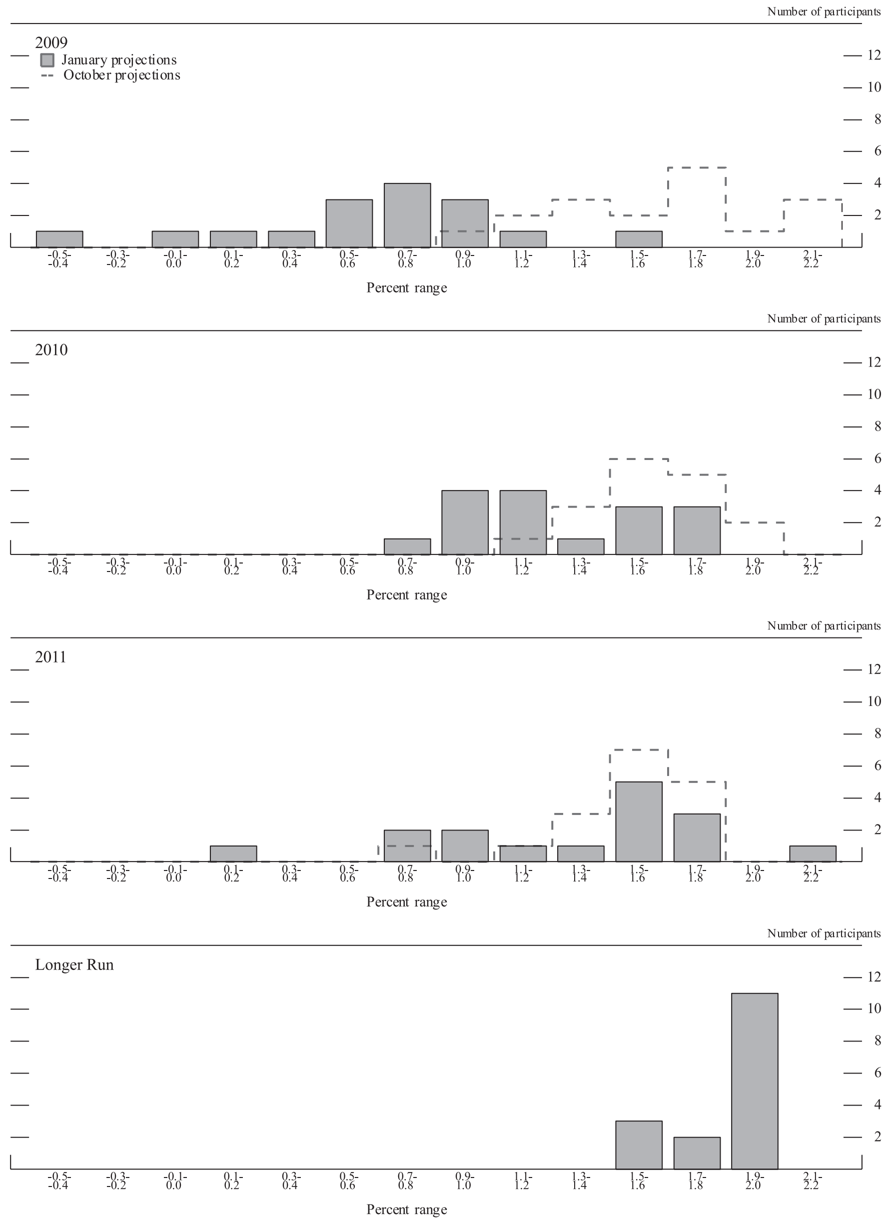
NOTE: Definitions of variables are in the general note to table 1.

Figure 2.B. Distribution of Participants' Projections for the Unemployment Rate, 2009–11 and over the Longer Run



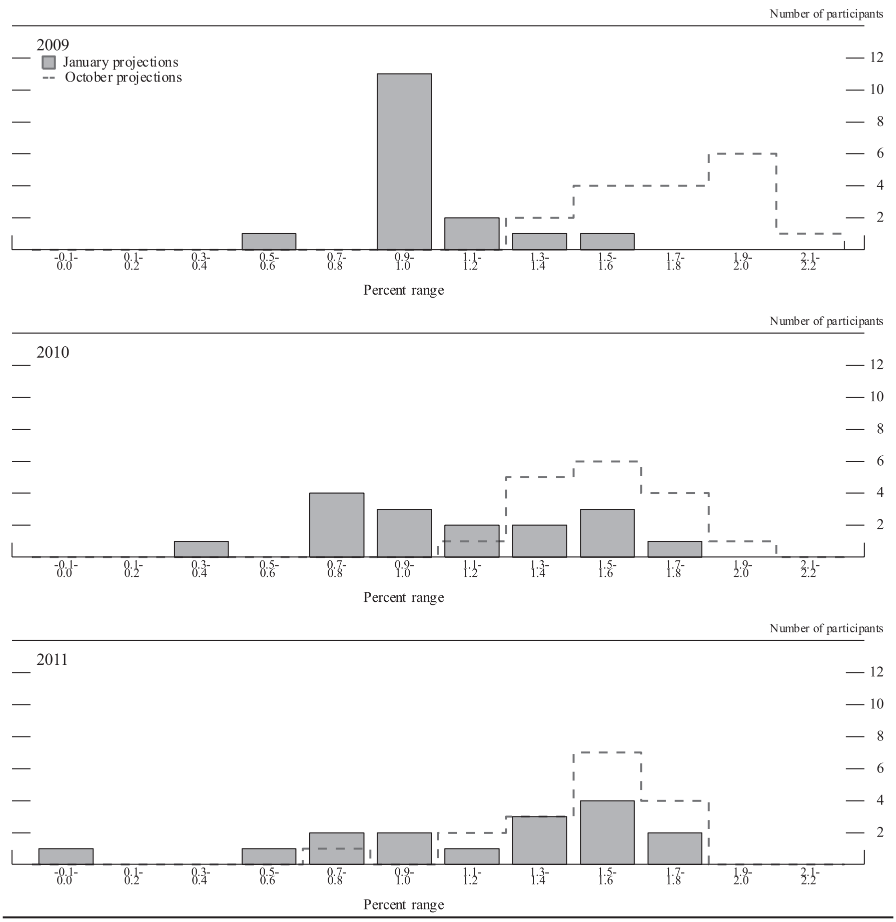
NOTE: Definitions of variables are in the general note to table 1.

Figure 2.C. Distribution of Participants' Projections for PCE Inflation, 2009–11 and over the Longer Run



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

Figure 2.D. Distribution of Participants' Projections for Core PCE Inflation, 2009–11



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

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 Federal Reserve Board 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 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 between 1.8 percent to 4.2 percent in the current year and 1.6 percent to 4.4 percent in the second and third years. The corresponding 70 percent confidence intervals for overall inflation would be 1.1 percent to 2.9 percent in the current year, 1.0 percent to 3.0 percent in the second year, and 1.1 percent to 2.9 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, 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.

Appendix
Federal Reserve Initiatives to Address Financial Strains

Since the onset of the financial turmoil in the summer of 2007, the Federal Reserve has announced several new measures to address the strains in financial markets, as well as enhancements to its existing liquidity facilities. (For outstanding balances related to these facilities, see table.)

Provision of Liquidity to Banks and Dealers

Modifications to the Primary Credit Program

Following the onset of the financial turmoil, the Federal Reserve Board announced temporary changes to its primary credit discount window facility on August 17, 2007. These changes were designed to provide depositories with greater assurance about the cost and availability of funding. First, the Federal Reserve Board approved a 50 basis point reduction in the primary credit rate to narrow the spread between the primary credit rate and the Federal Open Market Committee's target federal funds rate to 50 basis points. Second, the Federal Reserve Board announced a change to the Reserve Banks' usual practices to allow the provision of term financing for as long as 30 days, renewable by the borrower.

To bolster market liquidity further in the face of increasing financial strains, on March 16, 2008, the Federal Reserve Board unanimously approved a request by the Federal Reserve Banks to decrease the spread of the primary credit rate over the FOMC's target federal funds rate to ¼ percentage point. The Board also approved an increase in the maximum maturity of primary credit loans to 90 days from 30 days.

Federal Reserve Provision of Liquidity and Credit, 2007–09

Millions of dollars

Asset	Dec. 31, 2007	June 30, 2008	Feb. 18, 2009
Provision of liquidity to banks and dealers			
Primary credit program	8,620	24,095	65,144
Term Auction Facility	40,000	150,000	447,563
Liquidity swaps with foreign central banks	21,000	62,000	375,005
Securities lent under the Term Securities Lending Facility	n.a.	104,097	115,280
Primary Dealer Credit Facility and other broker-dealer credit	n.a.	1,455	25,268
Provision of liquidity to other market participants			
Asset-Backed Commercial Paper Money Market Mutual Funding Facility	n.a.	n.a.	12,722
Net portfolio holdings of Commerical Paper Funding Facility	n.a.	n.a.	248,671
Net portfolio holdings of LLCs funded through the Money Market Investor Funding Facility	n.a.	n.a.	0
Support of critical institutions			
Net portfolio holdings of Maiden Lane I, II, and III LLCs[1]	n.a.	29,970	72,231
Credit extended to American International Group, Inc.	n.a.	n.a.	37,357

NOTE: LLC is a limited liability company.

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

n.a. Not available.

SOURCE: Federal Reserve Board.

The Term Auction Facility

To address elevated pressures in short-term funding markets, in December 2007 the Board of Governors of the Federal Reserve System approved the establishment of a Term Auction Facility (TAF). Under this program, the Federal Reserve auctions term funds to depository institutions against the wide variety of collateral that can be used to secure loans at the discount window. By increasing the access of depository institutions to funding, the TAF has supported the ability of such institutions to meet the credit needs of their customers.

Each depository institution that is judged to be in generally sound financial condition by its Reserve Bank (and likely to remain so over the term of the loan) can participate in TAF auctions. All advances must be fully collateralized. Each TAF auction is for a fixed amount of funds, with the rate determined by the auction process (subject to a minimum bid rate). A depository institution submits bids through its Reserve Bank. The minimum bid rate for the auctions was initially established at the overnight index swap (OIS) rate corresponding to the maturity of the credit being auctioned. In January 2009, the minimum bid rate was changed to the interest rate paid by the Federal Reserve on excess reserve balances.

Initially, TAF auctions were in amounts of $20 billion and provided primarily 28-day term funds. Over the course of 2008, the Federal Reserve extended the term of some auctions to 84 days and raised the regular amounts of both the 28- and 84-day TAF auctions to $150 billion. The Federal Reserve also conducted two forward TAF auctions in November for $150 billion each, which provided funding over year-end.

Liquidity Swap Lines with Foreign Central Banks

To address the increasing demand for dollar funding in foreign jurisdictions, in December 2007, the Federal Open Market Committee (FOMC) authorized temporary reciprocal currency arrangements (swap lines) with the European Central Bank (ECB) and the Swiss National Bank (SNB). These arrangements initially provided dollars in amounts of up to $20 billion and $4 billion to the ECB and the SNB, respectively, for use in their jurisdictions. The FOMC approved these liquidity swap lines for a period of up to six months and later extended this term to October 30, 2009.

As demand for dollar funding rose further over the course of 2008, the FOMC authorized the expansion of its existing swap lines with the ECB and SNB. In the fall, the formal quantity limits on these lines, as well as on swap lines that were set up with the Bank of Japan and the Bank of England, were eliminated. The FOMC also authorized new liquidity swap lines with 10 other central banks: the Reserve Bank of Australia, the Banco Central do Brasil, the Bank of Canada, the Danmarks Nationalbank, the Bank of Korea, the Bank of Mexico, the Reserve Bank of New Zealand, the Norges Bank, the Monetary Authority of Singapore, and the Sveriges Riksbank.

The Term Securities Lending Facility

On March 11, 2008, to address increasing liquidity pressures in funding markets, the Federal Reserve announced the establishment of a Term Securities Lending Facility (TSLF). Under the TSLF, the Federal Reserve lends up to $200 billion of Treasury securities to primary dealers for a term of 28 days (rather than overnight, as in the regular securities lending program); the lending is secured by a pledge of other securities. Initially, the eligible collateral included other Treasury securities, federal agency debt, federal agency residential mortgage-backed securities (MBS), and non-agency AAA/Aaa-rated private-label residential MBS. In September, this list was broadened to include all investment-grade debt securities. The TSLF is intended to strengthen the financing position of primary dealers and foster improved conditions in financial markets more generally. Securities are made available through weekly auctions. This facility is currently scheduled to expire on October 30, 2009.

The Primary Dealer Credit Facility

To bolster market liquidity and promote orderly market functioning, on March 16, 2008, the Federal Reserve Board voted unanimously to authorize the Federal Reserve Bank of New York to create a lending facility—the Primary Dealer Credit Facility—to improve the ability of primary dealers to provide financing to participants in securitization markets. This facility became available for business on Monday, March 17, and was originally instituted for a term of six months; this term was subsequently extended, and the facility is currently set to expire on October 30, 2009. Collateral pledged to secure loans under this facility was initially limited to investment-grade debt securities; subsequently, eligible collateral was expanded to include all collateral eligible for pledge in triparty funding arrangements through the major clearing banks. The interest rate charged on such credit is the same as the primary credit rate at the Federal Reserve Bank of New York.

Provision of Liquidity to Other Market Participants

The Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility

On September 19, 2008, the Federal Reserve announced the creation of the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF). Under this program, the Federal Reserve extends nonrecourse loans at the primary credit rate to U.S. depository institutions and bank holding companies to finance their purchases of high-quality asset-backed commercial paper (ABCP) from money market mutual funds. This initiative is intended to assist money funds that hold such paper in meeting demands for redemptions by investors and to foster liquidity in the ABCP markets and broader money markets. Although the AMLF was initially authorized through January 2009, the Board subsequently extended its operation through October 30, 2009.

The Commercial Paper Funding Facility

On October 7, the Federal Reserve authorized the creation of the Commercial Paper Funding Facility (CPFF) to provide a liquidity backstop to U.S. issuers of commercial paper. The CPFF is intended to improve liquidity in short-term funding markets and thereby increase the availability of credit for businesses and households. The CPFF is currently authorized to purchase commercial paper through October 30, 2009.

Under the CPFF, Federal Reserve credit is provided to a special purpose vehicle (SPV) that, in turn, purchases commercial paper of eligible issuers.

The Federal Reserve Bank of New York has committed to lend to the SPV on a recourse basis, with such loans secured by all the assets of the SPV. The SPV purchases from eligible issuers three-month U.S. dollar-denominated commercial paper through the Federal Reserve Bank of New York's primary dealers. Eligible issuers are U.S. issuers of commercial paper, including U.S. issuers with a foreign parent company. The SPV purchases only U.S. dollar-denominated commercial paper (including ABCP) that is rated at least A-1/P-1/F1.

The maximum amount of a single issuer's commercial paper that the SPV may own at any time is the greatest amount of U.S. dollar-denominated commercial paper the issuer had outstanding on any day between January 1 and August 31, 2008. The SPV will not purchase additional commercial paper from an issuer whose total commercial paper outstanding to all investors (including the SPV) equals or exceeds the issuer's limit. Pricing is based on the three-month OIS rate plus fixed spreads. At the time of its registration to use the CPFF, each issuer must pay a facility fee equal to 0.1 percent of the maximum amount of its commercial paper the SPV may own.

The Money Market Investor Funding Facility

On October 21, 2008, the Federal Reserve announced the creation of the Money Market Investor Funding Facility (MMIFF). Under the MMIFF, the Federal Reserve Bank of New York will provide senior secured funding to a series of SPVs to facilitate an industry-supported private-sector initiative to finance the purchase of eligible assets from eligible investors. Eligible assets include U.S. dollar-denominated certificates of deposit and commercial paper issued by highly rated financial institutions and having remaining maturities of 90 days or less. Eligible investors currently include U.S. money market mutual funds and other similar entities. By backstopping the sales of money market instruments in the secondary market, the MMIFF should improve the liquidity of money market investors, thus increasing their ability to meet redemption requests and their willingness to invest in money market instruments. Improved money market conditions enhance the ability of banks and other financial intermediaries to accommodate the credit needs of businesses and households.

The SPVs will purchase eligible money market instruments from eligible investors using financing from the MMIFF and from the issuance of ABCP. The SPVs will issue to the seller of each eligible asset ABCP equal to 10 percent of the asset's purchase price, with the remaining 90 percent of the transaction funded in cash. The Federal Reserve Bank of New York will commit to lend to each SPV 90 percent of the purchase price of each eligible asset. These loans will be on an overnight basis and at the primary credit rate. The loans will be senior to the ABCP, with recourse to the SPV, and secured by all the assets of the SPV. At the time of an SPV's purchase of a debt instrument issued by a financial institution, the debt instruments of that financial institution may not constitute more than 15 percent of the assets of the SPV, except during an initial ramp-up period when the concentration limit may be 20 percent. The SPVs financed by the MMIFF are scheduled to enter a wind-down process on October 30, 2009.

The Term Asset-Backed Securities Loan Facility

On November 25, 2008, the Federal Reserve Board announced plans for the Term Asset-Backed Securities Loan Facility (TALF), a facility that will help market participants meet the credit needs of households and small businesses by supporting the issuance of asset-backed securities (ABS) collateralized by student loans, auto loans, credit card loans, and loans guaranteed by the Small Business Administration. The TALF is designed to increase credit availability and support economic activity by facilitating renewed issuance of consumer and small business ABS at more normal interest rate spreads.

Under the current design of the TALF, the Federal Reserve Bank of New York will lend up to $200 billion on a nonrecourse basis to holders of certain AAA-rated ABS backed by consumer and small business loans. Eligible securities must have been issued on or after January 1, 2009, and all or substantially all of the credit exposures underlying eligible ABS must be newly or recently originated exposures to U.S.-domiciled obligors. Originators of the credit exposures underlying eligible ABS must have agreed to comply with, or already be subject to, the executive compensation requirements of the Emergency Economic Stabilization Act of 2008.

On February 10, 2009, the Federal Reserve Board announced that it is prepared to undertake a substantial expansion of the TALF. The expansion could increase the size of the TALF to as much as $1 trillion and could broaden the eligible collateral to encompass other types of newly issued AAA-rated asset-backed securities, such as commercial MBS and private-label residential MBS. An expansion of the TALF would be supported by the provision by the Treasury of additional funds from the Troubled Asset Relief Program (TARP).

All U.S. persons who own eligible collateral may participate in the TALF, and each borrower must use a primary dealer to access the TALF. The Federal Reserve Bank of New York will offer a fixed amount of loans under the TALF on a monthly basis. Via a competitive, sealed-bid auction process, the Federal Reserve Bank of New York will award loans in amounts equal to the market value of the ABS less a haircut. The loans will be nonrecourse, will be secured at all times by the ABS, and will have a three-year term, with interest payable monthly. The Treasury, under the TARP, will provide credit protection to the Federal Reserve Bank of New York in connection with the TALF. The facility will cease making new loans on December 31, 2009, unless the Board agrees to extend the facility.

Direct Purchases of Assets

On September 19, 2008, the Federal Reserve announced that, to support market functioning, the Open Market Trading Desk would begin purchasing federal agency discount notes in the secondary market for the System Open Market Account. These instruments are short-term debt obligations issued by Fannie Mae, Freddie Mac, and the Federal Home Loan Banks. Similar to secondary-market purchases of Treasury securities, purchases of Fannie Mae, Freddie Mac, and Federal Home Loan Bank debt are conducted with the Federal Reserve's primary dealers through a series of competitive auctions.

To help reduce the cost and increase the availability of residential mortgage credit, the Federal Reserve announced on November 25 a program to purchase up to $100 billion in direct obligations of housing-related government-sponsored enterprises (GSEs) and up to $500 billion in MBS backed by Fannie Mae, Freddie Mac, the Federal Home Loan Banks, and Ginnie Mae. Purchases of agency debt obligations began in December, and purchases of MBS began in January.

The program to purchase GSE direct obligations has initially focused on fixed-rate, noncallable, senior benchmark securities issued by Fannie Mae, Freddie Mac, and the Federal Home Loan Banks. Over the course of the program, the Federal Reserve may change the scope of purchasable securities. Purchases will be made through a multiple-price competitive auction process. Primary dealers are eligible to transact directly with the Federal Reserve and are encouraged to submit offers for themselves and their customers.

Support of Critical Institutions

Bear Stearns

In mid-March of 2008, The Bear Stearns Companies, Inc., a major investment bank and primary dealer, was pushed to the brink of failure after losing the confidence of investors and finding itself without access to short-term financing markets. A bankruptcy filing would have forced the secured creditors and counterparties of Bear Stearns to liquidate underlying collateral, and given the illiquidity of markets, those creditors and counterparties might well have sustained substantial losses. If they had responded to losses or the unexpected illiquidity of their holdings by pulling back from providing secured financing to other firms and by dumping large volumes of illiquid assets on the market, a much broader financial crisis likely would have ensued. Thus, the Federal Reserve judged that a disorderly failure of Bear Stearns would have threatened overall financial stability and would most likely have had significant adverse implications for the U.S. economy.

After discussions with the Securities and Exchange Commission and in close consultation with the Treasury, the Federal Reserve determined that it should invoke emergency authorities to provide special financing to facilitate the acquisition of Bear Stearns by JPMorgan Chase & Co. JPMorgan Chase agreed to purchase Bear Stearns and assume the company's financial obligations. The Federal Reserve agreed to supply term funding, secured by $30 billion in Bear Stearns assets, to facilitate the purchase. A limited liability company, Maiden Lane LLC, was formed to facilitate the arrangements associated with the purchase by acquiring certain assets of Bear Stearns and managing those assets through time to maximize repayment of the credit extended and to minimize disruption to financial markets. JPMorgan Chase completed the acquisition of Bear Stearns on June 26, and the Federal Reserve extended approximately $29 billion of funding to Maiden Lane on that date.

American International Group

In early September, the condition of American International Group, Inc. (AIG), a large, complex financial institution, deteriorated rapidly. In view of the likely systemic implications and the potential for significant adverse effects on the economy of a disorderly failure of AIG, on September 16, the Federal Reserve Board, with the support of the Treasury, authorized the Federal Reserve Bank of New York to lend up to $85 billion to the firm to assist it in meeting its obligations and to facilitate the orderly sale of some of its businesses. This facility had a 24-month term, with interest accruing on the outstanding balance at a rate of 3-month Libor plus 850 basis points, and was collateralized by all of the assets of AIG and its primary nonregulated subsidiaries. On October 8, the Federal Reserve announced an additional program under which it would lend up to $37.8 billion to finance investment-grade, fixed-income securities held by AIG. These securities had previously been lent by AIG's insurance company subsidiaries to third parties.

In November, the Treasury announced that it would purchase $40 billion of newly issued AIG preferred shares under the TARP, which allowed the Federal Reserve to reduce from $85 billion to $60 billion the total amount available under the credit facility. Further, the interest rate on that facility was reduced to Libor plus 300 basis points, the fee on undrawn funds was reduced to 75 basis points, and the term of the facility was lengthened from two years to five years. The Federal Reserve also announced plans to restructure its lending related to AIG by extending credit to two newly formed limited liability companies. The first, Maiden Lane II LLC, received a $22.5 billion loan from the Federal Reserve and a $1 billion subordinated loan from AIG and purchased residential mortgage-backed securities from AIG. As a result of these actions, the securities lending facility established on October 8 was subsequently repaid and terminated. The second new company, Maiden Lane III LLC, received a $30 billion loan from the Federal Reserve and a $5 billion subordinated loan from AIG and purchased multisector collateralized debt obligations on which AIG has written credit default swap contracts.

Citigroup

Market anxiety about the condition of Citigroup intensified in November 2008, especially in the wake of the firm's announcement that it would lay off 52,000 workers and absorb $17 billion in distressed assets from structured investment vehicles that it sponsored, and concerns about the firm's access to funding mounted. To support financial market stability, the U.S. government on November 23 entered into an agreement with Citigroup to provide a package of capital, guarantees, and liquidity access. As part of the agreement, the Treasury and Federal Deposit Insurance Corporation (FDIC) are providing capital protection against outsized losses on a pool of about $306 billion in residential and commercial real estate and other assets, Citigroup has issued preferred shares to the Treasury and FDIC, and the Treasury has purchased an additional $20 billion in Citigroup preferred stock using TARP funds. In addition and if necessary, the Federal Reserve stands ready to backstop residual risk in the asset pool by providing nonrecourse credit.

Bank of America

Despite the improvement in bank funding markets after year-end, Bank of America also came under intense pressure. In mid-January 2009, the firm reported a $1.8 billion net loss for the fourth quarter, and it was further strained by its merger on January 2 with Merrill Lynch, which reported a fourth-quarter loss of $23 billion on a pretax basis and $16 billion on an after-tax basis. On January 16, Bank of America entered into an agreement with the

Treasury, the FDIC, and the Federal Reserve similar to that arranged with Citigroup in November. Under the arrangement, the Treasury and the FDIC provide protection against the possibility of unusually large losses on a pool of approximately $118 billion of financial instruments. In addition, and if necessary, the Federal Reserve will provide nonrecourse credit to Bank of America against this pool of financial instruments. As a fee for this arrangement, Bank of America issued preferred shares to the Treasury and the FDIC.

Abbreviations

ABS	asset-backed securities
AMLF	Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility
C&I	commercial and industrial
CMBS	commercial mortgage-backed securities
CPFF	Commercial Paper Funding Facility
CRE	commercial real estate
FOMC	Federal Open Market Committee; also, the Committee
GSE	government-sponsored enterprise
Libor	London interbank offered rate
MBS	mortgage-backed securities
MMIFF	Money Market Investor Funding Facility
OIS	overnight index swap
PDCF	Primary Dealer Credit Facility
SFP	Supplementary Financing Program
TAF	Term Auction Facility
TALF	Term Asset-Backed Securities Loan Facility
TARP	Troubled Asset Relief Program
TLGP	Temporary Liquidity Guarantee Program
TSLF	Term Securities Lending Facility

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Monetary Policy Report of July 2008

Part 1
Overview: Monetary Policy and the Economic Outlook

The U.S. economy remained sluggish in the first half of 2008, and steep increases in commodity prices boosted consumer price inflation. The housing market continued to contract, weighing on overall economic activity. Against a backdrop of mounting losses incurred by major financial institutions, financial market conditions deteriorated sharply further toward the end of the first quarter—a development that threatened to severely impair the functioning of the overall financial system and to hinder economic growth. In response, the Federal Reserve undertook a number of significant actions to address liquidity pressures faced by banks and other financial institutions, thereby augmenting the liquidity-enhancing measures implemented in the second half of 2007. Taken together, these measures fostered some improvement in the functioning of financial markets, but considerable strains persist. In view of the implications of the substantial reduction in credit availability and the continuing decline in housing activity for the economic outlook, the Federal Open Market Committee (FOMC) further eased the stance of monetary policy. After cutting the target federal funds rate 100 basis points in the second half of 2007, the FOMC reduced rates another 225 basis points over the first four months of 2008. The further easing of policy was seen as consistent with fostering price stability over time, given the Committee's expectation that a flattening-out of energy prices and increasing economic slack would damp inflationary pressures.

The most recent economic projections of participants in FOMC meetings (Board members and Reserve Bank presidents) are presented in part 4 of this report. According to these projections, the economy is expected to expand slowly over the rest of this year. FOMC participants anticipate a gradual strengthening of economic growth over coming quarters as the lagged effects of past monetary policy actions, amid gradually improving financial market conditions, begin to provide additional lift to spending and as housing activity begins to stabilize. FOMC participants marked up their forecasts of inflation for 2008 as a whole, reflecting the upward pressure on inflation from rising commodity prices. However, with longer-run inflation expectations anticipated to remain reasonably well anchored, with futures markets indicating that commodity prices are expected to flatten out, and with pressures on resources likely to ease, inflation is projected to moderate appreciably in 2009. FOMC participants indicate that considerable uncertainty surrounds the outlook for economic growth and that they see the risks around that outlook as skewed to the downside. They also see

Note: The discussion in this chapter consists of the text and tables from parts 1–3 of the Monetary Policy Report submitted to Congress on July 15, 2008 (the figures from that report are available on the Board's website, at www.federalreserve.gov/boarddocs/hh). Part 4 of that report is identical to the addendum to the minutes of the June 24–25, 2008, meeting of the Federal Open Market Committee and is presented with those minutes in the "Records" section of this annual report.

prospects for inflation as unusually uncertain, and they view the risks surrounding their forecasts for inflation as skewed to the upside.

In the second half of 2007, the deteriorating performance of subprime mortgages in the United States triggered a reassessment of credit and liquidity risks across a broad range of assets, leading to widespread strains and turbulence in domestic and international financial markets. During the first quarter of 2008, reports of further losses and write-downs at major financial institutions intensified concerns about credit and liquidity risks and resulted in a further sharp reduction of market liquidity. Risk spreads—particularly for structured credit products—widened dramatically, and securitization activity all but shut down in a number of markets. By March, many securities dealers and other institutions that had relied heavily on short-term financing in markets for repurchase agreements were facing much more stringent borrowing conditions.

In mid-March, a major investment bank, The Bear Stearns Companies, Inc., was pushed to the brink of failure after suddenly losing access to short-term financing markets. The Federal Reserve judged that a disorderly failure of Bear Stearns would have threatened overall financial stability and would most likely have had significant adverse implications for the U.S. economy. After discussions with the Securities and Exchange Commission and in consultation with the Treasury, the Federal Reserve determined that it should invoke emergency authorities to provide special financing to facilitate the acquisition of Bear Stearns by JPMorgan Chase & Co. The Federal Reserve also used emergency authorities to establish the Term Securities Lending Facility and the Primary Dealer Credit Facility to support the liquidity of primary dealers and financial markets more generally, which would bolster the availability of credit to the overall economy.[1] (See the box entitled "The Federal Reserve's Liquidity Operations.") Other steps taken by the Federal Reserve in recent months to address strains in financial markets include a further easing in the terms for bank borrowing at the discount window and an increase in the amount of credit made available to banks through the Term Auction Facility. The FOMC also authorized increases in its currency swap arrangements with the European Central Bank and the Swiss National Bank to facilitate an expansion of dollar lending operations to banks in their jurisdictions.

Over the second quarter, financial market conditions improved somewhat—credit spreads generally narrowed, liquidity pressures ebbed, and financial institutions made progress in raising new capital. Still, asset prices continue to be volatile, and many financial markets and institutions remain under considerable stress. Very recently, the share prices of Fannie Mae and Freddie Mac dropped sharply on investor concerns about their financial condition and capital position. The Treasury announced a legislative initiative to bolster the capital, access to liquidity, and regulatory oversight of the government-sponsored enterprises (GSEs). As a supplement to the Treasury's existing authority to lend to the GSEs, the Board of Governors established a temporary arrangement that allows the Federal Reserve to extend credit to Fannie Mae and Freddie Mac, if necessary.

1. Primary dealers are firms that trade in U.S. government securities with the Federal Reserve Bank of New York. On behalf of the Federal Reserve System, the New York Fed's Open Market Desk engages in such trades to implement monetary policy.

The sluggish pace of economic activity in the first half of 2008 was accompanied by a further deterioration in the labor market. Private-sector payroll employment declined at an average monthly pace of 94,000, and the unemployment rate rose to 5½ percent. Moreover, real labor income appears to have been flat in the first half of the year. Although wages rose in nominal terms, the purchasing power of those nominal gains was eroded by the rapid increases in consumer prices. Declining employment, stagnant real wages, and lower equity and home values weighed on consumer sentiment and spending. In addition, amid falling house prices and rising foreclosures, activity in the housing sector continued to decrease. The resulting softness in business sales and profits also made the environment for capital spending less hospitable. The weakness in overall domestic demand was partly offset by strong growth of exports, which were supported by a sustained expansion of foreign activity and a lower dollar.

The substantial further rise this year in the prices of many commodities, especially oil and agricultural products, largely reflected strong growth of physical demand that outstripped supply in these markets. Although weakening economic activity and rising prices have tempered demand for commodities in many industrialized nations, demand has continued to grow in booming emerging market economies. However, supplies of commodities have generally not kept pace for a variety of reasons, including political tensions in some oil-producing nations, higher input costs, lags in the development of new capacity, and more recently, floods in the Midwest. To varying degrees, the resulting increases in materials prices have passed through into retail prices of energy, food, and some other items.

Overall consumer price inflation, as measured by the price index for personal consumption expenditures, remained elevated in the first half of 2008, largely because of the sharp increases in the prices of many commodities. The decline in the foreign exchange value of the dollar has boosted import prices more generally and thus has also put upward pressure on inflation. Nonetheless, increases in labor costs and core consumer prices (which exclude the direct effects of movements in energy and food prices) have remained moderate. The rapid advance in overall prices has boosted some measures of inflation expectations: Near-term inflation expectations have risen considerably in recent months, and some indicators of longer-term inflation expectations have also moved up—a development that will require close monitoring in the period ahead.

Part 2
Recent Economic and Financial Developments

The growth of economic activity, which slowed sharply in the fourth quarter of 2007, remained subpar in the first half of 2008. Although the restraint on activity late in 2007 was concentrated in the housing sector, spillovers to other areas of the economy began to show through more clearly in the first half of 2008. Meanwhile, consumer price inflation has remained elevated this year, primarily because of steep increases in the prices of many commodities. Probably in response to the sizable rise in headline price indexes, some indicators of longer-term inflation expectations have risen in recent months. However, increases in labor costs and core prices have been fairly stable, reflecting in part the softening in aggregate activity.

Financial market stress that had developed over the second half of last year intensified in the first quarter of this year. Increased concerns about the possibility of a global economic slowdown and a generalized flight from riskier assets contributed to sharply wider risk spreads, heightened volatility, and impaired liquidity across a range of markets. The Federal Reserve responded to these developments and their potential adverse implications for the economy by aggressively easing the stance of monetary policy and by taking a number of steps to bolster liquidity and enhance market functioning. Conditions in financial markets improved somewhat in the wake of these actions, but significant strains remain. With credit conditions tight, equity and home values falling, and rapidly rising commodity prices boosting costs and consumer prices, growth of household and business spending appears to have been sluggish over the first half of the year.

The Household Sector

Residential Investment and Finance

Housing demand, residential construction, and home prices have all continued to fall so far this year. Following a decline at an annual rate of 43 percent in the second half of 2007, sales of new homes decreased at an annual rate of 32 percent in the first five months of 2008. However, sales of single-family existing homes, which dropped at an annual rate of 26 percent in the second half of last year, have been about unchanged this year. Moreover, pending home sales, which provide a glimpse of the pace of existing home sales in the months ahead, on net leveled out in the spring, hinting at some stabilization in transactions in the resale market. Still, for the overall housing sector, the challenging mortgage lending environment and the concerns of prospective homebuyers about further declines in house prices are likely continuing to depress housing demand.

As new home sales have continued to decline, homebuilders have struggled to work down their substantial overhang of unsold houses. As a consequence, residential construction activity has been pared further this year. In the single-family housing sector, new units were started at an annual rate of 674,000 in May—down more than 13 percent this year and roughly 60 percent since the peak reached in the first quarter of 2006. Despite these deep production cuts, the stock of unsold homes has moved down only 20 percent from its record high in early 2006. When evaluated relative to the three-month average pace of sales, the months' supply of unsold new homes has continued to rise and stood at 10½ months in May. In the multifamily sector, starts averaged an annual rate of about 320,000 units during the first five months of 2008, a level of activity at the lower end of its range in the past several years. All told, the decline in residential investment trimmed the growth rate of real gross domestic product (GDP) about 1 percentage point in the first quarter of 2008 and appears to have held down the second-quarter growth rate by about the same amount.

House prices also have continued to fall. The monthly price index published by the Office of Federal Housing Enterprise Oversight dropped at a 6 percent annual rate in the first four months of 2008 (the latest available data), a slightly faster rate of decline than in the second half of 2007.[2] In May, the av-

2. This index is the purchase-only version of the repeat-transactions price index for existing single-family homes published by the Office of Federal Housing Enterprise Oversight.

erage price of existing single-family homes sold—which does not control for changes in the mix of houses sold but is available on a more timely basis—was about 7¼ percent below that of a year earlier. Although lower prices should eventually help bolster housing demand, survey and anecdotal reports suggest that expectations of further house price declines are quite prevalent, a consideration that may make potential buyers reluctant to purchase homes until prices show signs of stabilizing.

The rising volume of foreclosures likely has contributed to falling house prices. Continuing the upward trend that began in late 2006, about 550,000 loans began the foreclosure process in the first quarter of 2008—more than double the average quarterly rate from 2003 to 2005. This rise in foreclosure starts will increase the supply of houses for sale unless borrowers can make up the missed payments or arrange with the lenders or mortgage servicers to have their loans modified.[3] Lenders and mortgage servicers have increasingly been working with borrowers to modify loans to allow borrowers to remain in their homes. However, some borrowers may not be able to afford even reduced monthly payments, and other borrowers may not wish to keep their properties in an environment of falling house prices. Thus, the share of foreclosure starts that ultimately result in the loss of a home seems likely to be higher in the current episode than customarily has been the case. (See the box entitled "Recent Federal Reserve Initiatives to Address Problems in the Mortgage Market".)

The rates of delinquency continued to rise in the first few months of 2008 across all categories of mortgage loans. Problems remained especially severe for subprime loans. However, the growth rate of subprime delinquencies has slowed this year, while that of prime and near-prime delinquencies—particularly on adjustable-rate loans—has picked up. Credit quality is strongly related to the origination date of mortgage loans, with loans originated in 2006 and 2007 much more likely to experience delinquency and default than loans originated in previous years. The poorer performance of the more recent loan vintages reflects a general deterioration in underwriting standards through early 2007 and the decline in house prices since 2007, which has increased the occurrence of negative homeowner equity for houses purchased near the peak of the real estate market.

New subprime mortgage loans remained largely unavailable in the first half of 2008, and borrowers with higher credit risk had to turn to government guarantee programs, such as that of the Federal Housing Administration, to obtain mortgage loans. The availability of prime mortgage credit has been held down by a further tightening of lending standards at many commercial banks, according to the Senior Loan Officer Opinion Survey on Bank Lending Practices conducted in January and April. Securitization of mortgages by the government-sponsored enterprises (GSEs), Fannie Mae and Freddie Mac, was robust through April, although the GSEs tightened standards and increased guarantee fees. For prime loans, interest rates on conforming fixed-rate mortgages were up slightly, on net, over the first half of 2008 after declining moderately late last year.[4] Rates on conform-

3. A loan may be modified by reducing the principal balance, reducing the interest rate, or extending the term so as to make monthly payments more affordable.

4. Conforming mortgages are those eligible for purchase by Fannie Mae and Freddie Mac; they must be equivalent in risk to a prime mortgage

Recent Federal Reserve Initiatives to Address Problems in the Mortgage Market

The high rate of mortgage foreclosures is creating personal, economic, and social distress for many homeowners and communities. The Federal Reserve is collaborating with other regulators, community groups, policy organizations, financial institutions, and public officials to identify solutions to prevent unnecessary foreclosures and their negative effects. The Federal Reserve also has taken a number of regulatory and supervisory actions to reduce the likelihood of such problems in the future.

In 2007, the Federal Reserve and other banking agencies called on mortgage lenders and mortgage servicers to work closely with borrowers who are having difficulty meeting their mortgage payment obligations. Foreclosure cannot always be avoided, but prudent loan workouts and other loss-mitigation techniques that help troubled borrowers can be less costly to lenders than foreclosure.

The Federal Reserve's Homeownership and Mortgage Initiatives reflect a comprehensive strategy across the Federal Reserve System to provide information and outreach to prevent unnecessary foreclosures and to stabilize communities. Under these initiatives, the Federal Reserve has been providing community coalitions, counseling agencies, and others with detailed analyses identifying neighborhoods at high risk of foreclosures. With this information, community leaders can target their scarce resources to borrowers in need of counseling and other interventions that may help prevent unnecessary foreclosures. One example of this effort is the online dynamic maps and data that illustrate nonprime loan conditions across the United States. In addition, community affairs offices across the Federal Reserve System have sponsored or cosponsored more than 75 events related to foreclosures since January 2007, reaching more than 5,800 attendees including lenders, counselors, community development specialists, and policymakers.

The Federal Reserve also is helping to address the challenges that foreclosed homes present, such as decreased home values and vacant properties that can deteriorate from neglect. Toward this end, the Federal Reserve entered into a partnership this spring with NeighborWorks America, a national nonprofit organization, to work together in identifying strategies to mitigate the effect of foreclosures and vacant homes on communities. In June 2007, the Federal Reserve began hosting a series of forums in several cities across the country to

ing adjustable-rate mortgages dropped in January but have since reversed a portion of that decline. Offered rates on jumbo fixed-rate loans—which ran up in the second half of last year as the securitization market for such loans dried up—remained elevated in the first half of 2008, and spreads between rates offered on these loans and on conforming loans stayed unusually wide.[5] To

with an 80 percent loan-to-value ratio, and they cannot exceed the conforming loan limit.

5. Jumbo mortgages are those that exceed the maximum size of a conforming loan; they are typically extended to borrowers with relatively strong credit histories.

examine the effects that foreclosures have on neighborhoods in both strong and weak housing markets and to assess the tools available to local communities to address the consequences of foreclosures.

The Federal Reserve is committed to fostering an environment that supports the homeownership goals of creditworthy borrowers with appropriate consumer protection and responsible lending practices. It is using its regulatory and supervisory authorities to help avoid future problems in mortgage markets. In coordination with other federal supervisory agencies and the Conference of State Bank Supervisors, the Federal Reserve issued principles-based guidance on specific types of adjustable-rate subprime mortgages in June 2007. The guidance is designed to help ensure that borrowers who choose an adjustable-rate mortgage get a loan that they can afford to repay and can refinance without prepayment penalty for a reasonable period before the first interest rate reset. The Federal Reserve issued similar guidance on nontraditional mortgages in 2006.

Strong uniform enforcement of the consumer protection regulations that govern mortgage lenders is critical to avoid future problems in mortgage markets. Together with other federal and state supervisory agencies, the Federal Reserve launched a pilot program to review consumer protection compliance and impose corrective or enforcement actions, as warranted, at selected nondepository lenders with significant subprime mortgage operations.

In December 2007, the Board proposed new rules under the Home Ownership and Equity Protection Act to ban unfair and deceptive mortgage lending practices. The Board received about 4,500 comments on the proposal and, taking into consideration these comments, issued new rules in July. For consumers receiving higher-priced mortgages, the final rules prohibit lenders from extending credit without regard to a borrower's ability to repay, require lenders to verify income and assets they rely upon in making loans, require lenders to establish escrow accounts for taxes and insurance, and prohibit prepayment penalties unless certain conditions are met. In addition, the rules also are designed to curtail deceptive mortgage advertising and to ensure that consumers receive mortgage disclosures at a time when the information is likely to be most useful to them.

Finally, the Board also is undertaking a broad and rigorous review of the Truth in Lending Act, which involves extensive consumer testing of mortgage disclosure documents. Clearer and easier-to-understand disclosures should help consumers better evaluate the loans that are offered to them and thus make more-appropriate choices when financing their homes.

support the market for larger loans, the Congress raised the conforming loan limit temporarily for 2008, which allowed the GSEs to back these mortgages. However, because the prepayment characteristics of jumbo mortgage borrowers are different from those of other borrowers, the GSEs and other market participants decided not to pool these "jumbo conforming" mortgages with other mortgages when creating mortgage-backed securities (MBS). As a result, the secondary market for such mortgages has thus far failed to thrive. Concerns expressed by public policymakers persuaded Fannie Mae and Freddie Mac to make greater efforts to jump-start trading in the market for jumbo conforming loans, and the GSEs have recently taken a variety of actions to encourage the development of that market.

The weakness in the housing market was associated with a sharp slowing in the growth of household mortgage debt to an annual rate of 3 percent in the first quarter of 2008, down from 6¾ percent in 2007 and 11¼ percent in 2006. The available indicators suggest that mortgage debt likely slowed further in the second quarter.

Consumer Spending and Household Finance

The growth rate of consumer spending slowed some in the first half of 2008 from its solid pace in the second half of 2007. The slowing reflected a number of restraining influences. The growth rate of real labor income has stepped down substantially since last summer as labor market conditions have weakened and as rising prices for food and energy have put a sizable dent in consumers' purchasing power. At the same time, household wealth has been reduced by declining values of both equities and houses. In addition, borrowing at banks to finance outlays has become more difficult as terms and standards on consumer credit have been tightened. Although the tax rebates that households began receiving in the spring are likely cushioning these effects to some extent, consumers appear to be quite downbeat. Measures of consumer confidence, which had dropped sharply in the second half of 2007, plunged further in the first half of this year and now stand at or below the low levels reached in the early 1990s.

Real personal consumption expenditures (PCE) rose at a modest annual rate of 1 percent in the first quarter. The available data suggest that spending picked up in the second quarter, reportedly boosted by tax rebates. Spending on light motor vehicles was lackluster in the first half of the year, as high gasoline prices curbed demand for sport-utility vehicles and pickup trucks. Outlays for other types of goods fell slightly in the first quarter but appear to have turned back up in recent months. Spending on services has held up well in recent quarters.

Following a sharp deceleration in the second half of last year, real labor income has been flat so far this year, as nominal wage gains have been eroded by rising consumer prices. Average hourly earnings, a measure of wages for production or nonsupervisory workers, rose at the same rate as the PCE price index in the five months through May; thus, wages were unchanged in real terms. In the past couple of months, part of the strain on household incomes caused by the stagnation in real wages was likely alleviated temporarily by the tax rebates that were paid out in May and June. As a result of these rebates, growth in real disposable personal income (DPI)—that is, after-tax income adjusted for inflation—which was subpar in the fourth quarter of 2007 and the first quarter of 2008, likely jumped in the second quarter. Despite an increase in transfers reflecting the recently passed extension of unemployment insurance benefits, real DPI is likely to fall back in the third quarter as the disbursement of rebates slows considerably.

After several years of providing an impetus to spending, household wealth has been a negative influence this year. Changes in household net worth tend to influence consumer spending most heavily over a period of a year or two. Accordingly, the drop last year in the ratio of household net worth relative to income probably weighed on consumption outlays in the first half of 2008. Moreover, this year's declines in residential real estate values and in equity prices have exacerbated the situation. Flagging wealth has likely left households less inclined to raise their spending at a rate that exceeds income growth, and the personal saving rate has flattened out over the past few quarters. In May, the saving rate jumped to 5 percent, as the immediate effect of tax rebates in many households was to boost savings.

Overall household debt increased at an annual rate of about 3½ percent in the first quarter of 2008, a notable deceleration from the 6¾ percent advance in 2007. Household debt appears to have slowed further in the second quarter. Because the growth of household debt was slightly less than the growth in nominal DPI in the first quarter and interest rates on mortgage and consumer debt declined a bit, the ratio of financial obligations to DPI ticked down.

Consumer (nonmortgage) debt expanded at an annual rate of 5¾ percent in the first quarter, about the same pace as in 2007. Consumer debt growth held up despite a reported tightening of lending terms and standards at banks. In part, this pattern may reflect some substitution away from mortgage credit. Also, interest rates on auto loans and on credit cards generally declined in the first half of this year but by less than short-term market interest rates.

Overall credit quality of consumer loans has deteriorated somewhat in recent months. Delinquency rates on consumer loans at commercial banks and captive auto finance companies rose in the first quarter but stayed within the range experienced over the past 10 years. Although household bankruptcy filings remained low relative to the levels seen before the changes in bankruptcy law implemented in late 2005, the bankruptcy rate rose modestly in the first few months of 2008.

Secondary-market data suggest that funding for credit card and auto loans has been well maintained in recent months. Notably, issuance of asset-backed securities (ABS) tied to credit card loans and auto loans has remained robust, despite spreads of yields on these securities over comparable-maturity swap rates that continue to be near historically high levels. In contrast, pressures in secondary markets for student loan ABS have reportedly affected the availability of such credit. The reimbursement formula for government-guaranteed student loans did not adequately compensate lenders for the higher funding cost in securitization markets, and issuance of guaranteed student loan ABS dropped sharply early in 2008. Legislation enacted in May gave the Department of Education and the Treasury the authority to provide short-term liquidity to institutions that lend to students, and availability of student loans appears to have improved. However, concerns persist about access to loans by students at community and career colleges, as these loans tend to be less profitable for lenders.

The Business Sector

Fixed Investment

After having posted robust gains in the middle of last year, real business fixed investment lost some steam in the fourth quarter and eked out only a small advance in the first quarter of 2008. Economic and financial conditions that influence capital spending deteriorated appreciably late last year and early this year: Business sales slowed, corporate profits fell, and credit conditions for some borrowers tightened. In addition, the heightened concern about the economic outlook may have caused some firms to postpone or abandon plans for capital expansion this year.

Real business outlays for equipment and software were flat in the first quarter. Growth in real spending on high-tech equipment and software slowed to an annual rate of about 10 percent, down from the 13 percent pace recorded in 2007. In addition, business spending on motor vehicles tumbled. Investment in equipment other than high tech and transportation dropped at an annual rate of 3¾ percent in the first quarter after a smaller decline in the previous quarter. The available indicators suggest that capital spending on equipment and software fell in the second quarter: Business purchases of new motor vehicles reportedly slipped again; shipments of nondefense capital goods (adjusted to exclude both transportation items and goods that were sent abroad) were lower, on average, in April and May than in the first quarter; and the tone of recent surveys of business conditions remained downbeat.

Nonresidential construction activity, which exhibited considerable vigor in 2006 and 2007, slowed appreciably in the first quarter of 2008. Real outlays for new commercial buildings declined sharply in the first quarter, and increases in outlays for most other types of building stepped down. More-recent data on construction expenditures suggest that spending on nonresidential structures may have bounced back in the second quarter. However, deteriorating economic and financial conditions indicate that this rebound may be short-lived. In addition to the weakening of business sales and profits, vacancy rates turned up in the first quarter (the latest available data). Moreover, the financing environment has remained difficult; bank lending officers have reported a significant tightening of terms and standards for commercial real estate loans, and funding through the commercial mortgage-backed securities (CMBS) market has continued to be extremely limited.

Inventory Investment

Despite sluggish final sales, inventories declined again in the first quarter of 2008 as firms acted promptly to prevent inventory imbalances from arising. Automakers, which had worked to bring days' supply down to a sustainable level last year, have moved aggressively to keep production aligned with demand in recent quarters. Excluding motor vehicles, real inventory investment fell in the fourth quarter of 2007 to its lowest level in several years and then turned negative in the first quarter of this year. According to the limited available data, nonauto businesses continued to liquidate real inventories early in the second quarter. Business surveys suggest that companies are generally comfortable with their current stock levels. Nonetheless, a few industries, most notably those producing construction supplies, are showing some evidence of inventory overhangs.

Corporate Profits and Business Finance

The sluggish pace of business investment in recent months is due in part to the weakening of domestic profitability and the tighter credit conditions faced by some businesses. In the first quarter of 2008, total economic profits for all U.S. corporations were down slightly from their level four quarters earlier; a nearly 20 percent rise in receipts from foreign subsidiaries was not sufficient to offset a 2½ percent fall in domestically generated profits. Although profits as a share of output in the nonfinancial corporate sector have declined in recent quarters, they remain well above previous cyclical lows. For companies in the S&P 500, operating earnings per share fell 17 percent over the year ending in the first quarter. This decline was more than accounted for by plummeting earnings at financial firms, which reported large write-downs on leveraged loans and mortgage-related assets.[6] For nonfinancial firms in the S&P 500, earnings rose nearly 11 percent over the four quarters ending in the first quarter of 2008; energy-sector firms had a strong 31 percent increase in earnings, whereas earnings at other nonfinancial firms rose 4½ percent.

Although credit has remained available to the business sector, yields on corporate bonds increased significantly over the first half of the year, and banks reported tighter terms and standards on commercial and industrial loans and on commercial real estate loans. All told, the growth rate of the debt of nonfinancial businesses fell from 11¾ percent in 2007 to 9¼ percent in the first quarter of 2008; the available data point to a further deceleration in the second quarter of this year.

On balance, the composition of borrowing by nonfinancial businesses has shifted this year toward longer-maturity debt. Net bond issuance by nonfinancial firms has been strong. Speculative-grade issuance, which dropped sharply late last year and was practically nil in the first quarter, rebounded markedly in the second quarter, while investment-grade issuance has continued to be robust. Spreads between yields on investment- and speculative-grade bonds and those on comparable-maturity Treasury securities climbed in January and then surged in March. After narrowing in April and May, bond spreads jumped again in late June. Outstanding commercial paper (CP) for nonfinancial firms has been little changed, on net, this year. Yields on nonfinancial CP have moved down since the beginning of the year, roughly in line with other short-term interest rates, although spreads between yields on lower-rated and higher-rated nonfinancial CP remain well above the levels prevailing before the onset of the financial difficulties last summer.

Commercial and industrial (C&I) loans at banks expanded briskly in the first quarter and then slowed markedly in the second quarter. In the Senior Loan Officer Opinion Survey taken in January and April, considerable net fractions of banks reported that they had tightened credit standards and boosted spreads on C&I loans. According to the respondent banks, the move to a more stringent lending posture mainly reflected a less favorable or more uncertain economic outlook and a reduced tolerance for risk; a significant fraction also noted concerns about the capital position of their own bank as a reason for tightening standards. The secondary market for syndicated leveraged loans remained relatively weak, but loans associated with some prominent buyouts were sold, albeit at a discount.

Gross equity issuance by nonfinancial firms dipped in the first quarter and rebounded in the second quarter. A sharp decline in share repurchases and cash mergers led to a notable reduction of net equity retirement in the first quarter.

The credit quality of nonfinancial corporations generally has remained solid. The six-month trailing bond default rate was very low despite a small

6. Asset write-downs and capital losses are generally excluded from the calculation of economic profits but are included as an expense in the operating earnings per share of financial firms.

tick up in June. The delinquency rate on C&I loans at commercial banks continued the mild increase that began last year, but it remained subdued by historical standards. Ratings downgrades in the first five months of this year were modest, only slightly exceeding upgrades. Balance sheet liquidity at nonfinancial corporations remained high through the first quarter of 2008, and leverage stayed very low.

In the April 2008 Senior Loan Officer Opinion Survey, a large fraction of banks reported having tightened credit standards on commercial real estate loans. Delinquency rates on commercial real estate loans for construction and land development projects extended by commercial banks moved sharply higher in the first quarter of 2008 after rising noticeably last year. In contrast, delinquency rates on bank loans that finance existing commercial properties moved up only slightly. Delinquency rates on commercial mortgages held by life insurance companies and those in CMBS pools, which mostly finance existing commercial properties, remained low.

Despite the generally solid performance of commercial mortgages in securitized pools, spreads of yields on CMBS over comparable-maturity swap rates soared to unprecedented levels early in 2008. In recent months, these spreads have narrowed somewhat, but they remain well above levels seen before this year. The widening of spreads reportedly reflected heightened concerns regarding standards for underwriting commercial mortgages over the past few years and likely also investors' wariness of structured finance products more generally. After hitting a record level in early 2007, issuance of CMBS dropped sharply late last year and slowed to a trickle so far this year.

The Government Sector

Federal Government

The deficit in the federal unified budget has widened during the current fiscal year after having narrowed in the preceding few years. A substantial portion of the rebates authorized by the Economic Stimulus Act of 2008 was distributed in May and June, which caused a significant widening of the deficit. In addition, the growth of receipts has slowed in response to the weaker pace of economic activity, and the growth of outlays has stepped up. Over the first nine months of fiscal year 2008—from October through June—the unified budget recorded a deficit that was $148 billion greater than during the comparable period ending in June 2007. When measured relative to nominal GDP, the deficit moved up from 1¼ percent in fiscal 2007 to 2¼ percent during the 12 months ending in June 2008; a continued slow pace of economic activity and additional revenue losses associated with the Stimulus Act are expected to widen the deficit further in the final three months of fiscal 2008.

The Economic Stimulus Act is estimated to result in about $115 billion of rebates being sent to households in 2008 and 2009. The rebates began to be distributed in the last few days of April, and by the end of June, approximately $80 billion worth of rebates had been disbursed, accounting for more than half of the widening of the budget deficit in the first nine months of fiscal 2008 relative to the same period in fiscal 2007.

The slower pace of economic activity has cut into receipts. Excluding the budgetary effects of stimulus rebates, federal revenues in the first nine months of fiscal 2008 were only 2 percent higher than in the same period in fiscal 2007, down from a rise of 6¾ percent in fiscal 2007 and considerably smaller than the double-digit gains recorded in fiscal 2005 and fiscal 2006. The slowdown in federal revenues has been most pronounced for corporate receipts, reflecting the decline in corporate profits since the middle of 2007. Individual income and payroll tax receipts—excluding the stimulus rebates—also have slowed, likely because of the smaller gains in personal income during the current fiscal year.

Nominal federal outlays in the first nine months of fiscal 2008 were 6½ percent above their level in the comparable period in fiscal 2007, a faster pace of increase than was recorded in fiscal 2007 but generally below the rapid increases seen in fiscal 2002 through 2006. So far this fiscal year, the growth of outlays for defense has stepped up relative to fiscal 2006 and 2007, and spending has continued to rise apace in most major nondefense categories. In the months ahead, outlays will be bumped up further by the extension of eligibility for unemployment insurance benefits to individuals who have exhausted their benefits.

As measured in the national income and product accounts (NIPA), real federal expenditures on consumption and gross investment—the part of federal spending that is a direct component of GDP—increased at an annual rate of 4¼ percent in the first quarter, a contribution of 0.3 percentage point to real GDP growth. Real defense spending accounted for almost the entire rise, as nondefense outlays only edged up. In the second quarter, defense spending appears to have posted another sizable increase, and given currently enacted appropriations, it is likely to rise further in coming quarters.

Federal Borrowing

Federal debt rose at an annual rate of 7½ percent in the first two quarters of fiscal year 2008—from October through March—a notable step-up from the 4¼ percent pace in fiscal 2007. As of the end of March, the ratio of federal debt held by the public to nominal GDP was about 37 percent, slightly higher than in recent years.

The deterioration in the budget position of the federal government led the Treasury to reintroduce the one-year Treasury bill, which was last issued in 2001. The initial auction on June 3 was very well received, with a bid-to-cover ratio above 3. Issuance also increased for both shorter- and longer-maturity Treasury securities. The proportion of nominal coupon securities purchased at Treasury auctions by foreign investors changed little over the first half of 2008 and remains in the range of 10 percent to 25 percent observed over the past several years. However, holdings of Treasury securities by foreign official institutions at the Federal Reserve Bank of New York increased more rapidly in the first half of 2008 than over any of the previous three years.

State and Local Government

The fiscal positions of state and local governments began to weaken last year and have continued to deteriorate in 2008. After having improved significantly from 2003 to 2006, net saving by the sector—which is broadly similar to the surplus in an operating budget—turned slightly negative in 2007, and this measure moved further into negative territory in the first quarter of 2008. The deterioration in budget conditions has occurred as increases in revenues have slowed while nominal expenditures have risen at a brisk pace. The slowdown in state income tax revenues has followed a pattern similar to the one that has emerged at the federal level. Corporate receipts have declined, and the rise in individual income taxes has become more subdued. At the same time, state receipts from sales taxes have softened markedly. At the local level, the decline in house prices has not yet begun to curb local property tax revenues appreciably, but increases in local receipts from this source seem likely to slow more noticeably in the next few years.

On the outlays side of the accounts, nominal spending has continued to rise, particularly for expenditures on health care and energy items. In real terms, expenditures on consumption and gross investment by state and local governments (as measured in the NIPA) rose only a bit in the first quarter, as increases in expenditures on current operations were largely offset by a decline in outlays on structures. However, construction expenditures are volatile from quarter to quarter, and the data through May suggest that real state and local expenditures for structures picked up in the second quarter. Meanwhile, state and local hiring remained elevated through June.

State and Local Government Borrowing

Bond issuance by state and local governments slowed moderately in the first quarter of 2008 as the cost of borrowing rose. Investors demanded higher returns, in part because of concerns about the strength of financial guarantors that insure many municipal bonds and in part because of concerns about the effect of a potential economic slowdown on state and local government revenues.[7] Beginning in February, these investor apprehensions also led to widespread failures of rate-resetting auctions for auction rate securities (ARS) issued by state and local governments.[8] Pressures in the municipal securities market eased somewhat in the second quarter, along with the broader relaxation of financial market strains. In addition, ratings upgrades of municipalities greatly exceeded downgrades in the second quarter. Since March, municipal bond issuance has rebounded, and a significant fraction of failing ARS issues have been paid down with the proceeds of standard bond issues.

National Saving

Total net national saving—that is, the saving of households, businesses, and governments excluding depreciation charges—dipped below zero in the first quarter of 2008. After having stood at an already low rate of 1¾ percent of nominal GDP in the second quarter of 2007, the national saving rate declined steadily over the subsequent three quarters, as the federal budget deficit widened, the fiscal positions of state and

7. Concerns about the financial guarantors arose in 2007, but significant downgrades did not occur until early this year. In June, Moody's and Standard & Poor's downgraded MBIA and Ambac, two of the largest guarantors, from AAA to AA or lower. New bond insurance business has shifted to guarantors that are viewed as financially stronger, and some municipalities have stated their intention to dispense with guarantors and issue on the strength of their own ratings.

8. ARS are long-term securities whose interest rates are reset through regularly scheduled auctions, typically every 7, 28, or 35 days. As of the end of 2007, the size of the ARS market in the United States was about $330 billion, about half of which was accounted for by municipal securities. A resetting auction fails when investors do not bid for the entire issue at an interest rate below the contract maximum. Upon auction failure, the asset holders from before the auction retain ownership of the securities and receive a specified ceiling interest rate, which is usually, but not necessarily, equal to the maximum bid rate.

local governments deteriorated, and business saving decreased. Accordingly, total national saving as a share of nominal GDP, which has been declining, on balance, since the late 1990s, has fallen to a historic low (apart from the third quarter of 2005, which was marked by sizable hurricane-related property losses). If not reversed over the longer run, persistent low levels of saving will be associated with either slower capital formation or continued heavy borrowing from abroad, either of which would retard the rise in the standard of living of U.S. residents over time and hamper the ability of the nation to meet the retirement needs of its aging population.

The External Sector

International Trade

Foreign demand has continued to be an important source of strength for the U.S. economy. Net exports contributed ¾ percentage point to the growth of real GDP in the first quarter of 2008 after adding a similar amount to growth in 2007. The growth of real exports of goods and services expanded at a 5½ percent pace in the first quarter, moderating from the 12½ percent surge recorded in the second half of 2007. Export growth in the first quarter was supported by higher exports of agricultural products, consumer goods, industrial supplies, and services. In contrast, exports of both aircraft and automobiles moved down after rising rapidly in the second half of 2007. Exports to Europe and Latin America rose robustly (in current dollars), while exports to Canada and to OPEC countries fell back. Data for April and May suggest that exports continued to expand in the second quarter, with exports of industrial supplies showing particular strength.

The positive contribution of net exports in the first quarter reflected, in part, a ¾ percent decline in real imports of goods and services. Imports of automotive products and consumer goods fell in line with slowing U.S. domestic demand, more than offsetting higher real imports of oil and a slight increase in imports of capital goods. Imports from China and Mexico declined (in current dollars), whereas imports from Canada, Japan, and OPEC countries expanded. After falling sharply in March, imports rebounded, on average, in April and May, as imports of capital equipment and consumer goods increased strongly.

In the first quarter of 2008, the U.S. current account deficit was $706 billion at an annual rate, or 5 percent of GDP, $25 billion narrower than its level in 2007; the narrowing largely reflects higher net investment income. A large improvement in the non-oil trade deficit was offset by a sharp increase in the bill for imported oil, which resulted from the jump in oil prices.

Compared with 2007, prices for imports of both material-intensive and finished goods are increasing at much faster rates so far this year. Although import price increases also reflect the depreciation of the dollar, rising commodity prices (discussed in more detail in the box entitled "Commodity Prices") have significantly boosted the rate of import price inflation. In the first quarter, prices of imported goods excluding oil and natural gas rose at an annual rate of about 7½ percent, a pace more than twice that of the previous year. Available data suggest that import price inflation was sharply higher in the second quarter.

The Financial Account

In late 2007 and the first quarter of 2008, the U.S. current account deficit

Commodity Prices

Prices for crude oil and many other commodities continued to soar through the first half of 2008. After shooting up about 60 percent last year, the spot price of West Texas intermediate crude oil has increased an additional 50 percent thus far in 2008, climbing from $92 per barrel in December 2007 to about $140 recently. While weaker economic growth and the high level of prices appear to be damping oil demand in industrialized nations, demand from emerging market countries remains robust. The continued strength in emerging market demand reflects, in part, government subsidies that limit the pass-through of higher crude prices to retail products and thus mute the response to higher prices. Furthermore, on the supply side, incoming information since the beginning of the year has been decidedly downbeat, with non-OPEC production continuing to fall short of expectations. Despite additional investment, oil production capacity has not risen at a pace commensurate with the growth of global demand. The lack of spare capacity has led, in turn, to heightened sensitivity of oil prices to political developments, such as ongoing tensions in the Middle East and instability in Nigeria. The price of the far-dated NYMEX oil futures contract (currently for delivery in 2016) has also risen to about $140 per barrel and suggests that the balance of supply and demand is expected to remain tight for some time to come.

Nearer-term market pressures have been reflected in domestic inventories of both crude oil and refined oil products, which have declined notably in recent months and stand well below year-earlier levels. Inventories also appear to be tight in other countries (although data are less complete for emerging market countries). Lean inventories increase the vulnerability of petroleum markets to any disruptions in production, transportation, and refining, which is of particular concern during hurricane season. The tightness of inventories suggests that the recent increases in oil prices reflect near-term demand and supply pressures, rather than speculative hoarding.

Prices of nonfuel commodities were quite volatile in the first half of 2008. Through early March, prices of many commodities rose sharply, including those for some foods (such as corn and wheat) and metals (in particular, copper and aluminum). This broad-based price

was financed primarily by foreign purchases of U.S. securities, as has been the norm in recent years. The global financial turmoil has continued to leave an imprint on both the sources and composition of cross-border financial flows, including a net private outflow in the first quarter. Meanwhile, foreign official inflows provided all of the financing from abroad during the first quarter, driven by net purchases of U.S. Treasury and agency securities by Asian institutions. Unusually large net purchases of corporate securities also contributed to foreign official inflows, likely reflecting sovereign wealth fund activity.

Foreign private demand appeared to remain robust for the safest U.S. investments—net private purchases of U.S. Treasury securities, which surged in the third quarter of 2007 when the turmoil began, remained at near-record levels through April 2008. In contrast, corporate bond purchases by foreign private investors have been weaker in each quarter of the turmoil than in any previous quarter since 2002. Corporate eqincrease appears to have been driven mainly by growth in global demand. More recently, however, price movements have been less uniform, and commodities such as wheat and nickel have seen sharp price declines. Nevertheless, some other food commodity prices have continued to soar, particularly the price of corn, which has been affected by weather-related concerns, including the recent floods in the Midwest. The price of rice has also increased sharply this year, which has led a number of rice-producing countries to enact export bans, adding to upward pressure on global prices. Through feed costs, increased grain prices also have been reflected in higher prices for meat and dairy products.

The supply response of farm crops to price increases typically has had a relatively short time lag, usually through increasing land under cultivation. Although increases in acreage devoted to one crop have recently come at the expense of other crops, yields have risen and should continue to do so as more-advanced seed varieties and cultivation techniques are employed.

In addition to supply and demand conditions in the physical markets, other factors have been cited as contributing to the rise in commodity prices in recent years, including depreciation of the dollar and lower interest rates. All else being equal, a lower value of the dollar implies a higher dollar price of commodities, but the causal relationships between the exchange value of the dollar and commodity prices are complex and run in both directions. The fact that commodity prices have risen significantly in terms of all major currencies suggests that factors other than the depreciation of the dollar have been important causes of the rise in prices. Similarly, the relationship between interest rates and commodity prices may depend on what is driving changes in interest rates. For example, to the extent that lower interest rates reflect a relatively weak economy and thus softer demand for commodities, interest rates and commodity prices may tend to move in the same direction. And irrespective of their cause, lower interest rates might also lead to a buildup in commodity inventories—as a result of reduced financing costs of holding inventories—potentially putting upward pressure on prices. However, inventory levels of key commodities have not risen this year, a fact that is at odds with such explanations of price increases that emphasize the role of interest rates.

uity purchases have also been very weak in 2008 through April after a strong rebound in the fourth quarter of 2007. Overall, total inflows from foreign private acquisitions of U.S. securities were well below average in the first quarter of 2008 but slightly above the nine-year low set in the third quarter of 2007 as the turmoil began.

Inflows from private purchases of U.S. securities in the first quarter of 2008 were offset by strong outflows associated with U.S. direct investment abroad and by interbank flows. Somewhat surprisingly given the global financial turmoil, the strength seen in U.S. direct investment abroad in 2007 persisted through the fourth quarter and into the first quarter of 2008. In addition, net lending abroad by U.S.-resident banks, which tends to be quite volatile, has increased with unusual consistency since the turmoil began; these outflows, primarily from foreign-owned banks to their European affiliates, were particularly large in March as conditions in U.S. and European interbank funding markets re-intensified.

The Labor Market

Employment and Unemployment

The demand for labor has been contracting this year. After having increased 54,000 per month, on average, in the second half of 2007, private payroll employment declined at an average monthly pace of 94,000 in the first half of 2008. Over the same period, the civilian unemployment rate moved up more than ½ percentage point, to 5½ percent.

Job losses in the first half of 2008 were concentrated in the construction and manufacturing sectors. Although businesses in these industries have been trimming payrolls for more than two years, the downsizing has intensified during the past several months. In addition, job losses have begun to mount this year in the wholesale and retail trade sectors and in the professional and business services category. Even among the many sectors in which payrolls have continued to expand, such as technical services providers and eating and drinking establishments, job gains have been less robust so far this year than in 2007. A notable exception has been hiring by providers of health and education services, which has remained strong.

The unemployment rate, which rose ½ percentage point in 2007, increased another ½ percentage point in the first half of this year. Initial claims for unemployment insurance and the number of individuals receiving unemployment insurance benefits moved up considerably over the six months ending in June; accordingly, the share of unemployed workers who lost their last jobs (as opposed to those who voluntarily left their jobs or were new entrants to the labor force) rose, on net, this spring. In addition, the percentage of persons who reported that they were working part time for economic reasons increased sharply. Thus far, the labor force participation rate, which typically falls during periods of labor market weakness, has remained steady and stood at 66.1 percent in June, near the middle of the range that has prevailed since early 2007.

Other indicators also point to further deterioration in labor market conditions this year: Private surveys of businesses suggest that firms plan to continue cutting back on hiring in the near term. At the same time, according to surveys of consumers, assessments of labor market prospects in the year ahead, which had worsened late last year, slipped further in the first half of 2008.

Productivity and Labor Compensation

Gains in labor productivity have moved up significantly of late. According to the latest available published data, output per hour in the nonfarm business sector rose 3¼ percent during the year ending in the first quarter of 2008, up from the ½ percent increase recorded over the preceding four quarters. On average, the rise in productivity over the past two years, although less than the outsized increases posted earlier in the decade, suggest that the fundamental forces that in recent years have supported a solid uptrend in underlying productivity remain in place. Those forces include the rapid pace of technological change and the ongoing efforts by firms to use information technology to improve the efficiency of their operations. Increases in the amount of capital, especially high-tech capital, available to each worker also appear to be providing considerable impetus to productivity growth.

Broad measures of hourly labor compensation have not kept pace with the rapid increases in both overall consumer prices and labor productivity, despite a labor market that, until recently, had been generally tight. The employment cost index (ECI) for private industry workers, which measures both wages and the cost to employers of providing benefits, rose 3¼ percent in nominal terms between March 2007 and March 2008 (the latest available data), the same gain as was recorded over the preceding 12 months. Although the increase in the wage and salary component of the ECI edged down, the rise in benefits costs picked up markedly. Benefits costs were pushed up by a sharp rise in employer contributions to retirement plans, which likely reflected, in part, the weak performance of the stock market and an atypically small increase in employer contributions in the preceding year.

According to preliminary data, compensation per hour in the nonfarm business (NFB) sector—an alternative measure of hourly compensation derived from the data in the NIPA—rose 4 percent over the year ending in the first quarter of 2008, down from a 5 percent gain in the previous year. Because of the slower growth in NFB hourly compensation and the faster growth in productivity over the period, unit labor costs rose just ¾ percent over the year ending in the first quarter of 2008 after having increased 4¼ percent over the preceding year. On average, the rise in unit labor costs over the past two years is about on par with the increases recorded in the preceding two years.

Prices

Headline inflation remained elevated in the first half of 2008, as prices for both food and energy continued to surge. The chain-type price index for personal consumption expenditures increased at an annual rate of 3.4 percent between December 2007 and May 2008, about the same as the brisk pace registered over the 12 months of 2007. Excluding food and energy items, the PCE price index rose at an annual rate of 1.9 percent over the first 5 months of the year, down from the 2.2 percent increase over the 12 months of 2007.

Energy prices, which jumped 20 percent over 2007, continued to soar in the first five months of this year. Spurred by rising crude oil costs, motor fuel prices continued to move up through May, and increases in prices of heating fuel and natural gas also jumped appreciably. Furthermore, the pass-through of the record-high levels of crude oil prices into retail gasoline prices was only partial, and wholesale and retail margins were unusually compressed in May. As these margins return to more typical levels, retail prices are likely to rise further. Indeed, survey evidence suggests that prices at the pump jumped again in June and early July. The recent pickup in natural gas prices apparently reflected substitution by utilities and other users away from relatively expensive crude oil as well as the unexpected shutdown of some production in the Gulf of Mexico during the spring.

Food prices have also picked up further this year. After climbing 4¾ percent in 2007, the PCE price index for food and beverages increased at an annual rate of more than 6 percent between December 2007 and May 2008. High grain prices and strong export demand have been primarily responsible for sizable increases in the retail prices of poultry, fish, eggs, cereal and bakery items, fats and oils, and a variety of other prepared foods. In addition, the index for fruits and vegetables rose at an annual rate of 7¼ percent over the first five months of the year, likely reflecting, in part, higher input costs. Although world grain production improved this spring, excessively wet weather and flooding in the Midwest boosted spot prices for corn and soybeans in June.

The small decline in core PCE price inflation this year masked some substantial—but largely offsetting—crosscurrents. Shelter costs have continued to decelerate as housing markets have softened further. In addition, a moderation in the pace of medical care price increases has also held down core price inflation this year. In contrast, prices of core services besides medical and shelter costs have increased more rapidly. Similarly, prices of core goods, which declined some in 2007, were about flat, on net, over the first five months of this year.

More fundamentally, increased slack in labor and product markets is likely damping price increases this year. However, a number of other factors are putting upward pressure on core inflation. Higher prices for energy and other industrial commodities continue to add to the cost of producing a wide variety of goods, and increases in the prices of non-oil imports have picked up appreciably. Moreover, inflation expectations, especially for the near term, have moved up since the turn of the year. Probably reflecting the elevated level of actual headline inflation, the median expectation for year-ahead inflation in the Reuters/University of Michigan Surveys of Consumers moved up to about 3½ percent at the end of 2007 and then continued to rise in 2008; it reached 5.3 percent in the preliminary July estimate. However, the upward movement in longer-run inflation expectations has been much less pronounced. According to the preliminary July result in the Reuters/University of Michigan survey, median 5- to 10-year inflation expectations were 3.4 percent for a third consecutive month, compared with the readings in the range of 3 percent to 3¼ percent that had prevailed for the preceding few years. Similarly, estimates of 10-year inflation compensation, as measured by the spreads of yields on nominal Treasury securities over those on their inflation-protected counterparts, have moved up about 20 basis points, on balance, since the turn of the year. However, most of that increase reflected higher inflation compensation over the next 5 years; estimates of inflation compensation 5 to 10 years ahead were up only 10 basis points by early July. According to the Survey of Professional Forecasters conducted by the Federal Reserve Bank of Philadelphia, expectations of inflation over the next 10 years ticked up in the first half of 2008, though they remain essentially unchanged since 1998.

Broader, NIPA-based measures of inflation, which are available only through the first quarter of this year, slowed relative to the pace of the past couple of years. The latest data show a

Alternative Measures of Price Change, 2007–08

Percent

Price measure	2007	2008
Chain-type (Q1 to Q1)		
Gross domestic product (GDP)	2.9	2.2
Excluding food and energy	2.9	1.9
Gross domestic purchases	2.6	3.2
Personal consumption expenditures (PCE)	2.3	3.4
Excluding food and energy	2.4	2.0
Market-based PCE excluding food and energy	2.2	1.8
Fixed-weight (Q2 to Q2)		
Consumer price index	4.0	3.8
Excluding food and energy	2.3	2.2

NOTE: Changes are based on quarterly averages of seasonally adjusted data. For the consumer price index, the 2008:Q2 value is calculated as the average for April and May compared with the average for the second quarter of 2007 and is expressed at an annual rate.

SOURCE: For chain-type measures, Department of Commerce, Bureau of Economic Analysis; for fixed-weight measures, Department of Labor, Bureau of Labor Statistics.

rise in the price index for GDP less food and energy of about 2 percent over the year ending in the first quarter, down about 1 percentage point from the figure for the year ending in the first quarter of 2007. In addition to a lower reading for core PCE inflation over the past four quarters, prices for some other components of final demand, especially construction, decelerated.

Financial Markets

The elevated risk spreads, high volatility, and impaired functioning that characterized domestic and international financial markets in the second half of 2007 continued through the first half of 2008. Spillovers from the slumping U.S. housing market were the largest direct source of these pressures, but a generalized flight from riskier assets—particularly structured credit products—and worries about a global economic slowdown also contributed to financial strains.[9] The Federal Reserve lowered the target federal funds rate an additional 225 basis points over the first four months of 2008 in response to a deteriorating outlook for economic activity.

Financial strains increased significantly during the first quarter, leading to a liquidity crisis in March at The Bear Stearns Companies, Inc., a major investment bank, and to its subsequent acquisition by JPMorgan Chase & Co. Additional actions taken by the Federal Reserve to improve market functioning and liquidity, including the introduction of liquidity facilities for primary dealers, appeared to have an ameliorative effect, and tensions eased somewhat in the second quarter. (See the box entitled "The Federal Reserve's Liquidity Operations.") Nevertheless, conditions in a broad range of domestic and international financial markets remained strained relative to previous years. This week, the Board of Governors announced a temporary arrangement that allows the Federal Reserve to extend credit to Fannie Mae and Freddie Mac, if necessary.

Market Functioning and Financial Stability

The deteriorating performance of subprime mortgages in the United States prompted widespread strains and turbulence in domestic and international financial markets in the second half of 2007. Substantial losses on even the highest-rated structured products based on subprime mortgages caused market participants to reassess the risks associated with other structured financial instruments and raised concerns about the exposures of major financial institutions to these assets. As liquidity in markets for structured products evaporated, banks were forced, at least temporarily, to hold more assets on their balance sheets than they anticipated. In addition, banks' losses on mortgage-related securities and other assets prompted credit concerns among counterparties. Both of these factors contributed to strains in bank funding markets. The resulting deleveraging in the financial sector reduced the availability of credit to the overall economy. By late 2007, U.S. house prices had begun to fall, residential investment was contracting sharply, and indicators of overall economic activity had softened noticeably. These developments induced investors to pull back from a broader range of financial assets, leading to impaired liquidity conditions in many

9. In a structured credit product, the credit risk of a portfolio of underlying exposures is segmented into tranches of varying seniority and risk exposure.

The Federal Reserve's Liquidity Operations

In response to serious financial strains, the Federal Reserve has taken a number of steps since August 2007 to enhance liquidity and foster the improved functioning of financial markets and thereby promote its dual objectives of maximum employment and price stability.

The Federal Reserve eased the terms of access for borrowing by depository institutions under the regular primary credit program, or discount window. The spread of the primary credit rate over the target federal funds rate was narrowed from 100 basis points to 50 basis points in August 2007 and to 25 basis points in March. The maximum loan term was extended to 30 days in August 2007 and to 90 days in March; institutions have the option to renew term loans so long as they remain in sound financial condition. Over time, more institutions have used the discount window, and the more accommodative terms for borrowing at the window have reportedly improved confidence by assuring depository institutions that backstop liquidity will be available should they need it.

In December 2007, the Federal Reserve introduced the Term Auction Facility (TAF), through which predetermined amounts of discount window credit are auctioned every two weeks to eligible borrowers for terms of about one month. In effect, TAF auctions are similar to open market operations but are conducted with depository institutions rather than primary dealers and against a much broader range of collateral than is accepted in standard open market operations. The TAF appears to have overcome the reluctance to borrow associated with standard discount window lending because of its competitive auction format, the certainty that a large amount of credit would be made available, and the fact that it is not designed to meet urgent funding needs. Indeed, a large number of banks—ranging at various points in time from around 50 to more than 90—have participated in each of the 16 auctions held thus far. The size of individual TAF auctions was raised in several steps from an initial level of $20 billion at inception last December to $75 billion most recently; the amount of TAF credit currently outstanding is $150 billion.

In conjunction with the introduction of the TAF, the Federal Reserve also established swap lines with the European Central Bank and the Swiss National Bank to provide dollar funds to facilitate dollar lending by those central banks to banks in their jurisdictions. These swap lines have been enlarged over time and currently stand at $50 billion with the European Central Bank and $12 billion with the Swiss National Bank.

In response to the unprecedented pressures in short-term repurchase agreement (repo) markets earlier this year, the Federal Reserve initiated a special program of 28-day term repurchase agreements; $80 billion of such agreements are currently outstanding. These agreements were designed to enhance the ability of primary dealers to obtain term funding for any assets that are eligible as collateral in conventional open market operations. Also, on March 11, the Federal Reserve announced plans to create the Term Securities Lending Facility (TSLF), in which the Federal Reserve lends Treasury securities held in its portfolio at auction against the collateral of high-grade securities held by dealers. In addition to conventional open market operation collateral—Treasury securities, agency securities, and agency-sponsored mortgage-backed securities (MBS)—the Federal Reserve now accepts AAA-rated residential MBS, commercial MBS, and other asset-backed securities as collateral at the TSLF. The Federal Reserve sets a minimum bid rate for each TSLF auction. Bids submitted at most TSLF auctions have fallen short of the announced auction quantities. Nevertheless, market participants have indicated that the TSLF has contributed to improved functioning in repo markets.

Pressures in short-term funding markets worsened sharply in mid-March. On March 13, The Bear Stearns Companies, Inc., a prominent investment bank and primary dealer, advised the Federal Reserve and other government agencies that its liquidity position had deteriorated significantly and that it would be forced to file for bankruptcy the next day unless alternative sources of funds became available. A bankruptcy filing would have forced the secured creditors and counterparties of Bear Stearns to liquidate the underlying collateral, and given the illiquidity of markets, those creditors and counterparties might well have sustained substantial losses. If they had responded to losses or the unexpected illiquidity of their holdings by pulling back from providing secured financing to other firms and by dumping large volumes of illiquid assets on the market, a much broader financial crisis likely would have ensued with consequent harm to the overall economy. In such circumstances, the Federal Reserve Board judged that it was appropriate to use its emergency lending authorities under the Federal Reserve Act to avoid a disorderly closure of Bear Stearns. Accordingly, the Federal Reserve, after discussions with the Securities and Exchange Commission and in close consultation with the Treasury, agreed to provide short-term funding to Bear Stearns through JPMorgan Chase & Co. Over the following weekend, JPMorgan Chase agreed to purchase Bear Stearns and assume the company's financial obligations. The Federal Reserve, again in close consultation with the Treasury, agreed to supply term funding, secured by $30 billion in Bear Stearns assets, to facilitate the purchase. JPMorgan Chase completed the acquisition of Bear Stearns on June 26, and the Federal Reserve extended approximately $29 billion of funding on that date.

In a further effort to prevent a possible downward spiral in financial markets, the Federal Reserve also used its emergency authorities to create the Primary Dealer Credit Facility (PDCF) in mid-March. The PDCF allows primary dealers to borrow at the discount window against collateral that includes a broad range of investment-grade securities. In effect, the PDCF provides primary dealers with a liquidity backstop similar to the discount window that is available to depository institutions.

These liquidity measures appear to have contributed to some improvement in financial markets since late March.

Over recent days, the share prices of Fannie Mae and Freddie Mac dropped sharply on investor concerns about their financial condition and capital position. The Treasury announced a legislative initiative to bolster the capital, access to liquidity, and regulatory oversight of the government-sponsored enterprises (GSEs). As a supplement to the Treasury's existing authority to lend to the GSEs, the Board of Governors established a temporary arrangement that allows the Federal Reserve to extend credit to Fannie Mae and Freddie Mac, if necessary. In establishing this arrangement, the Board exercised its authority under section 13(13) of the Federal Reserve Act. Credit under this arrangement will be extended at the primary credit rate and secured by government and federal agency securities.

markets, with widened risk spreads and elevated volatilities.

This market turbulence continued into early 2008, as liquidity in many financial markets continued to be impaired and risk spreads remained wide. After declining sharply late last year, issuance of non-agency-sponsored mortgage-backed securities essentially came to a halt by the beginning of 2008, and secondary-market trades of these assets were rare. Price indexes of non-agency-sponsored subprime MBS based on derivatives markets declined further. However, the unusual pressures that had been apparent in short-term investment-grade funding markets in December eased considerably in January, owing to a combination of the passing of year-end balance sheet concerns and the provision of additional liquidity by the Federal Reserve and foreign central banks.

In February and March, short- and long-term funding markets came under renewed pressure after reports of further losses and write-downs at major banks, broker-dealers, and the government-sponsored enterprises. Fears of a weakening economy exacerbated a generalized flight from all but the safest assets. Repurchase agreement (repo) market investors exhibited a marked preference for Treasury collateral and pushed rates on Treasury general collateral repos to historical lows that were well below the target federal funds rate. As liquidity for MBS not sponsored by the GSEs and for other private-label asset-backed securities dried up, the heightened uncertainty regarding values of these instruments led to an unprecedented increase in the margin, or "haircut," required on repos based on such collateral; the interest rate spread on these repos also rose. Spreads of corporate and GSE bond yields over yields on comparable-maturity Treasury securities jumped to multiyear highs. Ratios of yields on municipal bonds to yields on Treasury securities spiked, and failures were widespread in the auction rate securities markets for municipal securities, student loans, and other assets. Prices fell in the secondary market for leveraged loans, and implied spreads on indexes of loan-only credit default swaps, or LCDX, reached record levels in February. Liquidity was strained in many markets; for example, in the market for Treasury coupon securities, bid-asked spreads and spreads between yields on off-the-run and on-the-run securities reached multiyear highs. Bid-asked spreads in the leveraged loan market also widened noticeably. The orderly resolution of the Bear Stearns situation along with the implementation of the Primary Dealer Credit Facility and the Term Securities Lending Facility in March appeared to reduce strains in short-term funding markets and to relieve liquidity pressures more broadly across fixed-income markets (see the box entitled "The Federal Reserve's Liquidity Operations.")

Even though conditions in several markets improved somewhat after mid-March, pressures in some short-term funding markets continued to intensify into April. Yield spreads rose in April on unsecured financial, asset-backed, and lower-rated nonfinancial commercial paper. Interbank term funding pressures, as measured by spreads of term London interbank offered rates over comparable-maturity overnight index swap rates, peaked in April but have since moved somewhat lower, at least for terms of three months and less. The expansion in May of the Federal Reserve's Term Auction Facility and of the associated swap lines with the European Central Bank and the Swiss National Bank appears to have contributed to this easing of pressures. However, for interbank funding at terms greater than three months, transaction volumes are reportedly low, and spreads remain high.

In longer-term financial markets, pressures generally eased in April and May. Spreads of conforming mortgage rates and corporate bond yields over yields on comparable-maturity Treasury securities narrowed, and prices and liquidity in the secondary market for leveraged loans increased. However, yield spreads for corporate bonds and mortgages moved higher in June. Equity prices of financial intermediaries, including the housing-related GSEs, Fannie Mae and Freddie Mac, dropped sharply in June and early July as concerns mounted both about their losses and longer-term profitability and about the prospects for earnings dilution given the considerable new capital that may need to be raised. Overall, indicators of financial market strains remain elevated compared with their levels in previous years.

Debt and Financial Intermediation

The total debt of the domestic nonfinancial sector expanded at an annual rate of 6½ percent in the first quarter of 2008, a somewhat slower pace than in 2007. The moderation in borrowing was mainly accounted for by a slowdown in the growth of household debt, particularly mortgage debt. Borrowing by nonfinancial businesses also decelerated, but at a 9¼ percent pace, it was still high by historical standards. Preliminary data suggest that overall debt growth slowed further in the second quarter.

Commercial bank credit increased at an annual rate of 4¾ percent in the first half of 2008, down significantly from the 10¼ percent expansion registered in 2007.[10] Commercial and industrial loans decelerated sharply after growing at an annual rate of more than 25 percent in the fourth quarter of 2007. The surge in C&I loans late last year reportedly reflected, in part, the difficulties that banks faced in selling syndicated loans to nonbank investors; as a result, banks had to fund a number of previously committed large syndicated deals on their balance sheets. In the first quarter of 2008, C&I loans grew at a lower but still quite fast rate of 16¼ percent, with part of the strength reportedly due to increased utilization of existing credit lines, the pricing of which reflected previous lending practices. In the second quarter, C&I lending moderated significantly further, a pattern consistent with reports from the April Senior Loan Officer Opinion Survey, which indicated a further tightening of credit standards and terms and weakening of demand for C&I loans. Commercial real estate loans grew at an annual rate of about 9¾ percent in the first half of 2008, only slightly slower than their pace in 2007.

After contracting sharply in the final quarter of 2007, the outstanding stock of residential mortgages at commercial banks rose 3½ percent in the first quarter, in part because of a sluggish pace of securitization. In the second quarter, however, banks' holdings of residential mortgage loans fell again, a pattern consistent with the ongoing weakness in the housing market and the reduced availability of mortgage credit. Growth of home equity lines of credit picked up significantly in the first half of 2008, likely because of the decline in short-term market rates to which such loans

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10. The growth rate of bank credit in 2007 has been adjusted to remove the effects of the conversion of a large commercial bank to a thrift institution.

are generally tied. However, commercial banks have taken steps to limit their exposure to these loans; according to the April Senior Loan Officer Opinion Survey, a significant portion of respondents indicated that they had tightened their credit standards for approving new applications for home equity lines of credit, and a notable proportion reported that they had also firmed lending terms on existing lines, mainly in response to declines in property values. Despite the reported tightening of credit conditions in the household sector, consumer loans grew at a moderate pace in the first half of 2008.

Profitability of the commercial banking sector improved somewhat in the first quarter of 2008 but remained well below the levels seen before the summer of 2007. Many large banks received a significant boost to their first-quarter profits as a result of their stakes in Visa—the initial public offering of which occurred in March. However, continued write-downs of mortgage-related assets and leveraged loans, along with increasing loan-loss provisions, held profits down in the first quarter. Concerns about recent and potential losses have weighed heavily on bank stock prices this year. The median spread on credit default swaps on the senior debt of major banks climbed from 50 basis points at the end of 2007 to more than 100 basis points in mid-March. After declining noticeably in April and May, it returned close to the March peak in late June.

The overall delinquency rate on loans held by commercial banks rose in the first quarter to its highest level since the early 1990s, and the charge-off rate increased to the upper end of its range since 2000. The deterioration in credit quality was accounted for primarily by continued erosion in the performance of residential mortgages and a considerable worsening in construction and land development loans, but performance of most other types of loans also weakened. To bolster equity positions diminished by asset write-downs and loan-loss provisions, commercial banks raised a substantial volume of capital in the first half of 2008; some banks reduced dividends to further shore up their capital.

Equity Markets

Overall, share prices have dropped about 15 percent from the end of 2007. The declines were led by the financial sector, especially depository institutions and broker-dealers, which fell 37 percent and 41 percent, on average, respectively. The energy and basic materials sectors avoided the downtrend and have changed little on net.

Actual and implied volatilities of broad equity price indexes shot up last year with the onset of financial strains. The partial easing of financial strains in the second quarter was associated with modest declines in the actual and implied volatilities of equity prices to levels still above those of the past few years. The 12-month-forward expected earnings-price ratio for S&P 500 firms jumped in the first half of 2008, while the long-term real Treasury yield rose only slightly. The difference between these two values—a rough measure of the premium that investors require for holding equity shares—has reached the high end of its range over the past 20 years.

Policy Expectations and Interest Rates

The current target for the federal funds rate, at 2 percent, is substantially below the level that investors expected as of late December 2007. According to futures quotes at that time, market participants expected that the federal funds rate would be around 3½ percent by July. Looking forward, however, investors now expect that the next policy move will be up, and a small degree of tightening has been priced in by the end of 2008. Measures of uncertainty about the path of policy rose with the onset of financial turbulence last year and are currently near the high end of their range over the past 10 years.

Treasury yields fell sharply from the end of 2007 through March amid concerns about the health of financial firms, severe strains in financial markets, a weakening economic outlook, and lower expectations for future policy rates. Since late March, yields have risen across the curve as fears of a deep economic contraction have receded and concerns about the inflation outlook have increased. On net, 2-year yields are down 65 basis points, and 10-year yields are down 20 basis points since the start of the year.

Yields on Treasury inflation-protected securities largely moved in line with nominal yields—that is, they fell through mid-March and then rose—but the rise since March has been somewhat less than that of nominal yields. In addition, shifting liquidity conditions in the markets for nominal and indexed Treasury securities at times affected the spreads between nominal and indexed yields, also known as inflation compensation. On net, 10-year inflation compensation has risen about 20 basis points since the end of 2007, suggesting some increase in investors' concerns about the inflation outlook. Inflation compensation rose over both the near term and the longer term, but the increase was larger over the near term, as compensation over the next 5 years rose about 30 basis points whereas compensation over the period from 5 years ahead to 10 years ahead rose only 10 basis points. In part because of a lag in the indexation of inflation-protected securities, near-term inflation compensation can be strongly affected by the latest movements in energy and food prices; these prices have risen sharply in recent months.

Money and Reserves

M2 is estimated to have expanded at an annual rate of 7¾ percent over the first half of 2008, notably faster than the likely growth rate of nominal GDP. Demand for money balances was supported by declines in the opportunity cost of holding money relative to other financial assets and by strong demand for safe and liquid assets amid volatility and strains in financial markets. Money market mutual fund shares grew particularly rapidly in the first quarter. However, growth of money market mutual funds dropped considerably in the second quarter, and small time deposits contracted; M2 slowed accordingly. Demand for currency continued to be lackluster for the most of the first half-year, but it picked up noticeably late in the second quarter as domestic demand grew and foreign demand was estimated to be less weak.

The strains in bank funding markets over recent months have posed challenges for the implementation of monetary policy. Banks generally have seemed more cautious in their activity in the federal funds market and less willing to take advantage of potential arbitrage opportunities in that market over the course of a day and across the days of a reserve maintenance period. In this environment, the Open Market Desk's decisions regarding the appropriate quantity of reserves to be supplied each day through open market operations have been complicated, and volatility in the federal funds rate has been elevated. The authority to pay interest on reserves could be helpful to the Federal Reserve in limiting the volatility in the federal funds rate. The ability to pay interest on reserves would also allow the Federal Reserve to manage its balance sheet more efficiently in circumstances in which promoting financial stability required the provision of substantial amounts of discount window credit to the financial sector. In light of these considerations, the Federal Reserve has asked the Congress to accelerate the effective date of statutory authority to pay interest on reserve balances, which is currently October 2011.

International Developments

International Financial Markets

Global financial markets remained distressed over the first half of 2008, primarily because of concerns about weakness in real estate and slowing global economic growth. Amid heightened market turbulence in March, the European Central Bank (ECB), Bank of England, Bank of Canada, and Swiss National Bank (SNB) announced a further set of joint actions with the Federal Reserve to help improve the functioning of short-term funding markets. The Federal Open Market Committee increased its temporary swap line to the ECB in March from $20 billion to $30 billion and its line to the SNB from $4 billion to $6 billion. In May, these amounts were increased further to $50 billion and $12 billion, respectively, and the lines were extended through January 2009. Meanwhile, the Bank of England and the Bank of Canada each introduced new term funding arrangements in their domestic currencies, and the Bank of England also established a facility to swap government bonds for banks' mortgage-backed securities for a term of one to three years. The ECB has also continued to offer longer-term funding in euros, auctioning three-month funds totaling €270 billion in the first quarter and €250 billion in the second quarter and adding a new long-term refinancing operation with a six-month maturity.

Market volatility has persisted in recent months, with ongoing concerns about the balance sheets of financial institutions. Since the middle of last year, European banks have announced about $200 billion in write-downs—largely as a result of indirect exposure to U.S. credit markets through both sponsorship of and investments in structured credit products—and further losses may be recognized in second-quarter financial statements. In addition, mortgage lenders in the United Kingdom have been affected by weakness in property prices there and by reduced access to capital market funding. In general, the institutions that have recognized significant losses have taken prompt steps to replenish capital from a variety of sources; more than $140 billion had been raised by the end of June.

On net, most major equity indexes in the advanced foreign economies stand 12 percent to 25 percent lower in local currency terms compared with the end of 2007. European stock indexes were led lower by the stock prices of financial firms, which declined 34 percent (measured in euros); Japanese financial stocks are down 9 percent on the year. The financial turbulence has had less impact on Latin American stock prices. Equity indexes in Mexico and Brazil were virtually unchanged, on balance, over the first half of 2008. However, Chinese stock prices have tumbled 44 percent since the end of 2007, virtually erasing last year's gains, and other major emerging Asian equity indexes are also down, but to a lesser extent.

Liquidity in European government bond markets was impaired in March but seems to have improved in recent months. Long-term bond yields in the advanced foreign economies fell in the first quarter but have more than reversed these declines as investors no longer expect the ECB and the Bank of England to ease their policy rates. Since the end of 2007, long-term rates have risen, on net, 11 basis points in Germany, 38 basis points in the United Kingdom, and 12 basis points in Japan, and nominal yield curves have flattened. Meanwhile, implied long-term inflation compensation has increased 10 basis points in Japan and nearly 30 basis points in Germany and Canada.

The Federal Reserve's broadest measure of the nominal trade-weighted foreign exchange value of the dollar has declined about 3 percent, on net, since the end of last year. Over the same period, the major currencies index of the dollar has also declined about 3 percent. The dollar depreciated sharply against the euro and the yen in February and March but has recovered some in recent months. On net thus far this year, the dollar is down about 4 percent against the yen and 7 percent against the euro. The dollar is 2 percent higher against the Canadian dollar and slightly higher against sterling. The dollar has declined 6 percent against the Chinese renminbi since the end of 2007.

Advanced Foreign Economies

Economic growth in the major advanced foreign economies appears to have slowed somewhat this year. Although both the euro area and Japan posted strong first-quarter GDP growth rates, recent monthly indicators have been more subdued. In other countries, growth rates declined in the first quarter, and first-quarter real GDP even contracted slightly in Canada, where trade and financial ties to the United States are strong. Surveys of banks in Europe show a further tightening of credit standards in the first half of 2008 for both households and businesses. Lending to businesses appears to have remained solid, but household borrowing has slowed. Housing markets in a number of countries—including Ireland, Spain, and the United Kingdom—have continued to soften.

Since the beginning of the year, headline rates of inflation have continued to move up, on balance, in most economies, mainly because of increasing prices for food and energy. The 12-month change in consumer prices in both the euro area and the United Kingdom increased further from January to mid-2008, while core inflation rates (which exclude the changes in the prices of energy and unprocessed food) have increased much less. In Canada, where food price increases have been muted, inflation is little changed, on balance, since the beginning of the year but has risen in the past couple of months. Japanese consumer prices are roughly unchanged on a 12-month basis when both food and energy prices are excluded.

Over the first half of this year, the focus of the major foreign central banks appears to have shifted somewhat from the impact of financial market strains on growth to the effect of higher commodity prices on inflation. After initially lowering official interest rates, the Bank of Canada and the Bank of England have held their target rates steady since April, and the Bank of Japan has kept its policy rate unchanged at 0.5 percent all year. Recent inflation rates and statements from all of these central banks have led market participants to expect policy rates to increase slightly or to remain on hold. On July 3, the ECB raised its policy rate 25 basis points, to 4.25 percent, but it hinted that further rate hikes were not in the offing.

Emerging Market Economies

Recent data suggest that real GDP growth in China remained strong in the first half of this year. Although export growth slowed, domestic demand appears to have accelerated.

Elsewhere in emerging Asia, recent performance has varied but, on balance, indicators suggest that activity has remained solid in the region. In the first quarter, real GDP growth moderated in Korea, Malaysia, and Thailand but was strong in Hong Kong and Singapore. Exports of the region have generally slowed along with the deceleration in global economic activity; however, domestic demand strengthened in a number of countries.

Economic activity has decelerated in Latin America. In Mexico, output growth slowed to about 2 percent in the first quarter, in line with the step-down in the pace of activity in the United States that began toward the end of last year. In other Latin American countries, notably Brazil and Venezuela, growth also moderated.

Higher prices for food and energy have continued to exert upward pressures on inflation across emerging market economies. In China, headline inflation has risen, reaching roughly 8 percent in recent months. In response to the inflationary pressures, the Chinese authorities have allowed the renminbi to appreciate at a more rapid pace, and the People's Bank of China has further tightened monetary policy. The Bank has raised the required reserve ratio five times this year by a total of 300 basis points, to 17½ percent. Elsewhere in emerging market economies, 12-month headline inflation in a number of countries continued to rise in recent months, thereby prompting many central banks to tighten monetary policy. In some cases, governments also instituted export restrictions or reduced import duties for some food products. The rising cost of energy subsidies has led governments in China, India, Malaysia, Indonesia, and Taiwan to raise administered gasoline prices roughly 10 percent to 40 percent in recent months.

Part 3 Monetary Policy over the First Half of 2008

After easing the stance of monetary policy 100 basis points over the second half of 2007, the Federal Open Market Committee (FOMC) lowered the target federal funds rate 225 basis points further in the first half of 2008.[11] The Federal Reserve also took a number of additional actions to increase liquidity and to improve the functioning of financial markets.

In a conference call on January 9, the Committee reviewed recent economic data and financial market developments. The information, which included weaker-than-expected data on home sales and employment for December as well as a sharp decline in equity prices since the beginning of the year, suggested that the downside risks to growth had increased significantly since the time of the December FOMC meeting. Participants cited concerns that the

11. Members of the FOMC in 2008 consist of members of the Board of Governors of the Federal Reserve System plus the presidents of the Federal Reserve Banks of Cleveland, Dallas, Minneapolis, New York, and Philadelphia. Participants at FOMC meetings consist of members of the Board of Governors and all Reserve Bank presidents.

slowing of economic growth could lead to a further tightening of financial conditions, which in turn could reinforce the economic slowdown. However, core inflation had edged up in recent months, and considerable uncertainty surrounded the inflation outlook. On balance, participants were generally of the view that substantial additional policy easing might well be necessary to support economic activity and reduce the downside risks to growth, and they discussed the possible timing of such actions.

On January 21, the Committee held another conference call. Strains in some financial markets had intensified, and incoming evidence had reinforced the view that the outlook for economic activity was weak. Participants observed that investors apparently were becoming increasingly concerned about the economic outlook and downside risks to activity and that these developments could lead to an excessive pullback in credit availability. In light of these developments, all members judged that a substantial easing in policy was appropriate to foster moderate economic growth and reduce the downside risks to economic activity. The Committee decided to lower the target for the federal funds rate 75 basis points, to 3½ percent, and judged that appreciable downside risks to growth remained. Although inflation was expected to edge lower over the course of 2008, participants underscored their view that this assessment was conditioned upon inflation expectations remaining well anchored and stressed that the inflation situation should continue to be monitored carefully.

The data reviewed at the regularly scheduled FOMC meeting on January 29 and 30 confirmed a sharp deceleration in economic growth during the fourth quarter of 2007 and a continued tightening of financial conditions. With the contraction in the housing sector intensifying and a range of financial markets remaining under pressure, economic growth was expected to stay soft in the first half of 2008 before picking up strength in the second half. However, the ongoing weaknesses in home sales and house prices, as well as the tightening of credit conditions for households and businesses, were seen as posing downside risks to the near-term outlook for economic growth. Moreover, the potential for adverse feedback between the financial markets and the economy was a significant risk. Participants expressed some concern about the disappointing inflation data received over the latter part of 2007. Although many expected that a leveling-out of prices for energy and other commodities, such as that embedded in futures markets, and a period of below-trend growth would contribute to some moderation in inflation pressures over time, the Committee believed that it remained necessary to monitor inflation developments carefully. Against that backdrop, the FOMC decided to lower the target for the federal funds rate 50 basis points, to 3 percent. The Committee believed that this policy action, combined with those taken earlier, would help promote moderate growth over time and mitigate the risks to economic activity. However, members judged that downside risks to growth remained.

In a conference call on March 10, the Committee reviewed financial market developments and considered proposals aimed at supporting the liquidity and orderly functioning of those markets. In light of the sharp deterioration of some key money and credit markets, the Committee approved the establishment of the Term Securities Lending Facility, under which primary dealers would be able to borrow Treasury securities from the System Open Market Account for a term of approximately one month against any collateral eligible for open market operations and the highest-quality private residential mortgage-backed securities (MBS).[12] The new facility was designed to alleviate pressures in the financing markets for securities. In addition, the Committee agreed to expand the existing reciprocal currency agreements with the European Central Bank and the Swiss National Bank to $30 billion and $6 billion, respectively, and to extend the terms of these agreements through September 2008. Over the next few days, financial market strains intensified further. On March 16, the Federal Reserve announced emergency measures to bolster liquidity and promote orderly functioning in financial markets, including the approval of the financing arrangement associated with the acquisition of The Bear Stearns Companies, Inc., by JPMorgan Chase & Co. and the establishment of the Primary Dealer Credit Facility to improve the ability of primary dealers to provide financing to participants in securitization markets. In addition, the primary credit rate was lowered 25 basis points, and the maximum term of primary credit loans was extended to 90 days.

When the Committee met on March 18, financial markets continued to be under great stress, particularly the markets for short-term collateralized and uncollateralized funding. Spreads on interbank loans and lower-rated commercial paper had widened over the intermeeting period, and obtaining credit through repurchase agreements backed by agency and private-label MBS had become more difficult amid reports of increased margin, or “haircuts,” being required by lenders. Yields on Treasury bills and repurchase agreements backed by Treasury securities had plummeted, reflecting investors’ heightened demand for the safest assets.

Participants at the March 18 FOMC meeting noted that prospects for both economic activity and near-term inflation had deteriorated since January, and many thought that some contraction in economic activity in the first half of 2008 was likely. Although the economy was expected to recover in the second half and to grow further in 2009, considerable uncertainty surrounded this forecast. Some participants expressed concern that falling house prices and financial market stress might lead to a more severe and protracted downturn than anticipated. Recent readings on inflation had been elevated, and some indicators of inflation expectations had risen. However, a flattening-out of prices for oil and other commodities—as implied by futures prices—and the projected easing of pressures on resources were expected to contribute to some moderation in inflation. All in all, most members judged that a 75 basis point reduction in the target federal funds rate, to 2¼ percent, was appropriate to address the combination of risks of slowing economic growth, inflationary pressures, and financial market disruptions. In its statement, the Committee highlighted the further weakening in the outlook for economic activity, but it also emphasized the importance of monitoring inflation developments carefully.

The data reviewed at the meeting on April 29 and 30 indicated that economic growth had been weak in the first three months of 2008 and that core consumer price inflation had slowed, but that overall inflation had remained elevated.

12. By notation vote completed on March 20, AAA-rated commercial MBS were added to the list of acceptable collateral.

FOMC participants indicated that these developments had been broadly consistent with their expectations. Conditions across a number of financial markets were judged to have improved since the March meeting, but financial markets remained under considerable stress. Although the likelihood that economic activity would be severely disrupted by a sharp deterioration in financial markets had apparently receded, most participants thought that the risks to economic growth were still skewed to the downside. All participants expressed concern about upside risks to inflation posed by rising commodity prices and the depreciation of the dollar, but some participants noted that the downside risks to economic activity also implied that there were downside risks to price pressures as well. Participants expressed significant uncertainty concerning the appropriate stance of monetary policy in these circumstances. Some participants noted that the level of the federal funds target, especially when compared with the current rate of inflation, was relatively low by historical standards. Others noted that financial market strains and elevated risk spreads had offset much of the effects of policy easing on the cost of credit to borrowers. On balance, most members agreed that the target for the federal funds rate should be lowered 25 basis points, to 2 percent. The Committee expected that the policy easing would help to foster moderate growth over time without impeding a moderation in inflation. The Committee agreed that, in light of the substantial policy easing to date and the ongoing measures to foster financial market liquidity, the risks to growth were now more closely balanced by the risks to inflation.

In view of persisting strains in funding markets, the FOMC also approved proposals to expand the liquidity arrangements that had been put in place in previous months. The reciprocal currency agreements with the European Central Bank and Swiss National Bank were increased to $50 billion and $12 billion, respectively, and both were extended through January 2009. The collateral accepted by the Term Securities Lending Facility was expanded to include all AAA-rated asset-backed securities. In addition, Chairman Bernanke announced his intention to expand the Term Auction Facility to $150 billion under authority previously delegated by the Board of Governors.

At the time of the meeting held June 24 and 25, the available indicators suggested that economic activity in the first half of the year had not been as weak as had been expected in April. Nevertheless, several factors were viewed as likely to restrain activity in the near term, including the contraction in the housing sector, sharply higher energy prices, and continued tight credit conditions. Although financial market conditions generally appeared to have improved modestly since the April meeting, participants noted that the potential for adverse financial market developments still posed significant downside risks to economic activity. The further large increase in energy prices also prompted an upward revision of projections for overall inflation in the second half of 2008. Most participants expected that a leveling-out of energy prices and continued slack in resource utilization would lead inflation to moderate in 2009 and 2010, but the persistent tendency in recent years for commodity prices to exceed the trajectory implied by futures market prices engendered considerable uncertainty around the projected moderation of inflation. Members generally agreed that the downside risks to growth had eased somewhat since the previous

FOMC meeting while the upside risks to inflation had intensified. Against this backdrop, most members judged that maintaining the current stance of policy at this meeting represented an appropriate balancing of the risks to the economic outlook. Nonetheless, policymakers recognized that circumstances could change quickly and noted that they might need to respond promptly to incoming information about the evolution of risks. ■

Federal Reserve Operations

Banking Supervision and Regulation

The Federal Reserve has supervisory and regulatory authority over a variety of financial institutions and activities. It plays an important role as umbrella supervisor of bank holding companies, including financial holding companies. And it is the primary federal supervisor of state banks that are members of the Federal Reserve System.

U.S. bank holding companies and state member banks continued to face substantial challenges in 2008, exacerbated by problems in funding and capital markets as well as the ongoing economic slowdown. Bank holding company asset quality and earnings continued their deterioration over the course of the year, in part due to ongoing problems linked to the residential housing market. The effects of the substantial challenges facing the banking industry were revealed in bank holding companies' reported net losses of $27 billion for the full year. Nonperforming assets increased notably as the quality of various types of assets declined, and overall loan delinquencies increased. As in 2007, several institutions recognized significant valuation write-downs on assets affected by market conditions. Liquidity and capital continued to be strained. Some institutions received federal government assistance in the form of capital injections via the Treasury's Troubled Asset Relief Program, and many others drew on Federal Reserve liquidity facilities to a considerable degree. While regulatory capital ratios suffered some erosion over 2008, bank holding companies in general continued to maintain ratios in excess of minimum regulatory requirements.

State member banks faced challenges similar to those faced by bank holding companies in 2008. As a group, they suffered net losses of $3.2 billion, reflecting asset write-downs and higher loan-loss provisions. Credit quality indicators worsened further during the year, with additional increases in nonperforming loans and delinquencies. Charge-off ratios reached their highest level in over a decade. Risk-based capital ratios increased somewhat over the year; at year-end more than 98 percent of all state member banks continued to report capital ratios consistent with a "well capitalized" designation under prompt corrective action standards. One state member bank, with assets of $237.5 million, failed.

During 2008, the Federal Reserve undertook a range of activities to identify and correct some of the risk-management weaknesses revealed by the financial crisis that began in mid-2007. These supervisory activities covered a number of areas, including firmwide risk identification and senior management oversight. Liquidity risk management and capital adequacy were given special attention. Where institutions did not make appropriate progress, supervisors downgraded supervisory ratings and used enforcement tools to bring about corrective action. In addition, the Federal Reserve undertook a Systemwide effort to identify lessons learned for supervisors and to begin developing recommendations for potential improvements to supervisory practices. The objective of the lessons-learned process is to improve all aspects of the supervisory process, including oversight of individual institutions and promotion of overall financial stability. The lessons-learned process, which will continue into 2009, has drawn on staff from around the Federal Reserve System, including presidents and members of the boards of directors of the Reserve Banks.

In 2008, banking supervisors continued to focus on the adequacy of banks' credit-risk management practices and the important role banks play in credit intermediation. The Federal Reserve issued two statements emphasizing the critical role that banking organizations have in U.S. credit markets and encouraging those organizations to pursue responsible lending activities as they meet the credit needs of households and businesses. Also, the Federal Reserve, Federal Deposit Insurance Corporation (FDIC), and Office of the Comptroller of the Currency (OCC) jointly issued revisions to the *Guide to the Interagency Country Exposure Review Committee Process* to reflect improvements in regulated institutions' analyses of cross-border-exposure and country-risk management programs and the increased availability of information on country and transfer risk. In addition, the Federal Reserve, FDIC, OCC, Office of Thrift Supervision (OTS), and National Credit Union Administration (NCUA) jointly issued for comment proposed Interagency Appraisal and Evaluation Guidelines to reaffirm supervisory expectations for sound practices in appraising and evaluating real estate.

Federal Reserve staff continued to work with the other federal banking agencies to implement the advanced approaches of the Basel II Capital Accord in the United States, with the final rule taking effect on April 1, 2008.[1] Institutions may begin transitioning to the new rules after they adopt an implementation plan and have in place systems that comply with the final rule's qualification requirements. In January 2008, the agencies published final reporting requirements and reporting templates for institutions that will be adopting the Basel II advanced approaches. In light of identified supervisory lessons learned, the Federal Reserve plans to augment its processes for conducting examinations and inspections as needed, as well as its processes for ensuring that there is appropriate follow-up with institutions about issues identified during examinations and inspections.

Scope of Responsibilities for Supervision and Regulation

The Federal Reserve is the federal supervisor and regulator of all U.S. bank holding companies, including financial holding companies formed under the authority of the 1999 Gramm-Leach-Bliley Act, and state-chartered commercial banks that are members of the Federal Reserve System. In overseeing these organizations, the Federal Reserve seeks primarily to promote their safe and sound operation, including their compliance with laws and regulations.

The Federal Reserve also has responsibility for supervising the operations of all Edge Act and agreement corporations, the international operations of

1. The Basel II Capital Accord, an international agreement formally titled "International Convergence of Capital Measurement and Capital Standards: A Revised Framework," was developed by the Basel Committee on Banking Supervision, which is made up of representatives of the central banks or other supervisory authorities of 19 countries. The original document was issued in 2004; the original version and an updated version issued in November 2005 are available on the website of the Bank for International Settlements (www.bis.org).

state member banks and U.S. bank holding companies, and the U.S. operations of foreign banking organizations.

The Federal Reserve exercises important regulatory influence over entry into the U.S. banking system, and the structure of the system, through its administration of the Bank Holding Company Act, the Bank Merger Act (with regard to state member banks), the Change in Bank Control Act (with regard to bank holding companies and state member banks), and the International Banking Act. The Federal Reserve is also responsible for imposing margin requirements on securities transactions. In carrying out these responsibilities, the Federal Reserve coordinates its supervisory activities with the other federal banking agencies, state agencies, functional regulators (that is, regulators for insurance, securities, and commodities firms), and the bank regulatory agencies of other nations.

Supervision for Safety and Soundness

To promote the safety and soundness of banking organizations, the Federal Reserve conducts on-site examinations and inspections and off-site surveillance and monitoring. It also takes enforcement and other supervisory actions as necessary.

Examinations and Inspections

The Federal Reserve conducts examinations of state member banks, 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 bank holding companies and their nonbank subsidiaries. Whether an examination or an inspection is being conducted, the review of operations entails (1) an evaluation of the adequacy of governance provided by the board and senior management, including an assessment of internal policies, procedures, controls, and operations; (2) an assessment of the quality of the risk-management and internal control processes in place to identify, measure, monitor, and control risks; (3) an assessment of the key financial factors of capital, asset quality, earnings, and liquidity; and (4) a review for compliance with applicable laws and regulations. The table provides information on examinations and inspections conducted by the Federal Reserve during the past five years.

Inspections of bank holding companies, including financial holding companies, are built around a rating system introduced in 2005 that 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.[2] The fourth component, Depository Institution (D), is intended to mirror the primary supervisor's rating of the subsidiary depository institution.

The Federal Reserve uses a risk-focused approach to supervision, with activities focused on identifying the areas of greatest risk to banking organi-

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

State Member Banks and Bank Holding Companies, 2004–2008

Entity/Item	2008	2007	2006	2005	2004
State member banks					
Total number	862	878	901	907	919
Total assets (billions of dollars)	1,854	1,519	1,405	1,318	1,275
Number of examinations	717	694	761	783	809
By Federal Reserve System	486	479	500	563	581
By state banking agency	231	215	261	220	228
Top-tier bank holding companies					
Large (assets of more than $1 billion)					
Total number	485	459	448	394	355
Total assets (billions of dollars)	14,138	13,281	12,179	10,261	8,429
Number of inspections	519	492	566	501	500
By Federal Reserve System[1]	500	476	557	496	491
On site	445	438	500	457	440
Off site	55	38	57	39	51
By state banking agency	19	16	9	5	9
Small (assets of $1 billion or less)					
Total number	4,545	4,611	4,654	4,760	4,796
Total assets (billions of dollars)	1,008	974	947	890	852
Number of inspections	3,192	3,186	3,449	3,420	3,703
By Federal Reserve System	3,048	3,007	3,257	3,233	3,526
On site	107	120	112	170	186
Off site	2,941	2,887	3,145	3,063	3,340
By state banking agency	144	179	192	187	177
Financial holding companies					
Domestic	557	597	599	591	600
Foreign	45	43	44	38	36

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

zations and assessing the ability of the organizations' management processes for identifying, measuring, monitoring, and controlling those risks. Key aspects of the risk-focused approach to consolidated supervision of large complex banking organizations (LCBOs) include (1) developing an understanding of each LCBO's legal and operating structure, and its primary strategies, business lines, and risk-management and internal control functions; (2) developing and executing a tailored supervisory plan outlining the work required to maintain a comprehensive understanding and assessment of each LCBO, incorporating reliance to the fullest extent possible on assessments and information developed by other relevant domestic and foreign supervisors and functional regulators; (3) maintaining continual supervision of these organizations—including through meetings with banking organization management and analysis of internal and external information—so that the Federal Reserve's understanding and assessment of each organization's condition remains current; (4) assigning to each LCBO a supervisory team composed of Reserve Bank staff members who have skills appropriate for the organization's risk profile (the team leader is the Federal Reserve System's central point of contact for the organization, has responsibility for only one LCBO, and is supported by specialists capable of evaluating the risks of LCBO business activities and functions and assessing the LCBO's consolidated financial condition); and (5) promoting Systemwide and interagency information-sharing through automated systems and other mechanisms (see box "Enhanced Guidance for the Consolidated Supervision of Bank Holding Companies and the Combined U.S. Operations of Foreign Banking Organizations).

For other banking organizations, the risk-focused consolidated supervision program provides that examination and inspection procedures are tailored to each banking organization's size, complexity, risk profile, and condition. As with the LCBOs, these supervisory programs entail both off-site and on-site work, including planning, pre-examination visits, detailed documentation, and examination reports tailored to the scope and findings of the examination.

State Member Banks

At the end of 2008, 862 state-chartered banks (excluding nondepository trust companies and private banks) were members of the Federal Reserve System. These banks represented approximately 12 percent of all insured U.S. commercial banks and held approximately 15 percent of all insured commercial bank assets in the United States.

The guidelines for Federal Reserve examinations of state member banks are fully consistent with 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. A full-scope, on-site examination of these banks is required at least once a year, although certain well-capitalized, well-managed organizations having total assets of less than $500 million may be examined once every 18 months.[3] The Federal Reserve conducted 486 exams of state member banks in 2008.

Bank Holding Companies

At year-end 2008, a total of 5,757 U.S. bank holding companies were in operation, of which 5,030 were top-tier bank holding companies. These organizations controlled 5,893 insured commercial banks and held approximately 97 percent of all insured commercial bank assets in the United States.

Federal Reserve guidelines call for annual inspections of large bank holding companies 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. Noncomplex bank holding companies with consolidated assets of $1 billion or less are subject to a special supervisory program that permits a more flexible approach.[4] In 2008, the Federal Reserve conducted 500 inspections of large bank holding companies and 3,048 inspections of small, noncomplex bank holding companies.

3. 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.

4. The special supervisory program was implemented in 1997 and modified in 2002. See SR letter 02-01 for a discussion of the factors considered in determining whether a bank holding company is complex or noncomplex (www.federalreserve.gov/boarddocs/srletters/).

Enhanced Guidance for the Consolidated Supervision of Bank Holding Companies and the Combined U.S. Operations of Foreign Banking Organizations

This guidance should not only provide greater clarity regarding our long-standing responsibilities as a consolidated supervisor, but is also responsive to ongoing developments in the financial sector. The objectives of fostering financial stability and deterring or managing financial crises will be furthered by the Federal Reserve having a more complete view of firmwide risks and controls.

Randall S. Kroszner, *Member*, Board of Governors
October 2008

The continuing growth and increased complexity of many banking organizations exposes these firms to a wide array of potential risks, and financial trouble in one part of an organization can spread rapidly to other parts of the organization. Moreover, because large banking organizations increasingly operate with multiple domestic and foreign banking and nonbanking entities, but operate and manage their businesses on an integrated basis, a single supervisor of a particular legal entity is unlikely to have a complete view of firmwide risks and controls.

In response to these trends, and to better fulfill both its supervisory responsibilities and its other central bank objectives such as fostering financial stability and deterring or managing financial crises, the Federal Reserve on October 16, 2008, issued guidance refining and clarifying its programs for the consolidated supervision of bank holding companies (including financial holding companies) and the combined U.S. operations of foreign banking organizations.[1]

The Federal Reserve has a long-standing responsibility for the consolidated supervision of U.S. bank holding companies (including financial holding companies). Consolidated supervision, which encompasses the parent holding company and its subsidiaries, enables the Federal Reserve to understand the organization's structure, activities, resources, and risks and to address any deficiencies before they pose a danger to the holding company's subsidiary depository institutions. In addition to its role as consolidated supervisor, the Federal Reserve is responsible for the overall supervision of the U.S. operations of foreign banking organizations. Fundamental to the effectiveness of the Federal Reserve as consolidated supervisor is coordination with, and reliance on, the work of other relevant domestic and foreign bank supervisors and functional regulators (that is, a federal or state regulator of a functionally regulated nondepository subsidiary of a bank holding company or foreign banking organization, such as the Securities and Exchange Commission).

While the effort to enhance and clarify the Federal Reserve's approach to consolidated supervision began well before the recent period of considerable strain in financial markets, the enhanced approach set forth in the guidance emphasizes several elements that should support a more resilient financial system. These include, among other things, greater focus on corporate governance, capital adequacy, funding and liquidity management, and the supervision of nonbank subsidiaries.

The guidance specifies principal areas of focus for consolidated supervision activities and provides for more-consistent Federal Reserve supervisory practices and assessments across institutions having similar activities and risks. It sets forth specific expectations for supervisors to use when assessing primary

1. See SR letter 08-9/CA letter 08-12, "Consolidated Supervision of Bank Holding Companies and the Combined U.S. Operations of Foreign Banking Organizations."

governance functions, risk controls, and business lines; nonbank operations; and other key activities and risks, with added emphasis on risk-management systems and internal controls used by bank holding companies and foreign banking organizations that provide core clearing and settlement services or have a significant presence in critical financial markets. In addition, the guidance discusses unique aspects of supervising the combined U.S. operations of foreign banking organizations.

For each bank holding company and foreign banking organization, the Federal Reserve (1) maintains an understanding of key elements of the organization's strategy, structure, business lines, framework for governance and internal control, presence in the financial markets, and primary sources of revenue and risk, and (2) assesses the effectiveness of the organization's risk-management systems and controls in accounting for the main risks inherent in the organization's activities, its financial condition, and the potential negative impact of nonbank operations on affiliated depository institutions. The Federal Reserve takes a systematic approach to developing these assessments, as reflected in the RFI (Risk management, Financial condition, and Impact) rating assigned to bank holding companies and the combined U.S. operations rating assigned to foreign banking organizations having multiple U.S. operations.

While the Federal Reserve's supervisory objectives are the same for all bank holding companies and foreign banking organizations, the amount and nature of the supervisory and examination work necessary to understand, supervise, and develop an assessment of an individual organization varies. Supervisory activities are tailored for each organization on the basis of a variety of factors, including the nature and degree of involvement by other supervisors and regulators; the risks posed by the organization's specific activities and systems; and the potential effect of weaknesses in control functions on the organization, its subsidiary depository institutions, or key financial markets. For example, additional supervisory activities may be conducted if there are gaps in information relating to significant risks or activities, indications of weaknesses in risk-management systems or internal controls, or indications of violations of consumer protection or other laws, or if a consolidated organization or subsidiary depository institution is in less-than-satisfactory condition.

An important aspect of the Federal Reserve's consolidated supervision programs for bank holding companies and foreign banking organizations is the assessment and evaluation of practices across groups of organizations having similar characteristics and risk profiles. This "portfolio approach" facilitates consistency of supervisory practices and assessments across comparable organizations and improves the Federal Reserve's ability to identify outlier organizations among established peer groups. Because the Federal Reserve's supervisory activities are tailored to specific institutions and portfolios, separate guidance documents were issued for different supervisory portfolios to promote appropriate and consistent supervision of organizations.

The nature and scope of the independent Federal Reserve supervisory work required to develop and maintain this understanding and assessment depends largely on the extent to which the Federal Reserve can draw on information or assessments from other bank supervisors or functional regulators. Understanding and assessing some areas—such as the risk management and financial condition of significant nonbank subsidiaries that are not functionally regulated—will, by their nature, typically require more independent Federal Reserve supervisory work. Understanding and assessing other areas—such as firmwide risk-management and control functions—typically will require a greater degree of coordination with other bank supervisors or functional regulators.

Financial Holding Companies

Under the Gramm-Leach-Bliley Act, bank holding companies that meet certain capital, managerial, and other requirements may elect to become financial holding companies and thereby engage in a wider range of financial activities, including full-scope securities underwriting, merchant banking, and insurance underwriting and sales. The statute streamlines the Federal Reserve's supervision of all bank holding companies, including financial holding companies, and sets forth parameters for the supervisory relationship between the Federal Reserve and other regulators. The statute also differentiates between the Federal Reserve's relations with regulators of depository institutions and its relations with functional regulators.

As of year-end 2008, 557 domestic bank holding companies and 45 foreign banking organizations had financial holding company status. Of the domestic financial holding companies, 33 had consolidated assets of $15 billion or more; 128, between $1 billion and $15 billion; 87, between $500 million and $1 billion; and 309, less than $500 million.

International Activities

The Federal Reserve supervises the foreign branches and overseas investments of member banks, Edge Act and agreement corporations, and bank holding companies and also the investments by bank holding companies 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 bank holding companies, 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 lies. Examiners also visit the overseas offices of U.S. banks to obtain financial and operating information and, in some instances, to evaluate the organizations' efforts to implement corrective measures or to test their adherence to safe and sound banking practices. 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 2008, 53 member banks were operating 545 branches in foreign countries and overseas areas of the United States; 32 national banks were operating 495 of these branches, and 21 state member banks were operating the remaining 50. In addition, 20 nonmember banks were operating 26 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 chartered or federally chartered, that enter into an agreement 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 2008, 60 banking organizations, operating 11 branches, were chartered as Edge Act or agreement corporations. These corporations are examined annually.

U.S. Activities of Foreign Banks

The Federal Reserve has broad authority to supervise and regulate the U.S. activities of foreign banks that engage in banking and related activities in the United States through branches, agencies, representative offices, commercial lending companies, Edge Act corporations, commercial banks, bank holding companies, and certain nonbanking companies. Foreign banks continue to be significant participants in the U.S. banking system.

As of year-end 2008, 175 foreign banks from 53 countries were operating 208 state-licensed branches and agencies, of which 6 were insured by the FDIC, and 45 OCC-licensed branches and agencies, of which 4 were insured by the FDIC. These foreign banks also owned 12 Edge Act and agreement corporations and 2 commercial lending companies; in addition, they held a controlling interest in 61 U.S. commercial banks. Altogether, the U.S. offices of these foreign banks at the end of 2008 controlled approximately 18 percent of U.S. commercial banking assets. These 175 foreign banks also operated 95 representative offices; an additional 54 foreign banks operated in the United States through a representative office.

State-licensed and federally licensed branches and agencies of foreign banks are examined on-site at least once every 18 months, either by the Federal Reserve or by a state or other federal regulator. 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.

In cooperation with the other federal and state banking agencies, the Federal Reserve conducts a joint program for supervising the U.S. operations of foreign banking organizations. The program has two main parts. One part involves examination of those foreign banking organizations that have multiple U.S. operations and is intended to ensure coordination among the various U.S. supervisory agencies. The other part is a review of the financial and operational profile of each organization to assess its general ability to support its U.S. operations and to determine what risks, if any, the organization poses through its U.S. operations. Together, these two processes provide critical information to U.S. supervisors in a logical, uniform, and timely manner. The Federal Reserve conducted or participated with state and federal regulatory authorities in 487 examinations in 2008.

Compliance with Regulatory Requirements

The Federal Reserve examines supervised institutions for compliance with a broad range of legal requirements, including anti-money-laundering 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 Community and Consumer 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

U.S. Department of 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 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 its supervised institutions for compliance with applicable anti-money-laundering laws and regulations and conducts such examinations in accordance with the Federal Financial Institutions Examination Council (FFIEC) *Bank Secrecy Act/Anti–Money Laundering Examination Manual.*[5]

Specialized Examinations

The Federal Reserve conducts specialized examinations of banking organizations 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 entities, other than banks, brokers, or dealers, 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 banking organizations 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 2008, the Federal Reserve continued as the lead agency in two interagency examinations of large, multiregional data processing servicers and assumed leadership in two additional such examinations.

Fiduciary Activities

The Federal Reserve has supervisory responsibility for state member commercial banks and depository trust companies that together reported, at the end

5. 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 Federal Deposit Insurance Corporation, the National Credit Union Administration, the Office of the Comptroller of the Currency, the Office of Thrift Supervision, and the chair of the State Liaison Committee.

of 2008, $39 trillion of assets in various fiduciary or custodial capacities. Additionally, state member nondepository trust companies supervised by the Federal Reserve reported $28 trillion of assets held in a fiduciary or custodial capacity. During on-site examinations of fiduciary activities, an organization's compliance with laws, regulations, and general fiduciary principles and its potential conflicts of interest are reviewed; its management and operations, including its asset- and account-management, risk-management, and audit and control procedures, are also evaluated. In 2008, Federal Reserve examiners conducted 116 on-site fiduciary examinations.

Transfer Agents

As directed by the Securities Exchange Act of 1934, the Federal Reserve conducts specialized examinations of those state member banks and bank holding companies 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 2008, the Federal Reserve conducted on-site examinations at 14 of the 62 state member banks and bank holding companies 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 Treasury regulations governing dealing and brokering in government securities. Twelve state member banks and 5 state branches of foreign banks have notified the Board that they are government securities dealers or brokers not exempt from Treasury's regulations. During 2008, the Federal Reserve conducted 2 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 bank holding companies 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. Of the 12 entities that dealt in municipal securities during 2008, 5 were examined during the year.

Securities Credit Lenders

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

At the end of 2008, 580 lenders other than banks, brokers, or dealers were registered with the Federal Reserve. Other federal regulators supervised 191 of these lenders, and the remaining 389 were subject to limited Federal Reserve supervision. The Federal Reserve exempted 180 lenders from its on-site inspection program on the basis of their regulatory status and annual reports. Nonexempt lenders are subject to either biennial or triennial inspection. Sixty-four inspections were conducted during the year.

Business Continuity

In 2008, the Federal Reserve continued its efforts to strengthen the resilience of the U.S. financial system in the event of unexpected disruptions. The Federal Reserve, together with other federal and state financial regulators, are members of the Financial Banking Information Infrastructure Committee (FBIIC), which was formed to improve coordination and communication among financial regulators, enhance the resilience of the U.S. financial sector, and promote the public/private partnership. The FBIIC has established emergency communication protocols to maintain effective communication among members in the event of an emergency. The FBIIC protocols were activated in 2008 at the time of the flooding in the Midwest, each time a significant hurricane made landfall in the United States, and at the time of the white powder HazMat incident.[6]

6. In October 2008, the FBI, U.S. Postal Inspectors, and state and local authorities began investigating more than 30 threatening letters that were received at financial institutions in New York, New Jersey, Washington, D.C., Ohio, Illinois, Colorado, Oklahoma, Georgia, California, and Texas. Most of the letters contained a powder substance with a threatening communication.

The Federal Reserve and the other FFIEC agencies continued in 2008 to coordinate their efforts to ensure a consistent supervisory approach in the area of business continuity practices. In March, the agencies published an update to the FFIEC *Business Continuity Planning Booklet*, which provides guidance to both examiners and the industry. The revised booklet expands discussions of business impact analysis and testing; discusses lessons learned in recent years, for example, lessons from Hurricanes Katrina and Rita; and provides a framework for financial institutions to develop or update their pandemic plans to address the unique business continuity challenges associated with a pandemic influenza outbreak. The booklet also stresses the responsibilities of each institution's board and management to address business continuity planning with an enterprise-wide perspective by considering technology, business operations, communications, and testing strategies for the entire institution.

Enforcement Actions

The Federal Reserve has enforcement authority over the banking organizations 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, removal and prohibition orders, and civil money penalties. In 2008, the Federal Reserve completed 54 formal enforcement actions. Civil money penalties totaling $32,790 were assessed, and an order of restitution totaling $203,923 was issued. As directed by statute, all civil money penalties are remitted to either the Treasury or the Federal Emergency Management

Agency. Enforcement orders, 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/boarddocs/enforcement/).

In addition to taking these formal enforcement actions, the Reserve Banks completed 216 informal enforcement actions in 2008. Informal enforcement actions include memoranda of understanding and board of directors resolutions. Information about these actions is not available to the public.

Surveillance and Off-Site Monitoring

The Federal Reserve uses automated screening systems to monitor the financial condition and performance of state member banks and bank holding companies 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 bank holding companies 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.

During 2008, four major upgrades to the web-based Performance Report Information and Surveillance Monitoring (PRISM) application were completed. PRISM is a querying tool used by Federal Reserve analysts 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 bank holding companies. The upgrades made more regulatory data available for querying, gave users the ability to display more data on commercial real estate concentration ratios, and provided a way to access SEC Focus Report (Part II) data.

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

International Training and Technical Assistance

In 2008, 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. Technical assistance in 2008 was concentrated in Latin America, Asia, and former Soviet bloc countries. The Federal Reserve, along with the OCC, the FDIC, and the Treasury, was also an active participant in the Middle East and North Africa (MENA) Financial Regulators' Training Initiative, which is part of the U.S. government's Middle East Partnership Initiative. The Federal Reserve also contributes to the regional training provision under the Asia Pacific Economic Cooperation (APEC) Financial Regulators' Training Initiative.

During the year, 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. System 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 (Basel Committee), and the Financial Stability Institute.

The Federal Reserve is also an associate member of the Association of Supervisors of Banks of the Americas (ASBA), an umbrella group of bank supervisors from countries in the Western Hemisphere. The group, headquartered in Mexico, promotes communication and cooperation among bank supervisors in the region; coordinates training programs throughout the region, with the help of national banking supervisors and international agencies; and aims to help members develop banking laws, regulations, and supervisory practices that conform to international best practices. The Federal Reserve contributes significantly to ASBA's organizational management and to its training and technical assistance activities.

Initiatives for Minority-Owned and De Novo Depository Institutions

The Federal Reserve is committed to fostering the strength and vitality of the nation's minority and de novo depository institutions. In furtherance of this objective, during 2008 the Federal Reserve launched Partnership for Progress, a training and technical assistance program designed specifically for these institutions. The program seeks to help these institutions compete effectively in today's marketplace by offering them a combination of one-on-one guidance and targeted workshops on topics of particular relevance to starting and growing a bank in a safe and sound manner. In addition, training and information on resources are provided via an extensive web-based program center (www.fedpartnership.gov). Designated Partnership for Progress contacts in each of the twelve Reserve Bank Districts and at the Board answer questions and coordinate assistance for institutions requesting guidance. These contacts also host regional conferences and conduct other outreach activities within their Districts in support of minority and de novo institutions. The Reserve Banks hosted 14 such regional training sessions and conferences during the year.

The Federal Reserve has coordinated its efforts with those of the other agencies through participation in an annual interagency conference for minority depository institutions. For the federal bank regulatory agencies, the conference provides an opportunity to meet with senior managers from minority-owned institutions and gain a better understanding of the institutions' unique challenges and opportunities. In addition, the agencies offer training classes and breakout sessions on emerging banking issues.

Supervisory Policy

Capital Adequacy Standards

Risk-Based Capital Standards for Certain Internationally Active Banking Organizations

During the year, the Federal Reserve, OCC, FDIC, and OTS issued a final rule, effective April 1, 2008, implementing the advanced approaches of Basel II. The advanced approaches framework is broadly consistent with the advanced approaches of the Basel II Capital Accord. It also includes a number of prudential safeguards—such as the requirement that banking organizations satisfactorily complete a four-quarter parallel run before operating under the advanced approaches framework—and transitional capital floors that limit maximum cumulative reductions of a banking organization's risk-based capital requirements over three transitional periods. It retains the longstanding minimum risk-based capital requirement of 4 percent tier 1 capital and 8 percent total qualifying capital relative to risk-weighted assets.[7] Banking organizations subject to the framework are required to meet certain public disclosure requirements designed to foster transparency and market discipline.

Institutions may begin transitioning to the new advanced approaches after they adopt an implementation plan and have in place systems that comply with the rule's qualification requirements. Final reporting requirements and reporting templates for institutions that will be adopting the Basel II advanced approaches were also published in 2008. In June, the agencies issued a notice of proposed rulemaking to adopt the standardized approaches of the Basel II Capital Accord. The agencies are currently reviewing and considering the comments received. In addition, in July the U.S. banking agencies issued supervisory guidance relating to an aspect of the Basel II framework, known as Pillar 2, that requires banks to have a robust internal capital adequacy assessment process (ICAAP) that prescribes capital levels commensurate with their full risk profiles—levels above those prescribed by minimum regulatory measures.

The recent market turmoil has highlighted areas in which the Basel II Capital Accord must be strengthened, and efforts are under way to address those areas. Among the changes under consideration are higher capital requirements for re-securitizations, such as collateralized debt obligations backed by asset-backed securities. The capital treatment of liquidity facilities that support asset-backed commercial paper conduits is also under review. In addition, the current market risk capital framework for trading activities is being reexamined to better reflect potential exposures arising from the complex, less-liquid credit products that institutions hold in their trading portfolios. These changes, which are being devel-

7. Tier 1 capital comprises common stockholders' equity and qualifying forms of preferred stock, less required deductions such as goodwill and certain intangible assets.

oped by the Basel Committee, will be considered for implementation in the United States through the agencies' notice and comment process.

Also during the year, the federal banking and thrift regulatory agencies issued a final rule that permits a banking organization to reduce the amount of goodwill it must deduct from tier 1 capital by any associated deferred tax liability. Under the rule, the regulatory capital deduction for goodwill is equal to the maximum capital reduction that could occur as a result of a complete write-off of the goodwill under generally accepted accounting principles (GAAP).

In response to the recent market turmoil, the Federal Reserve, in some instances together with the other banking agencies, issued several rulemakings and guidance.

- The agencies issued an interagency statement allowing banking organizations to recognize the effect of the tax change enacted in the Economic Emergency Stabilization Act of 2008 in their third quarter 2008 regulatory capital calculations. The change provided relief to banking organizations in recognizing their losses on certain holdings of Federal National Mortgage Association (Fannie Mae) and Federal Home Loan Mortgage Corporation (Freddie Mac) preferred stock by changing the character of the losses from capital to ordinary for federal income tax purposes.

- The agencies published a Notice of Proposed Rulemaking that proposed amending the agencies' risk-based capital rules to change the risk weight on Fannie Mae and Freddie Mac debt and guaranteed securities from 20 percent to 10 percent.

- The Board approved an interim final rule to provide state member banks and bank holding companies participating in the Board's newly established Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility with an exemption from the Board's leverage and risk-based capital guidelines for asset-backed commercial paper held as a result of participation in the facility. The exemption is subject to safety and soundness conditions.

- The Board approved an interim final rule to allow bank holding companies to include in their tier 1 capital, without restriction, the senior perpetual preferred stock issued to the Department of the Treasury under its newly established Capital Purchase Program.

Other Capital Issues

In 2008, Board staff conducted supervisory analyses of innovative capital instruments and novel transactions to determine whether the instruments qualify for inclusion in regulatory capital. Much of the work involved evaluating enhanced forms of trust preferred securities, mandatory convertible securities, perpetual preferred stock, and convertible perpetual preferred stock (mandatory and optionally convertible). Also, later in 2008 significant staff effort was devoted to working with Treasury staff to develop the Capital Purchase Program as part of the Troubled Asset Restructuring Program.

Staff members also identified and addressed supervisory concerns related to banking organizations' capital issuances and worked with the Reserve Banks to evaluate the overall composition of banking organizations' capital. As part of this process, the staff often must review the funding strategies proposed in applications for acquisitions and other transactions submitted to the Federal Reserve by banking organizations.

Other Policy Issues

Equity Investments in Banks and Bank Holding Companies

Also in 2008, the Board approved a policy statement that explains some of the most significant factors and principles considered when determining whether minority equity investments in a banking organization are "controlling" for purposes of the BHC Act. In assessing whether a minority equity investor has a controlling influence over the management or policies of the banking organization, all the facts and circumstances surrounding the investor's investment in, and relationship with, the banking organization will be considered, as well as the percentage of total equity owned.

Accounting Policy

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

Federal Reserve staff members interact with key constituents in the accounting and auditing professions, including standard-setters, accounting firms, other financial sector regulators, accounting and banking industry trade groups, and the banking industry. These efforts help in understanding current practice and proposed standards and in formulating appropriate policy responses based on the potential impact of changes in standards or guidance, or other events, on financial institutions. As a consequence, Federal Reserve staff routinely provide informal input to standard-setters, as well as formal input through public comment letters on proposals, to ensure appropriate and transparent financial statement reporting. Supervisory guidance is also issued to financial institutions and supervisory staff by the Federal Reserve as appropriate. In addition, Federal Reserve policy staff support the efforts of the System and Reserve Banks in financial institution supervisory activities related to financial accounting, auditing, reporting, and disclosure.

Domestic Accounting

During 2008, economic conditions resulted in accounting and reporting challenges for financial institutions. Addressing these challenges was a priority for Federal Reserve staff members. Significant issues arising from stressed market conditions included accounting for financial instruments at fair value, accounting for impairment in securities and other financial instruments, and analyzing proposals for modifying accounting for off-balance-sheet structures. Staff members participated in a number of discussions with accounting and auditing standard-setters and provided commentary on a number of proposals relevant to the banking industry. For example, they provided comment letters to the Financial Accounting Standards Board (FASB) on proposals related to accounting for transfers of financial assets, reducing complexity in reporting financial instruments, accounting for hedging activities, and impairment of certain beneficial interests.

Federal Reserve staff also participated in FASB and Securities and Exchange Commission (SEC) efforts to improve financial reporting and to consider accounting issues that have arisen during the global crisis, such as public roundtable discussions. A senior Federal Reserve representative was an official observer on the SEC Advisory Committee on Improvements to Financial Reporting, which was established to examine the U.S. financial reporting system with the goals of reducing unnecessary complexity and making information more useful and understandable for investors. In this role, senior staff participated in efforts that led to the issuance of the *Final Report of the Advisory Committee on Improvements to Financial Reporting* provided to the SEC in August 2008. In addition, the SEC consulted with Federal Reserve staff, as required under section 133 of the Emergency Economic Stabilization Act, when preparing its *Report on Mark-to-Market Accounting.*

Compliance Risk Management

Bank Secrecy Act and Anti-Money-Laundering Compliance

In 2008, the Federal Reserve provided training for staff on risk-focusing and the use of the FFIEC minimum Bank Secrecy Act/Anti–Money Laundering (BSA/AML) examination procedures in conjunction with broader efforts to increase consistency and address industry concerns about regulatory burden. The Federal Reserve participates in the FFIEC BSA/AML working group, which is a forum for the discussion of all pending BSA policy and regulatory matters, as well as the Treasury-led Bank Secrecy Act 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 and other federal banking agencies continued during 2008 to regularly share examination findings and enforcement proceedings with the Financial Crimes Enforcement Network (FinCEN) under the interagency memorandum of understanding (MOU) that was finalized in 2004, and with the Treasury's Office of Foreign Assets Control (OFAC) under the interagency MOU that was finalized in 2006.

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 and its working groups, contributing a banking supervisory perspective to formulation of international standards on these matters.

The Federal Reserve also continues to contribute to international efforts to promote transparency and address risks faced by financial institutions involved in international funds transfers. The Federal Reserve participates in a subcommittee of the Basel Committee that focuses on AML/counter-terrorism financing issues. In 2008, the Basel Committee released for public comment a consultative document titled *Due Diligence and Transparency regarding Cover Payment Messages Related to Cross-Border Wire Transfers* and assisted in the review of comments in preparation for finalizing the paper.

Corporate Compliance

In October 2008, the Federal Reserve issued guidance clarifying supervisory expectations with respect to compliance risk management. The guidance endorses principles applicable to all banking organizations set forth by the Basel Committee in its April 2005 paper titled *Compliance and the Compliance Function in Banks.* It also clarifies the Federal Reserve's supervisory views relating to firmwide compliance-risk management programs and oversight at large banking organizations having complex compliance profiles.

International Guidance on Supervisory Policies

As a member of the Basel Committee, the Federal Reserve participates in efforts to advance sound supervisory policies for internationally active banking organizations and to improve the stability of the international banking system. In 2008, the Federal Reserve participated in ongoing cooperative work on strategic responses to the financial markets crisis, initiatives to enhance Basel II, implementation of Basel II, and development of international supervisory risk-management guidance, particularly in the areas of funding liquidity risk management, counterparty credit risk, and stress-testing practices.

Risk Management

The Federal Reserve contributed to supervisory policy papers, reports, and recommendations issued by the Basel Committee during 2008 that were generally aimed at improving the supervision of banking organizations' risk-management practices.[8] Three of these were

- *Principles for Sound Liquidity Risk Management and Supervision,* published in September
- *Proposed Revisions to the Basel II Market Risk Framework and Guidelines for Computing Capital for Incremental Risk in the Trading Book,* published in July
- *Liquidity Risk: Management and Supervisory Challenges,* published in February

Joint Forum

In 2008, the Federal Reserve continued to participate in the Joint Forum—a group established under the aegis of the Basel Committee to address issues related to the banking, securities, and insurance sectors, including the regulation of financial conglomerates. The Joint Forum is made up of representatives of the Basel Committee, the International Organization of Securities Commissions, and the International Association of Insurance Supervisors. The Federal Reserve contributed to the development of supervisory policy papers, reports, and recommendations issued by the Joint Forum during 2008.[9] The Federal Reserve also participated in Joint Forum–sponsored information-sharing on pandemic planning and other business continuity initiatives. In 2008, work of the Joint Forum published by the Basel Committee included

8. Papers issued by the Basel Committee can be accessed via the Bank for International Settlements website (www.bis.org).

9. Papers issued by the Joint Forum can be accessed via the Bank for International Settlements website (www.bis.org).

- *Credit Risk Transfer Developments* from 2005 to 2007, published in July
- *Cross-Sectoral Review of Group-wide Identification and Management of Risk Concentrations,* published in April
- *Customer Suitability in the Retail Sale of Financial Products and Services,* published in April

International Accounting

The Federal Reserve participates in the Basel Committee's Accounting Task Force (ATF), which represents the Basel Committee at international meetings on accounting, auditing, and disclosure issues affecting global banking organizations. During 2008, Federal Reserve staff participated in activities arising from global market conditions and in support of efforts related to financial stability. In particular, staff members contributed to the development of numerous Basel Committee comment letters related to accounting and auditing matters that were submitted to the International Accounting Standards Board and the International Auditing and Assurance Standards Board (IAASB).

The Basel Committee in November 2008 issued for public comment a consultative paper titled *Supervisory Guidance for Assessing Banks' Financial Instrument Fair Value Practices.* The paper describes supervisory expectations regarding bank practices and the supervisory assessment of valuation practices. It evolved from work related to the development of the paper *Fair Value Measurement and Modeling: An Assessment of Challenges and Lessons Learned from the Market Stress,* which was issued in June 2008. The two papers were prepared as a result of initial findings and lessons learned from the current financial crisis and were incorporated in *Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience,* issued in April.

Credit Risk Management

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

Working with Mortgage Borrowers

The ongoing financial and economic stress has highlighted the crucial role that prudent bank lending practices play in promoting the nation's economic welfare. In 2008, the Federal Reserve issued two statements to emphasize the important role of banking organizations in U.S. credit markets and to encourage these organizations to pursue responsible lending activities as they meet the credit needs of American households and businesses. In March, the Federal Reserve issued a statement emphasizing the need for regulated institutions to be transparent in their residential mortgage modification activities and to support industry efforts to improve the collection of data on the type and volume of mortgage modifications. In November, the Federal Reserve, FDIC, OCC, and OTS issued a statement emphasizing the need for banking organizations and their regulators to work together in meeting the credit needs of consumers and businesses. In this statement, the agencies encouraged banking organizations to pursue economically viable and appropriate lending opportunities and stressed the importance of prudent lending practices, a strong capital position, prudent dividend policies, and appropriate employee compensation practices.

Shared National Credit Program

In October, the Federal Reserve, FDIC, OCC, and OTS released summary results of the 2008 annual review of the Shared National Credit Program. The agencies established the program in 1977 to promote an efficient and consistent review and classification of shared national credits. A shared national credit (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 2008 SNC review was based on analyses of credit data as of December 31, 2007, provided by federally supervised institutions. The 2008 review found that the volume of shared national credits rose 22.6 percent over the 2007 review, to $2.8 trillion. The record growth in credit volume was concentrated in large syndicated loans underwritten in late 2006 and the first half of 2007, led by the media and telecom, utilities, finance and insurance, and oil and gas sectors. “Criticized” credits rose $259.3 billion, to $373.4 billion, accounting for 13.4 percent of the SNC portfolio compared with 5.0 percent in the 2007 review. Within the “criticized” category, “special mention” (potentially weak) credits increased $167.9 billion, accounting for 7.5 percent of the SNC portfolio compared with 1.9 percent in the 2007 review, and “classified” credits (credits having well-defined weaknesses) increased $91.5 billion, accounting for 5.8 percent of the SNC portfolio compared with 3.1 percent in the 2007 review. The criticized credits and related ratios do not include the effects of hedging or other techniques that organizations often use to mitigate risk.

The 2008 SNC review also included a supervisory assessment of underwriting standards. Examiners found an inordinate volume of syndicated loans having structurally weak underwriting characteristics, particularly in non-investment-grade or leveraged transactions. The most commonly cited weaknesses were liberal repayment terms, repayment dependent on refinancing or recapitalization, and nonexistent or weak loan covenants. Examiners also found that an excessive number of loan agreements did not provide adequate warnings or allow for proactive control over the credit.

Revisions to the Guide to the Interagency Country Exposure Review Committee Process

In November, the Federal Reserve, FDIC, and OCC jointly issued revisions to the *Guide to the Interagency Country Exposure Review Committee (ICERC) Process* to reflect improvements in regulated institutions’ cross-border exposure analyses and country risk management programs, as well as increased availability of information on country and transfer risk (see SR letter 08-12). The agencies will now assign an ICERC rating to only those countries in default and, accordingly, have eliminated the rating categories Other Transfer Risk Problems (OTRP), Weak, Moderately Strong, and Strong. They will continue to closely monitor regulated institutions' cross-border exposures. The revised guide sets forth supervisory expectations for an institution's country risk assessment process and rating systems. It also emphasizes that an institution is expected to have appropriate limits on exposure to each sovereign entity, to perform financial analyses of its exposures, and to apply robust risk management to all country exposures, not just to the countries rated by the agencies.

Proposed Interagency Appraisal and Evaluation Guidelines

In November, the Federal Reserve, FDIC, NCUA, OCC, and OTS jointly issued for comment proposed Interagency Appraisal and Evaluation Guidelines to reaffirm supervisory expectations for sound real estate appraisal and evaluation practices. The proposed guidance would replace the 1994 Interagency Appraisal and Evaluation Guidelines to reflect changes in industry practice, uniform appraisal standards, and technology. It incorporates supervisory guidance issued by the agencies since 1994 and clarifies their expectations for a regulated institution's risk-management principles and internal controls for its real estate collateral valuation function. The proposed guidance also includes a discussion of the use of automated valuation models in the development of an evaluation of real estate collateral for real estate transactions below the appraisal threshold set forth in the agencies' appraisal regulation. The comment period for the proposal closed on January 20, 2009.

Pandemic Planning

In January, the FBIIC and the Financial Services Sector Coordinating Council (FSSCC), an organization made up of financial services trade associations and individual firms, published an after-action report on a pandemic flu exercise held in September and October 2007 for the financial services sector in the United States. A total of 2,775 organizations participated in the exercise, of which approximately 62 percent were banks, thrifts, and credit unions. The exercise revealed several key themes that are important to pandemic planning: communications plans, infrastructure-dependency plans, cross-trained employees, telecommuting, human resources issues, and plans for a second wave of the pandemic.

Throughout 2008, the Federal Reserve and the other FFIEC agencies were engaged in several projects designed to help the agencies prepare for a pandemic event. The agencies sponsored a Roundtable on Pandemic Planning attended by approximately 170 industry representatives, including some international participants. The FFIEC's *Business Continuity Planning Booklet* was updated in March to include guidance on identifying the continuity planning that should be in place to minimize adverse effects of a pandemic event. The agencies also discussed with industry representatives the potential industry need for regulatory relief in the event of a pandemic. A meeting of FFIEC members and industry trade group representatives focusing on emergency preparedness, response, and recovery was held in March, and a second meeting was held in September.

In January, the Federal Reserve Bank of New York began a series of reviews to assess the progress made by the top 15 banking organizations in the country with respect to pandemic preparedness. A white paper was published that highlights the practices of firms as well as conclusions and themes as they relate to the current state of pandemic preparedness planning at systemic banking organizations.[10]

Banks' Securities Activities

In August, the Federal Reserve released the *Small Entity Compliance Guide for Regulation R.* Regulation R, adopted jointly by the Board and the Securities and Exchange Commission in September 2007, implemented certain key exceptions for banks from the definition of the term "broker" under section 3(a)(4) of the Securities Exchange Act of 1934, as amended by the Gramm-Leach-Bliley Act. The guide provides a general description of the regulation and contact information for small entities having questions regarding compliance.

Regulatory Reports

The Federal Reserve's supervisory policy function is 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 relevant federal and state supervisors, including foreign bank supervisors as needed, to recommend and implement appropriate and timely revisions to the reporting forms and the attendant instructions.

Bank Holding Company Regulatory Reports

The Federal Reserve requires that U.S. bank holding companies periodically submit reports providing financial and structure information. The information is essential in supervising the companies and in formulating regulations and supervisory policies. It is also used in responding to requests from Congress and the public for information about bank holding companies and their nonbank subsidiaries. Foreign banking organizations also are required to periodically submit reports to the Federal Reserve.

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

10. The population under review included core clearing and settlement organizations and firms that play a critical role in financial markets and are subject to resiliency guidelines issued in April 2003, also called the "Sound Practices Paper."

eign banking organizations (FBOs). The FR Y-6 and FR Y-7 reports gather additional information on organization structure and shareholders from domestic banking organizations and FBOs, respectively; the information is used to monitor structure so as to determine compliance with provisions of the Bank Holding Company Act and Regulation Y and to assess the ability of an FBO to continue as a source of strength to its U.S. operations.

In February, a number of revisions to the FR Y-9C report were approved for implementation during 2008: (1) reporting of interest and fee income on one- to four-family residential mortgages and all other real estate loans separately from income on all other loans; (2) reporting of the quarterly average for one- to four-family residential mortgages and all other real estate loans separately from the quarterly average for all other loans; (3) addition of data items for restructured troubled mortgages and mortgage loans in the process of foreclosure; (4) expansion of the schedule for closed-end one- to four-family residential mortgage banking activity to include originations, purchases, and sales of open-end mortgages as well as closed-end and open-end mortgage loan repurchases and indemnifications during the quarter; (5) modification of the definition of "trading account" and collection of additional information about instruments accounted for under the fair value option on the loan schedule and the fair value measurements schedule; (6) revision of the schedule on trading assets and liabilities; (7) clarification of the instructions for reporting credit derivative data in the risk-based capital schedule, and corresponding change to the report; (8) modification of the threshold for reporting sub-categories of other non-interest income and expense in the income statement; and (9) revision of the instructions for reporting fully insured brokered deposits in the deposit liabilities schedule to conform to the instructions for reporting time deposits in the schedule.

Effective March 2008, the requirement that subsidiaries created for the purpose of issuing trust preferred securities (trust preferred securities subsidiaries) file the FR Y-11, FR 2314, and FR Y-7N was dropped. In addition, new items were added to the reports to collect (1) certain data from all institutions that choose, under generally accepted accounting principles, to apply a fair value option to one or more financial instruments and one or more classes of servicing assets and liabilities and (2) data on income from annuity sales. Also added on the FR Y-7N were a new item for reporting the amount of partnership interests and a new section, Notes to the Financial Statements. Effective December, a question was added to the FR Y-11S, FR 2314S, and FR Y-7NS to determine whether the subsidiary has adopted a fair value option.

Also effective December 2008, the FR Y-10 report was updated to include collection of the tax ID number for all reportable banking and nonbanking entities located in the United States. In addition, cover pages and instructions for the FR Y-6 and FR Y-7 were modified to highlight, for reporting entities, issues surrounding the submission of information on individuals.

In November, the Federal Reserve proposed a number of revisions to the FR Y-9C for implementation in 2009 comparable to those proposed for the bank Call Report, as described in the next section. In addition, the Federal Reserve proposed to revise the FR Y-9C to (1) add new data items and revise existing data items on trading assets and liabilities; (2) collect information associated with the Treasury's Capital Purchase Program; and (3) add new data items and revise existing data items on regulatory capital requirements. Also in November, the Federal Reserve proposed to revise the FR Y-11, FR 2314, and FR Y-7N in March 2009 to collect new information on assets held in trading accounts and to require that respondents submit all FR Y-8 reports electronically, effective with the June 30, 2009, report date.

Commercial Bank Regulatory Financial Reports

As the federal supervisor of state member banks, the Federal Reserve, along with the other banking agencies through the FFIEC, requires banks to submit quarterly Call Reports. Call Reports are the primary source of data for the supervision and regulation of banks and the ongoing assessment of the overall soundness of the nation's banking system. Call Report data, 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 2008, the FFIEC implemented revisions to the Call Report to address new safety and soundness considerations and to facilitate supervision. Among these revisions were collection of additional information related to one- to four-family residential mortgage loans; modification of the definition of "trading account" in response to the creation of a fair value option under generally accepted accounting principles; revision of certain schedules to collect additional information about instruments accounted for under the fair value option; revision of the instructions for reporting daily average deposit data by newly insured institutions to conform with the FDIC's assessment regulations; clarification of the instructions for reporting credit derivatives data on the risk-based capital schedule; and collection of information necessary to calculate assessments for participants in the FDIC's Transaction Account Guarantee Program.

In September, the FFIEC proposed a number of revisions to the Call Report for implementation in 2009. The proposed revisions include new items on (1) held-for-investment loans and leases acquired in business combinations; (2) the date on which the bank's fiscal year ends; (3) real estate construction and development loans on which interest is capitalized; (4) holdings of commercial mortgage–backed securities and structured financial products, such as collateralized debt obligations; (5) fair value measurements for assets and liabilities reported at fair value on a recurring basis; (6) pledged loans and pledged trading assets; (7) collateral and counterparties associated with over-the-counter derivatives exposures; (8) credit derivatives; (9) remaining maturities of unsecured other borrowings and subordinated notes and debentures; (10) unused short-term commitments to asset-backed commercial paper conduits; (11) past due and nonaccrual trading assets; (12) investments in real estate ventures; and (13) held-to-maturity and available-for-sale securities in domestic offices. In addition, revisions were proposed to (1) modify several data items relating to noncontrolling (minority) interests in consolidated subsidiaries; (2) provide for exemptions from reporting certain existing items by banks having less than $1 billion in total assets; (3) clarify the definition of the term "loan secured by real estate"; (4) provide guidance in the reporting instructions on quantifying misstatements in the Call Report; (5) eliminate the confidential treatment of data collected from trust institutions on fiduciary income, expenses, and losses; and (6) expand information collected on trust department activities.

Supervisory Information Technology

Information technology supporting Federal Reserve supervisory activities is managed within the System supervisory information technology (SSIT) function in the Board's Division of Banking Supervision and Regulation. SSIT works through assigned staff at the Board and the Reserve Banks, as well as through System committees, to ensure that key staff members throughout the System participate in identifying requirements and setting priorities for information technology initiatives.

In 2008, the SSIT function worked on several strategic projects and initiatives: (1) alignment of technology investments with business needs; (2) identification and implementation of improvements to make technology and data more accessible to staff working in the field; (3) strengthening of compliance with data-privacy regulations; (4) implementation of new software to improve the processing of bank applications; and (5) implementation of collaboration and analysis technologies (such as communities of practice and business intelligence tools) to integrate supervisory and management information systems that support both office-based and field staff. With the other federal regulatory agencies, the SSIT also implemented the first phase of the modernization of the Shared National Credit system. And it began a project to develop a comprehensive tool for tracking exam findings Systemwide.

National Information Center

The National Information Center (NIC) is the Federal Reserve's comprehensive repository for supervisory, financial, and banking-structure data. It is also the main repository for many supervisory documents. NIC includes (1) data on banking structure throughout the United States as well as foreign banking concerns; (2) the National Examination Database (NED), which enables supervisory personnel as well as federal and state banking authorities to access NIC data; (3) the Banking Organization National Desktop (BOND), 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, which contains documents supporting the supervisory processes.

Within the NIC, the supporting systems have been modified over time to extend their useful lives and improve business workflow efficiency. During 2008, work continued on upgrading the entire NIC infrastructure to provide easier access to information, a consistent Federal Reserve enterprise information data repository, a comprehensive metadata repository, and uniform security across the Federal Reserve System. An initial model was provided to a representative group of Federal Reserve users and stakeholders. Significant design changes resulted from the feedback of that group. Implementation is expected to be phased in beginning mid-year 2009 and to be completed by year-end 2010. Also during the year, several programming changes were made to NIC applications in support of business needs, primarily for the credit risk and discount window functions to monitor new Federal Reserve programs

Training for Banking Supervision and Regulation, 2008

Course sponsor or type	Number of participants		Instructional time (training days unless otherwise noted)	Number of course offerings
	Federal Reserve personnel	State personnel		
Federal Reserve System	3,217	359	11,998	128
FFIEC	508	275	2,006	55
The Options Institute[1]	6	4	18	1
Rapid response	1,745	0	10 one-hour conference calls	10

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

created to assist the financial and banking markets.

The Federal Reserve continued in 2008 to work with other federal regulatory agencies to modernize the collection of SNC information by creating a common collection facility. Implementation of the initial phase was effective year-end 2008, for fourth-quarter data. SNC data will begin being reported on a quarterly basis.

Finally, the Federal Reserve participated in a number of technology-related initiatives supporting the supervision function as part of FFIEC task forces and subgroups.

Staff Development

Training and staff development focuses on recruiting, deploying, developing, and retaining staff having the skills necessary to meet supervisory responsibilities today and in the future. The staff development program is responsible for the ongoing development of nearly 2,300 professional supervisory staff. Training for banking supervision and regulation in 2008 is summarized in the table.

Examiner Commissioning Program

The Examiner Commissioning Program (ECP) involves approximately 22 weeks of instruction. Individuals move through a combination of classroom offerings, self-paced assignments, and on-the-job training over a period of two to five years. Achievement is measured by two professionally validated proficiency examinations: the first proficiency exam is required of all ECP participants; the second proficiency exam is offered in two specialty areas—safety and soundness, and consumer affairs. A third specialty, in information technology, requires that individuals earn the Certified Information Systems Auditor certification offered by the Information Systems Audit Control Association. In 2008, 147 examiners passed the first proficiency exam and 93 passed the second proficiency exam (63 in safety and soundness, and 30 in consumer affairs).

Continuing Professional Development

Other formal and informal learning opportunities are available to examiners, including other schools and programs offered within the System and FFIEC-sponsored schools. System programs are also available to state agencies. In 2008, "rapid response" sessions were instituted in response to emerging or urgent training needs associated with implementation or issuance of new laws, regulations, or guidance.

Regulation of the U.S. Banking Structure

The Federal Reserve administers five federal statutes that apply to bank holding companies, financial holding companies, member banks, and foreign banking organizations—the Bank Holding Company Act, the Bank Merger Act, the Change in Bank Control Act, the Federal Reserve Act, and the International Banking Act. In administering these statutes, the Federal Reserve acts on a variety of proposals 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 proposals concern bank holding company formations and acquisitions, bank mergers, and other transactions involving bank or nonbank firms. In 2008, the Federal Reserve acted on 1,057 proposals representing 1,910 individual applications filed under the five statutes.

Bank Holding Company Act

Under the Bank Holding Company Act, a corporation or similar legal entity must obtain the Federal Reserve's approval before forming a bank holding company through the acquisition of one or more banks in the United States. Once formed, a bank holding company must receive Federal Reserve approval before acquiring or establishing additional banks. Also, bank holding companies 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 Bank Holding Company Act. Depending on the circumstances, these activities may or may not require Federal Reserve approval in advance of their commencement.[11]

When reviewing a bank holding company application or notice that requires prior approval, the Federal Reserve may consider the financial and managerial resources of the applicant, the future prospects of both the applicant and the firm to be acquired, the convenience and needs of the community to be served, the potential public benefits, the competitive effects of the proposal, and the applicant's ability to make available to the Federal Reserve information deemed necessary to ensure compliance with applicable law. In the case of a foreign banking organization seeking to acquire control of a U.S. bank, the Federal Reserve also considers whether the foreign bank is subject to comprehensive supervision or regulation on a consolidated basis by its home-country supervisor. In 2008, the Federal Reserve acted on 495 applications and notices filed by bank holding companies to acquire a bank or a nonbank firm, or to otherwise expand their activities.

A bank holding company may repurchase its own shares from its shareholders. When the company borrows money to buy the shares, the transaction increases the company's debt and decreases its equity. The Federal Reserve may object to stock repurchases by holding companies that fail to meet certain standards, including the Board's capital adequacy guidelines. In 2008,

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

the Federal Reserve reviewed 7 stock repurchase proposals by bank holding companies.

The Federal Reserve also reviews elections submitted by bank holding companies seeking financial holding company status under the authority granted by the Gramm-Leach-Bliley Act. Bank holding companies seeking financial holding company status must file a written declaration with the Federal Reserve. In 2008, 29 domestic financial holding company declarations and 5 foreign bank declarations were approved.

Bank Merger Act

The Bank Merger Act requires that all proposals involving the merger of insured depository institutions be acted on by the relevant federal banking agency. The Federal Reserve has primary jurisdiction if the institution surviving the merger is a state member bank. Before acting on a merger proposal, the Federal Reserve considers the financial and managerial resources of the applicant, the future prospects of the existing and combined organizations, the convenience and needs of the community(ies) 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 2008, the Federal Reserve approved 71 merger applications under the act.

Change in Bank Control Act

The Change in Bank Control Act requires individuals and certain other parties that seek control of a U.S. bank or bank holding company 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 and bank holding companies. 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 or bank holding company being acquired; the future prospects of the institution to be acquired; the effect of the proposed change on competition in any relevant market; the completeness of the information submitted by the acquiring person; and whether the proposed change would have an adverse effect on the Deposit Insurance Fund. A proposed transaction should not jeopardize the stability of the institution or the interests of depositors. During its review of a proposed transaction, the Federal Reserve may contact other regulatory or law enforcement agencies for information about relevant individuals. In 2008, the Federal Reserve approved 124 changes in control of state member banks and bank holding companies.

Federal Reserve Act

Under the Federal Reserve Act, 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 proposals to establish domestic branches, the Federal Reserve considers, among other things, the scope and nature of the banking activities to be conducted. When reviewing proposals for foreign branches, the Federal Reserve considers, among other things, the condition of the bank and the bank's experience in international banking. In 2008, the Federal Reserve acted on new and merger-related branch proposals for 890 domestic branches and granted prior approval for the establishment of 6 new foreign branches.

State member banks must also obtain Federal Reserve approval to establish financial subsidiaries. These subsidiaries may engage in activities that are financial in nature or incidental to financial activities, including securities-related and insurance agency–related activities. In 2008, 4 financial subsidiary applications were approved.

Overseas Investments 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 2008, the Federal Reserve approved 67 proposals for overseas investments by U.S. banking organizations, many of which represented investments through an Edge Act or agreement corporation.

International Banking Act

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 proposals, 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 2008, the Federal Reserve approved 19 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 bank holding company, a bank merger, a change in control, or the establishment of a new U.S. banking presence by a foreign bank are made known to the public by an order or an announcement.

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

Enforcement of Other Laws and Regulations

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

Financial Disclosures by State Member Banks

State member banks that issue securities registered under the Securities Exchange Act of 1934 must disclose certain information of interest to investors, including annual and quarterly financial reports and proxy statements. By statute, the Board's financial disclosure rules must be substantially similar to those of the Securities and Exchange Commission. At the end of 2008, 12 state member banks were registered with the Board under the Securities Exchange Act.

Securities Credit

Under the Securities Exchange Act, the Board is responsible for regulating credit in certain transactions involving the purchase 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 (formed through the combination of the National Association of Securities Dealers and the regulation, enforcement, and arbitration functions of the New York Stock Exchange), 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 National Credit Union Administration examine lenders under their respective jurisdictions; and the Federal Reserve examines other Regulation U lenders.

Federal Reserve Membership

At the end of 2008, 2,378 banks were members of the Federal Reserve System and were operating 55,892 branches. These banks accounted for 34 percent of all commercial banks in the United States and for 70 percent of all commercial banking offices. ■

Consumer and Community Affairs

Among the Federal Reserve's responsibilities in the areas of consumer and community affairs are

- writing and interpreting regulations to implement federal laws that protect and inform consumers,
- supervising state member banks to ensure compliance with the regulations,
- investigating complaints from the public about state member banks' compliance with regulations,
- promoting community development in historically underserved markets, and
- conducting research and promoting consumer education.

These responsibilities are carried out by the members of the Board of Governors, the Board's Division of Consumer and Community Affairs (DCCA), and the consumer and community affairs staffs at Federal Reserve Banks.

The Federal Reserve System's various consumer protection and community development roles continued to be areas of interest in 2008. Amid the consequences of a deteriorating financial marketplace, consumer protection was among the issues of concern, particularly in the mortgage and credit card markets. Throughout the year, lawmakers, regulators, the media, and consumers scrutinized various practices used in the financial services marketplace, expressing concern at the complexity of products and characterizing some practices as unfair or deceptive. In 2008, the Federal Reserve Board advanced consumer protection in financial services by finalizing regulations that set new rules for fairness and transparency in the high-cost mortgage and credit card markets. In addition, the Board continued to commit significant resources in the areas of supervision, research, community development, and consumer education to increase understanding of the issues and impacts of the credit crisis on consumers and communities.

Mortgage Credit

Throughout 2008, concerns over consumer protection and access to credit in the mortgage market continued to escalate, prompting the Federal Reserve to continue to pursue a range of efforts to support both consumers and industry through its regulatory and supervisory activities.

Regulatory Actions

Expansion of Consumer Protections under Regulation Z

Concerns about the mortgage credit markets continued into 2008 as many lenders and borrowers suffered significant losses and as property values declined in much of the country. Analyses of these developments revealed a range of lender practices that contributed to the crises, including lax underwriting standards and inadequate analyses of borrowers' ability to repay their mortgages. Many of these practices were common among nonbank, subprime mortgage creditors offering higher-priced mortgage loans. These lenders were not subject to the same level of supervision as insured depository institutions.

The Board had taken action to address some of these concerns in late 2007, when it issued proposed amendments to Regulation Z to strengthen consumer protection and underwriting standards. The proposed rules addressed, in particular, certain creditor practices as they relate to higher-priced mortgage loans, under authority granted by the Home Ownership and Equity Protection Act (HOEPA). The proposal received more than 4,500 comment letters from the mortgage industry, consumer and community organizations, individual consumers, and policymakers.

In July 2008, the Board approved and published the final rules for mortgage loans under Regulation Z to improve consumer protections and facilitate responsible lending. The new rules apply to all mortgage lenders, not just insured depository institutions, to provide broader protection to consumers and a uniform set of rules for the mortgage industry. The regulation prohibits unfair, abusive, or deceptive home mortgage lending practices, and restricts certain other mortgage practices. The final rules also establish advertising standards, and require lenders to provide certain mortgage disclosures to consumers earlier in the lending process.[1]

The regulation was approved at a public meeting held by the Board, where Federal Reserve Chairman Ben S. Bernanke stated, "The proposed final rules are intended to protect consumers from unfair or deceptive acts and practices in mortgage lending, while keeping credit available to qualified borrowers and supporting sustainable homeownership." The new rules apply to "higher-priced mortgage loans"—defined to capture virtually all loans originated in the subprime market—but generally exclude loans in the prime market. In addition, the rules also establish new consumer protections that apply to all mortgage loans secured by a borrower's principal dwelling.

For higher-priced mortgage loans secured by a consumer's principal dwelling, the final regulation adds four key protections:

- It prohibits a lender from making a loan without regard to a borrower's ability to repay the loan from income and assets other than the home's value.
- It requires creditors to verify the income and assets they rely upon to determine a borrower's ability to repay a loan.
- It bans any prepayment penalty if the payment can change in the initial four years. For other higher-priced loans, a prepayment penalty period cannot last for more than two years. This restriction on prepayment penalties is substantially more limiting than originally proposed.
- It requires creditors to establish escrow accounts for property taxes and homeowner's insurance for all first-lien mortgage loans.

For all mortgage loans secured by a borrower's principal dwelling, the final rules establish several requirements:

- Creditors and mortgage brokers are prohibited from coercing a real estate appraiser to misstate a home's value.
- Companies that service mortgage loans are prohibited from engaging in

1. See press release, "Board Issues Final Rule Amending Home Mortgage Provisions of Regulation Z" (July 14, 2008), www.federalreserve.gov/newsevents/press/bcreg/20080714a.htm.

certain practices, such as pyramiding late fees. In addition, servicers are required to credit consumers' loan payments as of the date of receipt and to provide a payoff statement within a reasonable time following a request.

- Creditors must provide a good-faith estimate of a loan's costs, including a schedule of payments, within three days after a consumer applies for any mortgage loan secured by the consumer's principal dwelling, such as a home improvement or a straight refinance loan.

The final rules also set additional standards that apply to all mortgage advertising, requiring additional information about rates, monthly payments, and other loan features. In addition, the final rules ban seven deceptive or misleading advertising practices, including representing that a rate or payment is "fixed" when it can change. The new rules take effect on October 1, 2009, except for the escrow requirement, which will be phased in during 2010 to allow lenders to establish new systems as needed.

After extensive consumer testing, the Board withdrew one element of the original proposal relating to "yield-spread premiums"—a common compensation method used by lenders originating loans through mortgage brokers. The testing, conducted to ascertain the effectiveness of a variety of strategies to disclose this practice and its impact on the cost of the loan to borrowers, revealed that the proposed disclosures were inadequate in conveying this information to consumers.[2] As a result, the Board committed to considering alternative approaches as part of its ongoing review of mortgage rules under Regulation Z.

Illustrations to Improve Consumers' Understanding of Adjustable-Rate Mortgage Products

With the expansion of mortgage credit markets over the last several years, the range and complexity of loan types also increased, particularly in the subprime market. Here, various adjustable-rate mortgage (ARM) loan products became more prevalent as a means to make homeownership more affordable through lower rates and payments in the early years of a loan.

While beneficial to some borrowers, ARMs also can be very complex and can present repayment challenges to borrowers whose circumstances prove unsuitable for loans with significant payment increases. Because of concerns that consumers were not fully aware of the implications presented by these products, the Federal Reserve and other federal financial regulatory agencies in May 2008 issued guidance containing illustrations that mortgage lenders can use to help consumers understand certain hybrid ARMs.[3] These illustrations are designed to assist institutions in complying with recommendations set forth in the agencies' 2007 "Statement on Subprime Mortgage Lending," which called on institutions to provide clear, balanced, and timely information to consumers about the relative benefits, costs, and risks of

2. See *Summary of Findings, Consumer Testing of Mortgage Broker Disclosures* (July 10, 2008), www.federalreserve.gov/newsevents/press/bcreg/20080714regzconstest.pdf.

3. See press release, "Federal Financial Regulators Issue Final Illustrations of Consumer Information for Hybrid Adjustable-Rate Mortgage Products" (May 22, 2008), www.federalreserve.gov/newsevents/press/bcreg/20080522a.htm.

Foreclosures: Responding to Consumers and Communities in Crisis through the Federal Reserve's Home Mortgage Initiative

With continued deterioration of the subprime mortgage market and the overall economy, 2008 was marked by an increase in the rate of foreclosure throughout the country. As foreclosures mounted and projections worsened throughout the year, nonprofit organizations, governments, lenders, and servicers mobilized to respond to the needs of borrowers and communities confronting defaulting mortgages and foreclosures. The Federal Reserve System actively engaged in national and regional partnerships to help inform policy and practices around foreclosure prevention and neighborhood stabilization in communities hard hit by foreclosures.

The Federal Reserve System has a significant presence throughout the country through its 12 regional banks and their branch offices and the Board of Governors in Washington, D.C. Each of these locations offers important research, supervision, and community development expertise and insights that help inform local and regional responses to economic conditions. As the mortgage market continued to deteriorate in 2008, the System worked to coordinate its resources through the Homeownership and Mortgage Initiative (HMI), a comprehensive strategy to provide information and outreach to stem unnecessary foreclosures, to stabilize communities, and to prevent negative spillovers at the neighborhood level. The HMI coordinated the activities of the various functional areas of the System, including research, public affairs, and community affairs, to improve access to data and information and to develop policies relating to foreclosure. This strategy capitalized on the following areas of expertise:

- *outreach* to strengthen existing collaborations with other regulators, community groups, policy organizations, financial institutions, and public officials to identify solutions to prevent unnecessary foreclosures and their negative effects
- *regulation* to foster an environment that supports the homeownership goals of creditworthy borrowers with appropriate consumer protection and responsible lending practices
- *research and analysis* to provide community groups, counseling agencies, regulators, financial institutions, and others with detailed analysis to support efforts to help troubled borrowers and communities
- *financial education* to help consumers make informed personal financial decisions, including those about home ownership

hybrid ARM products.[4] The illustrations were developed in response to requests by some industry groups, in commenting on the proposed Subprime Statement, that the agencies either provide uniform disclosures for these products or publish illustrations of the consumer information.

Although the illustrations are not mandatory, institutions may use them, provide information based on them, or provide consumers with information described in the guidance in an alternate format. The illustrations provide

- an explanation of some of the key features of certain ARM loans that are identified in the Subprime State-

4. See press release, "Federal Financial Regulatory Agencies Issue Final Statement on Subprime Mortgage Lending" (June 29, 2007), www.federalreserve.gov/newsevents/press/bcreg/20070629a.htm.

With respect to outreach, the Federal Reserve provided community coalitions, counseling agencies, fellow regulators, financial institutions, and others with detailed analyses identifying neighborhoods at high risk of foreclosures. By understanding those areas with high concentrations of subprime mortgages, delinquencies, and foreclosures, community leaders can better target their scarce resources to borrowers in need of counseling and other interventions that may help forestall foreclosure.

To explore the impact of the foreclosure crisis on different real estate markets, the Federal Reserve hosted a series of conferences entitled, "Recovery, Renewal, Rebuilding: A Federal Reserve Foreclosure Series,"[1] in five cities. These conferences, held in Atlanta, Los Angeles, Columbus (Ohio), St. Louis, and Washington, D.C., looked at strategies to address the negative impact of foreclosures in high-cost markets, as well as the difficulty of dealing with foreclosures in neighborhoods in weak-market communities. The series also highlighted research on foreclosure and the resulting problems of vacancy and abandonment. Through this series, conference attendees worked to clarify the issues and identify the strategies and best practices for moving toward solutions by examining best practices, creative solutions, and innovative ways to prepare for the future.

The Federal Reserve also forged a partnership with NeighborWorks America, a national nonprofit organization, to address issues related to neighborhood stabilization and, in particular, the disposition of real estate owned (REO) properties. As part of the collaboration, a website, www.stablecommunities.org, was developed to provide a one-stop source of information for homeowners, community development organizations, and local governments dealing with foreclosure-related vacant and abandoned properties.

In addition, the Community Affairs offices at each of the 12 Reserve Banks launched online Foreclosure Resource Centers that provide information for homeowners, prospective homebuyers, and community groups to prevent foreclosures and lessen their negative influence on neighborhoods. A Community Foreclosure Mitigation Toolkit was also developed.[2] The Board also developed information for consumers on how to protect their homes from foreclosure and updated other mortgage publications, including *A Consumer's Guide to Mortgage Settlement Costs* and *What You Should Know about Home Equity Lines of Credit.*

1. See additional information on the conferences at stlouisfed.org/RRRseries/ and www.clevelandfed.org/Our_Region/Community_Development/Events/Seminars/2008/20080827/Overview_4Forums.pdf.

2. See Foreclosure Resources at www.federalreserve.gov/consumerinfo/foreclosure.htm.

ment, including payment shock, responsibility for taxes and insurance, prepayment penalties, balloon payments, and increased costs associated with stated-income or reduced-documentation loans, and

- a chart, with numerical examples, that depicts in a concrete, readily understandable manner the potential payment shock for a loan structured with a discounted interest rate good for the first two years and then subject to increase.

Supervisory Actions

The Board applied its supervisory authority in an effort to address the aggressive credit tightening that gave cause for concern in 2008 and to urge mortgage lenders to work with troubled mortgage borrowers. Joining with other financial regulatory agencies, the Board

Staff also revised *A Consumer's Guide to Mortgage Refinancings,* providing a link to a mortgage refinancing calculator.[3] For consumers with questions about banking procedures and rules, or who feel they may have been treated unfairly by their banks, the Federal Reserve Consumer Help Center feeds queries directly to the various regulatory agencies so that consumers have only one stop to make to ask questions or file complaints.[4]

In the regulatory realm, the Federal Reserve issued new rules to improve consumer protections and disclosures relating to loans secured by a borrower's home (see the "Mortgage Credit" discussion earlier in this chapter).

To support needed research and analysis, the Federal Reserve System launched several initiatives to provide studies, data, and other foreclosure-related resources to communities grappling with foreclosures. The System provided, on the website of the Federal Reserve Bank of New York, data concerning subprime lending patterns and performance.[5] These dynamic maps and data illustrate subprime and alt-A mortgage loan conditions that may assist community groups, policymakers, and local governments as they prioritize the use of their resources for these foreclosure-related efforts. In addition, a System workgroup, consisting of some of the Federal Reserve System's top economists and community development experts, prepared overviews that summarize the current state of knowledge about housing and mortgage markets, as well as about foreclosures. The System continues to conduct research on a wide range of topics to fill analytical gaps and better understand the effects of foreclosure on neighborhoods, the economy, and the housing and mortgage markets.

In the interest of supporting borrowers experiencing difficulty in meeting their mortgage obligations, the Board has provided outlets for mortgage-related consumer financial education materials. In addition, through the HMI, the Federal Reserve has posted internal and external resources on each of the System's 13 websites to help improve staff and consumers' access to information that can assist them as they work to address challenges in the mortgage market.[6] As the mortgage and foreclosure issues and their implications evolve, the Federal Reserve will continue to coordinate its resources and expertise to assist consumers and communities during the crisis.

3. See "5 Tips for Protecting your Home from Foreclosure, www.federalreserve.gov/pubs/foreclosuretips/default.htm and www.federalreserve.gov/consumerinfo/mortgages.htm."

4. See www.federalreserveconsumerhelp.gov.

5. See "Dynamic Maps of Nonprime Mortgage Conditions in the United States," www.newyorkfed.org/mortgagemaps/.

6. See Resources for Consumers, www.federalreserve.gov/consumerinfo/foreclosure_consumers.htm.

issued an interagency statement on both topics in November 2008.[5]

With respect to the credit tightening, the supervisory statement noted the agencies' expectation that all banking organizations should fulfill their fundamental role in the economy as intermediaries that provide credit to businesses, consumers, and other creditworthy borrowers. The statement emphasizes the essential nature of providing credit in a manner consistent with prudent lending practices and continuing to ensure the pursuit of new lending opportunities on the basis of realistic asset valuations and balanced assessments of borrowers' repayment capacities.

In light of the escalating rate of mortgage foreclosures in 2008, the supervisory statement also articulated the agen-

5. See press release, "Interagency Statement on Meeting the Needs of Creditworthy Borrowers" (November 12, 2008), www.federalreserve.gov/newsevents/press/bcreg/20081112a.htm.

cies' expectation that financial institutions work with existing borrowers to avoid preventable foreclosures, which can prove costly to both the institutions and to the communities they serve, and to help mitigate other potential mortgage-related losses. The agencies' statement urges all lenders and servicers to adopt systematic, proactive, and streamlined mortgage loan modification protocols and to review troubled loans using these protocols. The goal of such efforts is to help achieve modifications that result in mortgages that borrowers can better manage.

Credit Cards

Credit cards are the most common consumer financial services credit product, and represent an important tool for facilitating transactions for both consumers and businesses. Advances in technology (such as credit scoring) and the expansion of the financial services marketplace have contributed to a significant increase in competition in the credit card market over the last decade. During this time, lenders have employed aggressive marketing and product development strategies and have applied billing practices to generate more fee-based income. (Previously, lenders had relied almost solely on interest from their customers' account balances for revenue.) These industry developments have elevated concerns about consumer protection, the transparency of credit card pricing, and the adequacy of consumer disclosures in credit card marketing materials, contracts, and periodic statements.

With the significant presence and increased consumer use of credit cards in the marketplace, concerns about certain practices have been the topic of public discussion and debate. In response, the Board issued proposed amendments to Regulation Z (Truth in Lending) in May 2007 that were intended to increase consumer protections and improve disclosures for credit cards.[6] Throughout 2008, Board staff conducted consumer testing and collected input from consumer advocates, lenders, and policymakers to gain insight into the effect the proposed rules would have on consumers' access to credit and their understanding of information they need to make informed decisions about the myriad credit card options in the market (see the "Advice from the Consumer Advisory Council" discussion later in this chapter). Based on this information, the Board issued additional proposed amendments to Regulation Z as well as proposed amendments to Regulation AA (Unfair or Deceptive Acts or Practices) in May 2008.[7] The public response to these proposals was unprecedented, with Board staff carefully considering information obtained through extensive consumer testing and review of more than 60,000 comment letters received during the comment period.[8]

Final rules regarding credit cards were issued in December 2008, with an

6. See press release (May 23, 2007), www.federalreserve.gov/newsevents/press/bcreg/20070523a.htm.

7. See press release (May 2, 2008), www.federalreserve.gov/newsevents/press/bcreg/20080502a.htm.

8. See Design and Testing of Effective Truth in Lending Disclosures: Findings from Qualitative Consumer Testing Research, submitted to the Federal Reserve Board of Governors by Macro International, Inc. (December 15, 2008), www.federalreserve.gov/newsevents/press/bcreg/bcreg20081218a7.pdf, and Design and Testing of Effective Truth in Lending Disclosures: Findings from Experimental Study, submitted to the Federal Reserve Board by Macro International, Inc. (December 15, 2008), www.federalreserve.gov/newsevents/press/bcreg/bcreg20081218a8.pdf.

effective date of July 1, 2010.[9] These rules were designed to address areas of concern by prohibiting certain unfair acts or practices and by improving the disclosures consumers receive in connection with credit card accounts and other revolving credit plans.

The final rules prohibit certain credit card practices that the Board found most concerning. At the Board meeting where the rules were approved, Chairman Bernanke remarked, "The revised rules represent the most comprehensive and sweeping reforms ever adopted by the Board for credit card accounts. These protections will allow consumers to access credit on terms that are fair and more easily understood."[10] The rules seek to promote the responsible use of credit cards through greater transparency in credit card pricing, including the abolition of unfair practices. Greater transparency will enhance competition in the marketplace and improve consumers' ability to find products that meet their needs. In addition, reduced reliance on penalty rate increases should spur industry efforts to improve upfront underwriting.

The final rule amending Regulation AA prohibits specific unfair acts or practices by banks in connection with credit card accounts. Specifically, the final rule will

- protect consumers from unexpected interest charges, including increases in the interest rate during the first year after account opening and increases in the rate charged on preexisting credit card balances;
- forbid banks from imposing interest charges using the "two-cycle" billing method;
- require that consumers receive a reasonable amount of time to make their credit card payments;
- prohibit the use of payment allocation methods that unfairly maximize interest charges; and
- address subprime credit cards by limiting the fees that reduce the amount of available credit.

The final rule amending Regulation Z improves the effectiveness of the disclosures consumers receive in connection with credit card accounts and certain other revolving credit plans. These revisions are designed to ensure that information is provided to consumers in a timely manner and in a readily understandable form. Specifically, the final rule will

- increase the amount of advance notice consumers receive from 15 to 45 days before an increased rate or a new contract term can be imposed (in order to better allow consumers to obtain alternative financing or change their account usage);
- apply the advance notice requirement when the lender increases a rate due to the consumer's delinquency or default;
- prohibit advertisements that refer to a rate as "fixed" unless the rate (1) will not increase for any reason while the plan is open or a period is specified and (2) will not increase for any reason during that period; and
- require changes to the format, timing, and content requirements for credit

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9. See press release (December 18, 2008), www.federalreserve.gov/newsevents/press/bcreg/20081218a.htm.

10. See statement by Chairman Ben S. Bernanke (December 18, 2008), www.federalreserve.gov/newsevents/press/bcreg/bernanke20081218a.htm.

card applications and solicitations and for the disclosures that consumers receive throughout the life of an open-end account.

As Governor Randall Kroszner noted when the rules were approved, "Our intent is to increase transparency and fairness in how credit card and deposit accounts operate, thereby enhancing competition and empowering consumers to better manage their accounts and avoid unnecessary costs. The rules represent a significant step forward in consumer protection."[11]

Overdraft Services

Overdraft services are sometimes offered by depository institutions as an alternative to traditional ways of covering transactions that overdraw a deposit account (for example, overdraft lines of credit or linked accounts). Coverage is generally provided "automatically" to consumers who meet a depository institution's criteria (for example, the account has been open a certain number of days or deposits are made regularly). If an overdraft is paid, the consumer is charged a flat fee for each item. A daily fee also may apply for each day the account remains overdrawn.

In the past, institutions generally provided overdraft coverage only for check transactions. In recent years, however, the service has been extended to cover overdrafts resulting from other types of transactions, including automated teller machine (ATM) withdrawals and debit card transactions at the point of sale. For debit card transactions in particular, the fee may far exceed the amount of the transaction. Thus, concerns have been raised regarding the potentially substantial costs associated with a service that consumers may not be aware of or did not request.

In December 2008, the Board addressed concerns regarding overdraft services by adopting a final rule amending Regulation DD (Truth in Savings) and a proposed rule amending Regulation E (Electronic Fund Transfers).[12] The final rule amending Regulation DD (effective January 1, 2010) addresses depository institutions' disclosure practices related to overdrafts. This rule is intended to ensure that consumers receive accurate information regarding the available funds in their deposit accounts so that they can make informed decisions about the costs of engaging in transactions that overdraw those accounts. Specifically, the final rule will

- require all institutions to disclose on periodic statements the aggregate dollar amounts charged for overdraft fees and for returned-item fees (for the statement period and the year-to-date); and
- require institutions that provide account balance information through an automated system to provide a balance that does not include additional funds that may be made available to cover overdrafts.

In addition, the proposed rule amending Regulation E would, if adopted, provide consumers with certain protections relating to the assessment of overdraft fees. The proposed rule would

- generally prohibit institutions from imposing an overdraft fee when the

11. See statement by Governor Randall S. Kroszner (December 18, 2008), www.federalreserve.gov/newsevents/press/bcreg/kroszner20081218a.htm.

12. See press release (December 18, 2008), www.federalreserve.gov/newsevents/press/bcreg/20081218a.htm.

account is overdrawn because of a hold placed on funds in the consumer's account that exceeds the actual transaction amount; and

- provide consumers with a choice regarding their institutions' overdraft coverage for ATM and one-time debit card transactions, but solicits comment on two different approaches:
  - under one approach, an institution would be prohibited from imposing an overdraft fee unless (1) the consumer is given an initial notice and a reasonable opportunity to opt out of the institution's overdraft service and (2) the consumer does not opt out; or
  - under an alternative approach, an institution would be prohibited from imposing an overdraft fee for paying such overdrafts unless the consumer affirmatively consents (or opts in) to the institution's overdraft service.

Other Regulatory Actions: Proposed Rules on Risk-Based Pricing Notices

Consumer reports are a primary tool used by creditors to evaluate consumer creditworthiness and establish appropriate credit terms, including pricing, based on the risk level a loan applicant represents. Risk-based pricing refers to the practice of using consumer reports (which reflect a consumer's risk of nonpayment) in setting or adjusting the price and other terms of credit offered or extended to an individual. Many creditors offer more favorable terms to consumers with better credit histories. In recent years, concerns have been raised that consumers may not be provided with adequate information regarding risk-based pricing and the role that negative information in consumer reports can play in determining the cost of credit.

To help address this issue, Congress enacted the Fair and Accurate Credit Transactions Act (FACT Act), which directed the Federal Reserve Board and the Federal Trade Commission (FTC) to issue joint regulations requiring creditors to provide consumers with risk-based pricing notices when, based in whole or in part on information in consumer reports, a creditor offers or provides credit to a consumer on terms less favorable than it offers or provides to other consumers.[13]

The Board and the FTC issued proposed regulations in May 2008.[14] The proposed regulations would apply, with certain exceptions, to all creditors that engage in risk-based pricing. Under these regulations, a risk-based pricing notice would generally be provided to the consumer after the terms of credit have been set, but before the consumer becomes contractually obligated with regard to the credit transaction. The proposed regulations reflect the agencies' judgments as to the best approaches identified through extensive outreach efforts to consumer groups, financial institutions, mortgage bankers, and consumer reporting agencies. Based on this outreach, the proposal provides creditors with a number of acceptable approaches to use in identifying consumers to whom they must provide risk-based pricing notices. The notices

13. In general, the FACT Act amended the Fair Credit Reporting Act (FCRA) to enhance the ability of consumers to combat identity theft, increase the accuracy of consumer reports, and allow consumers to exercise greater control regarding the type and amount of solicitations they receive.

14. See press release, "Agencies Issue Proposed Rules on Risk-Based Pricing Notices" (May 8, 2008), www.federalreserve.gov/newsevents/press/bcreg/20080508a.htm.

serve to alert consumers to the existence of negative information on their consumer reports so that they may check their reports for accuracy and correct any inaccurate information.

In addition, the proposed regulations include certain exceptions to the notice requirement. The most significant of the exceptions permits creditors, in lieu of providing a risk-based pricing notice to those consumers who receive less favorable terms, to provide all of their consumers with their credit scores and explanatory information about their scores. The proposed regulations include model notices to facilitate compliance.

Other Supervisory Activities Related to Compliance with Consumer Protection and Community Reinvestment Laws

DCCA supports and oversees the supervisory efforts of the Federal Reserve Banks to ensure that consumer protection laws and regulations are fully and fairly enforced. Division staff members provide guidance and expertise to the Reserve Banks on consumer protection regulations, examination and enforcement techniques, examiner training, and emerging issues. Routinely, staff members develop and update examination policies, procedures, and guidelines; review Reserve Bank supervisory reports and work products; and participate in interagency activities that promote uniformity in examination principles and standards.

Examinations are the Federal Reserve System's primary means for enforcing compliance with consumer protection laws. During the 2008 reporting period,[15] Reserve Banks conducted 268 consumer compliance examinations: 263 of state member banks and five of foreign banking organizations.[16]

Fair Lending

The Federal Reserve is committed to ensuring that the institutions it supervises comply fully with the federal fair lending laws—the Equal Credit Opportunity Act (ECOA) and the Fair Housing Act. The Federal Reserve enforces ECOA and the provisions of the Fair Housing Act that apply to its supervised lending institutions. The Federal Reserve conducts fair lending reviews regularly within the supervisory cycle. Additionally, examiners may conduct fair lending reviews outside of the usual supervisory cycle, if warranted by fair lending risk. When examiners find evidence of potential discrimination, they work closely with the division's Fair Lending Enforcement Section, which brings additional legal and statistical expertise to the examination and ensures that fair lending laws are enforced rigorously and consistently throughout the Federal Reserve System.

ECOA prohibits creditors from discriminating against any applicant, in any aspect of a credit transaction, on the basis of race, color, religion, national origin, sex, marital status, or age. In addition, creditors may not discriminate against an applicant because the applicant receives income from a public assistance program or has exercised, in

15. The 2008 reporting period for examination data was July 1, 2007, through June 30, 2008.

16. The foreign banking organizations examined by the Federal Reserve are organizations that operate under section 25 or 25A of the Federal Reserve Act (Edge Act and agreement corporations) and state-chartered commercial lending companies owned or controlled by foreign banks. These institutions are not subject to the Community Reinvestment Act and typically engage in relatively few activities covered by consumer protection laws.

good faith, any right under the Consumer Credit Protection Act. The Fair Housing Act prohibits discrimination in residential real estate-related transactions, including the making and purchasing of mortgage loans, on the basis of race, color, religion, national origin, handicap, familial status, or sex.

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

During 2008, the Board referred the following three matters to the DOJ:

- One referral involved an institution's policy of automatically discounting child support income, in violation of Regulation B, ECOA's implementing regulation. As this policy primarily affected female applicants, the policy also constituted discrimination on the basis of gender in violation of Regulation B and ECOA.

- Two referrals involved improper spousal guarantees. One referral involved a bank's policy and practice of obtaining spousal signatures on all automobile loans secured by jointly held collateral, in violation of Regulation B. In another matter, an institution obtained spousal guarantees for all of its agricultural and commercial loans, in violation of Regulation B.

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

Evaluating Pricing Discrimination Risk with HMDA Data and Other Information

When Home Mortgage Disclosure Act (HMDA) pricing data first became available in 2005, Board staff developed—and presently continues to refine—HMDA screens that identify institutions warranting further review based on an analysis of HMDA pricing data. Because HMDA data lack many factors that lenders routinely use to make credit decisions and set loan prices, such as information about a borrower's creditworthiness and loan-to-value ratios, HMDA data alone cannot be used to determine whether a lender discriminates. Thus, the Federal Reserve staff analyzes HMDA data in conjunction with other available supervisory information to evaluate a lender's risk for engaging in discrimination.

For the 2007 HMDA pricing data—the most recent year for which the data are publicly available—Federal Reserve examiners performed a pricing discrimination risk assessment for each institution that was identified through the HMDA screening process. These risk assessments considered not just the institution's HMDA data, but also the strength of the institution's fair lending compliance program; past supervisory experience with the institution; consumer complaints against the institution; and the presence of fair lending risk factors, such as discretionary pricing. On the basis of these comprehensive assessments, Federal Reserve staff determined which institutions would receive a targeted pricing review. Depending on the examination schedule, the targeted pricing review could occur as part of the institution's next examination or outside the usual supervisory cycle.

Even if an institution is not identified through HMDA screening, examiners may still conclude that it is at risk for engaging in pricing discrimination and may elect to perform a pricing review. The Federal Reserve supervises many institutions that are not required to report data under HMDA. Also, many of the HMDA-reporting institutions supervised by the Federal Reserve originate few higher-priced loans and, therefore, report very little pricing data. For these institutions, examiners analyze other available information to assess pricing-discrimination risk and, when appropriate, perform a pricing review.

During a targeted pricing review, staff analyze additional information, including potential pricing factors not available in the HMDA data, to determine whether any pricing disparity by race or ethnicity is fully attributable to legitimate factors, or whether any portion of the pricing disparity may be attributable to illegal discrimination. To perform these reviews, staff use analytical techniques that account for the increasing complexity of the mortgage market. Two industry changes in particular—the proliferation of product offerings and the increased use of risk-based pricing—have increased the complexity of fair lending reviews. To effectively detect discrimination by lenders offering an expanding range of products and credit-risk categories, the Federal Reserve increasingly uses statistical techniques. When performing a pricing review, staff typically obtain extensive proprietary loan-level data on all mortgage loans originated by the lender, including prime loans (that is, not just the higher-priced loans reported under HMDA). To determine how to analyze these data, the Federal Reserve studies the lender's specific business model, its pricing policies, and its product offerings. On the basis of the review of the lender's policies, staff determine which factors from the lender's data should be considered. A statistical model is then developed that takes those factors into account and is then tailored to that specific lender. Typically, a test for discrimination in particular geographic markets, such as metropolitan statistical areas (MSAs), is performed. Analyzing specific markets is important, as relatively small unexplained pricing disparities at the national level can mask much larger disparities in individual markets.

Monitoring Emerging Fair Lending Issues

During this period of financial turbulence in credit markets, many institutions have been reevaluating and tightening credit standards. Some consumer advocates have voiced concern that certain policies implemented by lenders to tighten credit standards may fall disproportionately on minorities. For example, some lenders have implemented tighter credit standards in specific geographic markets.

The Federal Reserve evaluates lenders' policies to ensure that lenders comply with the federal fair lending laws as they adjust their lending practices. It conducts reviews to evaluate whether lender policies may violate the fair lending laws by having an illegal disparate impact on minorities, and to identify steering, redlining, reverse redlining, and other fair lending violations.

Reporting on HMDA Data

HMDA, enacted by Congress in 1975, requires most mortgage lenders located in metropolitan areas to collect data about their housing-related lending activity, report the data annually to the federal government, and make the data publicly available. In 1989, Congress expanded the data required by HMDA to include information about loan applications that did not result in a loan origination, as well as information about the race, sex, and income of applicants and borrowers.

In response to the growth of the subprime loan market, the Federal Reserve updated Regulation C (HMDA's implementing regulation) in 2002. The revisions, which became effective in 2004, require lenders to collect price information for loans they originated in the higher-priced loan segment of the home mortgage market. When applicable, lenders report the number of percentage points by which a loan's annual percentage rate exceeds the threshold that defines "higher-priced loans." The threshold is 3 percentage points or more above the yield on comparable Treasury securities for first-lien loans, and 5 percentage points or more above that yield for junior-lien loans. The HMDA data, collected in 2004 and released to the public in 2005, provided the first publicly available loan-level data about loan prices. The Federal Financial Institutions Examination Council (FFIEC) released the 2007 HMDA data to the public in September 2008.

Analysis of the HMDA data for 2004 through 2007 found that the approach used to identify higher-priced loans could be improved in a way that could make the identification of higher-priced loans less sensitive to changes in the term-structure of interest rates and more consistent with the way mortgage prices are established. Consequently, Regulation C was modified in 2008 (effective for loan applications taken as of October 1, 2009) to define higher-priced loans as closed-end mortgages where the spread between the loan's APR and a survey-based estimate of rates currently offered on prime mortgage loans of a comparable type meets or exceeds 1.5 percentage points for a first-lien loan (or 3.5 percentage points for a subordinate-lien loan). The revised definition of higher-priced loans under Regulation C is the same as the definition of "higher-priced mortgage loan" adopted by the Federal Reserve Board under Regulation Z (Truth in Lending) in July 2008, when it modified this regulation to address unfair and deceptive practices in the closed-end segment of the mortgage market.

An article published in December 2008 by Federal Reserve staff in the *Federal Reserve Bulletin* uses the 2007 HMDA data to describe the market for higher-priced loans and patterns of lending across loan products, geographic markets, and borrowers and neighborhoods of different races and incomes.[17] The article focuses attention

17. Robert B. Avery, Kenneth P. Brevoort, and Glenn B. Canner, "The 2007 HMDA Data," *Federal Reserve Bulletin* vol. 94 (December 2008) www.federalreserve.gov/pubs/bulletin/2008/pdf/hmda07final.pdf.

on the effects of the mortgage market turmoil on the 2007 HMDA data, including a detailed assessment of the effects on the data of the unusually large number of institutions that discontinued operations in 2008.

As with the 2004–2006 HMDA data, the 2007 HMDA data show that most reporting institutions originated few if any higher-priced loans in 2007: 56 percent of the lenders originated less than 10 higher-priced loans that year, and 33 percent originated no higher-priced loans. The data also indicate that relatively few lenders accounted for most of the higher-priced loan originations in 2007. Of the 8,610 mortgage lenders reporting HMDA data, 987 made 100 or more higher-priced loans. The 10 mortgage lenders with the largest volume of higher-priced loans accounted for about 31 percent of all such loans in 2007.

As in earlier years, the HMDA data show that the majority of all loan originations were not higher priced; in fact, owing in large part to the mortgage market turmoil in 2007, the incidence of higher-priced lending fell from 28.7 percent in 2006 to 18.3 percent in 2007. Some of the decrease reflects the fact that (1) 169 lenders reporting HMDA data for 2006 data closed operations in 2007 and (2) although these lenders extended higher-priced loans in 2007, they did not report this lending activity. The effect of these 169 institutions on the 2007 data is explored in-depth in the *Federal Reserve Bulletin* article. The analysis shows that these lenders were heavily involved in the higher-priced segment of the mortgage market, but they did not account for most of the decline in the share of loans that were higher-priced. The 169 lenders that closed operations also tended to extend larger loans than did other lenders, and these lenders were more likely to lend in the western region of the United States and in U.S. metropolitan areas that experienced greater recent declines in home values and greater increases in mortgage delinquencies.

Loan pricing is a complex process that may reflect a wide variety of factors about the level of risk a particular loan or borrower presents to the lender. As a result, the prevalence of higher-priced lending varies widely.

First, the incidence of higher-priced lending varies by product type. For example, manufactured-home loans show the greatest incidence of higher-priced lending (more than half of these loans are higher priced), because these loans are considered higher risk. In addition, first-lien mortgages are generally less risky than comparable junior-lien loans: 14.0 percent of first-lien conventional home purchase loans were reported as higher-priced in 2007, compared with 21.6 percent of comparable junior-lien loans.

Second, higher-priced lending varies widely by U.S. geographic region, reflecting among other things differences in regional housing and economic conditions and differences in the credit-risk profiles of borrowers by region. As in 2004, 2005, and 2006, many of the metropolitan areas reporting the greatest incidence of higher-priced lending in 2007 were in the southern region of the country, including a number of areas in Texas. Several West Coast metropolitan areas also reported elevated incidences of higher-priced lending in 2007. Overall, in many metropolitan areas in the South, Southwest, and West, 25 percent to 40 percent of the homebuyers who obtained conventional loans in 2007 received higher-priced loans.

Third, the incidence of higher-priced lending varies greatly among borrowers of different races and ethnicities. In 2007—as in 2004, 2005, and 2006—

African-Americans and Hispanics were much more likely than non-Hispanic whites and Asians to receive higher-priced loans. For example, in the second half of 2007, 29.5 percent of African-American borrowers and 24.3 percent of Hispanic borrowers received higher-priced, first-lien conventional home purchase loans, compared with 9.2 percent of non-Hispanic white and 5.6 percent of Asian borrowers.[18] Because HMDA data lack information about credit risk and other legitimate pricing factors, it is not possible to determine from HMDA data alone whether the observed pricing disparities and market segmentation reflect discrimination. When analyzed in conjunction with other fair lending risk factors and supervisory information, however, the HMDA data can facilitate fair lending supervision and enforcement (see the "Fair Lending" discussion earlier in this chapter).

Examinations and Activities Related to the Community Reinvestment Act

The Community Reinvestment Act (CRA) requires that the Federal Reserve and other banking 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 CRA,[19]
- analyzes applications for mergers and acquisitions by state member banks and bank holding companies in relation to performance under CRA, and
- disseminates information on community development techniques to bankers and the public through community affairs offices at the Reserve Banks.

The Federal Reserve assesses and rates the performance of state member banks under CRA in the course of examinations conducted by staff at the 12 Reserve Banks. During the 2008 reporting period, the Reserve Banks conducted 243 CRA examinations: 35 of the banks were rated Outstanding, 204 were rated Satisfactory, 4 were rated Needs to Improve, and none was rated Substantial Noncompliance.[20]

Annual Release of CRA Distressed or Underserved List

In May 2008, the Federal Reserve and other federal bank and thrift regulatory agencies[21] released the 2008 list of "distressed" or "underserved" nonmetropolitan, middle-income geographies where bank revitalization or stabilization activities will receive consideration as "community development" under CRA. "Distressed" or "underserved" geographies are designated by the agencies in accordance with their CRA regulations. In accordance with 2005 CRA regulatory changes, the agencies annually designate "distressed" and "underserved" geographies, and post the list

18. Because the 169 lenders that discontinued operations in 2008 extended an unknown quantity of loans in the first part of 2007 but were all out of business by the second half of 2007, focusing on data for the second half of 2007 provides the most reliable assessment of lending patterns.

19. See testimony by Sandra F. Braunstein, director, Division of Consumer and Community Affairs (February 13, 2008), www.federalreserve.gov/newsevents/testimony/braunstein20080213a.htm.

20. The 2008 reporting period for examination data was July 1, 2007, through June 30, 2008.

21. Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, and Office of Thrift Supervision.

of these geographies on the FFIEC website.

Supervisory Practices regarding Banking Organizations Affected by Hurricanes

In September 2008, the Federal Reserve released a joint supervision and regulation (SR) and consumer affairs (CA) letter reaffirming a longstanding policy to use available regulatory flexibility to facilitate the recovery efforts of banking organizations affected by hurricanes. Banking organizations supervised by the Federal Reserve were encouraged to work with Reserve Bank supervisory and operations staff to resolve any operational issues resulting from Hurricane Gustav or any subsequent storms. The letter encouraged banking organizations to work with borrowers and other customers in affected areas, and recognized that banking organizations may have to take prudent steps to modify, extend, or restructure existing loans in areas affected by 2008 hurricanes.

A separate CA letter, issued in October 2008, extended for an additional 36 months the period for examiners to recognize community development activities related to revitalization or stabilization activities in the Gulf Coast areas affected by Hurricanes Rita and Katrina. The extension was based on the continued need for long-term recovery efforts in those communities affected by these hurricanes.

Analysis of Applications for Mergers and Acquisitions in relation to CRA

Throughout 2008, the Board considered applications for several significant banking mergers. In June, the Board approved the application by Bank of America Corporation, Charlotte, North Carolina, one of the nation's largest depository institutions, to acquire Countrywide Financial Corporation, Calabasas, California. Public meetings were held in Chicago, Illinois, and Los Angeles, California, to allow interested persons the opportunity to present oral testimony on the factors the Board must review under the Bank Holding Company Act.

Several other significant applications were

- an application by PNC Financial Services Group, Inc., Pittsburgh, Pennsylvania, to acquire Sterling Financial Corporation, Lancaster, Pennsylvania, which was approved in January;
- an application by Toronto-Dominion Bank, Toronto, Canada, to acquire Commerce Bancorp, Inc., Cherry Hill, New Jersey, which was approved in March;
- an application by Fifth Third Bancorp, Cincinnati, Ohio, to acquire First Charter Corporation, Charlotte, North Carolina, which was approved in April;
- an application by Wells Fargo & Company, San Francisco, California, to acquire Wachovia Corporation, Charlotte, North Carolina, which was approved in October;
- an application by Bank of America Corporation to acquire Merrill Lynch & Co., New York, New York, and its subsidiaries, Merrill Lynch Bank & Trust Co., FSB, New York, New York, and Merrill Lynch Bank USA, Salt Lake City, Utah, and Merrill Lynch Yatirim Bank A.S., Istanbul, Turkey, which was approved in November; and
- an application by PNC Financial Services Group, Inc., Pittsburgh, Penn-

sylvania, to acquire National City Corporation, Cincinnati, Ohio, which was approved in December.

The public submitted comments related to concerns about consumer compliance or CRA issues on nine applications. Many of the commenters referenced pricing information on residential mortgage loans and concerns that minority applicants were more likely than nonminority applicants to receive higher-priced mortgages. These concerns were largely based on observations of lenders' 2006 and 2007 HMDA pricing data. Other issues raised by commenters included incidents where minority applicants were allegedly denied mortgage loans more frequently than nonminority applicants, where potentially predatory lending was practiced by subprime and payday lenders, where branch closings created potentially adverse effects, and where lenders allegedly failed to effectively address the needs of low- and moderate-income communities. In addition, the Board also received comments about the adverse effects of increased foreclosures, especially in low- and moderate-income communities.

The Board considered an additional 59 expansionary applications by bank holding companies or state member banks with outstanding issues involving compliance with consumer protection statutes and regulations, including several related to CRA or fair lending laws. Of those applications, 55 were approved, three were withdrawn (including one with an adverse CRA rating), and one was returned due to an adverse consumer compliance rating.

The Board also considered several-nontraditional bank holding company applications from commercial entities with banking affiliates, including GMAC, LLC, in Detroit, Michigan, and CIT Group, Inc., in New York, New York. These entities were required to become bank holding companies in order to participate in the TARP program administered by the Department of the Treasury. CRA and consumer compliance performance records of those banking affiliates were factors considered by the Board in approving the applications.

Bank Examiner Training and Guidance

Ensuring that financial institutions comply with the laws that protect consumers and encourage community reinvestment is an important part of the Federal Reserve's bank examination and supervision process. As the number and complexity of consumer financial transactions have grown, training for examiners of the organizations under the Federal Reserve's supervisory responsibility has become even more crucial. The Board's consumer compliance examiner training curriculum consists of six courses, focused on various consumer protection laws, regulations, and examination concepts. In 2008, these courses were offered in 12 sessions where nearly 200 consumer compliance examiners and System staff members participated.

Board and Reserve Bank staff regularly review the core curriculum for examiner training, updating subject matter and adding new elements as appropriate. During 2008, staff conducted a curriculum review of the Consumer Compliance Examinations II (CA II) course in order to incorporate recent technical changes in policy and laws, along with changes in instructional delivery techniques. This course, renamed Real Estate Lending Examination Techniques, enables assistant examiners to focus on the fundamental skills necessary to determine a bank's compliance with consumer laws and regulations as they apply to real estate products. Examiners also learn about the Federal Reserve System policies and regulatory requirements associated with the residential real estate lending examination, including annual percentage rate calculations. In addition, Board and Reserve Bank staff conducted an interim curriculum review of the Consumer Affairs Risk-focused Examination Techniques course to update and realign technical content with the risk-focused examination procedures.

The consumer compliance examiner training curriculum was included in the System's content mapping initiative. These content maps provide stakeholders—staff development experts throughout the Federal Reserve—a "bird's eye view" of individual instructional learning objectives and topics for all of the courses included in the Federal Reserve's examiner commissioning program. The goal of the mapping initiative is to facilitate modularization of course content for "just-in-time training" and periodic sourcing of course content for core proficiency examinations.

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

In addition to providing core training, the examiner curriculum emphasizes the importance of continuing professional development. In 2008, the System initiated a powerful training delivery method, entitled Rapid Response, to better meet this need. In contrast to a much longer and more traditional training development and delivery model, technical and instructional content on time-sensitive or emerging topics are being designed, developed, and presented to System staff within days or weeks of any perceived need.

Statement to Financial Institutions Servicing Residential Mortgages on Reporting Loss Mitigation of Subprime Mortgages

In March 2008, DCCA and the Division of Banking Supervision and Regulation jointly released a statement that encourages financial institutions that service subprime mortgage loans to report their loss-mitigation activities consistent with uniform standards.[22] The statement encourages financial institutions to consider utilizing loan modification reporting standards provided by the HOPE NOW alliance, and emphasizes that standard reporting will help investors in securitized mortgages, including financial institutions, monitor foreclosure prevention efforts.[23] It also notes that consistent loan modification reporting will foster transparency in the securitization market and provide standardized data across the mortgage industry. The latest statement follows previous statements, issued by the Federal Reserve and the other federal banking agencies, that encourage financial institutions to

22. For purposes of this statement, the term "financial institutions" refers to state-chartered banks and their subsidiaries and bank holding companies and their nonbank subsidiaries.

23. HOPE NOW is an alliance between mortgage counselors, market participants, and servicers to create a unified, coordinated plan to reach and help as many homeowners in distress as possible. The Department of the Treasury and the Department of Housing and Urban Development encouraged the formation of this alliance. For more information, visit www.hopenow.com.

work constructively with residential borrowers who are financially unable to make contractual payment obligations on their home loans.[24]

Interagency Examination Procedures for the Department of Defense's Final Rule on Limitations on Consumer Credit Extended to Service Members and Dependents (Talent Amendment)

In July 2008, DCCA issued interagency examination procedures associated with establishing compliance with a Department of Defense (DoD) rule limiting the extension of consumer credit to service members and their dependents (the Talent Amendment). The examination procedures are intended to help determine a service provider's compliance with regulations issued by the DoD regarding limitations on the amount of consumer credit that may be extended to service members and dependents for payday loans, motor vehicle title loans, and tax refund anticipation loans. The rule applies to all persons engaged in the business of extending such credit and their assignees, and limits the amount that a creditor can charge service members and their dependents in connection with these transactions. Total charges must be expressed as a total dollar amount and as an annualized rate referred to as the "Military Annual Percentage Rate" or "MAPR," and which may not exceed 36 percent.

Interagency Examinations Concerning Affiliate Marketing Standards

In August 2008, DCCA issued interagency examination procedures associated with establishing compliance with a regulation implementing Section 624 of the Fair Credit Reporting Act (FCRA), as amended by the FACT Act. This "affiliate marketing regulation" generally prohibits a financial institution from using certain information received from an affiliate to make a solicitation to a consumer unless the consumer is given notice and a reasonable opportunity to opt out of such solicitations, and the consumer does not opt out. The final rule applies to information obtained from the consumer's transactions or account relationships with an institution's affiliate, from any application the consumer submitted to an affiliate, and from third-party sources, such as credit reports, if the information will be used to send marketing solicitations.

Interagency Examinations concerning Identity-Theft Red Flags and Other Regulations under the Fair Credit Reporting Act

In October 2008, DCCA and the Board's Division of Banking Supervision and Regulation jointly released interagency[25] examination procedures associated with establishing compliance with regulations implementing several sections of the FCRA, as amended by the FACT Act. The procedures estab-

24. See SR 07-16/CA 07-4, Statement on Loss Mitigation Strategies for Servicers of Residential Mortgages (September 4, 2007), www.federalreserve.gov/newsevents/press/bcreg/20070904a.htm, and SR 07-6/CA 07-1, Working with Mortgage Borrowers (April 17, 2007), www.federalreserve.gov/boarddocs/srletters/2007/SR0706.htm.

25. The Board of Governors of the Federal Reserve System, the Conference of State Bank Supervisors, the Federal Deposit Insurance Corporation, the National Credit Union Administration, the Office of the Comptroller of the Currency, and the Office of Thrift Supervision.

lished the agencies' expectations for financial institutions and examination staff with respect to the final rules and guidelines regarding identity-theft red flags as well as for other regulations under FCRA. The regulatory provisions focused on the duties of users of consumer reports regarding address discrepancies; the duties of financial institutions and creditors in detecting, preventing, and mitigating identity theft; the duties of card issuers regarding changes of address; and the duties of financial institutions regarding affiliate marketing practices.

A new identity-theft red-flags rule requires a financial institution to periodically determine whether it offers or maintains consumer accounts susceptible to identity theft. For accounts covered under the new rule, an institution must develop and implement a written identity-theft prevention program that detects, prevents, and mitigates identity theft involving new or existing covered accounts. The program must be appropriate to the size and complexity of the financial institution and the nature and scope of its activities. A new card-issuer rule requires credit and debit card issuers to develop reasonable policies and procedures to assess the validity of requests for changes of address followed closely by requests for additional or replacement cards. In such situations, the card issuer must not issue an additional or replacement card until it assesses the validity of the change of address in accordance with its policies and procedures.

Examinations Concerning Truth in Savings Disclosures

In July 2008, DCCA issued updated interagency examination procedures associated with establishing compliance with Regulation DD (Truth in Savings). The updated procedures incorporate recommendations made by the Government Accountability Office (GAO) in a report issued in March 2008 entitled *Bank Fees: Federal Banking Regulators Could Better Ensure That Consumers Have Required Disclosure Documents Prior to Opening Checking or Savings Accounts* (GAO-08-281). The study suggests that, despite regulatory disclosure requirements, consumers may find it difficult to obtain information about checking and savings account fees. As a result of the study, the GAO recommended that federal banking regulators assess the extent to which customers receive disclosures on fees, terms, and conditions prior to opening an account. It also recommended that the agencies incorporate appropriate steps into their oversight programs to ensure that disclosures continue to be made available.

The Board's updated Regulation DD examination procedures emphasize the existing requirement to provide full account disclosure (e.g., fees, terms, and conditions) to a consumer, upon request, whether or not the consumer is an existing or a prospective customer. The revisions also highlight that the disclosures should be provided at the time of the request if the consumer makes the request in person, or within 10 days if the consumer is not present when making the request. The revisions to the procedures also remind examiners that institutions must maintain evidence of compliance with Regulation DD, including the requirement to provide consumer disclosures upon request.

Interagency Examinations Concerning Electronic Fund Transfers

In August 2008, DCCA issued approved interagency examination procedures associated with establishing compliance with Regulation E (Electronic Fund Transfers). The updated procedures incorporate all amendments to Regulation E (and the Federal Reserve's Official Staff Commentary) since a prior version was released in 1998. Among other changes, the procedures clarify the responsibilities of parties involved in electronic check conversion transactions, include a requirement that consumers receive written notification in advance of these transactions, and revise the Official Staff Commentary to provide guidance on preauthorized transfers from consumers' accounts, error resolution, and disclosures at automated teller machines.

Interagency Statement on Lending to Creditworthy Borrowers

In November 2008, the agencies issued an Interagency Statement on Meeting the Needs of Creditworthy Borrowers. In implementing this statement, institutions were encouraged to lend prudently and responsibly to creditworthy borrowers, work with borrowers to preserve homeownership and avoid preventable foreclosures, adjust dividend policies to preserve capital and lending capacity, and employ compensation structures that encourage prudent lending. The statement emphasized that the agencies expect banking organizations to work with existing borrowers to avoid preventable foreclosures, which can be costly to both the organizations and to the communities they serve, and to mitigate other potential mortgage-related losses. The agencies urged that all lenders and servicers seek modifications that result in mortgages that borrowers will be able to sustain over the remaining maturity of their loans. The statement also emphasized that the agencies will fully support banking organizations as they work to implement effective and sound loan modification programs.

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 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—and any personal property securing the loan—are covered by flood insurance for the term of the loan. Moreover, the act requires the Board and other federal financial institution regulatory agencies to impose civil money penalties when it finds a pattern or practice of violations of the regulation. The civil money penalties are payable to the Federal Emergency Management Agency for deposit into the National Flood Mitigation Fund.

In March 2008, the agencies, along with the National Credit Union Administration (NCUA) and Farm Credit System, requested public comment on new and revised interagency questions and answers regarding flood insurance. The agencies proposed substantive as well as technical revisions to existing guidance to help financial institutions meet their responsibilities under federal flood insurance legislation and increase public understanding of the flood insurance regulations. Final action on these proposed revisions is expected in 2009.

During 2008, the Board imposed civil money penalties against four state member banks that violated the act. The penalties, which were assessed via consent orders, totaled $17,790.

Agency Reports on Compliance with Consumer Protection Laws

The Board reports annually on compliance with consumer protection laws by entities supervised by federal agencies. This discussion summarizes data collected from the 12 Federal Reserve Banks and the FFIEC member agencies (collectively, the FFIEC agencies), as well as other federal enforcement agencies.[26]

Regulation B (Equal Credit Opportunity)

The FFIEC agencies reported that 85 percent of institutions examined during the 2008 reporting period were in compliance with Regulation B, which equals the level of compliance for the 2007 reporting period. The most frequently cited violations involved

- the failure to properly collect information for government monitoring purposes, including data on race, ethnicity, sex, marital status, and age of applicants seeking credit primarily for the purchase or refinancing of a principal residence;
- the improper collection of information on applicant race, color, religion, national origin, or sex when not permitted by regulation;
- the improper requirement of the signature of an applicant's spouse or other person, other than a joint applicant, when the applicant qualified under the creditor's standards of creditworthiness for the amount and terms of the credit requested; and
- the failure to provide a credit applicant with a written notice of denial or other adverse action that contains the specific reason for the adverse action, along with other required information.

The FFIEC agencies did not issue any public enforcement actions specific to Regulation B during the reporting period.

The Farm Credit Administration, the Department of Transportation, the Securities and Exchange Commission, the Small Business Administration, and the Grain Inspection, Packers and Stockyards Administration of the United States Department of Agriculture reported substantial compliance among the entities they supervise.

Regulation E (Electronic Fund Transfers)

The FFIEC agencies reported that approximately 94 percent of the institutions examined during the 2008 reporting period complied with Regulation E, which equals the level of compliance for the 2007 reporting period. The most frequently cited violations involved the failure to take one or more of the following actions:

- determining whether an error occurred within 10 business days of receiving a notice of error from a consumer;
- giving a consumer provisional credit for the amount of an alleged error when an investigation into the alleged error could not be completed within 10 business days;
- providing initial disclosures that contain required information, including limitations on the types of transfers

26. Because the agencies use different methods to compile the data, the information presented here supports only general conclusions. The 2008 reporting period was July 1, 2007, through June 30, 2008.

permitted and error-resolution procedures, at the time a consumer contracted for an electronic fund transfer service; and

- providing a written explanation noting the consumer's right to request documentation that supports the institution's findings when a determination is made that no error has occurred.

The FFIEC agencies did not issue any formal enforcement actions specific to Regulation E during the period.

Regulation M (Consumer Leasing)

The FFIEC agencies reported that more than 99 percent of institutions examined during the 2008 reporting period complied with Regulation M, which equals the level of compliance for the 2007 reporting period. The FFIEC agencies did not issue any formal enforcement actions relating to Regulation M during the period.

Regulation P (Privacy of Consumer Financial Information)

The FFIEC agencies reported that 97 percent of the institutions examined during the 2008 reporting period complied with Regulation P, which equals the level of compliance for the 2007 reporting period. The most frequently cited violations involved the failure to take one or more of the following actions:

- providing a clear and conspicuous annual privacy notice to customers;
- disclosing the institution's information-sharing practices in initial, annual, and revised privacy notices; and
- providing customers with a clear and conspicuous initial privacy notice that accurately reflects the institution's privacy policies and practices, not later than when the customer relationship is established.

The FFIEC agencies did not issue any formal enforcement actions relating to Regulation P during the reporting period.

Regulation Z (Truth in Lending)

The FFIEC agencies reported that 81 percent of the institutions examined during the 2008 reporting period were in compliance with Regulation Z, compared with 82 percent in 2007. The most frequently cited violations involved the failure to accurately disclose one or more of the following:

- the finance charge in closed-end credit transactions;
- the amount financed by subtracting any prepaid finance charges;
- the payment schedule, including the number, amounts, and timing of payments scheduled to repay the obligations; and
- the annual percentage rate in closed-end credit transactions.

In addition, 146 banks supervised by the Federal Reserve, FDIC, OCC, and OTS were required, under the Interagency Enforcement Policy in Regulation Z, to reimburse a total of approximately $2.77 million to consumers for understating annual percentage rates or finance charges in their consumer loan disclosures.

The FFIEC agencies did not issue any public enforcement actions specific to Regulation Z during the reporting period. The Department of Transportation continued to prosecute one air carrier for its improper handling of credit card refund requests and other Federal Aviation Act violations.

Regulation AA (Unfair or Deceptive Acts or Practices)

The FFIEC agencies reported that more than 99 percent of the institutions examined during the 2008 reporting period were in compliance with Regulation AA, which equals the level of compliance for the 2007 reporting period. No formal enforcement actions relating to Regulation AA were issued during the reporting period.

Regulation CC (Availability of Funds and Collection of Checks)

The FFIEC agencies reported that 89 percent of institutions examined during the 2008 reporting period were in compliance with Regulation CC, compared with 90 percent for the 2007 reporting period. The most frequently cited violations involved the failure to take one or more of the following actions:

- making available on the next business day the lesser of $100 or the aggregate amount of checks deposited that are not subject to next-day availability;
- following procedures when invoking the exception for large-dollar deposits;
- providing required information when placing exception holds on accounts; and
- making funds from local and certain other checks available for withdrawals within the times prescribed by regulation.

The FFIEC agencies did not issue any public enforcement actions specific to Regulation CC during the reporting period.

Regulation DD (Truth in Savings)

The FFIEC agencies reported that 86 percent of institutions examined during the 2008 reporting period were in compliance with Regulation DD, compared with 88 percent for the 2007 reporting period. The most frequently cited violations involved the failure to take one or more of the following actions:

- providing additional required language in advertisements that contain the term “annual percentage yield”;
- using the term “annual percentage yield” if advertisements state rates of return;
- providing initial account disclosures containing all required information; and
- providing account disclosures in writing and in a form consumers may keep.

The FFIEC agencies did not issue any public enforcement actions specific to Regulation DD during the reporting period.

Consumer Complaints and Inquiries

The Federal Reserve investigates complaints against state member banks, and forwards complaints against other creditors and businesses to the appropriate enforcement agency. Each Reserve Bank investigates complaints against state member banks in its District. The Federal Reserve also responds to consumer inquiries on a broad range of banking topics, including consumer protection questions.

The Federal Reserve centralized processing of consumer complaints and inquiries in late 2007, with the establishment of Federal Reserve Consumer Help (FRCH). In 2008, its first full year of operation, FRCH processed 36,996 cases. Of these cases, 19,515 (53 percent) were inquiries and 17,481 (47 percent) were complaints, with most cases received directly from consumers. Approximately six percent were referred from other agencies.

While consumers can contact FRCH by phone, fax, mail, e-mail, or online (www.federalreserveconsumerhelp.gov/), most FRCH consumer contacts occurred by telephone. Nevertheless, online complaints submissions totaled 5,147 (29 percent) of all complaints received in 2008, and the online form received over 300,000 visits during the year.

Consumer Complaints

Complaints against state member banks totaled 5,520 in 2008. Most of these complaints, 2,411 (44 percent) were closed without investigation pending the receipt of additional information from consumers. Of the remaining 3,109 complaints, 2,173 (70 percent) involved unregulated practices and 936 (30 percent) involved regulated practices.

The Federal Reserve forwarded 11,966 complaints against other banks and creditors to the appropriate regulatory agencies for investigation. To minimize the time required to re-route complaints to these agencies, referrals were transmitted electronically.

Complaints against State Member Banks about Regulated Practices

The majority of regulated-practice complaints concerned checking account (28 percent) and credit card (26 percent) activity. The most common checking account complaints related to insufficient funds or overdraft charges and procedures (33 percent), funds availability (13 percent), and disputed withdrawals of funds (15 percent). The most common credit card complaints concerned billing error resolutions (14 percent), "other rates, terms and fees" (12 percent) and debt-collection practices (9 percent).

Complaints against State Member Banks That Involve Regulated Practices, by Classification, 2008

Classification	Number
Regulation AA (Unfair or Deceptive Acts or Practices)	117
Regulation B (Equal Credit Opportunity)	30
Regulation C (Home Mortgage Disclosure Act)	8
Regulation E (Electronic Funds Transfers)	116
Regulation M (Consumer Leasing)	3
Regulation P (Privacy of Consumer Financial Information)	41
Regulation Q (Payment of Interest)	0
Regulation Z (Truth in Lending)	247
Regulation BB (Community Reinvestment)	0
Regulation CC (Expedited Funds Availability)	122
Regulation DD (Truth in Savings)	71
Regulation V (Fair and Accurate Credit Transactions)	9
Fair Credit Reporting Act	72
Fair Debt Collection Practices Act	62
Fair Housing Act	3
National Flood Insurance Act/ Insurance Sales	6
Home Ownership Counseling	1
HOPA (Homeowners Protection Act)	0
Real Estate Settlement Procedures Act	18
Right to Financial Privacy Act	10
Total	**936**

Real estate-related complaints[27] made up 18 percent of total complaints. Of those, 48 percent related to home-purchase loans, 32 percent to home equity credit lines, and only one percent (or two complaints) concerned adjustable rate mortgages. The most common complaints related to real estate-related payment errors and delays (14 percent), "other rates, terms, and fees" (10 percent), and escrow account problems (9 percent).

27. Includes 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.

Complaints against State Member Banks That Involve Regulated Practices, 2008

Subject of complaint	All complaints		Complaints involving violations	
	Number	Percent	Number	Percent
Total	**936**	**100**	**44**	**5**
Discrimination alleged				
Real estate loans	10	1	1	0.1
Credit cards	1	0.1	0	0
Other loans	6	1	0	0
Nondiscrimination complaints[1]				
Credit cards	245	26	6	1
Checking accounts	264	28	16	2
Real estate loans	156	18	7	1

1. Only the top three product categories of nondiscrimination complaints are listed here.

Seventeen complaints (2 percent) alleged discrimination on the basis of prohibited borrower traits or rights (race, color, religion, national origin, sex, marital status, handicap, age, applicant income deriving from public assistance programs, or applicant reliance on Consumer Credit Protection Act provisions). Sixty-five percent of discrimination complaints were related to the race or national origin of the applicant or borrower.

In the substantial majority (80 percent) of investigated complaints against state member banks, gathered evidence revealed that banks correctly handled the situation. Of the remaining 20 percent, 5 percent were deemed law violations, 3 percent were general errors, and the remainder mainly involved factual disputes or litigated matters. The most common violations involved checking accounts and credit cards.

Unregulated Practices

As required by section 18(f) of the Federal Trade Commission Act, the Board continued to monitor complaints about banking practices not subject to existing regulations, with a focus on instances of potential unfair or deceptive practices. In 2008, the Board received 2,119 complaints against state member banks that involved these unregulated practices. Most complaints concerned credit card and checking account activity. More specifically, consumers most frequently complained about issues involving insufficient funds or overdraft charges and procedures (386), deposit forgery, fraud, embezzlement or theft (91), concerns about credit card interest rates, terms, and fees (87), and concerns about opening and closing deposit accounts (80).

Complaint Referrals to HUD

In 2008, the Federal Reserve forwarded three complaints to the Department of Housing and Urban Development that alleged violations of the Fair Housing Act.[28] The Federal Reserve's investigation of these complaints revealed no evidence of illegal credit discrimination.

Consumer Inquiries

In 2008, the Federal Reserve received 19,515 inquiries from consumers re-

28. In accordance with a memorandum of understanding between HUD and the federal bank regulatory agencies requiring that complaints alleging a violation of the Fair Housing Act be forwarded to HUD.

lated to a wide range of topics. Of these, 4,488 (23 percent) fell into the “other” category, with several inquiries related to personal and national economic conditions and several inquiries related to regulatory changes or proposals under consideration. The top three consumer protection issues documented with specific codes were the following: adverse action notices received pursuant to the Equal Credit Opportunity Act (13 percent), consumer protection regulations (7 percent), and preapproved credit solicitations (7 percent). Consumers were typically directed to other resources, including other federal agencies or written materials, to address their inquiries.

Outreach and Response to Community Development Needs in Historically Underserved Communities and Markets

The mission of the community affairs function within the Federal Reserve System is to promote community economic development and fair access to credit for low- and moderate-income communities and populations. A decentralized function, the Community Affairs Offices (CAOs) are maintained at each of the 12 Reserve Banks, where CAO staffs design activities in response to the needs of communities in the Districts they serve, with oversight of operations provided by Board staff. The CAOs focus on providing information and promoting awareness of investment opportunities to financial institutions, government agencies, and organizations that serve low- and moderate-income people and communities. Similarly, the Board’s CAO promotes and coordinates Systemwide community development efforts; in particular, Board community affairs staff focus on issues that have public policy implications.

In 2008, the Board’s regulatory and supervisory actions were augmented by the System’s Community Affairs staff activities to address the negative impact of foreclosures on individuals and communities. Community Affairs staff developed online Foreclosure Resource Centers on the websites of each Reserve Bank and the Board. These centers provide up-to-date information regarding resources available to distressed borrowers, local governments, and lenders. Community Affairs analysts and outreach specialists continued to use their longstanding networks of industry and community relationships to convene meetings and provide information to local community and business leaders, government officials, consumer and community groups, and others engaged in addressing the foreclosure issue locally. To complement these efforts, System research staff collected and analyzed data on real estate and subprime mortgage conditions, and provided regional foreclosure projections and in-depth analysis of the incidence of defaults within particular areas to support state and local government efforts to develop action plans under the Neighborhood Stabilization Program (NSP). In addition, visiting scholar Alan Mallach, of the Federal Reserve Bank of Philadelphia, published a discussion paper, *How to Spend $3.92 Billion: Stabilizing Neighborhoods by Addressing Foreclosed and Abandoned Properties.* The paper serves to assist states, counties, and cities in determining the best use of funds distributed under the Housing and Economic Recovery Act of 2008 (HERA).

Federal Reserve Community Affairs staff also hosted a number of events, conferences, and meetings on the topic of foreclosure in 2008. The System developed a conference series, *Renewal, Recovery, Rebuilding: A Federal*

Reserve System Foreclosure Series, to highlight issues and best practices in weak as well as strong housing markets (see *Foreclosures: Responding to Consumers and Communities in Crisis through the Federal Reserve's Home Mortgage Initiative* in the "Mortgage Credit" discussion earlier in this chapter). The culmination of the series, held at the Board's offices in Washington, D.C., were presentations on the challenges of valuing foreclosed properties, on the NSP program, and on the issuance of best practices for dealing with large numbers of foreclosures developed in communities such as Flint, Michigan and Youngstown, Ohio.

The System also continued to work with the HOPE NOW alliance, a collaboration of counselors, servicers, investors, and other mortgage market participants. Many Reserve Banks co-sponsored "foreclosure mitigation" events, bringing distressed borrowers together with counselors and mortgage servicers to discuss and, where possible, to implement loan compromises between borrowers and lenders. The largest such event drew more than 2,000 borrowers to Gillette Stadium in Foxboro, Massachusetts. The Federal Reserve Bank of Boston is working to track the success of the loan modifications that were arranged at that event and to better understand any limitations of the current modification structure. Similar events have either been held or are planned in other Reserve Bank districts.

The Board and System worked with NeighborWorks America on a unique partnership to (1) address the impact of foreclosures on neighborhoods by jointly developing the tools and training necessary to help local governments and nonprofit organizations, and (2) evaluate approaches and tailor responses to address the increase in foreclosures and real-estate-owned (REO) properties. The partnership, begun in May 2008, not only builds on an existing relationship with NeighborWorks (Federal Reserve staff serve on its Board of Directors), but also leverages the System's ability to conduct data analysis, research, and outreach to address issues related to neighborhood stabilization. As part of the partnership, the Board supported the development of a new website,[29] and new courses for the NeighborWorks Training Institute, which helps ensure effective management of REO properties. In addition to being offered as part of the Training Institute, these courses are designed to be portable so that they can be brought directly to communities in 2009.

Finally, the Community Affairs programs at all 12 Reserve Banks and the Board of Governors collaborated to publish *The Enduring Challenge of Concentrated Poverty: Case Studies from Communities Across the U.S.,* a project undertaken by Community Affairs in partnership with the Brookings Institution. The report was undertaken to develop a deeper understanding of the relationship between "poverty, people, and place." The Board hosted a policy forum to highlight issues raised in the case studies and to discuss place-based and people-based policy solutions, such as workforce development and education, to address problems prevalent in communities experiencing concentrated poverty.

Advice from the Consumer Advisory Council

The Board's Consumer Advisory Council—whose members represent consumer and community organiza-

29. See www.stablecommunities.org.

tions, the financial services industry, academic institutions, and state agencies—advises the Board of Governors on matters of Board-administered laws and regulations as well as other consumer-related financial services issues. Council meetings, open to the public, were held in March, June, and October. For a list of members of the Council, see the "Federal Reserve System Organization" section in this report; also, visit the Board's website for transcripts of Council meetings.[30]

Three significant topics of discussion for the Council in 2008 were

- the Board's proposal to establish new protections for consumers in the residential mortgage market through amendments to Regulation Z, which implements the Truth in Lending Act (TILA) and the Home Ownership and Equity Protection Act;
- the Board's proposal, under the Federal Trade Commission Act (FTC Act), to prohibit unfair or deceptive acts or practices by banks in connection with credit card accounts and overdraft services for deposit accounts; and
- issues related to home foreclosures, including loss-mitigation strategies, counseling initiatives, and community stabilization efforts.

Proposed Rules for Home Mortgage Loans

In its March meeting, the Council addressed various issues related to consumer protections proposed under Regulation Z (see the "Mortgage Credit" discussion earlier in this chapter).

30. See the Federal Reserve Board's Consumer Advisory Council webpage, www.federalreserve.gov/aboutthefed/cac.htm.

Some industry representatives endorsed the Board's approach to define subprime loans based on the annual percentage rate (APR) charged rather than on other loan features, but they expressed the view that the proposed definition would be too broad and would cover many prime loans. One member recommended using a mortgage-rate (instead of Treasury-securities) index to set the threshold and apply a different spread for first-lien loans. Another member commented that any APR threshold or other definitional trigger for higher-priced loans would be, at times, under-inclusive or over-inclusive, and expressed a preference for erring on the side of over-inclusion.

Several consumer representatives expressed support for the Board's proposal under which a creditor would be prohibited from engaging in a "pattern or practice" of lending based on the collateral without regard to the consumer's ability to make scheduled payments. They emphasized the importance of establishing rules for prudent underwriting. Offering the perspective of community banks, an industry representative commented that such institutions generally follow rigorous underwriting standards, but noted that they sometimes need flexibility to adjust their practices to meet the needs of particular customers. Regarding the proposal's "pattern or practice" provision, members expressed concern about the difficulty of establishing proof of a pattern or practice in litigation, and urged the Board to clarify what constitutes a pattern or practice. Some members noted that the "pattern or practice" provision sets up significant hurdles for individual consumers to bring cases against lenders. Members presented a variety of views about the idea of designating a bright-line presumption of a violation, or a safe harbor, for repayment ability at a 50 percent debt-to-income (DTI) ratio. Several members cautioned against using the 50 percent DTI ratio or another specific number in the regulation.

Several members endorsed the use of third-party documentation to verify income and assets, noting that such flexibility would help address the needs of different borrowers. A consumer representative urged the Board to clarify whether nontraditional forms of documentation from small- or micro-business owners would be acceptable under the regulation.

Various members endorsed a complete ban on prepayment penalties for higher-priced loans. They expressed concern that prepayment penalties are not balanced by lower interest rates for subprime borrowers, who are often the least financially sophisticated consumers and for whom there is no well-known interest-rate benchmark for negotiating better loan terms. Several industry representatives expressed the view that, although there have been problems with prepayment penalties in the subprime market, they can be useful tools and yield lower interest rates for consumers. Industry representatives suggested that prepayment penalties can be effectively regulated, such as through better disclosure and limits on duration or amount. Both consumer and industry representatives agreed that the five-year duration permitted in the proposal for penalties would be too long, and considered it not reflective of current best practices in the industry.

There was general support among Council members for proposed mandatory escrow accounts as a way to help ensure the successful performance of higher-priced loans. In considering the option to cancel escrow accounts 12 months after consummation, one member expressed the view that 12 months would be too short, especially for more financially vulnerable borrowers or first-time homeowners. Several industry representatives noted the potential impacts of mandatory escrow accounts on financial institutions' business processes.

In the discussion of yield-spread premiums, some members expressed support for requiring the same compensation disclosures for all loan originators in order to facilitate better comparisons among products and services as well as to better ensure fair lending. Other members supported applying the proposed disclosure rules only to brokers. Some members spoke against the idea of establishing an agreement characterized by a specific compensation figure before the loan application is received. In the absence of key information about the borrower or the loan product, the broker would have to disclose the highest possible fee, which would not be useful to the particular borrower. One member noted that, in the subprime market, loan applications and fees are often taken at closing, and recommended that the Board consider another trigger for the written agreement that would more likely occur earlier.

Consumer representatives generally supported the proposal's advertising restrictions. They specifically endorsed a "bright-line" rule for use of the word "fixed" in advertisements, permitting it only if the rate or payment would not change for the entire length of the loan.

Members expressed support for the proposed rules regarding servicing practices. An industry member noted that most of the rules, such as crediting payments as of the date of receipt and not pyramiding late fees, are consistent with current best practices in the industry. Other members expressed concern about the difficulty of accurately disclosing third-party fees, which may change without notice, and potential compliance challenges if a re-disclosure is required whenever a third-party fee changes.

There was general consensus regarding the provisions prohibiting coercion of appraisers, with one member noting that the rule should highlight the more subtle ways of unduly influencing the appraisal process.

Under the proposal, creditors would be required to provide transaction-specific cost disclosures earlier. Some members cautioned that providing disclosures earlier would not clarify loan terms for consumers, who could end up with several sets of disclosures as various details changed during the loan process. One member expressed concern about the proposed rule regarding what fees can be collected before early disclosures are provided. Another member stated that providing the cost disclosures early in the application process would not address a key issue, which is that estimates generally change by the time loans close.

Proposed Rules for Credit Cards and Overdraft Services

In its June and October meetings, the Council's discussions focused on various aspects of the Board's proposed rules to prohibit unfair or deceptive acts or practices in connection with credit card accounts and overdraft services for deposit accounts (see the "Credit Cards" discussion earlier in this chapter).

Credit Card Accounts

Some industry representatives expressed concern about labeling certain practices that are used widely among financial institutions as unfair or deceptive, and urged the Board to consider issuing many of the credit card rules under TILA. Other members supported issuing the rules under the FTC Act rather than TILA. They expressed the view that institutions would face little new litigation risk from the proposal, especially if the regulations have clear safe harbors.

In the discussion of payment allocation, consumer representatives encouraged the Board to require that payments be allocated first to balances with the highest APR. Several members commented that a single allocation method would make credit pricing more transparent to consumers and would provide a level playing field for creditors. Some consumer representatives emphasized the benefit to less sophisticated consumers of allocating payments first to the highest APR balance.

Industry representatives supported the current industry practice of allocating payments to the lowest APR balance first, expressing the view that the proposed pro rata and equal portion allocation methods would be confusing to consumers. They also cautioned that switching to the proposed allocation methods likely would lead to higher credit costs and reduced access to credit as institutions seek to offset losses in revenue. Some members urged the Board, in applying the approved payment-allocation methods, to treat promotional rate balances and deferred interest balances in the same way as other balances.

Several members supported the proposal to restrict creditors' ability to increase rates on existing balances, emphasizing that it would provide safeguards for both consumers and lenders. They noted that consumers may not be able to prevent risk-based repricing solely through their behavior because often they lack information about how credit scores are determined and can change. Industry representatives opposed the proposal, saying it would eliminate a key risk-management tool for creditors. They stated that, due to lost revenues, overall pricing for credit may increase and credit availability may decline if creditors cannot apply risk-based pricing to their riskiest customers. Industry representatives also urged the Board to consider expanding the circumstances where existing balances can be repriced to include other consumer behavior that raises concerns about a borrower's risk.

There was general support among the Council members for restricting the practice of financing security deposits and initial fees that use up most of a borrower's credit limit. Several members expressed concern that the percentages in the proposed rule would be too high, and they cautioned that those thresholds could become the standard. One member recommended that the financing of security deposits and fees should be spread out beyond the proposed 12 months.

Members disagreed about the appropriateness of the proposed safe harbor for mailing periodic statements 21 days before a payment's due date, particularly given the trend toward electronic payments. There was general agreement among the members about the proposed provisions regarding cut-off times and due dates for mailed payments. Several members recommended that the rule apply to all types of payments. Consumer representatives endorsed the ban on two-cycle billing, and expressed support for the proposed provision regarding firm offers of credit.

Overdraft Services

The Board's overdraft services proposal would prohibit banks from imposing a fee for paying an overdraft unless the bank provides the consumer with an opportunity to opt out of the overdraft payment and the consumer has not done so. Industry representatives recommended issuing the rules under Regulation E (Electronic Fund Transfer Act) rather than the FTC Act, expressing the view that overdraft services do not constitute an unfair or deceptive practice because they provide important benefits to consumers. Industry representatives supported the proposed right to opt out of the payment of overdrafts and described potential operational difficulties with an opt-in. They also suggested additional exceptions under which overdrafts should be paid and a fee charged even if the consumer has opted out.

Several other members urged the Board to require institutions to gain consumers' affirmative consent for overdraft payments with an opt-in, commenting that banks would be more likely to provide clear information about overdraft services to their customers. They expressed concern that consumers are currently enrolled in overdraft programs automatically, which they described as an expensive form of credit that often poses more harm than benefits for low- and moderate-income consumers, especially college-age students and the elderly. Some members supported the proposed rule requiring institutions to allow consumers to opt out of overdrafts for ATM and point-of-sale transactions without opting out of overdraft services for checks. Industry representatives opposed the partial opt-out, and urged the Board to treat all transactions in the same way. There was general support for requiring notice of the opt-out at least once for each periodic statement cycle in which an overdraft fee or charge occurs.

Industry representatives commented on the operational challenges and the potential impact on consumers of a provision that would prohibit banks from imposing a fee when an account is overdrawn solely because a hold was placed on funds in the consumer's deposit account. Consumer representatives supported the provision, expressing the view that institutions should be able to readily address any operational issues. There was general consensus on the importance of faster settlement of authorized transactions so that debit holds can be released more quickly. Several members also expressed the view that consumers should receive better notice of debit holds from merchants at the point of sale so they can choose whether and how to proceed with the transaction.

In a discussion of disclosures related to overdraft services, several members emphasized the importance of disclosing, on the opt-out notice, any alternatives for the payment of overdrafts that the institution offers. Consumer representatives expressed support for disclosing on periodic statements the aggregate dollar amounts charged for overdraft fees and returned-item fees. Some members also stated that institutions, when they provide account-balance information, should not be permitted to include funds that would be available through overdrafts.

Foreclosure Issues

In its March and October meetings, the Council also addressed various issues related to the surge in foreclosures, including loss-mitigation strategies, counseling initiatives, and community stabilization efforts. The October discussion focused on two initiatives in HERA: the HOPE for Homeowners Program and the NSP.

In March, consumer representatives expressed concern about the capacity of servicers to engage in loss mitigation on a large scale. They stated that, despite some recent improvements, servicers generally are overwhelmed. Members pointed to other areas of concern regarding servicers, such as the lack of coordination between servicers' foreclosure and loss-mitigation departments as well as pressure for repayment workouts rather than modifications of loan rates or principal amounts. The efforts of the HOPE NOW alliance—coordinating servicer and lender work with borrowers and collecting and sharing data—were also highlighted.

In October, there was general agreement that the results of loss-mitigation efforts by servicers have been mixed, with some improvement in responsiveness but also continued backlogs and capacity issues. Several members also expressed concern about the voluntary nature of the HOPE for Homeowners Program for lenders, though industry representatives noted that the program is only one tool among various loss-mitigation strategies.

Several members expressed support for a more comprehensive plan to stem the increasing wave of foreclosures, including a moratorium on foreclosures and more systematic loan modifications. They urged the Board to use its influence with lenders and servicers to encourage them to pursue sustainable loan modifications. One member expressed support for court-ordered modifications of mortgages for principal residences. Several consumer representatives suggested that institutions participating in the Troubled Assets Relief Program (TARP) should be required to modify loans.

Industry representatives expressed the view that servicers and lenders increasingly recognize the importance of doing loan modifications that are sustainable for the long term, but a consumer advocate stated that many modifications still have too short-term a time frame. Several consumer representatives endorsed a focus on principal write-downs as a key way to achieve sustainable modifications. Industry representatives pointed to the difficulties in doing principal write-downs, and noted that focusing on affordability in loss mitigation can preserve homeownership even if the loss of equity is not addressed.

There was a consensus that timely, accurate, comprehensive, and accessible information about the scope of delinquencies and defaults and the outcomes of loss-mitigation efforts are critical to an effective analysis of foreclosure issues and proposed policies or solutions. Noting that some key data on these issues are privately held, several members supported the idea of a survey conducted by the Federal Reserve to ensure the credibility and comprehensiveness of the data collected.

Several members expressed concerns about the proliferation of firms that offer loan-modification or foreclosure-rescue services at high upfront fees, and consumer representatives described the need for greater support for counseling agencies.

Various members described the negative impact of the rising number of foreclosures in their communities, and expressed concern about the effects of foreclosure concentrations in low- and moderate-income neighborhoods. They also described various local efforts to respond to foreclosures, such as programs to provide counseling to struggling borrowers and initiatives to reclaim and rehabilitate foreclosed properties. Some consumer representatives recommended giving favorable Community Reinvestment Act (CRA) credit to institutions to address foreclosure-related issues, which could prompt banks to go beyond their usual work in low-income areas and take on initiatives related to foreclosures. Another member suggested that banks could get favorable CRA credit for foreclosure efforts that fall outside their assessment area, similar to what was permitted after Hurricane Katrina.

There was general support for the wide array of activities permitted under the NSP, which will give communities various strategies to address their specific challenges. One member emphasized the need to pay attention to fair-housing issues amid the NSP implementation. Another member commended the intent of the NSP but cautioned that its goals cannot be met if financial institutions do not resume lending for community development projects. He expressed the view that such lending could be tied to the receipt of TARP funds or could be accomplished through the network of the Community Development Financial Institutions Fund. The members generally agreed on the need for comprehensive and accurate data on real-estate-owned properties, so that communities can more effectively develop and evaluate their stabilization strategies.

Other Discussion Topics

At the Council's June meeting, members provided feedback on proposed regulations from the Board and the Federal Trade Commission to implement a provision of the Fair and Accurate Credit Transactions Act of 2003 (which amends the Fair Credit Reporting Act) that addresses risk-based pricing. An industry representative commended the Board for its attention to the goal of operational feasibility in implementing the proposal. Some members expressed support for defining "material terms" primarily with reference to the annual percentage rate because the bright-line test would make it easier for creditors to identify consumers who must receive risk-based pricing notices. In considering the proposed tests for identifying which consumers should receive notices, one member urged the Board to set forth a test to identify those consumers receiving less-favorable terms across the spectrum of creditors. Several members expressed concern about the vagueness of the proposed definition of "materially less favorable."

One member commented that while the risk-based pricing notices would aid consumers by encouraging them to check their consumer reports, they would benefit further if the notices advised that other factors also can affect the credit terms and if the notices gave examples of those factors. Members expressed divergent views about the Board's interpretation that the statute gives a consumer the right to request a free consumer report upon receipt of a risk-based pricing notice. An industry representative commended the Board for providing alternative approaches by which creditors could determine which consumers must receive risk-based pricing notices. Several members expressed support for the proposal's exceptions for prescreened credit solicitations and credit-score disclosures. One member urged the Board to require a notice for consumers who lack credit files, so that they might become aware of their lack of credit records and receive information on how to establish traditional credit files.

At the Council's October meeting, members discussed recent financial developments, including the challenges faced by banks and nonbank financial institutions, disruptions in credit markets, and the recently launched TARP. In the discussion of the challenges and opportunities presented by the current financial crisis, several members cited the need to encourage the flow of credit to communities, especially to low-income communities. They also highlighted the opportunity for Community Development Fund Institutions, community development banks, minority banks, and credit unions to continue their responsible lending activities, particularly in distressed communities. Members also commented on the importance of maintaining access to credit for small businesses. Both consumer and industry representatives emphasized the need for greater accountability from institutions that receive TARP funds to ensure that there are benefits for low- and moderate-income areas.

Another October discussion topic was the Board's analysis of the 2007 Home Mortgage Disclosure Act (HMDA) data (see the "Evaluating Pricing Discrimination Risk with HMDA Data and Other Information" discussion earlier in this chapter). Several consumer representatives pointed to the HMDA statistics (about higher-priced loan originations by independent mortgage companies and the percentage of higher-priced loans made to CRA-eligible customers) as evidence that CRA did not cause the subprime mortgage crisis. Various members urged the Board to use its data and analysis to rebut misperceptions about CRA, especially in connection with the subprime crisis, and to highlight the positive outcomes of CRA for low- and moderate-income individuals and communities. ■

Federal Reserve Banks

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

Developments in Federal Reserve Priced Services

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

The Monetary Control Act of 1980 requires that the Federal Reserve establish fees for priced services provided to depository institutions so as to recover, over the long run, all direct and indirect costs actually incurred as well as the imputed costs that would have been incurred, including financing costs, taxes, and certain other expenses, and the return on equity (profit) that would have been earned if a private business firm had provided the services.[1] The imputed costs and imputed profit are collectively referred to as the *private-sector adjustment factor* (PSAF).[2] Over the past 10 years, Reserve Banks have recovered 98.7 percent of their priced services costs, including the PSAF (see table, next page).[3]

In 2008, Reserve Banks recovered 98.5 percent of total priced services costs of $886.9 million, including the PSAF.[4] Revenue from priced services amounted to $773.4 million, other income was $100.4 million, and costs were $820.4 million, resulting in net income from priced services of $53.4 million.[5]

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1. Financial data reported throughout this chapter—including revenue, other income, costs, income before taxes, and net income—can be linked to the pro forma financial statements at the end of this chapter.

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

3. Effective December 31, 2006, the Reserve Banks implemented the Financial Accounting Standards Board's Statement of Financial Accounting Standards (SFAS) No. 158, *Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans,* which has resulted in the recognition of a $690.6 million reduction in equity related to the priced services' benefit plans through 2008. Including this reduction in equity, which represents a decline in economic value, results in cost recovery of 92.0 percent for the 10-year period. For details on how implementing SFAS No. 158 affected the pro forma financial statements, refer to notes 3 and 5 at the end of this chapter.

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

5. *Other income* is revenue from investment of clearing balances net of earnings credits, an amount termed net income on clearing balances.

Priced Services Cost Recovery, 1999–2008

Millions of dollars except as noted

Year	Revenue from services[1]	Operating expenses and imputed costs[2]	Targeted return on equity	Total costs	Cost recovery (percent)[3, 4]
1999	867.6	775.7	57.2	832.9	104.2
2000	922.8	818.2	98.4	916.6	100.7
2001	960.4	901.9	109.2	1,011.1	95.0
2002	918.3	891.7	92.5	984.3	93.3
2003	881.7	931.3	104.7	1,036.1	85.1
2004	914.6	842.6	112.4	955.0	95.8
2005	994.7	834.7	103.0	937.7	106.1
2006	1,031.2	875.5	72.0	947.5	108.8
2007	1,012.3	913.3	80.4	993.7	101.9
2008	873.8	820.4	66.5	886.9	98.5
1999–2008	9,377.4	8,605.3	896.3	9,501.7	98.7

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

1. For the 10-year period, includes revenue from services of $8,774.1 million and other income and expense (net) of $603.3 million.

2. For the 10-year period, includes operating expenses of $8,092.7 million, imputed costs of $171.3 million, and imputed income taxes of $341.3 million.

3. Revenue from services divided by total costs.

4. For the 10-year period, cost recovery is 92.0 percent, including the net reduction in equity related to FAS 158 reported by the priced services in 2008.

Commercial Check-Collection Service

In 2008, Reserve Banks recovered 97.8 percent of the total costs of their commercial check-collection service, including the PSAF. Reserve Banks' operating expenses and imputed costs totaled $647.1 million, of which $14.1 million was attributable to the transportation of commercial checks between Reserve Bank check-processing offices. Revenue amounted to $605.2 million, of which $11.0 million was attributable to estimated revenues derived from the transportation of commercial checks between Reserve Bank check-processing offices, and other income was $78.4 million. The resulting net income was $36.5 million. Check-service fee revenue in 2008 decreased $99.8 million from 2007.

Reserve Banks handled 9.5 billion checks in 2008, a decrease of 4.6 percent from 2007 (see table, opposite page). The decline in Reserve Bank check volume is consistent with nationwide trends away from the use of checks and toward greater use of electronic payment methods.[6] Of all the checks presented by Reserve Banks to paying banks in 2008, 75.9 percent were deposited and 53.9 percent were presented using Check 21 products, compared with 42.2 percent and 24.6 percent, respectively, in 2007.[7] By year-end 2008, this growth resulted in 91.1 percent of Reserve Bank check deposits and 70.5 percent of Reserve

6. The Federal Reserve System's retail payments research suggests that the number of checks written in the United States has been declining since the mid-1990s. For details, see Federal Reserve System, "The 2007 Federal Reserve Payments Study: Noncash Payment Trends in the United States, 2003-2006" (December 2007), www.frbservices.org/files/communications/pdf/research/2007_payments_study.pdf.

7. The Reserve Banks also offer non-Check 21 electronic-presentment products. In 2008, 8.4 percent of Reserve Banks' deposit volume was presented to paying banks using these products.

Activity in Federal Reserve Priced Services, 2006–2008
Thousands of items

Service	2008	2007	2006	Percent change	
				2007 to 2008	2006 to 2007
Commercial check	9,545,424	10,001,289	11,083,122	–4.6	–9.8
Commercial ACH	10,040,388	9,363,429	8,230,782	7.2	13.8
Fedwire funds transfer	134,220	137,555	135,227	–2.4	0.9
National settlement	469	505	470	7.2	7.4
Fedwire securities transfer	11,717	10,110	9,053	15.9	11.7

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.

Bank check presentments being made through Check 21 products.

In November 2008, the Federal Reserve Banks announced that the System would consolidate to a sole site for paper-check-processing and check-adjustments operations. These announcements are part of the Reserve Banks' multiyear initiative, begun in 2003, to reduce the number of offices at which Banks process checks and in order to meet their long-run cost-recovery requirement under the Monetary Control Act of 1980. Because of the rapid adoption of electronic check processing, the Reserve Banks were able to reduce their check-processing infrastructure more quickly than originally expected. The consolidations made it possible for Reserve Banks, in December 2008, to discontinue their dedicated check-transportation routes between Reserve Bank offices. Remaining paper checks that must be shipped between Reserve Banks are transported by the U.S. Postal Service or air freight services.

Commercial Automated Clearinghouse Services

In 2008, the Reserve Banks recovered 101.5 percent of the total costs of their commercial ACH services, including the PSAF. Reserve Bank operating expenses and imputed costs totaled $88.8 million. Revenue from ACH operations totaled $86.6 million and other income totaled $11.3 million, resulting in net income of $9.0 million. The Banks processed 10.0 billion commercial ACH transactions, an increase of 7.2 percent from 2007.

In 2008, nationwide ACH volumes continued to grow, but at a slower rate, as volume increases associated with electronic check-conversion applications—including checks converted at lockbox locations or at the point of purchase—decelerated.

Fedwire Funds and National Settlement Services

In 2008, Reserve Banks recovered 100.4 percent of the costs of their Fedwire Funds and National Settlement Services, including the PSAF. Reserve Bank operating expenses and imputed costs totaled $62.3 million in 2008. Revenue from these operations totaled $59.9 million, and other income amounted to $7.9 million, resulting in net income of $5.5 million.

Fedwire Funds Service

The Fedwire Funds Service allows participants to use their balances at Reserve Banks to transfer funds to other participants. In 2008, the number of Fedwire funds transfers originated by depository institutions decreased 2.4 percent from 2007, to approximately 134.2 million. The average daily value of Fedwire funds transfers in 2008 was $3.0 trillion.

In 2008, the Reserve Banks announced plans to implement enhanced Fedwire Funds Service message formats for cover payments and for payments containing remittance information by November 2009 and late 2010, respectively. These changes are intended to improve payment transparency and efficiency, and provide additional value-added services to Fedwire Funds Service participants.

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 2008, the service processed settlement files for 47 local and national private-sector arrangements, primarily check clearinghouse associations. The Reserve Banks processed slightly more than 15,000 files that contained almost 469,000 settlement entries for these arrangements in 2008.

Fedwire Securities Service

In 2008, the Reserve Banks recovered 102.5 percent of the total costs of their Fedwire Securities Service, including the PSAF. The Reserve Banks' operating expenses and imputed costs for providing this service totaled $22.2 million in 2008. Revenue from the service totaled $21.6 million, and other income totaled $2.9 million, resulting in net income of $2.3 million.

The Fedwire Securities Service allows participants to transfer electronically to other participants in the service certain securities issued by the U.S. Treasury, federal government agencies, government-sponsored enterprises, and certain international organizations.[8] In 2008, the number of non-Treasury securities transfers processed via the service increased 15.9 percent from 2007, to approximately 11.7 million.

Float

The Federal Reserve had daily average credit float of $1,193.4 million in 2008, compared with credit float of $604.9 million in 2007.[9]

Developments in Currency and Coin

The Federal Reserve Banks issue the nation's currency (in the form of Federal Reserve notes) and distribute coin through depository institutions. The Reserve Banks also receive currency and coin from circulation through these institutions. The Reserve Banks received 36.7 billion Federal Reserve notes from circulation in 2008, a

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 the section "Debt Services" later in this chapter.

9. Credit float occurs when the Reserve Banks present items for collection to the paying bank prior to providing credit to the depositing bank, and debit float occurs when the Reserve Banks credit the depositing bank prior to presenting items for collection to the paying bank.

3.4 percent decrease from 2007, and made payments of 37.7 billion notes into circulation in 2008, a 2.1 percent decrease from 2007. They received 64.4 billion coins from circulation in 2008, a 1.9 percent increase from 2007, and made payments of 72.3 billion coins into circulation, a 4.5 percent decrease from 2007.

Since mid-September, the crisis in financial markets has heightened demand for $100 notes among both international and domestic users.[10] In 2008, payments exceeded receipts by 1.0 billion notes, most of which were of the $100 denomination. For this reason, the value of currency in circulation, as of December 31, increased 7.8 percent from December 31, 2007, to $853.2 billion.[11]

Board staff worked with the Treasury Department, the U.S. Secret Service, and the Reserve Banks' Currency Technology Office to develop more-secure designs for the $5 and $100 Federal Reserve notes. Reserve Banks issued the redesigned $5 note in March 2008. The Treasury is continuing to develop a new design for the $100 note.

Consistent with the requirements of the Presidential $1 Coin Act, the Federal Reserve and the Mint conducted additional outreach to depository institutions and coin users to gauge demand for the coins and to anticipate and eliminate obstacles to the efficient circulation of $1 coins. Board staff worked with the Reserve Banks' Cash Product Office to address other coin distribution and management issues, including increased coin inventories, resulting partially from the United States Mint's commemorative circulating coin programs.

Reserve Banks continued implementing a program to extend the useful life of the System's BPS 3000 high-speed currency-processing machines. The program will replace the operating systems of the current equipment, which will help improve processing efficiency. Reserve Banks are in the early stages of adopting a new cash automation platform, known as the currency and coin handling environment, or CACHE. The new system will facilitate control and improve efficiency in cash operations, provide an expansive and responsive management information reporting system with superior and flexible report tools, facilitate business continuity and contingency planning, and enhance the support provided to customers and business partners.

Developments in Fiscal Agency and Government Depository Services

As fiscal agents and depositories for the federal government, the Federal Reserve Banks provide services related to the federal debt, help the Treasury collect funds owed to the federal government, process electronic and check payments for the Treasury, maintain the Treasury's bank account, and invest Treasury balances. Reserve Banks also provide certain fiscal agency and depository services to other entities.

The total cost of providing fiscal agency and depository services to the Treasury and other entities in 2008 amounted to $461.1 million, compared with $458.2 million in 2007 (see table, next page). Treasury-related costs

10. The Federal Reserve measures demand for U.S. currency in terms of growth in net payments (payments to circulation minus receipts from circulation). International demand for U.S. currency is influenced primarily by political and economic uncertainties associated with certain foreign currencies, which contrast with the U.S. dollar's relatively high degree of stability.

11. This increase is double the 3.9 percent average annual increase over the last five years.

Expenses of the Federal Reserve Banks for Fiscal Agency and Depository Services, 2006–2008

Thousands of dollars

Agency and service	2008	2007	2006
DEPARTMENT OF THE TREASURY			
Bureau of the Public Debt			
Treasury retail securities	72,373.7	74,149.2	73,931.4
Treasury securities safekeeping and transfer	9,304.7	8,687.7	7,535.2
Treasury auction	37,071.6	41,372.0	23,594.9
Computer infrastructure development and support	4,463.7	3,558.7	3,853.1
Other services	909.9	724.5	1,578.7
Total	124,123.7	128,492.1	110,493.2
Financial Management Service			
Payment services			
Government check processing	16,366.9	17,522.7	20,918.6
Automated clearinghouse	6,530.5	6,050.3	5,823.1
Fedwire funds transfers	108.3	116.8	123.1
Other payment programs	85,212.8	81,636.9	69,696.8
Collection services			
Tax and other revenue collections	37,412.1	38,254.5	37,095.5
Other collection programs	11,767.6	12,483.6	14,122.6
Cash-management services	51,620.6	46,093.6	48,320.2
Computer infrastructure development and support	65,058.6	70,999.9	67,046.4
Other services	7,577.4	**7,245.7**	7,414.8
Total	281,654.8	**280,404.2**	270,561.2
Other Treasury			
Total	24,073.1	**18,258.6**	16,786.3
Total, Treasury	429,851.5	427,154.9	397,840.7
OTHER FEDERAL AGENCIES			
Department of Agriculture			
Food coupons	2,676.3	2,706.0	2,929.8
United States Postal Service			
Postal money orders	8,257.7	8,913.2	9,334.4
Other agencies			
Other services	20,358.4	19,412.0	15,977.1
Total, other agencies	31,292.3	31,031.1	28,241.4
Total reimbursable expenses	461,143.9	458,186.0	426,082.1

NOTE: Numbers in bold reflect restatements due to recategorization.

were $429.9 million in 2008, compared with $427.2 million in 2007, an increase of 0.6 percent. The cost of providing services to other entities was $31.3 million, compared with $31.0 million in 2007. In 2008, as in 2007, the Treasury and other entities reimbursed Reserve Banks for the costs of providing these services.

Debt Services

The Reserve Banks support Treasury's wholesale securities services by auctioning, providing book-entry safekeeping for, and transferring Treasury securities. Reserve Bank operating expenses for these activities totaled $46.4 million in 2008, compared with $50.1 million in 2007. To improve support of Treasury-securities auction activities, the Reserve Banks implemented a new Treasury-securities auction application and infrastructure in April 2008. The Banks conducted 263 Treasury securities auctions in 2008, compared with 220 in 2007. In addition, the Banks processed 12.8 million transfers of Treasury securities in 2008 through the Fedwire Securities Service, compared with 13.7 million transfers in 2007.

Reserve Banks also support the Treasury's retail securities program that primarily serves individual investors. Reserve Bank operating expenses for these activities were $72.4 million in 2008, compared with $74.1 million in 2007. Reserve Banks operate the Legacy Treasury Direct system, which allows investors to purchase and hold marketable Treasury securities directly with the Treasury instead of through a financial institution. The Legacy Treasury Direct system held $63.4 billion (par value) of Treasury securities as of December 31. The Banks also issue, service, and redeem nonmarketable savings bonds. The Banks printed and mailed more than 22.6 million savings bonds in 2008, a 9.7 percent decrease from 2007. Overall, the volume of retail securities transactions processed by the Reserve Banks has declined for several years and, consequently, the Banks have reduced expenses and staffing levels.

Payments Services

Reserve Banks process both electronic and check payments for the Treasury. Reserve Bank operating expenses for processing government payments and for payments-related programs totaled $108.2 million in 2008, compared with $105.3 million in 2007. In 2008, the Banks processed 1,132 million ACH payments for the Treasury, an increase of 10.2 percent from 2007. They also processed 269.4 million government checks, an increase of 26.1 percent from 2007. The increase in ACH and check payments is largely attributable to economic stimulus payments issued in 2008.

The proportion of government checks processed in paper form continues to decline, as an increasing number of depository institutions present checks in image form. Of all the government checks processed by the Reserve Banks in 2008, 23 percent were presented in paper form and 77 percent in image form, compared with 54 percent and 46 percent, respectively, in 2007.

Reserve Banks also support the Treasury's initiative to convert check benefit payments to direct deposit. In 2008, more than 577,000 check payments were converted to direct deposit.

Collection Services

Reserve Banks support several Treasury programs that serve to collect funds owed the federal government. Reserve Bank operating expenses related to these programs totaled $49.2 million in 2008, compared with $50.7 million in 2007. For example, the Banks operate the Federal Reserve Electronic Tax Application (FR-ETA), which provides taxpayers a same-day electronic federal tax payment alternative. FR-ETA collected $505.0 billion for the Treasury in 2008, compared with $519.8 billion in 2007.

In addition, the Reserve Banks operate Pay.gov, a Treasury program that allows the public to use the Internet to initiate and authorize payment for federal government goods and services. They also operated the Treasury's Paper Check Conversion and Electronic Check Processing programs, whereby checks written to government agencies are converted into ACH transactions at the point of sale or at lockbox locations. In 2008, Reserve Banks originated 35.6 million ACH transactions through these three programs, compared with 15.3 million in 2007. At the Treasury's direction, Reserve Banks worked to ensure a smooth transition of the Paper Check Conversion and Electronic Check Processing programs to a commercial bank effective in early 2009.

Treasury Cash-Management Services

The Treasury maintains an operating cash account at the Reserve Banks, and invests the funds it does not need for a given day's payments with qualified depository institutions through several investment programs supported by the Reserve Banks. Reserve Bank operating expenses related to these programs and other cash management initiatives totaled $51.6 million in 2008, compared with $46.1 million in 2007. In the Treasury Tax and Loan (TT&L) program, qualified depository institutions collect tax payments and may retain these funds as investments for the Treasury. The Treasury also invests funds at certain TT&L depositories through direct deposits. These fully collateralized investments are either callable on demand or set for a term. In 2008, Reserve Banks placed a total of $783.1 billion in immediately callable investments—including funds invested through retained tax deposits and direct investments—and $1,217.8 billion in term investments. In addition, the Treasury may invest a portion of its operating funds directly with TT&L depositories through its repurchase agreements program. In 2008, the Reserve Banks placed a total of $225.8 billion of investments through this program.

In 2008, the Reserve Banks and Treasury continued work on the Collections and Cash Management Modernization (CCMM) initiative, which is a multiyear effort to streamline, modernize, and improve the services, systems, and processes supporting the Treasury's collections and cash management programs. Several Reserve Banks have been selected to work on aspects of the CCMM initiative.

Services Provided to Other Entities

When permitted by federal statute or when required by the Secretary of the Treasury, Reserve Banks provide fiscal agency and depository services to other domestic and international entities. The majority of the work performed for these entities is securities-related.

Electronic Access to Reserve Bank Services

In 2008, the Federal Reserve Banks substantially completed the migration of computer interface customers to FedLine Direct and FedLine Command.[12] This migration, typically for high-volume depository institutions, and the FedLine Advantage migration, typically for low- to moderate-volume depository institutions, complete the Reserve Banks' initiative to migrate electronic access to Reserve Bank services to internet-protocol-based electronic access.[13]

Information Technology

In 2008, the Federal Reserve continued to develop and implement the Reserve Banks' IT strategy, further strengthened IT governance, managed information security risk, and analyzed and coordinated the System's IT investments.

In 2008, Federal Reserve Information Technology (FRIT) continued to lead Reserve Bank efforts to transition to

12. FedLine Direct is a computer-to-computer electronic access channel used to access critical payment services, such as Fedwire Funds, Fedwire Securities, National Settlement, and FedACH Services. FedLine Command is a lower-cost internet-protocol-based computer-to-computer electronic access channel for file delivery services, including the FedACH Service.

13. FedLine Advantage is a web-based electronic access channel used to access critical payment services. The Reserve Banks completed the FedLine Advantage migration in 2006.

a more-robust information security model. The Information Security Architecture Framework (ISAF), a three-year program, was successfully completed. ISAF was developed to respond to the continuing and increasingly sophisticated security threats facing information technology systems and to improve information security at all points in the Federal Reserve. Through ISAF, the System was able to implement projects that enhanced user authentication, separated sensitive applications and infrastructure from low- and moderate-risk systems, and strengthened compliance and patch management. FRIT will continue working to address residual information security risks.

To enable certain functionalities and, secondly, to help address the business implications of reduced demand for mainframe services, Reserve Banks are engaged in a multiyear effort to move major business applications off the mainframe and to a distributed environment. In 2008, the new Treasury automated auction processing system became one of the first major business applications to be migrated.

Examinations of the Federal Reserve Banks

Section 21 of the Federal Reserve Act requires the Board of Governors to order an examination of each Federal Reserve Bank at least once a year. The Board performs its own reviews and engages a public accounting firm. The public accounting firm performs an annual audit of the combined financial statements of the Reserve Banks (see the "Federal Reserve Banks Combined Financial Statements" section of this report) as well as the annual financial statements of each of the 12 Banks and the consolidated limited liability company (LLC) entities. The Reserve Banks use the framework established by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) to assess their internal controls over financial reporting, including the safeguarding of assets. The Reserve Banks have further enhanced their assessments under the COSO framework to strengthen the key control assertion process and, in 2008, again met the requirements of the Sarbanes-Oxley Act of 2002. Within this framework, the management of each Reserve Bank provides an assertion letter to its board of directors annually that confirms adherence to COSO standards, and a public accounting firm issues an attestation report to each Bank's board of directors and to the Board of Governors.

In 2008, the Board engaged Deloitte & Touche LLP (D&T) for the audits of the individual and combined financial statements of the Reserve Banks and those of the consolidated LLC entities. Fees for D&T's services totaled $9.5 million. Of the total fees, $2.3 million were for the audits of the consolidated LLC entities that are associated with recent Federal Reserve actions to address the financial crisis, and are consolidated in the financial statements of the Federal Reserve Bank of New York (the New York Reserve Bank).[14] To ensure auditor independence, the Board requires that D&T be independent in all matters relating to the audit. 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

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14. Each LLC will reimburse the Board of Governors for the fees related to the audit of its financial statements from the entity's available net assets.

its audit independence. In 2008, one Reserve Bank engaged D&T for nonaudit consulting services for which the fees were immaterial.

The Board's annual examination of the Reserve Banks and the consolidated LLC entities includes a wide range of off-site and on-site oversight activities, conducted primarily by the Division of Reserve Bank Operations and Payment Systems. Division personnel monitor the activities of each Reserve Bank on an ongoing basis and conduct a comprehensive on-site review of each Reserve Bank at least once every three years. The reviews also include an assessment of the internal audit function's conformance to *International Standards for the Professional Practice of Internal Auditing,* conformance to applicable policies and procedures, and the audit department's efficiency.

To assess compliance with the policies established by the Federal Reserve's Federal Open Market Committee (FOMC), the division also reviews the accounts and holdings of the System Open Market Account (SOMA) at the New York Reserve Bank and the foreign currency operations conducted by that Bank. In addition, D&T audits the schedule of participated asset and liability accounts and the related schedule of participated income accounts at year-end. The FOMC receives the external audit reports and the report on the division's examination.

Income and Expenses

The table opposite summarizes the income, expenses, and distributions of net earnings of the Federal Reserve Banks for 2008 and 2007. Income in 2008 was $41,046 million, compared with $42,576 million in 2007.

Expenses totaled $5,723 million ($3,232 million in operating expenses, $901 million in interest paid to depository institutions on reserve balances and earnings credits granted to depository institutions, $737 million in interest expense on securities sold under agreements to repurchase, $352 million in assessments for Board of Governors expenditures, and $500 million for currency costs).[15] Net additions to and deductions from current net income showed a net profit of $3,341 million, which consists of $3,769 million in realized gains on sales of U.S. government securities and $1,266 million in unrealized gains on investments denominated in foreign currencies revalued to reflect current market exchange rates, reduced by $1,693 million in net losses associated with consolidated variable interest entities (VIEs). Dividends paid to member banks, set at 6 percent of paid-in capital by section 7(1) of the Federal Reserve Act, totaled $1,190 million, $198 million more than in 2007; the increase reflects an increase in the capital and surplus of member banks and a consequent increase in the paid-in capital stock of the Reserve Banks.

Payments to the U.S. Treasury in the form of interest on Federal Reserve notes totaled $31,689 million in 2008, down from $34,598 million in 2007; the payments equal net income after the deduction of dividends paid and of the amount necessary to equate the Reserve Banks' surplus to paid-in capital.

In the "Statistical Tables" section of this report, table 10 details the income and expenses of each Reserve Bank for

15. Effective October 9, 2008, the Reserve Banks began paying explicit interest on reserve balances held by depository institutions at the Reserve Banks as authorized by the Emergency Economic Stabilization Act of 2008.

Income, Expenses, and Distribution of Net Earnings of the Federal Reserve Banks, 2008 and 2007

Millions of dollars

Item	2008	2007
Current income	41,046	42,576
Current expenses	4,870	**5,198**
Operating expenses[1]	3,232	3,270
Interest paid to depository institutions and earnings credits granted[2]	901	240
Interest expense on securities sold under agreements to repurchase	737	**1,688**
Current net income	36,175	**37,378**
Net additions to (deductions from, −) current net income	3,341	**1,886**
Profits on sales of U.S. government securities	3,769	. . .
Profits on foreign exchange transactions	1,266	1,886
Net loss from consolidated VIEs[3]	−1,693	. . .
Assessments by the Board of Governors	853	872
For Board expenditures	352	296
For currency costs	500	576
Change in funded status of benefit plans[4]	–3,159	324
Comprehensive income before payments to Treasury	35,504	38,716
Dividends paid	1,190	992
Transferred to surplus and change in accumulated other comprehensive income	2,626	3,126
Payments to U.S. Treasury[5]	31,689	34,598

NOTE: Numbers in bold reflect reclassification of amounts to maintain comparability for the years presented.

1. Includes a net periodic pension expense of $160 million in 2008 and $110 million in 2007.

2. In October 2008, the Reserve Banks began to pay interest to depository institutions on qualifying balances.

3. Includes $961 million of interest earnings on loans extended by the New York Reserve Bank in 2008.

4. Subsequent to the adoption of SFAS 158 in 2006, the Reserve Banks began to recognize the change in funded status of benefit plans as an element of other comprehensive income in their Statements of Income and Comprehensive Income.

5. Interest on Federal Reserve notes.

. . . Not applicable.

2008, and table 11 shows a condensed statement for each Bank for the years 1914 through 2008; table 9 is a statement of condition for each Bank, and table 13 gives the number and annual salaries of officers and employees for each Bank. A detailed account of the assessments and expenditures of the Board of Governors appears in the section "Board of Governors Financial Statements."

SOMA Holdings and Loans

The Federal Reserve Banks' average net daily holdings of securities and loans during 2008 amounted to $1,035,700 million, an increase of $233,072 million from 2007 (see table, next page).

SOMA Securities Holdings

The average daily holdings of U.S. government, federal agency, and government-sponsored enterprise (GSE) securities decreased by $235,014 million, to an average daily level of $547,165 million. The decrease is due to the sale of securities during 2008 and maturing securities that were not replaced, offset by the purchase of federal agency and GSE securities beginning in 2008. Average daily holdings of securities purchased under agreements to resell in 2008 were $86,130 million, an increase of $54,447 million from 2007, while the average daily balance of securities sold under agreements to repurchase was $55,034 million, an increase of $20,486 million from 2007. Average daily holdings of investments denominated in for-

SOMA Holdings and Loans of the Federal Reserve Banks, 2008 and 2007[1]

Millions of dollars except as noted

Item	Average daily assets (+)/ liabilities(−)[2]		Current income (+)/ expense (−)		Average interest rate (percent)	
	2008	2007	2008	2007	2008	2007
U.S. government securities[3]	547,165	**782,179**	25,631	**38,707**	4.68	**4.95**
Securities purchased under agreements to resell	86,130	**31,683**	1,891	**1,591**	2.20	**5.02**
Securities sold under agreeements to repurchase	−55,034	−34,548	−737	−1,688	1.34	4.89
Investments denominated in foreign currencies[4]	24,212	21,325	623	546	2.57	2.56
Central bank liquidity swaps[5]	160,331	532	3,606	28	2.25	5.34
Primary, secondary, and seasonal credit[6]	32,022	**636**	512	33	1.60	**5.20**
Term auction credit	172,905	822	3,305	38	1.91	4.66
Other loans						
Primary dealer and other broker-dealer credit[7]	28,298	...	511	...	1.81	...
AMLF	21,036	...	470	...	2.24	...
Credit extended to AIG[8]	18,636	...	2,367	...	12.70	...
Total	1,035,700	802,628	38,179	39,256	3.69	4.89

NOTE: Amounts in bold reflect restatements due to changes in previously reported data and recategorization.

1. Does not include loans to consolidated VIEs.
2. Based on holdings at opening of business.
3. Includes federal agency and GSE obligations beginning in 2008.
4. Excludes accrued interest. Investments denominated in foreign currencies are revalued daily at market exchange rates.
5. 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.
6. Excludes indebtedness assumed by the Federal Deposit Insurance Corporation.
7. Includes credit extended through the PDCF and credit extended to certain other broker-dealers.
8. Excludes credit extended to consolidated LLCs and undrawn amounts.

. . . Not applicable.

eign securities in 2008 were $24,212 million, compared with $21,325 million in 2007. During 2008, the Federal Reserve authorized increases in the amount of central bank liquidity swaps and in the number of eligible foreign central banks. The average daily balance of central bank liquidity swap drawings was $160,331 million in 2008 and $532 million in 2007.

The average rate of interest earned on the Reserve Banks' holdings of government securities decreased to 4.68 percent, from 4.95 percent in 2007. The average interest rates for securities purchased under agreements to resell and securities sold under agreements to repurchase were 2.20 percent and 1.34 percent, respectively, in 2008. Investments denominated in foreign currencies and central bank liquidity swaps earned interest at average rates of 2.57 percent and 2.25 percent, respectively, in 2008.

Lending

In 2008, average daily primary, secondary, and seasonal credit extended increased $31,386 million to $32,022 million and term auction credit extended under the Term Auction Facility increased $172,083 million to $172,905 million. The average rate of interest earned on primary, secondary, and seasonal credit decreased to 1.60 percent in 2008, from 5.20 percent in 2007, while the average interest rate on term auction credit decreased to 1.91 percent in 2008, from 4.66 percent in 2007.

During 2008, the Federal Reserve established several lending facilities under authority of section 13(3) of the Federal Reserve Act. These included the Primary Dealer Credit Facility

(PDCF), the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF), and the American International Group, Inc. (AIG) credit line. Amounts funded by the Reserve Banks under these programs are recorded as loans by the Reserve Banks. During 2008, the average daily holdings under the PDCF and AMLF were $28,298 million and $21,036 million, respectively, with average rates of interest earned of 1.81 percent and 2.24 percent, respectively. The average daily balance of credit extended to AIG in 2008 was $18,636 million, which earned interest at an average rate of 12.70 percent.

Investments of Consolidated Variable Interest Entities

Additional lending facilities established during 2008 under authority of section 13(3) of the Federal Reserve Act involved creating and lending to special purpose vehicles (SPVs).[16] The SPVs were funded by the New York Reserve Bank and acquired financial assets and financial liabilities pursuant to the policy objectives. The SPVs were determined to be VIEs, and the New York Reserve Bank is considered to be the primary beneficiary of each.[17] Consistent with generally accepted accounting principles, the assets and liabilities of these VIEs have been consolidated with the assets and liabilities of the New York Reserve Bank in the preparation of the statements of condition included in this report.[18] The proceeds at the maturity or the liquidation of the VIEs' assets will be used to repay the loans extended by the New York Reserve Bank. Information regarding the Reserve Banks' lending to the VIEs and the asset portfolios of each VIE is as described in the table, next page.

Reserve Bank Branch Closure

The Board approved the discontinuation of the New York Reserve Bank's Buffalo Branch effective October 31.[19] At the time of the discontinuation, the Branch consisted of a small research and community outreach staff and the Branch board of directors, which provided economic and financial intelligence to the Bank. The Branch had not performed financial services since 2004. The Branch board of directors was replaced by an upstate New York regional advisory board, which provides economic and financial intelligence.

Federal Reserve Bank Premises

A number of Reserve Banks took action in 2008 to upgrade and refurbish their

16. For further information on the establishment and policy objectives of these SPVs, see the "Monetary Policy Report" section of this report.

17. A VIE is an entity for which the value of the beneficiaries' financial interests in the entity changes with changes in the fair value of its net assets. A VIE is consolidated by the financial interest holder that is determined to be the primary beneficiary of the VIE because the primary beneficiary will absorb a majority of the VIE's expected losses, receive a majority of the VIE's expected residual gains, or both. To determine whether it is the primary beneficiary of a VIE, the Reserve Bank evaluates the VIE's design, capital structure, and the relationships among the variable interest holders.

18. As a consequence of the consolidation, the extensions of credit from the New York Reserve Bank to the VIEs are eliminated, the net assets of the VIEs appear as assets in table 9 in the "Statistical Tables" section of this report, and the liabilities of the VIEs to entities other than the New York Reserve Bank, including those with recourse only to the portfolio holdings of the VIEs, are included in other liabilities in statistical table 9.

19. Before the Buffalo Branch closure, the only discontinued Branch in the history of the System was the Federal Reserve Bank of San Francisco's Spokane Branch, which was discontinued in 1938.

Key Financial Data for Consolidated Variable Interest Entities as of December 31, 2008

Millions of dollars

Item	Commercial Paper Funding Facility LLC (CPFF)	Maiden Lane LLC[1]	Maiden Lane II LLC[1]	Maiden Lane III LLC[1]	Total
Net portfolio assets[2]	334,910	30,635	19,195	27,256	411,996
Liabilities of consolidated VIEs	−812	−4,951	−2	−48	−5,813
Net portfolio assets available[3]	334,098	25,684	19,193	27,208	406,183
Loans extended by the New York Reserve Bank[4]	333,020	29,087	19,522	24,384	406,013
Other beneficial interests[4,5]	. . .	1,188	1,003	5,022	7,213
Total loans and other beneficial interests	333,020	30,275	20,525	29,406	413,226
Allocation of excess/(deficiency) of net portfolio assets available over loans and other beneficial interests[6]					
Loans extended by the New York Reserve Bank	1,078	−3,403	−329	0	−2,654
Other beneficial interests	. . .	−1,188	−1,003	−2,198	−4,389
Total	1,078	−4,591	−1,332	−2,198	−7,043

1. Maiden Lane LLC was formed to acquire certain assets of Bear Stearns; Maiden Lane II LLC and Maiden Lane III LLC were formed to acquire certain assets of AIG and its subsidiaries.
2. 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. CPFF holdings are recorded at book value, which includes amortized cost and related fees.
3. Represents the net assets available for repayment of loans extended by the New York Reserve Bank and other beneficiaries of the consolidated VIEs as of December 31, 2008.
4. Book value. Includes accrued interest.
5. The “other beneficiary” for Maiden Lane is JPMorgan Chase & Co., and AIG is the “other beneficiary” for Maiden Lane II and Maiden Lane III.
6. Represents the allocation of the change in net assets and liabilities of the consolidated VIEs available for repayment of the loans extended by the New York Reserve Bank and other beneficiaries of the consolidated VIEs. The differences between the fair value of the net assets available and the face 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 as of December 31, 2008.
. . . Not applicable.

facilities and streamline operations. The Kansas City Bank moved into its new building, and the Seattle Branch of the San Francisco Bank dedicated its new building. The multiyear renovation program at the New York Bank’s headquarters building also continued, while the St. Louis Bank continued a long-term facility redevelopment program that includes the construction of an addition to the Bank’s headquarters building. The New York Bank made progress on a program to enhance the business resiliency of its information technology systems and to upgrade facility support for the Bank’s open market operations, central bank services, and data center operations.

Security-enhancement programs continued at several facilities, including construction of security improvements to the Richmond Bank’s headquarters building and the development of remote vehicle-screening facility designs for the Philadelphia and Dallas Banks.

Additionally, the St. Louis Bank sold its Little Rock Branch building, and the San Francisco Bank continued its efforts to sell the former Seattle Branch building.

For more information, see Table 14 in the “Statistical Tables” section of this report, which details the acquisition costs and net book value of the Federal Reserve Banks and Branches.

Pro Forma Financial Statements for Federal Reserve Priced Services

Pro Forma Balance Sheet for Federal Reserve Priced Services, December 31, 2008 and 2007

Millions of dollars

Item	2008		2007	
Short-term assets (Note 1)				
Imputed reserve requirements on clearing balances	418.8		755.7	
Imputed investments	4,292.7		6,465.7	
Receivables	60.0		66.7	
Materials and supplies	2.1		1.8	
Prepaid expenses	29.2		28.5	
Items in process of collection	983.1		1,769.6	
Total short-term assets		5,786.0		9,088.0
Long-term assets (Note 2)				
Premises	441.1		453.5	
Furniture and equipment	113.0		130.2	
Leases, leasehold improvements, and long-term prepayments	76.7		64.2	
Prepaid pension costs	0.0		484.6	
Deferred tax asset	313.2		109.4	
Total long-term assets		944.0		1,242.0
Total assets		6,729.9		10,330.0
Short-term liabilities				
Clearing balances and balances arising from early credit of uncollected items	2,391.8		7,641.1	
Deferred-availability items	2,779.8		1,685.1	
Short-term debt	0.0		0.0	
Short-term payables	573.5		102.4	
Total short-term liabilities		5,745.1		9,428.5
Long-term liabilities				
Long-term debt	0.0		0.0	
Accrued benefit costs	605.6		385.0	
Total long-term liabilities		605.6		385.0
Total liabilities		6,350.7		9,813.5
Equity (including accumulated other comprehensive loss of $690.6 million and $237.9 million at December 31, 2008 and 2007, respectively)		379.2		516.5
Total liabilities and equity (Note 3)		6,729.9		10,330.0

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.

Pro Forma Income Statement for Federal Reserve Priced Services, 2008 and 2007

Millions of dollars

Item	2008		2007	
Revenue from services provided to depository institutions (Note 4)		773.4		878.4
Operating expenses (Note 5)		808.7		888.2
Income from operations		–35.3		–9.8
Imputed costs (Note 6)				
Interest on float	–22.4		–32.0	
Interest on debt	0.0		0.0	
Sales taxes	9.4		11.6	
FDIC Insurance	0.5	–12.5	0.0	–20.4
Income from operations after imputed costs		–22.8		10.6
Other income and expenses (Note 7)				
Investment income	181.2		362.3	
Earnings credits	–80.7	100.4	–228.5	133.8
Income before income taxes		77.6		144.5
Imputed income taxes (Note 6)		24.2		45.5
Net income		53.4		98.9
Memo: Targeted return on equity (Note 6)		66.5		80.4

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.

Pro Forma Income Statement for Federal Reserve Priced Services, by Service, 2008

Millions of dollars

Item	Total	Commercial check collection	Commercial ACH	Fedwire funds	Fedwire securities
Revenue from services (Note 4)	773.4	605.2	86.6	59.9	21.6
Operating expenses (Note 5)	808.7	644.4	84.4	59.0	20.9
Income from operations	–35.3	–39.2	2.2	0.9	0.7
Imputed costs (Note 6)	–12.5	–13.8	0.3	0.8	0.3
Income from operations after imputed costs	–22.8	–25.3	1.9	0.2	0.5
Other income and expenses, net (Note 7)	100.4	78.4	11.3	7.9	2.9
Income before income taxes	77.6	53.0	13.1	8.1	3.3
Imputed income taxes (Note 6)	24.2	16.5	4.1	2.5	1.0
Net income	53.4	36.5	9.0	5.5	2.3
Memo: Targeted return on equity (Note 6)	66.5	51.9	7.6	5.3	1.7
Memo: Cost recovery (percent) (Note 8)	98.5	97.8	101.5	100.4	102.5

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.

FEDERAL RESERVE BANKS

Notes to Pro Forma Financial Statements for Priced Services

(1) Short-Term Assets

The imputed reserve requirement on clearing balances held at Reserve Banks by depository institutions reflects a treatment comparable to that of compensating balances held at correspondent banks by respondent institutions. The reserve requirement imposed on respondent balances must be held as vault cash or as balances maintained at a Reserve Bank; thus, a portion of priced services clearing balances held with the Federal Reserve is shown as required reserves on the asset side of the balance sheet. Another portion of the clearing balances is used to finance short-term and long-term assets. The remainder of clearing balances is assumed to be invested in a portfolio of investments, shown as imputed investments.

Receivables are comprised of fees due the Reserve Banks for providing priced services and the share of suspense-account and difference-account balances related to priced services.

Materials and supplies are the inventory value of short-term assets.

Prepaid expenses include salary advances and travel advances for priced-service personnel.

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-System items that would otherwise be double-counted on a consolidated Federal Reserve balance sheet; adjustments for items associated with nonpriced items (such as those collected for government agencies); and adjustments for items associated with providing fixed availability or credit before items are received and processed. 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.

(2) Long-Term Assets

Long-term assets consist of long-term assets used solely in priced services, the priced-service portion of long-term assets shared with nonpriced services, an estimate of the assets of the Board of Governors used in the development of priced services, and a deferred tax asset related to the priced services pension and postretirement benefits obligation (see Note 3).

(3) Liabilities and Equity

Under the matched-book capital structure for assets, short-term assets are financed with short-term payables and clearing balances. Long-term assets are financed with long-term liabilities and core clearing balances. As a result, no short- or long-term debt is imputed. Other short-term liabilities include clearing balances maintained at Reserve Banks and deposit balances arising from float. Other long-term liabilities consist of accrued postemployment, postretirement, and qualified and nonqualified pension benefits costs and obligations on capital leases.

Effective December 31, 2006, the Reserve Banks implemented the Financial Accounting Standard Board's Statement of Financial Accounting Standards (SFAS) No. 158, *Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans,* which requires an employer to record the funded status of its benefit plans on its balance sheet. In order to reflect the funded status of its benefit plans, the Reserve Banks recognized the deferred items related to these plans, which include prior service costs and actuarial gains or losses, on the balance sheet. This resulted in an adjustment to the pension and benefit plans related to priced services and the recognition of an associated deferred tax asset with an offsetting adjustment, net of tax, to accumulated other comprehensive income (AOCI), which is included in equity. The Reserve Bank priced services recognized a net pension liability in 2008 and a net pension asset in 2007. The reduction in the System Retirement Plan's funded status in 2008 was due to reduced asset values and an increase in the projected benefit obligation. This reduction in the funded status resulted in a corresponding change in AOCI of $452.7 million in 2008.

To satisfy the FDIC requirements for a well-capitalized institution, equity is imputed at 10 percent of total risk-weighted assets.

(4) Revenue

Revenue represents fees charged to depository institutions for priced services, and is realized from each institution through one of two methods: direct charges to an institution's account or charges against its accumulated earnings credits (see Note 7).

(5) Operating Expenses

Operating expenses consist of the direct, indirect, and other general administrative expenses of the Reserve Banks for priced services plus the expenses of the Board of Governors related to the development of priced services. Board expenses were $7.2 million in 2008 and $6.7 million in 2007.

Effective January 1, 1987, the Reserve Banks implemented SFAS No. 87, *Employers' Accounting for Pensions.* Accordingly, the Reserve Bank priced services recognized qualified pension-plan operating expenses of $28.8 million in 2008 and $21.3 million in 2007. Operating expenses also include the nonqualified pension expense of $5.4 million in 2008 and $3.1 million in 2007. The implementation of SFAS No. 158 does not change the systematic approach required by generally accepted accounting principles to recognize the expenses associated with the Reserve Banks' benefit plans in the income statement. As a result, these expenses do not include amounts related to changes in the funded status of the Reserve Banks' benefit plans, which are reflected in AOCI (see Note 3).

The income statement by service reflects revenue, operating expenses, imputed costs, other income and expenses, and cost recovery. Certain corporate overhead costs not closely related to any particular priced service are allocated to priced services based on an expense-ratio method. Corporate overhead was allocated among the priced services during 2008 and 2007 as follows (in millions of dollars):

	2008	2007
Check	31.0	34.7
ACH	4.6	4.3
Fedwire Funds	3.5	3.0
Fedwire Securities	1.9	1.7
Total	41.2	43.7

(6) Imputed Costs

Imputed costs consist of income taxes, return on equity, interest on debt, sales taxes, an FDIC assessment, and interest on float. Many imputed costs are derived from the private-sector adjustment factor (PSAF) model. The cost of debt and the effective tax rate are derived from bank holding company data, which serves as the proxy for the financial data of a representative private-sector firm, and are used to impute debt and income taxes in the PSAF model. The after-tax rate of return on equity is based on the returns of the equity market as a whole, and is used to impute the profit that would have been earned had the services been provided by a private-sector firm.

Interest is imputed on the debt assumed necessary to finance priced-service assets; however, no debt was imputed in 2008 or 2007.

Effective in 2007, the Reserve Bank priced services imputed a one-time FDIC assessment credit. In 2008, the credit offset $4.6 million of the imputed $5.1 million assessment, resulting in a remaining credit of $8.0 million. The remaining credit can be used to offset up to 90 percent of the assessment in the future.

Interest on float is derived from the value of float to be recovered, either explicitly or through per-item fees, during the period. Float costs include costs for the Check, Fedwire Funds, National Settlement Service, ACH, and Fedwire Securities services.

Float cost or income is based on the actual float incurred for each priced service. Other imputed costs are allocated among priced services according to the ratio of operating expenses, less shipping expenses, for each service to the total expenses, less the total shipping expenses, for all services.

The following shows the daily average recovery of actual float by the Reserve Banks for 2008 in millions of dollars:

Total float	–1,191.8
Unrecovered float	–42.1
Float subject to recovery	–1,149.7
Sources of recovery of float	
Income on clearing balances	–89.3
As-of adjustments	1.6
Direct charges	111.8
Per-item fees	–1,173.8

Unrecovered float includes float generated by services to government agencies and by other central bank services. Float recovered through income on clearing balances is the result of the increase in investable clearing balances; the increase is produced by a deduction for float for CIPC, which reduces imputed reserve requirements. The income on clearing balances reduces the float to be recovered through other means. As-of adjustments and direct charges refer to float that is created by interterritory check transportation and the observance of non-standard holidays by some depository institutions. Such float may be recovered from the depository institutions through adjustments to institution reserve or clearing balances or by billing institutions directly. Float recovered through direct charges and per-item fees is valued at the federal funds rate; credit float recovered through per-item fees has been subtracted from the cost base subject to recovery in 2008.

(7) Other Income and Expenses

Other income and expenses consist of investment and interest income on clearing balances and the cost of earnings credits. Investment income on clearing balances for 2008 and 2007 represents the average coupon-equivalent yield on three-month Treasury bills plus a constant spread, based on the return on a portfolio of investments. Before October 9, 2008, the return was applied to the *total* clearing balance maintained, adjusted for the effect of reserve requirements on clearing balances. On October 9, 2008, the Federal Reserve began paying interest on required reserve and excess balances held by depository institutions at Reserve Banks as authorized by the Emergency Economic Stabilization Act of 2008. As a result of this change, the investment return is applied only to the *required* portion of the clearing balance. Other income also includes imputed interest on the portion of clearing balances set aside as required reserves. Expenses for earnings credits granted to depository institutions on their clearing balances are based on a discounted average coupon-equivalent yield on three-month Treasury bills.

(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 targeted return on equity.

The Board of Governors and the Government Performance and Results Act

The Government Performance and Results Act (GPRA) of 1993 requires that federal agencies, in consultation with Congress and outside stakeholders, prepare a strategic plan covering a multi-year period and submit an annual performance plan and performance report. Although the Federal Reserve is not covered by the GPRA, the Board of Governors voluntarily complies with the spirit of the act.

Strategic Plan, Performance Plan, and Performance Report

The Board's strategic plan articulates the Board's mission, sets forth major goals, outlines strategies for achieving those goals, and discusses the environment and other factors that could affect their achievement. It also addresses issues that cross agency jurisdictional lines, identifies key quantitative measures of performance, and discusses the evaluation of performance. The most recent strategic plan covers the period 2008–2011.

Both the performance plan and the performance report are prepared every two years. The performance plan includes specific targets for some of the performance measures identified in the strategic plan and describes the operational processes and resources needed to meet those targets. It also discusses validation of data and verification of results. The most recent performance plan covers the period 2008–09.

The performance report discusses the Board's performance in relation to its goals. The most recent performance report covers the period 2006–07.

The strategic plan, performance plan, and performance report are available on the Board's website, at www.federalreserve.gov/boarddocs/rptcongress. The Board's mission statement and a summary of the Federal Reserve's goals and objectives, as set forth in the most recently released strategic and performance plans, are listed below. Updated documents will be posted on the website as they are completed.

Mission

The mission of the Board is to foster the stability, integrity, and efficiency of the nation's monetary, financial, and payment systems to promote optimal macroeconomic performance.

Goals and Objectives

The Federal Reserve has six primary goals with interrelated and mutually reinforcing elements.

Goal

Conduct monetary policy that promotes the achievement of the statutory objectives of maximum employment and stable prices

Objectives

- Stay abreast of recent developments in and prospects for the U.S. economy and financial markets, and in those

abroad, so that monetary policy decisions will be well informed.
- Enhance our knowledge of the structural and behavioral relationships in the macroeconomic and financial markets, and improve the quality of the data used to gauge economic performance, through developmental research activities.
- Implement monetary policy effectively in rapidly changing economic circumstances and in an evolving financial market structure.
- Contribute to the development of U.S. international policies and procedures, in cooperation with the U.S. Department of the Treasury and other agencies, with respect to global financial markets and international institutions.
- Promote understanding of Federal Reserve policy among other government policy officials and the general public.

Goal

Promote a safe, sound, competitive, and accessible banking system and stable financial markets

Objectives

- Promote overall financial stability, manage and contain systemic risk, and identify emerging financial problems early so that crises can be averted.
- Provide a safe, sound, competitive, and accessible banking system through comprehensive and effective supervision of U.S. banks, bank and financial holding companies, foreign banking organizations, and related entities. At the same time, remain sensitive to the burden on supervised institutions.
- Enhance efficiency and effectiveness, while remaining sensitive to the burden on supervised institutions, by addressing the supervision function's procedures, technology, resource allocation, and staffing issues.
- Promote compliance by domestic and foreign banking organizations supervised by the Federal Reserve with applicable laws, rules, regulations, policies, and guidelines through a comprehensive and effective supervision program.

Goal

Develop regulations, policies, and programs designed to inform and protect consumers, to enforce federal consumer protection laws, to strengthen market competition, and to promote access to banking services in historically underserved markets

Objectives

- Be a leader in, and help shape the national dialogue on, consumer protection in financial services.
- Promote, develop, and strengthen effective communications and collaborations within the Board, the Federal Reserve Banks, and other agencies and organizations.

Goal

Provide high-quality professional oversight of Reserve Banks

Objective

- Produce high-quality assessments and oversight of Federal Reserve System strategies, projects, and operations, including adoption of technology to meet the business and operational needs of the Federal Reserve. The oversight process and outputs should help Federal Reserve management foster and strengthen sound internal control systems, efficient and reliable operations, effective performance, and sound project management and should assist the Board in the effective discharge of its oversight responsibilities.

Goal

Foster the integrity, efficiency, and accessibility of U.S. payment and settlement systems

Objectives

- Develop sound, effective policies and regulations that foster payment system integrity, efficiency, and accessibility. Support and assist the Board in overseeing U.S. dollar payment and securities settlement systems by assessing their risks and risk management approaches against relevant policy objectives and standards.
- Conduct research and analysis that contributes to policy development and increases the Board's and others' understanding of payment system dynamics and risk.

Goal

Foster the integrity, efficiency, and effectiveness of Board programs

Objectives

- Develop appropriate policies, oversight mechanisms, and measurement criteria to ensure that the recruiting, training, and retention of staff meet Board needs.
- Establish, encourage, and enforce a climate of fair and equitable treatment for all employees regardless of race, creed, color, national origin, age, or sex.
- Provide strategic planning and financial management support needed for sound business decisions.
- Provide cost-effective and secure information resource management services to Board divisions, support divisional distributed-processing requirements, and provide analysis on information technology issues to the Board, Reserve Banks, other financial regulatory institutions, and central banks.
- Efficiently provide safe, modern, secure facilities and necessary support for activities conducive to efficient and effective Board operations. ■

Federal Legislative Developments

The Federal Reserve played an important role in the public debates leading up to enactment of the Housing and Economic Recovery Act of 2008 (HERA) and the Emergency Economic Stabilization Act of 2008 (EESA). Each of these laws provided the U.S. government with important new tools—utilized during 2008—to help address the causes and consequences of the recent and ongoing turmoil in the financial markets.

Although the following summaries are not comprehensive reviews of these laws, they highlight some of the key provisions, including those that affect Federal Reserve System functions.

This report also describes the Higher Education Opportunity Act of 2008 (HEOA), legislation that modified the disclosure requirements for private educational loans under the Truth in Lending Act, which is administered by the Board.

Housing and Economic Recovery Act of 2008

On July 30, 2008, President Bush signed into law the Housing and Economic Recovery Act of 2008 (HERA) (Pub. L. No. 110-289), which substantially revises the supervisory and regulatory framework for housing-related government-sponsored enterprises (GSEs), specifically, the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac), and the Federal Home Loan Banks (FHLBs). Among other things, HERA establishes a new, independent agency, the Federal Housing Finance Agency (FHFA) to succeed to (i) the supervisory and regulatory responsibilities of the Office of Federal Housing Enterprise Oversight (OFHEO) with respect to Fannie Mae and Freddie Mac (collectively, the enterprises) and of the Federal Housing Finance Board with respect to the FHLBs, and (ii) the authority of the Secretary of the Department of Housing and Urban Development (HUD) with respect to housing goals and new program approval requirements for the enterprises.

To help stabilize and maintain confidence in the enterprises, the Act also provides the Department of Treasury with temporary authority to acquire obligations of the GSEs, as well as other securities of the enterprises. In addition, HERA includes provisions to

- modernize the mortgage insurance programs of the Federal Housing Administration (FHA);
- create a new HOPE for Homeowners program within FHA to assist distressed homeowners attempting to refinance into more sustainable mortgages;
- establish a nationwide mortgage originator licensing and registration system; and
- improve the disclosures provided consumers in connection with mortgage transactions.

Treasury Authorization to Provide Financial Support to GSEs

As strains in financial markets intensified in 2008, investors became increasingly worried that the capital of Fannie

Mae and Freddie Mac would be insufficient to absorb current and expected losses on their mortgage portfolios. In light of the important role that the GSEs play in the housing finance markets and the financial system, Treasury requested and Congress passed changes as part of HERA that granted temporary authority to Treasury to purchase obligations of the GSEs and other securities (including equity capital) issued by Fannie Mae and Freddie Mac, on such terms and in such amounts as the Treasury determines. The statute requires that the Treasury secretary determine that any such purchases are necessary to provide stability to the financial markets, prevent disruptions in the availability of mortgage finance, and protect the taxpayer. The Treasury's authority to purchase such obligations or securities expires on December 31, 2009; however, the statute expressly permits the Treasury, after December 31, 2009, to retain (and exercise any rights associated with) any obligations or securities acquired by such date.

On September 7, 2008, FHFA, after consulting with Treasury Secretary Henry M. Paulson and Federal Reserve Board Chairman Ben S. Bernanke, appointed itself conservator for Fannie Mae and Freddie Mac in accordance with the conservatorship and consultation provisions of HERA (described in "Prompt Corrective Action and Conservatorship and Receivership" and "Required Consultations" later in this section). In conjunction with this action, the Treasury, utilizing the new purchase authority granted under HERA, entered into stock purchase agreements with Fannie Mae and Freddie Mac pursuant to which Treasury acquired preferred shares of each enterprise. Pursuant to these stock purchase agreements, Treasury agreed to provide up to $100 billion to each enterprise to ensure that the enterprise maintains a positive net worth. In connection with these actions, Treasury also established a temporary secured lending credit facility for Fannie Mae, Freddie Mac, and the FHLBs, and initiated a temporary program to purchase mortgage-backed securities guaranteed as to principal and interest by Fannie Mae and Freddie Mac. The actions taken by FHFA and Treasury helped to stabilize the GSEs, as investors became more confident of the government's support for the GSEs.

GSE Regulation and Supervision

Title I of HERA significantly reforms the supervisory and regulatory framework for the GSEs, representing the culmination of almost a decade of work by Congress and other relevant parties. For several years prior to the enactment of HERA, the Board had supported legislative changes to improve the supervisory and regulatory framework of the GSEs and to address the systemic risks posed by the retained mortgage portfolios of Fannie Mae and Freddie Mac. For example, the Board had urged the Congress to

- provide the supervisor of Fannie Mae and Freddie Mac with the authority to set and adjust the capital requirements for the enterprises in a manner comparable to the capital authority available to the federal banking agencies with respect to insured banks;
- establish a clear and credible receivership process for the enterprises; and
- limit the size of the retained portfolios of the enterprises by anchoring them to a well-understood public purpose.

The supervisory and regulatory changes enacted under HERA include provisions that address each of these elements. As a general matter, HERA allows the FHFA director to oversee the prudential operations of the GSEs and to ensure that each GSE operates in a safe and sound manner by, among other means, maintaining adequate capital and establishing adequate internal controls.

Capital

Importantly, HERA grants the FHFA director broad new authority to set and adjust the capital requirements for the GSEs. For example, HERA provides the director a free hand to establish, by regulation, risk-based capital requirements for the enterprises to ensure that the enterprises operate in a safe and sound manner and maintain sufficient capital and reserves to support the risks that arise in the operations and management of the enterprises. Previously, federal law specified, in many respects, the type of risk-based capital standards that had to be applied to the enterprises, thus greatly constraining the ability of the supervisor of the enterprises to alter or modify these standards to improve their risk sensitivity or take account of financial developments or improvements in methodologies for assessing regulatory capital adequacy.

HERA also authorizes the FHFA director to raise, by regulation, the minimum capital level for Fannie Mae and Freddie Mac under statute (generally, core capital equal to at least 2.5 percent of on-balance-sheet assets plus 0.45 percent of mortgage-backed securities guaranteed by the enterprise and other off-balance-sheet obligations) or by the FHLBs (generally, total capital equal to at least 5 percent of total assets). Specifically, the director is permitted to raise a GSE's minimum capital level to the extent needed to ensure its safe and sound operation. The director also must periodically review GSE capital levels, and may increase, by order, the minimum capital levels for the enterprises or FHLBs on a temporary basis, if necessary, and consistent with the prudential regulation and the safe and sound operation of the GSE.

Portfolio Limits

HERA requires that the FHFA director establish, by regulation, criteria governing the portfolio holdings of Fannie Mae and Freddie Mac to ensure that the holdings are backed by sufficient capital and consistent with the mission and the safe and sound operations of the enterprises. In establishing such criteria, the director must consider (i) the ability of the enterprises to provide a liquid secondary market through securitization activities, (ii) the portfolio holdings of the enterprises in relation to the overall mortgage market, and (iii) the enterprise's adherence to the prudential management and operation standards established by the director under HERA and described below (see "Prudential Management and Operation Standards"). Additionally, the director is authorized, by order, to make temporary adjustments to these portfolio criteria, such as during times of economic distress or market disruption, and to make an enterprise dispose of or acquire any asset if the director determines that such action is consistent with the purposes of the Federal Housing Enterprises Financial Safety and Soundness Act of 1992, as amended, or consistent with the authorizing statutes for the enterprises.

Prompt Corrective Action and Conservatorship and Receivership

HERA significantly alters the statutory provisions governing the supervisory actions that may or must be taken against a GSE as its regulatory capital levels decline, and addresses the manner in which a troubled or failing GSE's condition may be resolved. As a general matter, HERA modifies the prompt corrective action framework applicable to a troubled GSE in a manner more closely tracking a similar regime used with a troubled insured depository institution under the Federal Deposit Insurance Act (FDIA). In addition, HERA establishes a process for placing a troubled GSE into conservatorship or receivership and for managing such a conservatorship or receivership broadly similar in nature to those used with insured depository institutions under the FDIA. However, because GSEs, unlike insured depository institutions, do not offer federally insured deposits, the provisions under FDIA related to insured deposits (e.g., depositor preferences) and the FDIC's deposit insurance fund (e.g., least-cost resolution and related requirements) do not apply in the case of the resolution of a GSE.

For example, HERA modifies the existing prompt corrective action regime for Fannie Mae and Freddie Mac to

- require the FHFA director to closely monitor the condition of an undercapitalized enterprise and its compliance with the mandatory capital restoration plan and other restrictions applicable to an undercapitalized entity;
- restrict the ability of an undercapitalized enterprise to grow in asset size, acquire additional companies, or engage in new activities;
- allow the FHFA director to order a new election for the board of directors of a significantly undercapitalized enterprise, require a significantly undercapitalized enterprise to employ qualified executive officers, or require the dismissal of any director or officer who held office for more than 180 days before the enterprise became significantly undercapitalized; and
- allow the FHFA director to appoint the FHFA as receiver for a critically undercapitalized enterprise.

HERA also applied the prompt corrective action regime governing the enterprises (as modified) to FHLBs.

HERA also allows, or requires, the FHFA director to place a GSE into conservatorship or receivership for reasons other than critical undercapitalization. Specifically, HERA authorizes the director to establish a conservatorship or a receivership for a GSE if the director finds that any of 11 other separate conditions are met. These conditions include, among others, that

- the GSE's obligations exceed its assets;
- the GSE is in an unsafe or unsound condition to transact business;
- the GSE is likely to be unable to pay its obligations or meet the demands of its creditors in the normal course of business;
- the GSE has incurred or is likely to incur losses that will deplete all or substantially all of its capital and there is no reasonable prospect that the firm will become adequately capitalized; and
- the board of directors, shareholders, or members of the GSE have consented to the appointment.

HERA also requires that the FHFA director place a GSE (even one then operating in a conservatorship) into a receivership if the director determines in writing that

- the assets of the GSE are, and during the preceding 60 calendar days have been, less than the obligations of the GSE to its creditors or others; or

- the GSE is not, and during the preceding 60 calendar days has not been, generally paying its debts as they become due (other than debts subject to a bona fide dispute).

If a GSE is placed into either conservatorship or receivership, HERA authorizes the FHFA to take over the business and operations of the troubled GSE and change management of the GSE. In the case of a conservatorship, the FHFA is directed to seek to rehabilitate the troubled entity for the benefit of its shareholders and creditors by preserving the entity's assets and improving its business operations in order to restore the entity to a sound and solvent condition. In contrast, in the case of a receivership, the FHFA must place the GSE into liquidation, and it has the ability to determine claims of creditors against the GSE.

HERA allows FHFA, as receiver, to establish a "bridge" entity to assume the assets and liabilities of an FHLB in receivership. HERA also requires the FHFA director to organize a bridge entity (referred to in HERA as a limited-life regulated entity) if Fannie Mae or Freddie Mac are placed into a receivership. HERA provides that a bridge entity established for Fannie Mae or Freddie Mac would immediately, and by operation of law, succeed to the charter of Fannie Mae or Freddie Mac, as relevant. Moreover, HERA specifically provides that the amount of assets transferred from a failed enterprise to the bridge entity must exceed the amount of liabilities transferred to the bridge entity. Together, these provisions help ensure that, if an enterprise were to be placed into a receivership, a new, solvent entity would be established that could continue to fulfill the enterprises' important mission in accordance with the enterprises' governing charter.

Required Consultations

Title I of HERA requires the FHFA director to consult with, and consider the views of, the Chairman of the Board of Governors of the Federal Reserve System with respect to the risks posed by the GSEs to the financial system prior to issuing any proposed or final regulations, orders, or guidelines regarding prudential management and operations standards, safe and sound operations of, and capital requirements and portfolio standards applicable to, the GSEs. The Act also requires the director to consult with the chairman regarding any decision to place a GSE into conservatorship or receivership. These consultation requirements expire on December 31, 2009. As noted above, FHFA Director James Lockhart consulted with Federal Reserve Board Chairman Bernanke prior to placing Fannie Mae and Freddie Mac into separate conservatorships on September 7, 2008.

Prudential Management and Operation Standards

HERA also requires that the FHFA director establish standards for the GSEs related to, among other things, the management of interest rate risk exposure; management of market risk; adequacy and maintenance of liquidity and reserves; management of asset and investment portfolio growth; investments and acquisitions of assets; overall risk-management processes; and such other operational and management standards as the director deems appropriate.

Increase in Conforming-Loan Limits

HERA also permanently increases the Fannie Mae and Freddie Mac conforming-loan limits, which are the maximum dollar size of a mortgage that may be purchased by the enterprises. Earlier in 2008, the Economic Stimulus Act of 2008 increased, until December 31, 2008, the conforming-loan limit for mortgages on single-family residences to the greater of $417,000, or 125 percent of the relevant area median home price (not to exceed $729,500). Effective January 1, 2009, HERA allows Fannie Mae and Freddie Mac to purchase single-family mortgages with a maximum origination balance of up to the greater of $417,000, or the lesser of 115 percent of the area median price or $625,500. Adjustments also were made to the conforming-loan limits for two-to-four-family residences.

New Products and Activities

Under HERA, Fannie Mae and Freddie Mac must obtain the FHFA director's prior approval before offering any new product. In considering a request, the director must determine that the product is consistent with the enterprise's statutory authority, is consistent with the safety and soundness of the enterprise or the mortgage finance system, and is in the public interest. The director also must request public comment on any new product approval request for 30 days. The statute includes certain exclusions from the definition of a new product to avoid unduly interfering with the development of loan underwriting systems and mortgage products offered by the enterprises.

FHA Modernization

HERA also includes the FHA Modernization Act of 2008, which makes several modifications to the National Housing Act to improve the mortgage insurance programs of the FHA. Similar to the conforming-loan limits of Fannie Mae and Freddie Mac, FHA conforming-loan limits were increased by the Economic Stimulus Act of 2008 and HERA. Effective January 1, 2009, the maximum size of a single-family mortgage eligible for FHA insurance is the greater of $417,000, or the lesser of 115 percent of the area median price or $625,500. In addition, HERA

- increases from 3 percent to 3.5 percent the down payment that a borrower must make in cash or cash equivalents on a home in order for the mortgage to be eligible for FHA insurance;
- prohibits borrowers from receiving any part of the required down payment from the seller of the property, any other person who financially benefits from the transaction, or any third party or entity that is reimbursed by such a person or entity for providing the down payment assistance to the borrower;
- increases, from 2.25 percent to 3.0 percent, the maximum annual mortgage insurance premium that the FHA may collect; and
- prohibits the secretary of HUD from taking any action, prior to October 1, 2009, to implement the risk-based premium pricing program that the secretary had published in the *Federal Register* on May 13, 2008, or any other risk-based premium pricing program based on the borrower's "decision credit score" described in such *Federal Register* notice.

HOPE for Homeowners

As noted above, HERA also establishes the HOPE for Homeowners Program

(H4H Program), which is a voluntary program designed to allow qualified, at-risk mortgage borrowers to refinance their existing mortgages into new mortgage loans guaranteed by the FHA, subject to certain conditions and restrictions. FHA may insure eligible mortgages under the H4H Program commencing no earlier than October 1, 2008, and the authority to insure new mortgages expires on September 30, 2011. The Emergency Economic Stabilization Act of 2008, enacted on October 3, 2008, modified the H4H Program in several respects. The following outlines the key elements of the H4H Program as amended.

Borrower Eligibility Requirements

To be eligible for the H4H Program, a borrower must have a debt-to-income ratio of at least 31 percent before applying for a H4H Program mortgage. The borrower must occupy the property as his or her primary residence, and the borrower may not have an ownership interest in another residential property. Accordingly, investors and investor properties are not eligible for the program. Additionally, to be eligible for the H4H Program, a borrower must certify that he or she did not intentionally default on the existing mortgage or any other debt, and has not knowingly or willfully furnished material information known to be false for the purpose of obtaining the existing mortgage. Mortgagors that have been convicted under federal or state law for fraud in the past 10 years also are not eligible for this program.

H4H Mortgage Requirements

Loan-to-value and maximum loan amount. The new FHA-insured mortgage refinances an eligible borrower's existing mortgage at a potentially significant write-down from its current principal balance and, thus, may significantly benefit borrowers who are "underwater"—that is, owe more on their current mortgage than the value of their home. HERA prohibits the new FHA-insured mortgage loan from exceeding 90 percent (or such higher percentage as the oversight board for the program determines to be appropriate) of the appraised value of the property serving as security for the mortgage. The new FHA-insured refinancing loan also may not exceed 132 percent of the conforming-loan limit for Fannie Mae that was in effect for 2007 for a property of applicable size.

Premiums. HERA requires that HUD collect an amount equal to 3 percent of the principal balance of the new H4H mortgage as an upfront insurance premium. This amount is paid by the existing lender through a reduction in the amount paid to the lender upon refinancing. The Act also requires borrowers that refinance into an H4H Program mortgage to pay to HUD an annual premium equal to 1.5 percent of the amount of the outstanding mortgage balance.

Release of previous mortgage liens. Participation in the H4H Program by borrowers, mortgagees, servicers, and investors is voluntary. However, all holders of outstanding mortgage liens on a property to be refinanced under the H4H Program must agree to accept the proceeds of the new FHA-insured refinancing loan as payment in full for their existing mortgages on the property and release all liens on the property. In addition, all prepayment penalties and fees associated with default or delinquency must be waived in order for an existing mortgage to be refinanced into a new

H4H Program mortgage. HERA also limits the ability of a person with a H4H Program mortgage to take a second lien on the mortgaged property during the first five years of the new H4H mortgage term.

Loan term. HERA mandates that an H4H Program mortgage may have a term of not less than 30 years and must bear a single rate of interest that is fixed for the entire term of the mortgage, thereby eliminating the potential for future payment shocks on the mortgage.

First payment default. HERA prohibits HUD from paying insurance benefits on any mortgage where the borrower fails to make the first payment on the new H4H Program mortgage.

Requirement to Share Equity and Appreciation

HERA also requires borrowers that refinance into an H4H Program mortgage to share any newly created equity and future appreciation in the property with HUD. Specifically, under HERA, borrowers are required to share with HUD a portion of any new equity in the home created as a result of the H4H Program. Mortgagors also are required to share with HUD 50 percent of any future property appreciation upon sale or disposition of the property. HUD is authorized to offer subordinate mortgage lien holders on the property, in exchange for releasing their lien, either (1) a share of HUD's 50 percent interest in future appreciation of the mortgaged property *or* (2) an upfront payment in lieu of the right to receive a portion of HUD's interest in the property's future appreciation, if any.

Oversight Board

HERA also establishes a Board of Directors (Oversight Board) to oversee the H4H Program. The Oversight Board is composed of the secretary of Housing and Urban Development, the Treasury secretary, the Federal Reserve Board chairman, and the chairperson of the Board of Directors of the Federal Deposit Insurance Corporation, or the respective designee of each such person. HERA further requires the Board to, among other things, establish requirements and standards for the H4H Program and prescribe regulations and guidelines as may be necessary or appropriate to implement such requirements and standards. The Oversight Board published rules to implement the H4H Program in the *Federal Register* on October 6, 2008, and January 7, 2009.

Study of Auction or Bulk-Refinance Program

HERA also requires the Oversight Board to conduct a study of the need for, and efficacy of, an auction or bulk-refinancing mechanism to facilitate the refinancing of existing residential mortgages that are at risk for foreclosure into mortgages insured under the H4H Program. The study must identify and examine various options for mechanisms under which lenders and servicers of such mortgages may make bids for forward commitments for such insurance in an expedited manner. As required by HERA, the Oversight Board submitted the study of auction or bulk-refinancing mechanisms to Congress on September 29, 2008.

S.A.F.E. Mortgage Licensing Act

Another part of HERA—the Secure and Fair Enforcement for Mortgage Licensing Act of 2008 (S.A.F.E. Act)—provides for the establishment of a nationwide mortgage licensing system and registry for the residential mortgage industry. The registry is intended to improve the flow of information between regulators, increase industry accountability, enhance consumer protections and information, and establish a means by which residential mortgage loan originators would be required, to the extent possible, to act in the best interests of consumers.

The statute requires all states to develop and maintain a system for licensing and registering individuals engaged in mortgage loan originations. Pursuant to the S.A.F.E. Act, these state licensing and registering systems must interact with the Nationwide Mortgage Licensing System and Registry (NMLSR), which is to be developed and maintained by the Conference of State Bank Supervisors and the American Association of Residential Mortgage Regulators. In addition, the S.A.F.E. Act requires the federal banking agencies, along with the Federal Financial Institutions Examination Council and the Farm Credit Administration, to jointly develop and maintain a system for registering employees of depository institutions, or regulated subsidiaries of depository institutions, as loan originators with the NMLSR. Such a system must be implemented within one year after the date of enactment of the S.A.F.E. Act, and is to take into consideration, as may be appropriate, the same exceptions and requirements set forth below for state-licensed loan originators. If by the end of a one-year period (or in limited cases a two-year period) the secretary of HUD determines a state does not have an adequate system of licensing and registration, the S.A.F.E. Act requires the secretary to establish and maintain a system for that state.

The S.A.F.E. Act also requires that individuals obtain a license from a state, and that they register with either the state or federal registration system, before they may engage in loan originations. In connection with an application for licensing and registration, an individual must, at a minimum, provide information concerning the applicant's identity, including fingerprints and personal history and experience. An individual may not receive a license or registration if the individual fails to satisfy certain criteria outlined in the statute. The S.A.F.E. Act also outlines the minimum competence requirements for the pre-licensing education and testing requirements for loan originators, as well as for renewal of state-licensed loan originators, which includes a continuing education requirement.

In addition to provisions relating to registration and licensing, the S.A.F.E. Act requires the HUD secretary to recommend reforms to the Real Estate Settlement Procedures Act of 1974, and submit a preliminary report on the root causes of defaults and foreclosures of home loans to Congress not later than six months after the date of statute enactment.

Mortgage Disclosure Improvement Act

Title X of HERA enacts the Mortgage Disclosure Improvement Act (MDIA), which amends, in turn, portions of the Truth in Lending Act (TILA) to help ensure that a consumer is provided with timely and meaningful disclosures in connection with certain extensions of credit secured by the consumer's dwelling. EESA, enacted on October 3, 2008, also includes several amendments to the MDIA.

The MDIA, as amended, includes mortgage refinancings among the types of extensions of credit subject to early disclosures under TILA. The amendments to MDIA also modify the early disclosure requirement of TILA so that creditors must provide certain disclosures to borrowers no later than three days after receiving an application and at least seven days prior to closing. Additional disclosures are required in cases of extensions of credit secured by the dwellings of consumers where the annual rates of interest or schedules of payments are variable. Moreover the MDIA requires that any disclosure statement that no longer accurately reflects the annual percentage rate of interest should be replaced by an accurate statement within three business days before the date of transaction. The statute also provides that consumers must receive the disclosures before paying any fee related to the extension of credit. However, the statute allows a consumer to waive the timing requirement, in case of a bona fide personal financial emergency, by providing a lender with a signed written request outlining such emergency and specifically requesting waiver of the timing requirement.

Some of the disclosure modifications codified in the MDIA were previously required by regulations issued by the Board in July 2008. The Board issued a notice of proposed rulemaking on December 10, 2008, to implement the additional requirements included in the MDIA.

Emergency Economic Stabilization Act of 2008

On October 3, 2008, President Bush signed into law the Emergency Economic Stabilization Act of 2008 (EESA) (Pub. L. No. 110-343), which provides the Treasury secretary with important new tools to help restore liquidity and stability to the financial system, and establishes several mechanisms to oversee the implementation of this authority. The central feature of EESA is the establishment of the Troubled Assets Relief Program (TARP), through which the secretary is authorized to purchase troubled assets from qualifying financial institutions to help maintain and promote financial stability.

The EESA also includes several important limitations and conditions designed to protect the interests of taxpayers. For example, EESA generally requires that the secretary obtain warrants or comparable debt instruments from any financial institution from which the TARP acquires troubled assets. In addition, and as described below, section 111 of EESA requires that the secretary develop and impose certain executive compensation restrictions on financial institutions from which the TARP purchases troubled assets. Related provisions of EESA limit the ability of certain financial institutions that participate in TARP to deduct executive compensation expenses for federal tax purposes.

EESA also includes several other provisions affecting financial institutions or the Federal Reserve, including a temporary increase in federal deposit insurance coverage and an acceleration of the effective date of a previously adopted legislative amendment that permits the Federal Reserve to pay interest on balances held at Federal Reserve Banks by depository institutions.

Troubled Assets Relief Program

In light of the extraordinary events occurring in the financial markets and the substantial risks such events posed to financial stability and the U.S. economy, Congress passed EESA to immediately provide the Treasury secretary with the authority and facilities to restore liquidity and stability to the U.S.

financial system. EESA also provides that the secretary should seek to use such authorities and facilities to

- protect home values, college funds, retirement and other savings accounts;
- preserve homeownership;
- promote jobs and economic growth;
- maximize overall returns to taxpayers; and
- provide public accountability for the exercise of such authority.

In exercising this authority under EESA, the Treasury secretary must consult with the Federal Reserve Board, the FDIC, the Comptroller of the Currency, the Director of the Office of Thrift Supervision, the Chairman of the National Credit Union Administration Board, and the HUD secretary.

To assist in accomplishing these goals, EESA authorizes the Treasury secretary to establish the TARP and purchase troubled assets from financial institutions on such terms and subject to such conditions as the secretary may establish in accordance with EESA. As a general matter, the term "troubled assets" is defined to include residential and commercial mortgages, and any securities, obligations, or other instruments based on or related to such mortgages, so long as they were issued or originated on or before March 14, 2008. However, EESA also provides that the term "troubled assets" shall also apply to any other financial instrument (including, for example, equity instruments) that the secretary, after consultation with the Federal Reserve Board Chairman and notification to Congress, determines the purchase of which is necessary to promote financial market stability. EESA also generally defines a "financial institution" to mean any institution having significant operations in the United States—including but not limited to banks and other depository institutions—which is established and regulated under U.S. laws, or those of any of its states, territories, or possessions. EESA also provides that, if Treasury purchases troubled assets under the TARP, the secretary must establish a program to guarantee troubled assets originated or issued prior to March 14, 2008. The secretary must collect premiums for any guarantee issued under the program in an amount that the secretary deems necessary to meet the purposes outlined in EESA and provide sufficient reserves, based on an actuarial analysis, to ensure taxpayers are fully protected.

The purchase authority granted to the secretary by EESA terminates on December 31, 2009, although the secretary may extend this date until October 3, 2010 upon submission of a written certification to Congress. However, the authority of the secretary to hold any troubled assets purchased prior to the termination of authority, or to purchase or fund the purchase of troubled assets under a commitment already entered into before the termination date, is not subject to such termination.

EESA authorizes the secretary to purchase or insure up to a maximum of $700 billion in troubled assets. Of this amount, $250 billion was made immediately available for use when EESA was enacted, and the remaining amount was made available in two separate tranches of $100 billion and $350 billion.

Executive Compensation and Compensation-Related Tax Provisions

As noted above, EESA establishes certain executive compensation restrictions on financial institutions that sell troubled assets to the Treasury under the TARP. Specifically, EESA requires that the secretary impose executive compensation restrictions on a financial institution if the secretary directly (and not through an auction process) purchases troubled assets from the institution, if market prices for the assets are not available, and if the secretary receives a meaningful equity or debt position in the institution as a result of the transaction. These restrictions must

- be designed to ensure that the compensation paid to senior executive officers of the institution does not provide incentives to take unnecessary and excessive risks;
- require the financial institution to recover any bonus or incentive compensation paid to a senior executive officer based on criteria that are later proven to be materially inaccurate; and
- prohibit any "golden parachute" payment to a senior executive officer during the period that the secretary holds an equity or debt position in the financial institution.

For these purposes, the term "senior executive officer" refers, in the case of a publicly held financial institution, to an individual who is one of the five highest paid executives of the institution as disclosed under regulations issued under the Securities Exchange Act of 1934 and, in the case of a non-public company, the counterparts of such individuals.

If assets are purchased through an auction and the total amount of assets acquired from the institution exceeds certain quantitative levels, the secretary must prohibit any new employment contract with a senior executive officer from providing for a golden parachute in the event of the individual's involuntary termination or the institution's bankruptcy filing, insolvency, or receivership.

Title III of EESA modifies the Internal Revenue Code to provide special rules for the tax treatment of compensation (including so-called "golden parachute" payments) paid by TARP recipients to covered executives (as defined in the EESA). Among other things, financial institutions participating in the TARP and selling troubled assets to the TARP (on an aggregate basis) in excess of $300 million are prohibited, for a limited period, from deducting for federal tax purposes any remuneration in excess of $500,000 to any covered executive. In addition, such financial institutions will be subject to a 20 percent tax on certain "golden parachute" payments provided to covered executives.

Foreclosure Mitigation Efforts and Assistance to Homeowners

EESA provides that, if Treasury acquires mortgages, mortgage-backed securities, and other assets backed by residential real estate under the TARP, the Treasury secretary must implement a plan that seeks to maximize assistance to homeowners and, considering net present value to the taxpayers, encourage the servicers of underlying mortgages to take advantage of the HOPE for Homeowners Program as well as other programs available to minimize foreclosures. In dealing with loan modification requests under existing investment contracts, the secretary, where appropriate and after consideration of net present value to the taxpayer, is directed to consent to reasonable loss-mitigation measures, including rate reductions or principal write-downs. Furthermore, the secretary must coordinate with the FDIC, Board, FHFA, HUD, and other agencies that hold troubled assets to identify opportunities for acquiring different classes of troubled assets, such as mortgage-backed securities, in order to improve the loan modification and restructuring processes and provide protections to bona fide tenants who are current on their rent.

Additionally, EESA requires that designated "federal property managers" develop foreclosure prevention plans for residential mortgages and residential mortgage-backed securities that the managers hold, own, or control. Such plans must seek to maximize assistance for homeowners and, considering net present value to the taxpayers, encourage the servicers of the underlying mortgages to take advantage of the HOPE for Homeowners Program. Generally speaking, a "federal property manager" is defined to include the FHFA, the FDIC, and the Board, assuming that certain specific circumstances are present. The FHFA is deemed to be a federal property manager only in its capacity as conservator for Fannie Mae and Freddie Mac, and the FDIC is considered a federal property manager in cases where residential mortgage loans and mortgage-backed securities are held by a bridge depository institution established by the FDIC in connection with the resolution of a failed insured depository institution. The Board is considered a federal property manager only with respect to any mortgage or mortgage-backed securities held, owned, or controlled by or on behalf of a Reserve Bank, other than when such assets are held, owned, or controlled in connection with open-market operations under section 14 of the Federal Reserve Act or as collateral for an advance or discount that is not in default.

Oversight and Transparency Provisions

Continuing Oversight, Auditing, and Reporting Requirements

The EESA imposes several continuing reporting obligations on the Treasury Department with respect to its investments under the TARP. Section 114 of the EESA requires Treasury, within two business days after an investment, to make available to the public, in electronic form, pricing and other information about the investment. In addition, section 105(a) of EESA requires Treasury to issue a tranche report approximately every 30 days, which must provide information on, among other things, its actions taken during the covered period under the TARP and the administrative expenses of the TARP. Finally, for each additional aggregate Treasury investment of $50 billion under the TARP, section 105(b) of the EESA requires the Department to issue a report that describes, among other things, the transactions related to its additional incremental exposure, the pricing mechanism for each relevant transaction, a description of the challenges that remain in the financial system, and an estimate of the additional actions that may be necessary to address such challenges.

EESA also requires that the secretary provide to Congress no later than April 30, 2009, a report that analyzes both the current state of the regulatory system and its effectiveness in overseeing financial market participants. This report must include recommendations for improving the regulatory system.

Special Inspector General for the TARP

As an additional measure to increase transparency of TARP-related actions, EESA provides for the establishment of an Office of the Special Inspector General (Special IG) for the TARP, which must, among other things, conduct, supervise, and coordinate audits and investigations of the purchase, guarantee, management, and sale of troubled assets under the TARP. The Special IG must provide certain designated committees of Congress with periodic reports summarizing the activities of the Special IG during the reporting period. The Special IG, appointed by the President by and with the advice and consent of the Senate, also assumes inspector general duties and responsibilities as outlined under the Inspector General Act of 1978.

Government Accountability Office

EESA provides authority to the Comptroller General of the United States to commence ongoing oversight of TARP activities and performance, including examining TARP's efficacy in meeting the purposes of EESA. The comptroller must furnish Congress, as well as the Special IG, with reports at least every 60 days. These reports are required to analyze, among other things

- the performance of the TARP in meeting the purposes of the EESA,
- the financial condition of the TARP,
- characteristics of transactions and commitments entered into by the TARP,
- the efficiency of the TARP, and
- the compliance of TARP, its agents, and representatives with applicable laws and regulations.

The comptroller must also undertake a study to determine the extent to which leverage and sudden deleveraging of financial institutions served as a factor in the current financial crisis. This study must be provided to Congress no later than June 1, 2009.

Financial Stability Oversight Board

EESA also establishes the Financial Stability Oversight Board (FINSOB), a body comprising the Federal Reserve Board chairman; the Treasury secretary; the FHFA director; the Securities and Exchange Commission chairman; and the HUD secretary. The FINSOB is authorized to review the policies implemented by Treasury under TARP and make recommendations, as appropriate, to the Treasury secretary regarding use of EESA authority. Additionally, the FINSOB must report suspected TARP-related fraud, misrepresentations, or malfeasance to the Special IG or the U.S. attorney general.

Furthermore, the FINSOB is authorized to ensure, through appropriate means, that the policies implemented by the Treasury secretary are in accordance with the purposes of EESA, are in the economic interests of the United States, and are consistent with protecting taxpayers. The FINSOB must meet at least monthly and file a quarterly report with certain designated Congressional committees.

Congressional Oversight Panel

EESA also establishes a Congressional Oversight Panel to monitor the TARP and review the current state of the financial markets and the regulatory system. The Oversight Panel consists of five members appointed by members of Congress in the manner specified in section 125 of EESA. The Oversight Panel must submit reports to Congress every 30 days that discuss, among other things, the use by the Treasury secretary of EESA authority, the impact of purchases made by the TARP on the financial markets and financial institutions, the extent to which the information made available on transactions under the program has contributed to market transparency, the effectiveness of foreclosure mitigation efforts, and the effectiveness of the program in minimizing long-term costs and maximizing the benefits to taxpayers. Additionally, EESA requires the Oversight Panel to submit a separate report analyzing the current state of the regulatory system and its effectiveness in providing oversight of financial market participants, including analysis of existing gaps in consumer protections and recommendations for improvement. This separate report was submitted to Congress on January 20, 2009.

Other Provisions of Interest

Interest on Reserves

Section 128 of EESA accelerated to October 1, 2008, the effective date of an amendment, previously adopted as part of the Financial Services Regulatory Relief Act of 2006, that authorizes the Reserve Banks, in accordance with Board regulations, to pay interest on balances held by or on behalf of depository institutions at a Reserve Bank. EESA also authorized the Board to lower the level of reserve requirements on transaction accounts below the ranges established by the Monetary Control Act of 1980. On October 9, 2008, the Board issued an interim final rule implementing this new authority.

Section 13(3) Reporting Requirement

Section 129 of EESA requires that the Board submit a report to designated Congressional committees within seven days of authorizing any loan to an individual, partnership, or corporation under the emergency lending authority of section 13(3) of the Federal Reserve Act. This section of the Federal Reserve Act permits the Federal Reserve to make secured loans to such persons in unusual and exigent circumstances and subject to certain additional conditions. The newly required reports must include the justification for exercising such authority, and discuss the specific terms of the action, as well as any expected cost to taxpayers. In addition, while a loan under section 13(3) is outstanding, the Board must submit periodic updates to designated congressional committees not less than every 60 days. These periodic reports must address the status of the loan, the value of collateral held by the Reserve Bank which initiated the loan, and the projected cost to taxpayers.

Margin Study Requirement

Not later than June 1, 2009, the comptroller must complete and submit to designated congressional committees a study regarding the extent to which leverage and sudden deleveraging of financial institutions was a factor behind the financial crisis. The study must include an analysis of the roles and responsibilities of the Board, the SEC, the Treasury secretary, and other federal banking agencies with respect to monitoring these issues, analysis of the authority of the Board to regulate leverage, including to what extent such authority has been used, and an analysis of usage of margin authority by the Board, and any related recommendations.

Temporary Increase in Deposit Insurance and FDIC Borrowing Authority

As noted above, EESA provides for a temporary increase from $100,000 to $250,000 in FDIC deposit insurance coverage for insured depository institutions and NCUA share insurance coverage for insured credit unions. This temporary increase ends on December 31, 2009.

Additionally, EESA allows the FDIC to borrow from the Treasury amounts in excess of that authorized under sections 14(a) and 15(c) of the Federal Deposit Insurance Act and as necessary to carry out this increase in deposit insurance coverage.

Mark-To-Market Accounting

EESA authorizes the SEC to suspend application of the mark-to-market provisions embodied in Statement Number 157 of the Financial Accounting Standards Board, if it determines that doing so is necessary or appropriate in the public interest and consistent with the protection of investors. Additionally, the SEC, in consultation with the Federal Reserve Board and the Treasury secretary, must conduct a study to consider (1) the effects of these mark-to-market standards on the balance sheets of a financial institution, (2) the impact of such accounting on bank failures in 2008, (3) the extent to which such standards affect the quality of information available to investors, (4) the process used by FASB in developing such standards, and (5) whether alternative accounting standards would better suit the industry. This study, including legislative and administrative recommendations, was submitted to Congress on December 30, 2008.

Higher Education Opportunity Act of 2008

On August 14, 2008, President Bush signed the Higher Education Opportunity Act of 2008 (HEOA) (Pub. L. No. 11-315), which includes amendments to the disclosure requirements for private educational loans under TILA. The Federal Reserve Board must adopt regulations implementing HEOA's disclosure provisions, which require creditors to provide a number of new disclosures about the terms and features of private educational loans. Creditors will also have to disclose information about federal student loan programs, which may offer less costly alternatives.

The new disclosures required by the HEOA would be incorporated into the segregated cost disclosures that creditors must provide under TILA. Currently, creditors integrate much of this information in credit agreements, along with other contract terms. HEOA seeks to highlight key information by including it on the TILA disclosure and requiring that the information be disclosed multiple times during the lending process. As a result, the TILA disclosures for private educational loans will become longer and more detailed. HEOA also requires the Board to develop and test model disclosure forms, which the Board would publish to encourage lenders to standardize disclosure format.

HEOA defines "private educational loans" as loans made expressly for postsecondary educational expenses, excluding loans made, insured, or guaranteed by the federal government. Generally, creditors must furnish TILA cost disclosures before credit is extended. Under HEOA, however, creditors will be required to furnish three sets of disclosures for private educational loans. First, creditors must disclose the available loan rates and terms in an application or solicitation for a private educational loan. Creditors must also furnish a second set of disclosures after the borrower has been approved for a loan, and afford the applicant at least 30 days in which to accept the loan. During this period, the creditor may not change the rate or terms (except for changes to a variable interest rate based on an index). If the consumer accepts the loan, the creditor must then furnish a third set of disclosures, after which the consumer has three days in which to cancel the loan. The creditor may not disburse the loan funds until the three-day cancellation period expires.

HEOA also contains restrictions for the marketing of private student loans. It prohibits private creditors from using the name, emblem, or mascot of an educational institution in a way that implies that the institution endorses the creditor's loans. Some schools, however, enter into "preferred lender" arrangements and explicitly agree to endorse that creditor's student loan product. HOEA restricts but does not prohibit this practice.

The Board issued a notice of proposed rulemaking to implement these provisions on March 11, 2009. ■

Records

Record of Policy Actions of the Board of Governors

This report provides an account of actions taken by the Board on questions of policy in 2008 as implemented through (1) rules and regulations, (2) policy statements and other actions, (3) special liquidity facilities and other initiatives to address financial strains, and (4) discount rates for depository institutions. All actions were approved by a unanimous vote of the Board members, unless indicated otherwise. Full texts of the actions are available via the online version of the Annual Report, from the "Reading Rooms" on the Board's FOIA web page, and on request from the Board's Freedom of Information Office. Policy actions in 2009 that affect actions approved in 2008 have been summarized through March 31, 2009, in editorial notes.

Rules and Regulations

Regulation C
Home Mortgage Disclosure

[Docket No. R-1321]

On October 20, 2008, the Board approved amendments to conform the rules for reporting price information on higher-priced loans with the definition of "higher-priced mortgage loans" adopted by the Board for Regulation Z in July 2008. The new reporting thresholds for first-lien and subordinate-lien loans are based on the rate spread between a mortgage's annual percentage rate (APR) and a survey-based estimate of APRs currently offered on prime mortgages. They are intended to cover subprime mortgages (and generally avoid covering prime mortgages) by requiring mortgage loans to be reported if the rate spread is 1.5 percentage points or more for first liens and 3.5 percentage points or more for second liens. The amendments are effective October 1, 2009.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Duke.

Regulation D
Reserve Requirements of Depository Institutions

[Docket No. R-1334]

On October 3, 2008, the Board approved an interim final rule with request for comment to permit the Federal Reserve to begin paying interest on depository institutions' required reserve balances (held by the Reserve Banks to satisfy depository institutions' reserve requirements) and excess balances (held by the Reserve Banks in excess of required reserve and clearing balances). The Financial Services Regulatory Relief Act authorized the Federal Reserve to pay interest on such balances, beginning October 1, 2011, and the Emergency Economic Stabilization Act accelerated the effective date to October 1, 2008. The interest rates paid are determined by a formula based on the target federal funds rate. The Board also made minor changes to its clearing-balance policy and the method for recovering float costs. The interim final rule is effective October 9, 2008.

On October 21, 2008, and *November 4, 2008*, the Board approved interim final rules with requests for comment to alter the formulas used for determining the interest rates paid on excess balances and on required reserves and excess balances, respectively.

On December 16, 2008, the Board approved an interim final rule to set the interest rates on required reserve balances and excess balances at ¼ percent after the Federal Open Market Committee established a target range for the federal funds rate of 0 to ¼ percent. The rule also provides that interest rates paid on those balances may be rates as determined by the Board from time to time rather than the rates in the regulation. The interim final rule is effective December 23, 2008, and the revised rates apply to maintenance periods beginning December 18, 2008.

> Votes for these actions: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Duke.

Regulation H
Membership of
State Banking Institutions
in the Federal Reserve System

Regulation Y
Bank Holding Companies
and Change in Bank Control

[Docket No. R-1332]

On September 19, 2008, the Board approved an interim final rule with request for comment to provide state member banks or bank holding companies participating in the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF) (discussed under "Special Liquidity Facilities and Other Initiatives") with an exemption from the Board's leverage and risk-based capital guidelines for asset-backed commercial paper held as a result of participation in the facility. The exemption is subject to safety and soundness conditions. The interim final rule is effective September 19, 2008, and expires January 30, 2009, unless extended by the Board.

> Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Duke.

NOTE: *On January 27, 2009*, the Board approved final rules to conform with the extension of the AMLF to October 30, 2009.

[Docket No. R-1329]

On December 13, 2008, the Board, acting with the Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, and Office of Thrift Supervision, approved a final rule that permits a banking organization to reduce the amount of goodwill that it must deduct from tier 1 capital by the amount of any deferred tax liability associated with that goodwill. The final rule is effective January 29, 2009, and may be applied, at the banking organization's election, for purposes of the regulatory reporting period ending December 31, 2008.

> Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Duke.

Regulation W
Transactions between
Member Banks and Their Affiliates

[Docket No. R-1330]

On September 14, 2008, the Board approved an interim final rule with request for comment to provide a temporary exemption for member banks from certain limitations in section 23A of the Federal Reserve Act and Regulation W. The exemption increases the capacity of member banks to enter into securities-financing transactions with their affiliates and is subject to safety and soundness conditions. The interim final rule is effective September 14, 2008, and expires January 30, 2009, unless extended by the Board.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Duke.

NOTE: *On January 27, 2009*, the Board approved a final rule that extended the expiration date for the exemption to October 30, 2009.

[Docket No. R-1331]

On September 19, 2008, the Board approved an interim final rule with request for comment to provide a temporary exemption for member banks from certain provisions of sections 23A and 23B of the Federal Reserve Act and Regulation W to facilitate use of the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF) (discussed under "Special Liquidity Facilities and Other Initiatives"). The exemption increases the capacity of participating member banks to purchase asset-backed commercial paper from affiliated money market mutual funds and is subject to safety and soundness conditions. The interim final rule is effective September 19, 2008, and expires January 30, 2009, unless extended by the Board.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Duke.

NOTE: *On January 27, 2009*, the Board approved a final rule to conform with the extension of the AMLF to October 30, 2009.

On October 5, 2008, the Board granted a request by a depository institution for an exemption from the limits on transactions with affiliates under section 23A of the Federal Reserve Act and Regulation W to allow the institution to purchase assets from affiliated money market mutual funds under certain circumstances. The Board announced it would consider similar requests from depository institutions under similar circumstances.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Duke.

Regulation Y
Bank Holding Companies and Change in Bank Control

[Docket No. R-1336]

On October 13, 2008, the Board approved an interim final rule with request for comment to allow bank holding companies to include in their tier 1 capital without restriction the senior perpetual preferred stock they issue to the Department of the Treasury (Treasury) under its capital purchase program. Treasury announced the program, which was established under the Emergency Economic Stabilization Act, on October 14, 2008. The interim final rule is effective October 17, 2008.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Duke.

Regulation Z
Truth in Lending

[Docket No. R-1305]

On July 14, 2008, the Board approved comprehensive amendments under the

Home Ownership and Equity Protection Act that are intended to (1) protect consumers in the home mortgage market from unfair, abusive, or deceptive mortgage lending and servicing practices; (2) preserve responsible lending and sustainable homeownership; (3) ensure that advertisements for mortgage loans provide accurate and balanced information and do not contain misleading or deceptive representations; and (4) provide consumers with transaction-specific disclosures early enough to assist them in selecting a mortgage. Among other changes, the final rule prohibits certain acts and practices in connection with mortgages, particularly higher-priced mortgages; revises the disclosure requirements for mortgage advertisements; and revises the timing requirements for providing disclosures for mortgages. The final rule is effective October 1, 2009, except for the requirement to establish escrow accounts for taxes and insurance for higher-priced mortgage loans, which is effective April 1, 2010 (October 1, 2010, for such loans secured by manufactured housing).

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

Regulation AA
Unfair or Deceptive Acts or Practices

Regulation DD
Truth in Savings

Regulation Z
Truth in Lending

[Docket Nos. R-1314, R-1315, and R-1286]

On December 18, 2008, the Board approved comprehensive amendments that prohibit certain unfair or deceptive credit card practices and improve consumer disclosures in connection with credit card accounts, other revolving credit plans, and overdraft services. Among other changes, the amendments to Regulation AA, which are adopted under the Federal Trade Commission Act, prohibit banks from (1) increasing the rate on a pre-existing credit card balance (except under limited circumstances), (2) applying payments in excess of the minimum in a manner that maximizes interest charges, and (3) imposing finance charges based on balances on days in the current billing cycle and in the previous billing cycle, a practice that is sometimes referred to as “two-cycle” billing. Amendments to Regulation DD, which implements the Truth in Savings Act, address depository institutions’ disclosure practices for overdraft services. Amendments to Regulation Z, which implements the Truth in Lending Act, revise the disclosures consumers receive in connection with their credit cards and other revolving (non-home-secured) credit plans to ensure that information is provided in a timely manner and in a form that is readily understandable. The Regulation AA and Regulation Z amendments are effective July 1, 2010, and the Regulation DD amendments are effective January 1, 2010.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Duke.

Regulation GG
Prohibition on Funding of Unlawful Internet Gambling

[Docket No. R-1298]

On November 7, 2008, the Board approved a joint final rule to implement the Unlawful Internet Gambling Enforcement Act. Under the new regulation, promulgated with the Department of the Treasury as required by the act, non-exempt U.S. financial institutions that participate in designated payment systems must establish policies and procedures that are reasonably designed to prevent or prohibit payments to gambling businesses involved in unlawful Internet gambling. The final rule also provides non-exclusive examples of such policies and procedures. Compliance with the final rule is required by December 1, 2009.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Duke.

Rules of Practice for Hearings

[Docket No. R-1333]

On September 19, 2008, the Board approved amendments to adjust the maximum amount of the statutory civil money penalties under its jurisdiction to account for inflation, as required by the Debt Collection Improvement Act. The amendments are effective October 12, 2008.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Duke.

Rules regarding Equal Opportunity

[Docket No. OP-1264]

On March 25, 2008, the Board approved the publication of an amendment to its Rules regarding Equal Opportunity as a final rule. Under the rule, certain noncitizen employees are eligible for access to sensitive information if they meet particular conditions and subject to a preference for U.S. citizens over equally qualified noncitizens. The final rule is effective April 2, 2008.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

Policy Statements and Other Actions

Statement to Servicers on Reporting of Loss Mitigation of Subprime Mortgages

On March 2, 2008, the Board approved a statement encouraging Federal Reserve–supervised financial institutions that service subprime mortgage loans to report their loss-mitigation activities consistent with uniform standards and to consider using the HOPE NOW alliance's loan-modification reporting standards for subprime residential mortgages. The Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, Office of Thrift Supervision, and National Credit Union Administration issued similar statements to their supervised institutions.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

Illustrations of Consumer Information for Hybrid Adjustable-Rate Mortgage Products

[Docket No. OP-1292]

On April 15, 2008, the Board, acting with the Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, Office of Thrift Supervision, and National Credit Union Administration, approved final illustrations of consumer information for certain hybrid adjustable-rate mortgage products. The illustrations are intended to assist financial institutions in implementing the consumer protection provisions of the Interagency Statement on Subprime Mortgage Lending issued in July 2007. Financial institutions may use the illustrations as provided, change their format, or tailor the information to specific transactions or products. The illustrations are effective May 29, 2008.

Votes for this action: Chairman Bernanke and Governors Warsh, Kroszner, and Mishkin. Absent and not voting: Vice Chairman Kohn.

Memorandum of Understanding with the Securities and Exchange Commission on Information Sharing

On July 7, 2008, the Board approved a memorandum of understanding with the Securities and Exchange Commission that establishes a framework for collaborating, coordinating, and sharing information in areas of common regulatory and supervisory interest. The memorandum states that such efforts concerning certain banking and securities companies are important in maintaining effective oversight, promoting compliance with the banking and securities laws, fostering the stability of financial markets, and facilitating the effective execution of monetary policy by the Federal Reserve.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

Interagency Guidance on the Supervisory Review Process for Capital Adequacy (Pillar 2) related to the Implementation of the Advanced Approaches Final Rule

[Docket No. OP-1322]

On July 14, 2008, the Board, acting with the Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, and Office of Thrift Supervision, approved interagency guidance for banking organizations using the advanced approaches final rule of the new capital adequacy framework that is popularly known as Basel II. The advanced approaches rule, which became final on April 1, 2008, implements a new risk-based capital framework that encompasses three "pillars." The interagency guidance relates to pillar 2 (supervisory review of capital adequacy) and provides details about the agencies' standards for ensuring that each institution subject to the advanced approaches rule has a rigorous process for assessing its overall capital adequacy in relation to its risk profile and has a comprehensive strategy for maintaining appropriate capital levels.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

Policy Statement on Equity Investments in Banks and Bank Holding Companies

On September 19, 2008, the Board approved a policy statement to provide additional guidance on the Board's position on the types of minority equity investments in banks and bank holding companies that would not constitute "control" for purposes of the Bank Holding Company Act. The guidance covers director representation, total equity ownership, and consultations with management and discusses the permissible extent of a noncontrolling investment for each of these areas. The guidance also reiterates that control determinations are based on all the facts and circumstances surrounding an investor's investment in and relationship with a banking organization.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Duke.

Systemic-Risk Exceptions for Federal Deposit Insurance Corporation Guarantees

On October 13, 2008, the Board approved a proposal to broadly invoke the systemic-risk exception to the least-cost-resolution requirements in the Federal Deposit Insurance Act. Under the act, the Federal Deposit Insurance Corporation (FDIC) is generally required to resolve troubled depository institutions in a manner that is least costly to the deposit insurance fund. Invoking the systemic-risk exception allowed the FDIC to temporarily provide guarantees for new senior debt issued by insured depository institutions and their holding companies and for non-interest-bearing transaction deposit accounts at insured depository institutions. The FDIC provided the temporary guarantees in connection with the Department of the Treasury's capital purchase program that was announced on October 14, 2008.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Duke.

On November 23, 2008, the Board approved a proposal to invoke the systemic-risk exception to allow the FDIC, with the Department of the Treasury (Treasury), to provide protection against unusually large losses on a designated pool of Citigroup Inc. assets. The protection was one aspect of a package of coordinated actions by the Board, FDIC, and Treasury (discussed under "Special Liquidity and Other Facilities") that reflect the U.S. government's commitment to supporting financial market stability and restoring vigorous economic growth.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Duke.

NOTE: *On January 15, 2009*, the Board approved a proposal to similarly invoke the systemic-risk exception to allow the FDIC, with Treasury, to provide protection against unusually large losses on a designated pool of Bank of America Corporation assets, as part of a package of coordinated actions by the Board, FDIC, and Treasury.

Interagency Statement on Meeting the Needs of Creditworthy Borrowers

On November 5, 2008, the Board, acting with the Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, and Office of Thrift Supervision, approved an interagency statement to emphasize the need for banking organizations and their supervisors to work together to ensure that the needs of creditworthy borrowers are being met during the ongoing period of financial and economic stress. The statement encourages banking organizations to lend to creditworthy borrowers, engage in capital planning, work with borrowers to avoid preventable foreclosures, and structure compensation incentives to support prudent lending and discourage excessive risk-taking.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Duke.

Memorandum of Understanding with the Commodity Futures Trading Commission and the Securities and Exchange Commission on Credit Default Swaps

On November 14, 2008, the Board approved a memorandum of understanding with the Commodity Futures Trading Commission and the Securities and Exchange Commission that reflects the intent of the parties to cooperate, coordinate, and share information in carrying out their respective responsibilities and exercising their respective authorities with regard to central counterparties for credit default swaps. The memorandum states that such efforts are important in maintaining effective oversight; fostering stability in the market for credit default swaps and in the financial system as a whole; and promoting compliance with banking, commodities, and securities laws.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Duke.

Policy on Payment System Risk

[Docket Nos. OP-1345 and OP-1346]

On December 13, 2008, the Board approved revisions to part II of its Policy on Payment System Risk to improve intraday liquidity management and payment flows for the banking system and to help mitigate the credit exposures of Federal Reserve Banks from daylight overdrafts. The revisions include a new approach that explicitly recognizes the role of the central bank in providing intraday balances and credit to healthy depository institutions, a zero fee for collateralized daylight overdrafts, a 50-basis-point (annual rate) charge for uncollateralized daylight overdrafts, and a biweekly daylight-overdraft-fee waiver of $150. The Board also approved an interim policy change for foreign banking organizations that relates to the calculation of the amount to be deducted from daylight-overdraft fees and early implementation of a streamlined procedure for maximum daylight-overdraft capacity. The interim policy change is effective March 26, 2009. The other revisions will be effective in either late 2010 or early 2011; a specific date will be announced at least 90 days in advance. In addition, the Board decided not to pursue a proposal to change the daylight-overdraft posting rules but stated that it will reconsider the proposal in the future.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Duke.

Interagency Questions and Answers regarding Community Reinvestment

[Docket No. OP-1349]

On December 17, 2008, the Board, acting with the Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, and Office of Thrift Supervision, approved a final notice of new and revised Interagency Questions and Answers regarding Community Reinvestment. Among other new topics, the questions and answers provide guidance on (1) consideration by the agencies of a majority-owned financial institution's activities in cooperation with a minority- or women-owned financial institution or low-income credit union and (2) how an institution can demonstrate that investments in nationwide community development funds meet the geographic requirements of the Community Reinvestment Act. The agencies' revisions to existing questions and answers include, as additional examples of community development services, foreclosure prevention programs for low- or moderate-income homeowners and credit counseling to help low- or moderate-income borrowers avoid foreclosure. The interagency questions and answers are effective January 6, 2009, and supersede all previously published questions and answers.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Duke.

Special Liquidity Facilities and Other Initiatives

Against the background of continued fragility in financial markets, the Board established special liquidity facilities and authorized other initiatives in 2008 to address financial strains and support critical institutions. Unless otherwise indicated, the facilities and initiatives were established for the Federal Reserve Bank of New York and under section 13(3) of the Federal Reserve Act, which permits the Board, in unusual and exigent circumstances, to authorize Reserve Banks to extend credit to individuals, partnerships, or corporations that are unable to obtain adequate credit accommodations from other banking institutions. Also unless otherwise indicated, all facilities and initiatives authorized before August 31, 2008, were approved by the unanimous vote of Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin. After that date, all facilities and initiatives in 2008 were approved by the unanimous vote of Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Duke.

Special Liquidity Facilities

Term Securities Lending Facility

On March 11, 2008, the Board and the Federal Open Market Committee (FOMC) approved the establishment of the Term Securities Lending Facility (TSLF) to strengthen the financing position of primary dealers and foster improved conditions in financial markets more generally. Using an auction process, the facility lends up to $200 billion of Treasury securities to primary dealers for a term of 28 days (previous practice was to lend overnight) in transactions secured by a pledge of other securities.

On July 24, 2008, the Board and the FOMC extended their authorizations for the TSLF until January 30, 2009.

On September 14, 2008, the Board and the FOMC broadened the collateral accepted under the TSLF to include all investment-grade debt securities.

On November 24, 2008, the Board and the FOMC extended their authorizations for the TSLF until April 30, 2009.

Note: *On January 27, 2009*, the Board and the FOMC extended their authorizations for the TSLF until October 30, 2009.

Primary Dealer Credit Facility

On March 16, 2008, the Board approved the establishment of the Primary Dealer Credit Facility (PDCF) to bolster market liquidity, promote orderly market functioning, and improve the ability of primary dealers to provide financing to participants in securitization markets. Under the facility, overnight loans to primary dealers may be collateralized by a broad range of investment-grade debt securities.

On July 24, 2008, the Board extended its authorization for the PDCF until January 30, 2009.

On September 14, 2008, the Board broadened the collateral accepted by the PDCF to closely match the types of collateral that may be pledged in the triparty funding arrangements of the major clearing banks.

On September 21, 2008, the Board authorized extensions of credit to the U.K. broker-dealer subsidiaries of Goldman Sachs, Morgan Stanley, and Merrill Lynch and to the primary-dealer subsidiaries of these firms. Among other terms and conditions, credit extensions under these authorizations must be secured by the types of collateral accepted (1) at the PDCF, for the U.K. broker-dealer subsidiaries, and (2) at the primary credit facility for depository institutions or at the PDCF, for the primary-dealer subsidiaries.

On November 23, 2008, the Board authorized extensions of credit to the London-based broker-dealer subsidiary of Citigroup Inc. under the same terms and conditions.

On November 24, 2008, the Board extended its authorization for the PDCF until April 30, 2009.

NOTE: *On January 27, 2009*, the Board extended its authorization for the PDCF until October 30, 2009.

Term Auction Facility

On July 28, 2008, the Board approved the establishment of auctions for 84-day Term Auction Facility (TAF) loans, as a complement to the previously established auctions for 28-day TAF loans. The Board had initially established the TAF in December 2007 to provide depository institutions with a facility for obtaining advances from their local Reserve Banks at interest rates determined through auctions. By increasing depository institutions' access to funding, the TAF supports the ability of such institutions to meet the credit needs of their customers. The Board authorized the TAF under section 10B of the Federal Reserve Act, which permits (under certain terms and conditions) advances to individual member banks. The Federal Open Market Committee made coincident changes to its dollar-swap lines with several other central banks to accommodate similar auctions by those central banks of 84-day dollar loans.

Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility

On September 19, 2008, the Board approved the establishment of the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF) for the Federal Reserve Bank of Boston to provide funding to U.S. depository institutions and bank holding companies to help finance their purchases of high-quality asset-backed commercial paper from money market mutual funds. The facility is designed to assist money funds that hold such paper in meeting redemption demands from investors and to foster liquidity in asset-backed commercial paper markets and money markets more generally. The Board authorized the AMLF under sections 13(3) and 10B of the Federal Reserve Act (section 10B permits, under certain terms and conditions, advances to individual member banks).

On November 24, 2008, the Board extended its authorization for the AMLF until April 30, 2009.

NOTE: *On January 27, 2009*, the Board extended its authorization for the AMLF until October 30, 2009.

Commercial Paper Funding Facility

On October 7, 2008, the Board approved the establishment of the Commercial Paper Funding Facility (CPFF) to provide a liquidity backstop to U.S. issuers of commercial paper (CP) through a special-purpose vehicle (SPV) that purchases three-month unsecured and asset-backed CP directly from eligible issuers. The CPFF removes much of the risk that eligible issuers will not be able to roll over their maturing CP, thereby encouraging investors to engage in term lending in the CP market. The CPFF is intended to improve liquidity in short-term funding markets, thus increasing the availability of credit for businesses and households. The SPV will stop purchasing CP on April 30, 2009, unless the Board extends the facility, and the SPV will continue to be funded by the Federal Reserve until the underlying assets mature.

On October 13, 2008, the Board approved additional details regarding the CPFF's implementation on October 27, 2008.

On December 25, 2008, the Board approved setting the interest rate on discount window loans to the CPFF's SPV at the maximum rate within the target range for the federal funds rate, if the target federal funds rate is a range of rates rather than a specific rate.

NOTE: *On January 27, 2009*, the Board extended its authorization for the CPFF until October 30, 2009.

Money Market Investor Funding Facility

On October 21, 2008, the Board approved the establishment of the Money Market Investor Funding Facility (MMIFF) to support a private-sector initiative designed to provide liquidity to U.S. money market investors, thus increasing their ability to meet redemption requests and their willingness to invest in money market instruments. Improved money market conditions in turn enhance the ability of banks and other financial intermediaries to accommodate the credit needs of businesses and households. Under the facility, the Federal Reserve provides senior secured funding to a series of private-sector special-purpose vehicles (SPVs). Each SPV purchases eligible money market instruments from eligible money market investors using financing from the facility and from the issuance of asset-backed commercial paper to investors. The SPVs will stop purchasing money market instruments on April 30, 2009, unless the Board extends the facility, and the SPVs will continue to be funded by the Federal Reserve until the underlying assets mature.

On December 24, 2008, the Board approved changes to the MMIFF that (1) expand the set of eligible investors that may participate in the facility and (2) adjust several of the facility's economic parameters to ensure that it remains a viable source of backup liquidity for money market investors even if money market interest rates are at low levels.

Note: *On January 27, 2009*, the Board extended its authorization for the MMIFF until October 30, 2009.

Term Asset-Backed Securities Loan Facility

On November 24, 2008, the Board approved the establishment of the Term Asset-Backed Securities Loan Facility (TALF) to support the issuance of asset-backed securities (ABS) collateralized by consumer and small business loans. The facility is designed to increase credit availability and support economic activity by facilitating renewed issuance of consumer and small business ABS at more-normal interest rate spreads. The TALF will lend up to $200 billion on a nonrecourse basis to holders of certain AAA-rated ABS. Using funds from the Troubled Asset Relief Program, the Department of the Treasury (Treasury) will provide $20 billion of credit protection to the Federal Reserve in connection with the facility.

On December 19, 2008, the Board approved revisions to the terms and conditions of the TALF.

Note: *On February 6, 2009,* and *February 23, 2009*, the Board approved further revisions to the TALF. *On March 3, 2009*, the Board and Treasury announced the launch of the TALF for eligible holders of ABS that are backed by newly and recently originated auto, credit card, and student loans and Small Business Administration–guaranteed small business loans. *On March 19, 2009*, the Board expanded the set of eligible collateral for loans under the TALF to include ABS backed by mortgage-servicing advances, loans or leases relating to business equipment, leases of vehicle fleets, and non-auto floorplan loans, and expanded the list of eligible auto-related receivables.

Other Initiatives

The Bear Stearns Companies Inc.

On March 14, 2008, the Board approved temporary emergency financing for The Bear Stearns Companies Inc. through an arrangement with JPMorgan Chase & Co. Bear Stearns, a major investment bank and primary dealer, was on the brink of failure after losing the confidence of investors and finding itself without access to short-term financing markets. The Board judged that a disorderly failure of Bear Stearns would threaten overall financial stability and would most likely have significant adverse implications for the U.S. economy.

> Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh and Kroszner. Absent and not voting: Governor Mishkin.

On March 16, 2008, the Board authorized a nonrecourse loan of up to $30 billion that would be fully collateralized by a pool of Bear Stearns assets to facilitate JPMorgan's acquisition of Bear Stearns. The acquisition was completed on June 26, 2008.

Provisional Lending to Fannie Mae and Freddie Mac

On July 13, 2008, the Board authorized lending to the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac) if necessary. The authorization was made under section 13(13) of the Federal Reserve Act, which permits (under certain terms and conditions) advances to an individual, a partnership, or a corporation on obligations of the United States, and is intended to supplement the Department of the Treasury's existing lending authority and to help ensure the ability of Fannie Mae and Freddie Mac to promote the availability of home mortgage credit during a period of stress in financial markets. No lending took place, and the companies were placed in conservatorship on September 7, 2008.

American International Group, Inc.

On September 16, 2008, the Board approved, with the support of the Department of the Treasury (Treasury), a secured loan of up to $85 billion for the American International Group, Inc. (AIG) to assist AIG in meeting its obligations as they become due and to facilitate a process under which it can sell certain businesses in an orderly manner with the least possible disruption to the overall economy. The condition of AIG, a large complex financial institution, had deteriorated rapidly, and a disorderly failure of AIG would likely have systemic implications and potentially adverse effects on the economy. The loan is subject to terms and conditions that protect the interests of the U.S. government and taxpayers.

On October 6, 2008, the Board authorized borrowing up to $37.8 billion in securities from certain regulated U.S. insurance subsidiaries of AIG, in return for cash collateral. The authorization applied to investment-grade fixed-income securities previously lent by the insurance subsidiaries to third parties. This facility was subsequently repaid and terminated on December 12, 2008.

On November 7, 2008, the Board and Treasury approved a restructuring of the government's financial support to AIG. The new measures are intended to establish a more durable capital structure, resolve liquidity issues, facilitate AIG's execution of its plan to sell certain businesses in an orderly manner, promote market stability, and protect the interests of the U.S. government and taxpayers. They include a purchase of AIG equity by Treasury, modified terms for the Federal Reserve's existing AIG liquidity facility, and two new Federal Reserve lending facilities that each support a distinct AIG portfolio of mortgage-related securities.

NOTE: *On March 2, 2009*, the Board and Treasury announced an additional restructuring for AIG, which continues to face significant challenges. The plan is intended to help stabilize the company and, in turn, the financial system.

Citigroup Inc.

On November 23, 2008, the Board approved financing, if necessary, for Citigroup Inc. that would backstop residual risk in a pool of approximately $306 billion of Citigroup assets secured by residential and commercial real estate and certain other assets. Market anxiety about the condition of Citigroup had intensified, and concerns about the firm's access to funding continued to mount. The residual financing was approved as part of a package of coordinated actions with the Department of the Treasury (Treasury) and the Federal Deposit Insurance Corporation (FDIC). These actions included Treasury and the FDIC providing (1) protection against the possibility of unusually large losses on the Citigroup asset pool in return for preferred shares of Citigroup and (2) Treasury investing $20 billion in Citigroup under the Troubled Asset Relief Program in return for additional preferred shares.

Bank of America Corporation

NOTE: *On January 15, 2009*, the Board approved an agreement with Bank of America Corporation that is similar to the Citigroup arrangement of November 2008. Under the agreement, Treasury and the FDIC will provide protection against the possibility of unusually large losses on a pool of approximately $118 billion of financial instruments, in return for preferred shares in Bank of America. If necessary, the Federal Reserve Bank of Richmond will provide nonrecourse credit to Bank of America against this pool of financial instruments.

Discount Rates for Depository Institutions in 2008

Under the Federal Reserve Act, the boards of directors of the Federal Reserve Banks must establish rates on discount window loans to depository institutions at least every 14 days, subject to review and determination by the Board of Governors.

Primary Credit

Primary credit, the Federal Reserve's main lending program, is extended at a rate above the federal funds rate target set by the Federal Open Market Committee (FOMC). It is typically 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.

During 2008, the Board approved eight reductions in the primary credit rate, bringing the rate from 4¾ percent to ½ percent. One of these reductions came on March 16, when the Board approved a narrowing of the spread of the primary credit rate over the FOMC's target rate to 25 basis points, from 50 basis points, and announced a temporary change to the Reserve Banks' discount window lending practices to allow the provision of term financing for as long as 90 days.[1] These changes remained in effect at the end of 2008. In the remaining seven instances, the Board reached its determinations on the primary credit rate recommendations of the Reserve Bank boards of directors in conjunction with the FOMC's decisions to lower the target federal funds rate from 4¼ percent to a range of 0 to ¼ percent. Monetary policy developments are reviewed more fully in other parts of this report (see the section "Monetary Policy and Economic Developments" and the minutes of FOMC meetings held in 2008).

Secondary and Seasonal Credit

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 2008, the spread was set at 50 basis points.

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 secondary and seasonal credit rates were 1 percent and 1.05 percent, respectively.[2]

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1. The spread of the primary credit rate over the FOMC's target rate is usually 100 basis points. In 2007, the Board had approved a narrowing of this spread to 50 basis points.

2. For current and historical discount rates, see www.frbdiscountwindow.org/.

Term Auction Facility Credit

In December 2007, the Federal Reserve established a temporary Term Auction Facility (TAF). Under the TAF, the Federal Reserve auctions term funds to depository institutions that are in generally sound financial condition and are eligible to borrow under the primary credit program. The amount of each auction is determined in advance by the Federal Reserve, and the interest rate on TAF credit is determined by the bidding process as the rate at which all bids can be fulfilled, up to the maximum auction amount and subject to a minimum bid rate. The Federal Reserve conducted regular autions of 28- and 84-day TAF credit in 2008.[3]

Votes on Changes to Discount Rates for Depository Institutions

About every two weeks during 2008, the Board approved proposals by the 12 Reserve Banks to maintain the formulas for computing the secondary and seasonal credit rates as well as the auction method by which the TAF credit rate is set. Details on the eight actions by the Board to approve changes in the primary credit rate are provided below.

January 22, 2008. Effective this date, the Board approved actions taken by the directors of the Federal Reserve Banks of Boston, New York, Philadelphia, Cleveland, Richmond, Chicago, Minneapolis, Dallas, and San Francisco to lower the rate on discounts and advances under the primary credit program by ¾ percentage point, to 4 percent. The same decrease was approved for the Federal Reserve Bank of St. Louis, effective January 23, 2008. The Board also approved identical actions subsequently taken by the directors of the Federal Reserve Banks of Atlanta and Kansas City, effective January 24, 2008.

> Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh and Kroszner. Absent and not voting: Governor Mishkin.

January 30, 2008. Effective this date, the Board approved actions taken by the directors of the Federal Reserve Banks of Boston, New York, Philadelphia, Cleveland, Atlanta, Chicago, Kansas City, and San Francisco to lower the rate on discounts and advances under the primary credit program by ½ percentage point, to 3½ percent. The same decrease was approved for the Federal Reserve Bank of St. Louis, effective January 31, 2008. The Board also approved identical actions subsequently taken by the directors of the Federal Reserve Banks of Richmond, Minneapolis, and Dallas, effective January 31, 2008.

> Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

March 16, 2008. Effective this date, the Board approved an action taken by the directors of the Federal Reserve Bank of New York to lower the rate on discounts and advances under the primary credit program by ¼ percentage point, to 3¼ percent.[4] The Board also approved identical actions subsequently taken by the directors of the Federal Reserve Banks of Boston, Cleveland, Richmond, Chicago, Minneapolis, Kan-

3. For more information on TAF auctions, including minimum bid rates and the auction-determined rates on TAF credit, see www.federalreserve.gov/monetarypolicy/taf.htm.

4. As March 16, 2008, was a Sunday, the new primary credit rate for the Federal Reserve Bank of New York was first applied on the next business day, Monday, March 17.

sas City, and San Francisco, effective March 17, 2008.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

March 18, 2008. Effective this date, the Board approved actions taken by the directors of the Federal Reserve Banks of Boston, New York, Cleveland, Chicago, Kansas City, and San Francisco to lower the rate on discounts and advances under the primary credit program by ¾ percentage point, to 2½ percent. The Board also approved identical actions subsequently taken by the directors of the Federal Reserve Banks of Richmond and Minneapolis, effective March 19, 2008. The Board also approved actions taken to lower the rate on discounts and advances under the primary credit program by 1 percentage point, to 2½ percent, by the directors of the Federal Reserve Bank of Dallas, effective March 18, 2008; the Federal Reserve Banks of Atlanta and St. Louis, effective March 19, 2008; and the Federal Reserve Bank of Philadelphia, effective March 20, 2008.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

April 30, 2008. Effective this date, the Board approved actions taken by the directors of the Federal Reserve Banks of New York, Cleveland, Atlanta, Chicago, Kansas City, and San Francisco to lower the rate on discounts and advances under the primary credit program by ¼ percentage point, to 2¼ percent. The same decrease was approved for the Federal Reserve Bank of St. Louis, effective May 1, 2008. The Board also approved identical actions subsequently taken by the directors of the Federal Reserve Banks of Boston, Philadelphia, Richmond, Minneapolis, and Dallas, effective May 1, 2008.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

October 8, 2008. Effective this date, the Board approved actions taken by the directors of the Federal Reserve Banks of Boston, New York, Philadelphia, Cleveland, Richmond, Atlanta, Chicago, Minneapolis, Kansas City, Dallas, and San Francisco to lower the rate on discounts and advances under the primary credit program by ½ percentage point, to 1¾ percent. The same decrease was approved for the Federal Reserve Bank of St. Louis, effective October 9, 2008.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Duke.

October 29, 2008. Effective this date, the Board approved actions taken by the directors of the Federal Reserve Banks of Boston, New York, Cleveland, Chicago, Kansas City, and San Francisco to lower the rate on discounts and advances under the primary credit program by ½ percentage point, to 1¼ percent. The same decrease was approved for the Federal Reserve Bank of St. Louis, effective October 30, 2008. The Board also approved identical actions subsequently taken by the directors of the Federal Reserve Banks of Philadelphia, Richmond, Minneapolis, and Dallas, effective October 30, 2008; and the Federal Reserve Bank of Atlanta, effective October 31, 2008.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Duke.

December 16, 2008. Effective this date, the Board approved actions taken by the directors of the Federal Reserve Banks of New York, Cleveland, Richmond, Atlanta, Chicago, Minneapolis, Kansas City, and San Francisco to lower the rate on discounts and advances under the primary credit program by ¾ percentage point, to ½ percent. The same decrease was approved for the Federal Reserve Bank of St. Louis, effective December 17, 2008. The Board also approved identical actions subsequently taken by the directors of the Federal Reserve Banks of Boston and Dallas, effective December 17, 2008; and the Federal Reserve Bank of Philadelphia, effective December 18, 2008.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Duke. ■

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.[1] Changes in the instruments during the year are reported in the minutes for the individual meetings.

1. As of January 1, 2008, the Federal Reserve Bank of New York was operating under the Domestic Policy Directive approved at the December 11, 2007, 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, 2008, were approved at the January 30–31, 2007, meeting.

Meeting Held on January 29–30, 2008

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 29, 2008 at 2:00 p.m. and continued on Wednesday, January 30, 2008 at 9:00 a.m.

Present:

Mr. Bernanke, Chairman
Mr. Geithner, Vice Chairman
Mr. Fisher
Mr. Kohn
Mr. Kroszner
Mr. Mishkin
Ms. Pianalto
Mr. Plosser
Mr. Stern
Mr. Warsh

Messrs. Evans, Lacker, and Lockhart, and Ms. Yellen, Alternate Members of the Federal Open Market Committee

Messrs. Hoenig, Poole, and Rosengren, Presidents of the Federal Reserve Banks of Kansas City, St. Louis, and Boston, respectively

Mr. Madigan, Secretary and Economist
Ms. Danker, Deputy Secretary
Mr. Skidmore, Assistant Secretary
Ms. Smith, Assistant Secretary
Mr. Alvarez, General Counsel
Mr. Baxter, Deputy General Counsel
Mr. Sheets, Economist
Mr. Stockton, Economist

Messrs. Connors, English, and Kamin, Ms. Mester, Messrs. Rosenblum, Slifman, Sniderman, Tracy, and Wilcox, Associate Economists

Mr. Dudley, Manager, System Open Market Account

Mr. Struckmeyer,[2] Deputy Staff Director, Office of Staff Director for Management, Board of Governors

Mr. Parkinson,[3] Deputy Director, Division of Research and Statistics, Board of Governors

Mr. Clouse, Senior Associate Director, Division of Monetary Affairs, Board of Governors

Ms. Liang and Messrs. Reifschneider and Wascher, Associate Directors, Division of Research and Statistics, Board of Governors

Ms. Barger[3] and Mr. Greenlee,[3] Associate Directors, Division of Banking Supervision and Regulation, Board of Governors

Mr. Gibson,[3] Deputy Associate Director, Division of Research and Statistics, Board of Governors

Mr. Dale, Senior Adviser, Division of Monetary Affairs, Board of Governors

Mr. Oliner, Senior Adviser, Division of Research and Statistics, Board of Governors

Messrs. Durham and Perli, Assistant Directors, Division of Monetary Affairs, Board of Governors

Mr. Blanchard, Assistant to the Board, Office of Board Members, Board of Governors

Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors

Mr. Bassett,[4] Senior Economist, Division of Monetary Affairs, Board of Governors

Mr. Doyle,[4] Senior Economist, Division of International Finance, Board of Governors

Ms. Kusko,[4] Senior Economist, Division of Research and Statistics, Board of Governors

2. Attended Wednesday's session.

3. Attended portion of the meeting relating to the analysis of policy issues raised by financial market developments.

4. Attended portion of the meeting relating to the economic outlook and monetary policy decision.

Mr. Luecke, Senior Financial Analyst, Division of Monetary Affairs, Board of Governors

Mr. Driscoll, Economist, Division of Monetary Affairs, Board of Governors

Ms. Low, Open Market Secretariat Specialist, Division of Monetary Affairs, Board of Governors

Ms. Green, First Vice President, Federal Reserve Bank of Richmond

Messrs. Fuhrer and Judd, Executive Vice Presidents, Federal Reserve Banks of Boston and San Francisco, respectively

Messrs. Altig and Angulo,[3] Mses. Hirtle[3] and Mosser, Messrs. Peters[3] and Rasche, Senior Vice Presidents, Federal Reserve Banks of Atlanta, New York, New York, New York, New York, and St. Louis, respectively

Mr. Hakkio, Senior Adviser, Federal Reserve Bank of Kansas City

Mr. Krane, Vice President, Federal Reserve Bank of Chicago

Mr. Weber, Senior Research Officer, Federal Reserve Bank of Minneapolis

In the agenda for this meeting, it was reported that advices of the election of the following members and alternate members of the Federal Open Market Committee for a term beginning January 29, 2008 had been received and that these individuals had executed their oaths of office.

The elected members and alternate members were as follows:

Timothy F. Geithner, President of the Federal Reserve Bank of New York, with Christine M. 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.

Gary H. Stern, President of the Federal Reserve Bank of Minneapolis, with Janet L. Yellen, President of the Federal Reserve Bank of San Francisco, as alternate.

By unanimous vote, the following officers of the Federal Open Market Committee were selected to serve until the selection of their successors at the first regularly scheduled meeting of the Committee in 2009:

Ben S. Bernanke	Chairman
Timothy F. Geithner	Vice Chairman
Brian F. Madigan	Secretary and Economist
Deborah J. Danker	Deputy Secretary
David W. Skidmore	Assistant Secretary
Michelle A. Smith	Assistant Secretary
Scott G. Alvarez	General Counsel
Thomas C. Baxter, Jr.	Deputy General Counsel
Richard M. Ashton	Assistant General Counsel
D. Nathan Sheets	Economist
David J. Stockton	Economist

Thomas A. Connors, William B. English, Steven B. Kamin, Loretta J. Mester, Arthur J. Rolnick, Harvey Rosenblum, Lawrence Slifman, Mark S. Sniderman, Joseph S. Tracy, and David W. Wilcox, Associate Economists

By unanimous vote, the Committee made a few amendments to its rules and to the Program for Security of FOMC Information. The amendments primarily addressed the Committee's practice of approving the minutes via notation vote, attendance at Committee meetings, and access to Committee information by System employees.

By unanimous vote, the Federal Reserve Bank of New York was selected to execute transactions for the System Open Market Account.

By unanimous vote, William C. Dudley was selected to serve at the pleasure of the Committee as Manager, System Open Market Account, on the understanding that his selection was subject to being satisfactory to the Federal Reserve Bank of New York.

By unanimous vote, the Authorization for Domestic Open Market Operations was reaffirmed in the form shown below:

Authorization for Domestic Open Market Operations (Reaffirmed January 29, 2008)

1. The Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York, to the extent necessary to carry out the most recent domestic policy directive adopted at a meeting of the Committee:

(a) To buy or sell U.S. Government securities, including securities of the Federal Financing Bank, and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States in the open market, from or to securities dealers and foreign and international accounts maintained at the Federal Reserve Bank of New York, on a cash, regular, or deferred delivery basis, for the System Open Market Account at market prices, and, for such Account, to exchange maturing U.S. Government and Federal agency securities with the Treasury or the individual agencies or to allow them to mature without replacement;

(b) To buy U.S. Government securities, obligations that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States, from dealers for the account of the System Open Market Account under agreements for repurchase of such securities or obligations 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 dealers.

(c) To sell 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 to dealers for System Open Market Account under agreements for the resale by dealers of such securities or obligations 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 dealers.

2. In order to ensure the effective conduct of open market operations, the Federal Open Market Committee authorizes the Federal Reserve Bank of New York to lend on an overnight basis U.S. Government securities held in the System Open Market Account to dealers at rates that shall be determined by competitive bidding. The Federal Reserve Bank of New York shall set a minimum lending fee consistent with the objectives of the program and apply reasonable limitations on the total amount of a specific issue that may be auctioned and on the amount of securities that each dealer may borrow. The Federal Reserve Bank of New York may reject bids which could facilitate a dealer's ability to control a single issue as determined solely by the Federal Reserve Bank of New York.

3. In order to ensure the effective conduct of open market operations, while assisting in the provision of short-term investments for foreign and international accounts maintained at the Federal Reserve Bank of New York and accounts maintained at the Federal Reserve Bank of New York as fiscal agent of the United States pursuant to Section 15 of the Federal Reserve Act, the Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York (a) for System Open Market Account, to sell U.S. Government securities to such accounts on the bases set forth in paragraph l(a) under agreements providing for the resale by such accounts of those securities in 65 business days or less on terms comparable to those available on such transactions in the market; and (b) for New York Bank

account, when appropriate, to undertake with dealers, subject to the conditions imposed on purchases and sales of securities in paragraph l(b), repurchase agreements in U.S. Government and agency securities, and to arrange corresponding sale and repurchase agreements between its own account and such foreign, international, and fiscal agency accounts maintained at the Bank. Transactions undertaken with such accounts under the provisions of this paragraph may provide for a service fee when appropriate.

4. In the execution of the Committee's decision regarding policy during any intermeeting period, the Committee authorizes and directs the Federal Reserve Bank of New York, upon the instruction of the Chairman of the Committee, to adjust somewhat in exceptional circumstances the degree of pressure on reserve positions and hence the intended federal funds rate. Any such adjustment shall be made in the context of the Committee's discussion and decision at its most recent meeting and the Committee's long-run objectives for price stability and sustainable economic growth, and shall be based on economic, financial, and monetary developments during the intermeeting period. Consistent with Committee practice, the Chairman, if feasible, will consult with the Committee before making any adjustment.

By unanimous vote, the Committee approved the Authorization for Foreign Currency Operations with an amendment to paragraph 1.D. regarding the maximum open position in all foreign currencies. Accordingly, the Authorization for Foreign Currency Operations was adopted, as shown below:

Authorization for Foreign Currency Operations (Amended January 29, 2008)

1. The Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York, for System Open Market Account, to the extent necessary to carry out the Committee's foreign currency directive and express authorizations by the Committee pursuant thereto, and in conformity with such procedural instructions as the Committee may issue from time to time:

A. To purchase and sell the following foreign currencies in the form of cable transfers through spot or forward transactions on the open market at home and abroad, including transactions with the U.S. Treasury, with the U.S. Exchange Stabilization Fund established by Section 10 of the Gold Reserve Act of 1934, with foreign monetary authorities, with the Bank for International Settlements, and with other international financial institutions:

Canadian dollars	Mexican pesos
Danish kroner	Norwegian kroner
Euro	Swedish kronor
Pounds sterling	Swiss francs
Japanese yen	

B. To hold balances of, and to have outstanding forward contracts to receive or to deliver, the foreign currencies listed in paragraph A above.

C. To draw foreign currencies and to permit foreign banks to draw dollars under the reciprocal currency arrangements listed in paragraph 2 below, provided that drawings by either party to any such arrangement shall be fully liquidated within 12 months after any amount outstanding at that time was first drawn, unless the Committee, because of exceptional circumstances, specifically authorizes a delay.

D. To maintain an overall open position in all foreign currencies not exceeding $25.0 billion. For this purpose, the overall open position in all foreign currencies is defined as the sum (disregarding signs) of net positions in individual currencies, excluding changes in dollar value due to foreign exchange rate movements and interest accruals. The net position in a single foreign currency is defined as holdings of balances in that currency, plus outstanding contracts for future receipt, minus outstanding contracts for future delivery of that currency, i.e., as the sum of these elements with due regard to sign.

2. The Federal Open Market Committee directs the Federal Reserve Bank of New York to maintain reciprocal currency arrangements ("swap" arrangements) for the System Open Market Account for periods up to a maximum of 12 months with the following foreign banks, which are among those designated by the Board of Governors

of the Federal Reserve System under Section 214.5 of Regulation N, Relations with Foreign Banks and Bankers, and with the approval of the Committee to renew such arrangements on maturity:

Foreign bank	Amount of arrangement (millions of dollars equivalent)
Bank of Canada	2,000
Bank of Mexico	3,000

Any changes in the terms of existing swap arrangements, and the proposed terms of any new arrangements that may be authorized, shall be referred for review and approval to the Committee.

3. All transactions in foreign currencies undertaken under paragraph 1.A. above shall, unless otherwise expressly authorized by the Committee, be at prevailing market rates. For the purpose of providing an investment return on System holdings of foreign currencies or for the purpose of adjusting interest rates paid or received in connection with swap drawings, transactions with foreign central banks may be undertaken at non-market exchange rates.

4. It shall be the normal practice to arrange with foreign central banks for the coordination of foreign currency transactions. In making operating arrangements with foreign central banks on System holdings of foreign currencies, the Federal Reserve Bank of New York shall not commit itself to maintain any specific balance, unless authorized by the Federal Open Market Committee. Any agreements or understandings concerning the administration of the accounts maintained by the Federal Reserve Bank of New York with the foreign banks designated by the Board of Governors under Section 214.5 of Regulation N shall be referred for review and approval to the Committee.

5. Foreign currency holdings shall be invested to ensure that adequate liquidity is maintained to meet anticipated needs and so that each currency portfolio shall generally have an average duration of no more than 18 months (calculated as Macaulay duration). Such investments may include buying or selling outright obligations of, or fully guaranteed as to principal and interest by, a foreign government or agency thereof; buying such securities under agreements for repurchase of such securities; selling such securities under agreements for the resale of such securities; and holding various time and other deposit accounts at foreign institutions. In addition, when appropriate in connection with arrangements to provide investment facilities for foreign currency holdings, U.S. Government securities may be purchased from foreign central banks under agreements for repurchase of such securities within 30 calendar days.

6. All operations undertaken pursuant to the preceding paragraphs shall be reported promptly to the Foreign Currency Subcommittee and the Committee. The Foreign Currency Subcommittee consists of the Chairman and Vice Chairman of the Committee, the Vice Chairman of the Board of Governors, and such other member of the Board as the Chairman may designate (or in the absence of members of the Board serving on the Subcommittee, other Board members designated by the Chairman as alternates, and in the absence of the Vice Chairman of the Committee, his 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 his responsibilities. At the request of any member of the Subcommittee, questions arising from such reviews and consultations shall be referred for determination to the Federal Open Market Committee.

7. The Chairman is authorized:

A. With the approval of the Committee, to enter into any needed agreement or understanding with the Secretary of the Treasury about the division of responsibility for foreign currency operations between the System and the Treasury;

B. To keep the Secretary of the Treasury fully advised concerning System foreign currency operations, and to consult with the Secretary on policy matters relating to foreign currency operations;

C. From time to time, to transmit appropriate reports and information to the National Advisory Council on International Monetary and Financial Policies.

8. Staff officers of the Committee are authorized to transmit pertinent information on System foreign currency operations to appropriate officials of the Treasury Department.

9. All Federal Reserve Banks shall participate in the foreign currency operations for System Account in accordance with paragraph 3G(1) of the Board of Governors' Statement of Procedure with Respect to Foreign Relationships of Federal Reserve Banks dated January 1, 1944.

By unanimous vote, the Foreign Currency Directive was reaffirmed in the form shown below:

Foreign Currency Directive (Reaffirmed January 29, 2008)

1. System operations in foreign currencies shall generally be directed at countering disorderly market conditions, provided that market exchange rates for the U.S. dollar reflect actions and behavior consistent with IMF Article IV, Section 1.

2. To achieve this end the System shall:

A. Undertake spot and forward purchases and sales of foreign exchange.

B. Maintain reciprocal currency ("swap") arrangements with selected foreign central banks.

C. Cooperate in other respects with central banks of other countries and with international monetary institutions.

3. Transactions may also be undertaken:

A. To adjust System balances in light of probable future needs for currencies.

B. To provide means for meeting System and Treasury commitments in particular currencies, and to facilitate operations of the Exchange Stabilization Fund.

C. For such other purposes as may be expressly authorized by the Committee.

4. System foreign currency operations shall be conducted:

A. In close and continuous consultation and cooperation with the United States Treasury;

B. In cooperation, as appropriate, with foreign monetary authorities; and

C. In a manner consistent with the obligations of the United States in the International Monetary Fund regarding exchange arrangements under IMF Article IV.

By unanimous vote, the Procedural Instructions with Respect to Foreign Currency Operations were reaffirmed in the form shown below:

Procedural Instructions with respect to Foreign Currency Operations (Reaffirmed January 29, 2008)

In conducting operations pursuant to the authorization and direction of the Federal Open Market Committee as set forth in the Authorization for Foreign Currency Operations and the Foreign Currency Directive, the Federal Reserve Bank of New York, through the Manager, System Open Market Account ("Manager"), shall be guided by the following procedural understandings with respect to consultations and clearances with the Committee, the Foreign Currency Subcommittee, and the Chairman of the Committee. All operations undertaken pursuant to such clearances shall be reported promptly to the Committee.

1. The Manager shall clear with the Subcommittee (or with the Chairman, if the Chairman believes that consultation with the Subcommittee is not feasible in the time available):

A. Any operation that would result in a change in the System's overall open position in foreign currencies exceeding $300 million on any day or $600 million since the most recent regular meeting of the Committee.

B. Any operation that would result in a change on any day in the System's net position in a single foreign currency exceeding $150 million, or $300 million when the operation is associated with repayment of swap drawings.

C. Any operation that might generate a substantial volume of trading in a particular currency by the System, even though the change in the System's net position in that currency might be less than the limits specified in 1.B.

D. Any swap drawing proposed by a foreign bank not exceeding the larger of (i) $200 million or (ii) 15 percent of the size of the swap arrangement.

2. The Manager shall clear with the Committee (or with the Subcommittee, if the Subcommittee believes that consultation with the full Committee is not feasible in the time available, or with the Chairman, if the Chairman believes that consultation with the Subcommittee is not feasible in the time available):

A. Any operation that would result in a change in the System's overall open position in foreign currencies exceeding $1.5 billion since the most recent regular meeting of the Committee.

B. Any swap drawing proposed by a foreign bank exceeding the larger of (i) $200 million or (ii) 15 percent of the size of the swap arrangement.

3. The Manager shall also consult with the Subcommittee or the Chairman about proposed swap drawings by the System and about any operations that are not of a routine character.

The Manager of the System Open Market Account reported on recent developments in foreign exchange markets. There were no open market operations in foreign currencies for the System's account in the period since the previous meeting. The Manager also reported on developments in domestic financial markets and on System open market operations in government securities and federal agency obligations during the period since the previous meeting. By unanimous vote, the Committee ratified these transactions.

The information reviewed at the January meeting, which included the advance data on the national income and product accounts for the fourth quarter, indicated that economic activity had decelerated sharply in recent months. The contraction in homebuilding intensified in the fourth quarter, the growth in consumer spending slowed, and survey measures of both consumer and business sentiment were at low levels. In addition, industrial production contracted in the fourth quarter. Conditions in the labor market deteriorated noticeably, with private payroll employment posting a small decline in December and the unemployment rate rising. Readings on both headline and core inflation increased in recent months, although the twelve-month change in prices of core personal consumption expenditures in December was about the same as its year-earlier value.

On average, private nonfarm payroll employment in November and December rose at only about half of the average pace seen from July to October. Over 2007 as a whole, the deterioration in labor demand was most pronounced in the construction and financial activities industries, which had been hardest hit by the difficulties in the housing and mortgage markets. Manufacturing employment declined yet again in December, while the decrease in employment in retail trade nearly reversed the sizable increase in that sector recorded in November. Aggregate hours of production or nonsupervisory workers were unchanged in December. The unemployment rate rose to 5.0 percent in December after having been at or near 4.7 percent since September.

Industrial production declined in the fourth quarter, as a drag from motor vehicles and construction-related industries more than offset a positive contribution from other industries. Output in high-tech industries moderated in the fourth quarter, largely because of a deceleration in production of computers and semiconductors. Utilities output climbed for a second consecutive quarter, and mining output was boosted by increases in natural gas extraction and in crude oil.

The rise in real consumer spending moderated in the fourth quarter, with outlays on non-auto consumer goods increasing weakly. Spending on services rose solidly in November (the most recent month available), led by energy services and commissions paid to stockbrokers, but warmer-than-usual temperatures in December likely damped expenditures for energy services in that month. Sales of light motor vehicles were moderate during the fourth quarter. Real disposable personal income was little changed in the fourth quarter, held down by higher consumer energy prices. Also, the wealth-to-income ratio ticked down in the third quarter, and appeared likely to decline again in the fourth quarter, as equity prices had fallen since the end of the third quarter and available indicators pointed to continued declines in house prices in the fourth quarter. In December, readings on consumer sentiment remained at relatively low levels by historical standards.

Both single-family housing starts and permit issuance fell in December. Meanwhile, multifamily housing starts plunged in December, but permit issuance pointed to a rebound in multifamily starts in the near term. New home sales dropped in November and December after having held relatively steady since August, keeping inventories of unsold homes at elevated levels. Sales of existing homes also moved down in December but, on balance, had declined less in recent months than sales of new homes. Demand for housing through the end of 2007 likely continued to be restrained by tight financing conditions for jumbo and nonprime mortgages.

Real spending on equipment and software rose at a sluggish rate in the fourth quarter after having posted a solid increase in the third quarter. Sales of medium and heavy trucks edged up after falling to a four-year low. Spending on high-tech capital goods increased at a moderate pace over the second half of last year. Outside of the transportation and high-tech sectors, spending on equipment appeared to have declined last quarter after having posted sizable gains over the summer. Orders and shipments rose somewhat in the fourth quarter, but imports in the first two months of the quarter were below their average in the third quarter. Nonresidential construction remained vigorous in the fourth quarter. However, indicators of future spending in this sector pointed to a slowdown in coming months, with a decline in architectural billings, a rise in retail-sector vacancy rates, and survey reports that contractors were experiencing more difficulty in obtaining funding. More generally, surveys of business conditions and sentiment deteriorated and suggested that capital spending would be reduced in the near term.

Real nonfarm inventory investment excluding motor vehicles appeared to have stepped up from its average rate over the first three quarters of 2007. In November, the ratio of manufacturing and trade book-value inventories (excluding motor vehicles) to sales ticked down.

The U.S. international trade deficit widened slightly in October and then more substantially in November, as increases in imports in both months more than offset increases in exports. The increases in imports almost entirely reflected a jump in the value of imported oil. Non-oil goods imports were boosted by a large increase in imports of consumer goods and small increases in several other categories, which more than offset a steep decline in imports of non-oil industrial supplies. Imports of automotive products and capital goods recorded modest gains, with the increase in capital goods primarily reflecting a jump in imports of telecommunications equipment. Imports of services grew strongly. Exports in both months were boosted by higher exports of services. Exports of industrial supplies also recorded a strong gain, aided by a large increase in exports of fuels in November. Higher exports of semiconductors, aircraft, and machinery pushed up exports of capital goods, while exports of agricultural goods increased only slightly following a large jump in the third quarter. In contrast, exports of consumer goods fell from their third-quarter level.

Economic growth in the advanced foreign economies appeared to have slowed in the fourth quarter, with recent data on household expenditures and retail sales weakening on balance and consumers and businesses considerably less upbeat about growth prospects. In Japan, the estimate of real GDP growth in the third quarter was revised down, and business sentiment declined in December amidst concerns about high oil prices. In the euro area, retail sales growth declined in October and November, and consumer and business surveys in November and December pointed to economic weakness. In the United Kingdom, although real GDP grew solidly in the fourth quarter, the estimate of third-quarter real GDP growth was revised down. In Canada, indicators suggested that growth in economic activity moderated in the fourth quarter. Private employment shrank in December after having posted very strong growth in November. Incoming data on emerging-market economies pointed, on balance, to a slowing of growth in the fourth quarter. Overall, growth in emerging Asia appeared to have moderated somewhat in the fourth quarter, with trade balances declining in several countries as exports slowed. Readings on economic activity in Latin America were more mixed. Incoming data suggested that growth slowed in Mexico in the fourth quarter. In Brazil , third-quarter growth was solid, but indicators for the fourth quarter were mixed. Economic activity appeared to be strong in Argentina in both the third and fourth quarters.

In the United States, headline consumer price inflation stepped up noticeably in November and December from the low rates posted in the summer. Part of the increase reflected the rapid rise in energy prices, but prices of core personal consumption expenditures (PCE) also moved up faster in those months than they had earlier in the year. The pickup in core PCE inflation over the second half of 2007 reflected an acceleration in prices that had been unusually soft earlier in the year, such as prices for apparel, prescription drugs, and nonmarket services. For the year as a whole, core PCE prices increased at about the same rate as they had in 2006. Household survey measures of expectations for year-ahead inflation picked up in November and remained at that level in December and January. Households' longer-term inflation expectations rose in December but ticked down in January. Average hourly earnings increased faster in November and December than they had in October, although over the twelve months that ended in December, this wage measure rose a bit more slowly than the elevated pace posted in 2006.

At its December meeting, the FOMC lowered its target for the federal funds rate 25 basis points, to 4¼ percent. In addition, the Board of Governors approved a decrease of 25 basis points in the discount rate, to 4¾ percent, leaving the gap between the federal funds rate target and the discount rate at 50 basis points. The Committee's statement noted that incoming information suggested that economic growth was slowing, reflecting the intensification of the housing correction and some softening in business and consumer spending. Moreover, strains in financial markets had increased in recent weeks. The Committee indicated that its action, combined with the policy actions taken earlier, should help promote moderate growth over time. Readings on core inflation had improved modestly during the year, but elevated energy and commodity prices, among other factors, might put upward pressure on inflation. In this context, the Committee judged that some inflation risk remained and said that it would continue to monitor inflation developments carefully. Recent developments, including the deterioration in financial market conditions, had increased the uncertainty surrounding the outlook for economic growth and inflation. The Committee stated that it would continue to assess the effects of financial and other developments on economic prospects and would act as needed to foster price stability and sustainable economic growth.

Over the intermeeting period, the expected path of monetary policy over the next year as measured by money market futures rates tilted down sharply, primarily in response to softer-than-expected economic data releases. The Committee's action at its December meeting was largely anticipated by market participants, although some investors were surprised by the absence of any indication of accompanying measures to address strains in term funding markets. Some of that surprise was reversed the next day, following the announcement of a Term Auction Facility (TAF) and associated swap lines with the European Central Bank and the Swiss National Bank. The subsequent release of the minutes of the meeting elicited little market reaction. However, investors did mark down the expected path of policy in response to speeches by Federal Reserve officials; the speeches were interpreted as suggesting that signs of broader economic weakness and additional financial strains would likely require an easier stance of policy. The Committee's decision to reduce the target federal funds rate 75 basis points on January 22 surprised market participants and led investors to mark down further the path of policy over the next few months. Consistent with the shift in the economic outlook, the revision in policy expectations, and the reduction in the target federal funds rate, yields on nominal Treasury coupon securities declined substantially over the period since the December FOMC meeting. The yield curve steepened somewhat further, with the two-year yield dropping more than the ten-year yield. Near-term inflation compensation increased in early January amid rising oil prices, but it retreated in later weeks, along with oil prices, and declined, on net, over the period.

Conditions in short-term funding markets improved notably over the intermeeting period, but strains remained. Spreads of rates on securities in interbank funding markets over risk-free rates narrowed somewhat following the announcement of the TAF on December 12 and eased considerably after year-end, although they remained at somewhat elevated levels. Spreads of rates on asset-backed commercial paper over risk-free rates also fell, on net, and the level of such paper outstanding increased in the first two weeks of January for the first time since August. In longer-term corporate markets, yields on investment-grade corporate bonds fell less than those on comparable-maturity Treasury securities, while yields on speculative-grade bonds rose considerably. As a result, corporate bond spreads climbed to their highest levels since early 2003, apparently reflecting increased concern among investors about the outlook for corporate credit quality over the next few years.

Nonetheless, gross bond issuance in December remained strong. Commercial bank credit expanded briskly in December, supported by robust growth in business loans and in nonmortgage loans to households, and in the face of survey reports of tighter lending conditions. Over the intermeeting period, spreads on conforming mortgages over comparable-maturity Treasury securities remained about flat, as did spreads on jumbo mortgages, although credit availability for jumbo-mortgage borrowers continued to be tight. Broad stock price indexes fell over the intermeeting period on perceptions of a deteriorating economic outlook and additional write-downs by financial institutions. Similar stresses were again evident in the financial markets of major foreign economies. The trade-weighted foreign exchange value of the dollar against major currencies declined slightly, on balance, over the intermeeting period.

Debt in the domestic nonfinancial sector was estimated to have increased somewhat more slowly in the fourth quarter than in the third. The rate of increase of nonfinancial business debt decelerated in the fourth quarter from its rapid third-quarter pace despite robust bond issuance as the rise in commercial and industrial lending moderated. Household mortgage debt expanded at a slow rate in the fourth quarter, reflecting continued weakness in home prices, declining home sales, and tighter credit conditions for some borrowers. Nonmortgage consumer credit appeared to expand at a moderate pace. In December, the increase in M2 was up slightly from its November pace, boosted primarily by inflows into the relative safety and liquidity of money market mutual funds. The rise in small time deposits moderated but remained elevated, as several thrift institutions offered attractive deposit rates to secure funding. In contrast, liquid deposits continued to increase weakly and currency contracted noticeably, the latter apparently reflecting an ongoing trend in overseas demand away from U.S. dollar bank notes and towards the euro and other currencies.

In the forecast prepared for this meeting, the staff revised up slightly its estimated increase in aggregate economic activity in the fourth quarter of 2007 but revised down its projected increase for the first half of 2008. Although data on consumer spending and nonresidential construction activity for the fourth quarter had come in above the staff's expectations, most of the information received over the intermeeting period was weaker than had been previously expected. The drop in housing activity continued to intensify, conditions in labor markets appeared to have deteriorated noticeably near year-end, and factory output had weakened. Consumer confidence remained low, and indicators of business sentiment had worsened. Equity prices had also fallen sharply so far in 2008, and, while the functioning of money markets had improved, conditions in some other financial markets had become more restrictive. The staff projection showed the weakness in spending dissipating over the second half of 2008 and 2009, in response to the cumulative easing of monetary policy since August, the abatement of housing weakness, a lessening drag from high oil prices, and the prospect of fiscal stimulus. Still, projected resource utilization was lower over the next two years than in the previous forecast. The projection for core PCE price inflation in 2008 was raised slightly in response to elevated readings in recent months. The forecast for headline PCE price inflation also incorporated a somewhat higher rate of increase for energy prices for the first half of 2008; as a result, headline PCE price inflation was now expected to exceed core PCE price inflation slightly for that year. The forecasts for both headline and core PCE price inflation for 2009 were unchanged, with both receding from their 2008 levels.

In conjunction with the FOMC meeting in January, all meeting participants (Federal Reserve Board members and Reserve Bank presidents) provided annual projections for economic growth, unemployment, and inflation for the period 2008 through 2010. The projections are described in the Summary of Economic Projections, which is attached as an addendum to these minutes.

In their discussion of the economic situation and outlook, and in the projections that they had submitted for this meeting, participants noted that information received since the December meeting had been decidedly downbeat on balance. In particular, the drop in housing activity had intensified, factory output had weakened, news on business investment had been soft, and conditions in labor markets appeared to have deteriorated. In addition, consumer confidence had remained low and business confidence appeared to have worsened. Although the functioning of money markets had improved notably, strains remained evident in a number of other financial markets, and credit conditions had become generally more restrictive. Against this backdrop, participants expected economic growth to remain weak in the first half of this year before picking up in the second half, aided in part by a more accommodative stance of monetary policy and by likely fiscal stimulus. Further ahead, participants judged that economic growth would continue to pick up gradually in 2009 and 2010. Nonetheless, with housing activity and house prices still declining and with financial conditions for businesses and households tightening further, significant uncertainties surrounded this outlook and the risks to economic growth in the near term appeared to be weighted to the downside. Indeed, several participants noted that the risks of a downturn in the economy were significant. Inflation data had been disappointing in recent months, and a few participants cited anecdotal reports that some firms were able to pass on costs to consumers. However, with inflation expectations anticipated to remain reasonably well anchored, energy and other commodity prices expected to flatten out, and pressures on resources likely to ease, participants generally expected inflation to moderate somewhat in coming quarters.

Meeting participants observed that conditions in short-term funding markets had improved considerably since the December meeting, reflecting the easing of pressures related to funding around the turn of the year as well as the implementation of the TAF. However, broader financial conditions had tightened significantly, on balance, in the weeks leading up to the meeting, as evidence of further deterioration in housing markets and investors' more pessimistic view of the economic outlook adversely affected a range of financial markets. Many participants were concerned that the drop in equity prices, coupled with the ongoing decline in house prices, implied reductions in household wealth that would likely damp consumer spending. Moreover, elevated volatility in financial markets likely reflected increased uncertainty about the economic outlook, and that greater uncertainty could lead firms and households to limit spending. The availability of credit to consumers and businesses appeared to be tightening, likely adding to restraint on economic growth. Participants discussed the risks to financial markets and institutions posed by possible further deterioration in the condition of financial guarantors, and many perceived a possibility that additional downgrades in these firms' credit ratings could put increased strains on financial markets. To be sure, some positive financial developments were evident. Banks appeared to be making some progress in strengthening their balance sheets, with several financial institutions able to raise significant amounts of capital to offset the large losses they had suffered in recent quarters. Nevertheless, participants generally viewed financial markets as still vulnerable to additional economic and credit weakness. Some noted the especially worrisome possibility of an adverse feedback loop, that is, a situation in which a tightening of credit conditions could depress investment and consumer spending, which, in turn, could feed back to a further tightening of credit conditions.

In their discussion of individual sectors of the economy, meeting participants emphasized that activity in housing markets had continued to deteriorate sharply. With single-family permits and starts still falling, sales of new homes dropping precipitously, sales of existing homes flat, and inventories of unsold homes remaining elevated even in the face of falling house prices, several participants noted the absence of signs of stabilization in the sector. Of further concern were the reduced availability of nonconforming loans and the apparent tightening by banks of credit standards on mortgages, both of which had the potential for intensifying the housing contraction. The recent declines in interest rates had spurred a surge in applications for mortgage refinancing and would limit the upward resets on the rates on outstanding adjustable-rate mortgages, both of which would tend to improve some households' finances. Nonetheless, participants viewed the housing situation and its potential further effect on employment, income, and wealth as one of the major sources of downside risk to the economic outlook.

Recent data as well as anecdotal information indicated that consumer spending had decelerated considerably, perhaps partly reflecting a spillover from the weakness in the housing sector. Participants remarked that declining house prices and sales appeared to be depressing consumer sentiment and that the contraction in wealth associated with decreases in home and equity prices probably was restraining spending. In addition, consumption expenditures were being damped by slower growth in real disposable income induced by high energy prices and possibly by a softening of the labor market. The December employment report showed that job growth had slowed appreciably, and other indicators also pointed to emerging weakness in the labor market in the intermeeting period. And spending in the future could be affected by an ongoing tightening in the availability of consumer credit amid signs that lenders were becoming increasingly cautious in view of some deterioration of credit performance on consumer loans and widening expectations of slower income growth. Some participants, however, cited evidence that workers in some sectors were still in short supply and saw signs that the labor market remained resilient.

The outlook for business investment had turned weaker as well since the time of the December meeting. Several participants reported that firms in their districts were reducing capital expenditures in anticipation of a slowing in sales. Manufacturing activity appeared to have slowed or contracted in many districts. Although a few participants reported more upbeat attitudes among firms in the technology and energy sectors, business sentiment overall appeared to be declining. Moreover, a number of indicators pointed to a tightening in credit availability to businesses. For example, the Senior Loan Officer Opinion Survey on Bank Lending Practices indicated that banks had tightened lending standards and pricing terms on business loans. Lending standards had been raised especially sharply on commercial real estate loans. While real outlays for nonresidential construction apparently continued to rise through the fourth quarter, anecdotal evidence pointed to a weakening of commercial real estate spending in several districts, with some projects being canceled or scaled back.

Most participants anticipated that a fiscal stimulus package, including tax rebates for households and bonus depreciation allowances for businesses, would be enacted before long and would support economic growth in the second half of the year. Some pointed out, however, that the fiscal stimulus package might not help in the near term, when the risks of a downturn in economic activity appeared largest. In addition, the effects of the proposed package would likely be temporary, with the stimulus reversing in 2009.

With regard to the external sector, some participants noted that growth abroad had recently been strong and that increasing U.S. exports had been a significant source of strength for the U.S. economy of late. However, available data suggested that economic activity outside the United States appeared to be decelerating somewhat. Although slowing foreign growth would reduce a source of support for the U.S. economy at the same time that domestic spending was slackening, it could also damp commodity prices and help reduce global price pressures.

Participants agreed that the inflation data that were received since the December meeting had been disappointing. But many believed that the slow growth in economic activity anticipated for the first half of this year and the associated slack in resource utilization would contribute to an easing of price pressures. Moreover, a leveling-off of energy and commodity prices such as that embedded in futures markets would also help moderate inflation pressures. However, some participants cautioned that commodity prices had remained stubbornly high for quite some time and that inferences drawn in the past from futures markets about likely trends in such prices had often proven inaccurate. Participants also related anecdotal evidence of firms facing increasing input cost pressures and in some cases being able to pass on those costs to consumers. Moreover, headline inflation had been generally above 2 percent over the past four years, and participants noted that such persistently elevated readings could ultimately affect inflation expectations. Some survey measures of inflation expectations had edged up in recent months, and longer-term financial market gauges of inflation compensation had climbed. The latter probably reflected at least in part increased uncertainty—inflation risk—rather than greater inflation expectations; increases in nominal wages did not appear to be incorporating higher inflation expectations. On balance, expectations seemed to remain fairly well anchored, but participants agreed that continued stability of inflation expectations was essential.

In the discussion of monetary policy for the intermeeting period, most members believed that a further significant easing in policy was warranted at this meeting to address the considerable worsening of the economic outlook since December as well as increased downside risks. As had been the case in some previous cyclical episodes, a relatively low real federal funds rate now appeared appropriate for a time to counter the factors that were restraining economic growth, including the slide in housing activity and prices, the tightening of credit availability, and the drop in equity prices. Members judged that a 50 basis point reduction in the federal funds rate, together with the Committee's previous policy actions, would bring the real short-term rate to a level that was likely to help the economy expand at a moderate pace over time. Still, with no signs of stabilization in the housing sector and with financial conditions not yet stabilized, the Committee agreed that downside risks to growth would remain even after this action. Members were also mindful of the need for policy to promote price stability, and some noted that, when prospects for growth had improved, a reversal of a portion of the recent easing actions, possibly even a rapid reversal, might be appropriate. However, most members agreed that a 50 basis point easing at this meeting would likely not contribute to an increase in inflation pressures given the actual and expected weakness in economic growth and the consequent reduction in pressures on resources. Rather, members agreed that inflation was likely to moderate in coming quarters, but they also concurred that it would be necessary to continue to monitor inflation developments carefully.

The Committee agreed that the statement to be released after the meeting should indicate that financial markets remained under considerable stress, that credit had tightened further for some businesses and households, and that recent information pointed to a deepening of the housing contraction as well as to some softening in labor markets. The Committee again viewed it as appropriate to indicate that it expected inflation to moderate in coming quarters but also to emphasize that it would be necessary to monitor inflation developments carefully. The action taken at the meeting, combined with the cumulative policy easing already in place, should help to promote moderate growth over time and to mitigate the risks to economic activity. However, members concurred that downside risks to growth remained, and that the Committee would continue to assess the effects of financial and other developments on economic prospects and would act in a timely manner as needed to address those risks.

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

> The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with reducing the federal funds rate to an average of around 3 percent.

The vote encompassed approval of the statement below to be released at 2:15 p.m.:

> The Federal Open Market Committee decided today to lower its target for the federal funds rate 50 basis points to 3 percent.
>
> Financial markets remain under considerable stress, and credit has tightened further for some businesses and households. Moreover, recent information indicates a deepening of the housing contraction as well as some softening in labor markets.

The Committee expects inflation to moderate in coming quarters, but it will be necessary to continue to monitor inflation developments carefully.

Today's policy action, combined with those taken earlier, should help to promote moderate growth over time and to mitigate the risks to economic activity. However, downside risks to growth remain. The Committee will continue to assess the effects of financial and other developments on economic prospects and will act in a timely manner as needed to address those risks.

> Votes for this action: Messrs. Bernanke, Geithner, Kohn, Kroszner, and Mishkin, Ms. Pianalto, Messrs. Plosser, Stern, and Warsh. Votes against this action: Mr. Fisher.

Mr. Fisher dissented because he preferred to leave the federal funds rate unchanged. The rate had been lowered by 75 basis points just one week earlier in a decision he supported, which brought the funds rate down 175 basis points since September. Given these actions, he felt that monetary policy was already quite stimulative, while headline inflation was too high at more than 3 percent over the last year. Demand-pull inflation pressures from emerging-market economies abroad appeared to be continuing, and anecdotal reports from business contacts suggested greater willingness domestically to pass rising costs through to prices. Moreover, Mr. Fisher was concerned that inflation expectations could become unanchored if the perception of negative real rates of interest were to become pervasive. At the same time, the economy appeared to be still growing, albeit at a substantially weakened pace. Given the policy tradeoffs confronting the FOMC at this time, Mr. Fisher saw the upside risks to inflation as being greater than the downside risks to longer-term economic growth, especially in light of the recent, aggressive easing of monetary policy and the lag before it would have its full effect on the economy.

The Committee then turned to a discussion of selected longer-term regulatory and structural issues raised by recent financial market developments. A staff presentation began by noting that the difficulties in financial markets started with unexpectedly heavy losses on subprime mortgages and related structured securities, which led investors to question the valuations of complex structured instruments more generally and to pull back from such investments. The resulting effects in markets put pressure on some large banking organizations, particularly through losses on subprime-mortgage-related securities and other assets, and through the unplanned expansion of balance sheets triggered by the disruption of various markets in which assets were securitized. The remainder of the presentation, and the discussion by meeting participants, focused on two issues: first, the important role of credit ratings in the securitization process, including the methods used to set ratings and the way investors use ratings in making their investment decisions; and second, how weaknesses in risk management practices at some large global financial services organizations appear to have led to outsized losses at those institutions, and the reasons that such weaknesses may have emerged at some firms and not at others.

It was agreed that the next meeting of the Committee would be held on Tuesday, March 18, 2008.

The meeting adjourned at 1:15 p.m.

Notation Vote

By notation vote completed on December 31, 2007, the Committee unanimously approved the minutes of the

FOMC meeting held on December 11, 2007.

Conference Calls

On January 9, 2008, the Committee reviewed recent economic data and financial market developments. The available information suggested that the downside risks to growth had increased significantly since the time of the December FOMC meeting. Participants discussed the possibility that the slowing in economic growth and associated softening in labor markets might exacerbate the tightening in credit conditions and the correction in housing market activity and prices, which could in turn weigh further on economic activity. Participants emphasized the risks that such adverse dynamics could pose to economic and financial stability.

Participants noted that core price inflation had edged up in recent months, boosted in part by the pass-through of higher energy costs to the prices of core consumer goods and services. Inflation was expected to edge lower this year as energy prices leveled off and pressures on resources eased. However, this slowing in inflation was dependent on inflation expectations remaining well anchored, and participants noted that considerable uncertainty surrounded the inflation outlook.

Most participants were of the view that substantial additional policy easing in the near term might well be necessary to promote moderate economic growth over time and to reduce the downside risks to growth, and participants discussed the possible timing of such policy actions.

On January 21, 2008, the Committee again met by conference call. Incoming information since the conference call on January 9 had reinforced the view that the outlook for economic activity was weakening. Among other developments, strains in some financial markets had intensified, as it appeared that investors were becoming increasingly concerned about the economic outlook and the downside risks to activity. Participants discussed the possibility that these developments could lead to an excessive pull-back in credit availability and in investment. Although inflation was expected to moderate from recent elevated levels, participants stressed that this outlook relied upon inflation expectations remaining well anchored and that the inflation situation should continue to be monitored carefully.

All members judged that a substantial easing in policy in the near term was appropriate to foster moderate economic growth and reduce the downside risks to economic activity. Most members judged that an immediate reduction in the federal funds rate was called for to begin aligning the real policy rate with a weakening economic situation. Such an action, by demonstrating the Committee's commitment to act decisively to support economic activity, might reduce concerns about economic prospects that seemed to be contributing to the deteriorating conditions in financial markets, which could feed back on the economy. However, some concern was expressed that an immediate policy action could be misinterpreted as directed at recent declines in stock prices, rather than the broader economic outlook, and one member believed it preferable to delay policy action until the scheduled FOMC meeting on January 29–30. Some members also noted that were policy to become very stimulative it would be important for the Committee to be decisive in reversing the course of interest rates once the economy had strengthened and downside risks had abated.

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

> The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with reducing the federal funds rate to an average of around 3½ percent.

The vote encompassed approval of the text below for inclusion in the statement to be released at 8:30 a.m. on Tuesday, January 22:

> The Federal Open Market Committee has decided to lower its target for the federal funds rate 75 basis points to 3½ percent.
>
> The Committee took this action in view of a weakening of the economic outlook and increasing downside risks to growth. While strains in short-term funding markets have eased somewhat, broader financial market conditions have continued to deteriorate and credit has tightened further for some businesses and households. Moreover, incoming information indicates a deepening of the housing contraction as well as some softening in labor markets.
>
> The Committee expects inflation to moderate in coming quarters, but it will be necessary to continue to monitor inflation developments carefully.
>
> Appreciable downside risks to growth remain. The Committee will continue to assess the effects of financial and other developments on economic prospects and will act in a timely manner as needed to address those risks.

Votes for this action: Messrs. Bernanke, Geithner, Evans, Hoenig, Kohn, Kroszner, Rosengren, and Warsh. Votes against this action: Mr. Poole. Absent and not voting: Mr. Mishkin

Mr. Poole dissented because he did not believe that current conditions justified policy action before the regularly scheduled meeting the following week.

Brian F. Madigan
Secretary

Addendum: Summary of Economic Projections

In conjunction with the January 2008 FOMC meeting, the members of the Board of Governors and the presidents of the Federal Reserve Banks, all of whom participate in the deliberations of the FOMC, provided projections for economic growth, unemployment, and inflation in 2008, 2009, and 2010. Projections were based on information available through the conclusion of the January meeting, on each participant's assumptions regarding a range of factors likely to affect economic outcomes, and on his or her assessment of appropriate monetary policy. "Appropriate monetary policy" is defined as the future policy that, based on current information, is deemed most likely to foster outcomes for economic activity and inflation that best satisfy the participant's interpretation of the Federal Reserve's dual objectives of maximum employment and price stability.

The projections, which are summarized in table 1 and chart 1, suggest that FOMC participants expected that output would grow at a pace appreciably below its trend rate in 2008, owing primarily to a deepening of the housing contraction and a tightening in the availability of household and business credit, and that the unemployment rate would increase somewhat. Given the substantial reductions in the target federal funds rate through the January FOMC meeting as well as the assumption of appropriate policy going forward, output growth further ahead was projected to pick up to a pace around or

Table 1. Economic Projections of Federal Reserve Governors and Reserve Bank Presidents
Percent

	2008	2009	2010
Central Tendency[1]			
Growth of real GDP	1.3 to 2.0	2.1 to 2.7	2.5 to 3.0
October projections	1.8 to 2.5	2.3 to 2.7	2.5 to 2.6
Unemployment rate	5.2 to 5.3	5.0 to 5.3	4.9 to 5.1
October projections	4.8 to 4.9	4.8 to 4.9	4.7 to 4.9
PCE inflation	2.1 to 2.4	1.7 to 2.0	1.7 to 2.0
October projections	1.8 to 2.1	1.7 to 2.0	1.6 to 1.9
Core PCE inflation	2.0 to 2.2	1.7 to 2.0	1.7 to 1.9
October projections	1.7 to 1.9	1.7 to 1.9	1.6 to 1.9
Range[2]			
Growth of real GDP	1.0 to 2.2	1.8 to 3.2	2.2 to 3.2
October projections	1.6 to 2.6	2.0 to 2.8	2.2 to 2.7
Unemployment rate	5.0 to 5.5	4.9 to 5.7	4.7 to 5.4
October projections	4.6 to 5.0	4.6 to 5.0	4.6 to 5.0
PCE inflation	2.0 to 2.8	1.7 to 2.3	1.5 to 2.0
October projections	1.7 to 2.3	1.5 to 2.2	1.5 to 2.0
Core PCE inflation	1.9 to 2.3	1.7 to 2.2	1.4 to 2.0
October projections	1.7 to 2.0	1.5 to 2.0	1.5 to 2.0

NOTE: Projections of the growth of real GDP, of PCE inflation, and of core PCE 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 and the price index for personal consumption expenditures 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.

1. The central tendency excludes the three highest and three lowest projections for each variable in each year.

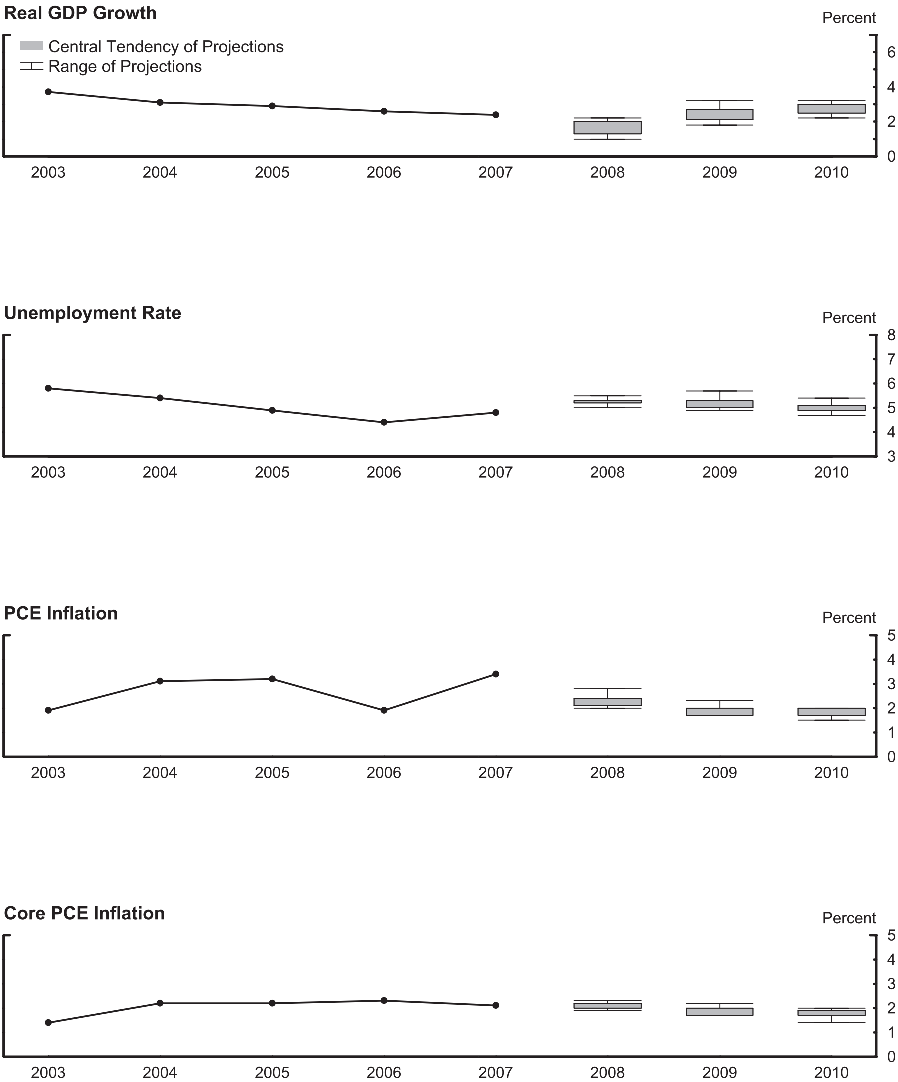
2. The range for a variable in a given year includes all participants' projections, from lowest to highest, for that variable in that year.

a bit above its long-run trend by 2010. Inflation was expected to decline in 2008 and 2009 from its recent elevated levels as energy prices leveled out and economic slack contained cost and price increases. Most participants judged that considerable uncertainty surrounded their projections for output growth and viewed the risks to their forecasts as weighted to the downside. A majority of participants viewed the risks to the inflation outlook as broadly balanced, but a number of participants saw the risks to inflation as skewed to the upside.

The Outlook

The central tendency of participants' projections for real GDP growth in 2008, at 1.3 to 2.0 percent, was considerably lower than the central tendency of the projections provided in conjunction with the October FOMC meeting, which was 1.8 to 2.5 percent. These downward revisions to the 2008 outlook stemmed from a number of factors, including a further intensification of the housing market correction, tighter credit conditions amid increased concerns about credit quality and ongoing turmoil in financial markets, and higher oil prices. However, some participants noted that a fiscal stimulus package would likely provide a temporary boost to domestic demand in the second half of this year. Beyond 2008, a number of factors were projected to buoy economic growth, including a gradual turnaround in housing markets, lower interest rates associated with the substantial easing of monetary policy to date and appropriate adjustments to policy going

Chart 1. Central Tendencies and Ranges of Economic Projections*



* See notes to Table 1 for variable definitions.

forward, and an anticipated reduction in financial market strains. Real GDP was expected to accelerate somewhat in 2009 and by 2010 to expand at or a little above participants' estimates of the rate of trend growth.

With output growth running below trend over the next year or so, most participants expected that the unemployment rate would edge higher. The central tendency of participants' projections for the average rate of unemployment in the fourth quarter of 2008 was 5.2 to 5.3 percent, above the 4.8 to 4.9 percent unemployment rate forecasted in October and broadly suggestive of some slack in labor markets. The unemployment rate was generally expected to change relatively little in 2009 and then to edge lower in 2010 as output growth picks up, although in both years the unemployment rate was projected to be a little higher than had been anticipated in October.

The higher-than-expected rates of overall and core inflation since October, which were driven in part by the steep run-up in oil prices, had caused participants to revise up somewhat their projections for inflation in the near term. The central tendency of participants' projections for core PCE inflation in 2008 was 2.0 to 2.2 percent, up from the 1.7 to 1.9 percent central tendency in October. However, core inflation was expected to moderate over the next two years, reflecting muted pressures on resources and fairly well-anchored inflation expectations. Overall PCE inflation was projected to decline from its current elevated rate over the coming year, largely reflecting the assumption that energy and food prices would flatten out. Thereafter, overall PCE inflation was projected to move largely in step with core PCE inflation.

Participants' projections for 2010 were importantly influenced by their judgments about the measured rates of inflation consistent with the Federal Reserve's dual mandate to promote maximum employment and price stability and about the time frame over which policy should aim to attain those rates given current economic conditions. Many participants judged that, given the recent adverse shocks to both aggregate demand and inflation, policy would be able to foster only a gradual return of key macroeconomic variables to their longer-run sustainable or optimal levels. Consequently, the rate of unemployment was projected by some participants to remain slightly above its longer-run sustainable level even in 2010, and inflation was judged likely still to be a bit above levels that some participants judged would be consistent with the Federal Reserve's dual mandate.

Risks to the Outlook

Most participants viewed the risks to their GDP projections as weighted to the downside and the associated risks to their projections of unemployment as tilted to the upside. The possibility that house prices could decline more steeply than anticipated, further reducing households' wealth and access to credit, was perceived as a significant risk to the central outlook for economic growth and employment. In addition, despite some recovery in money markets after the turn of the year, financial market conditions continued to be strained—stock prices had declined sharply since the December meeting, concerns about further potential losses at major financial institutions had mounted amid worries about the condition of financial guarantors, and credit conditions had tightened in general for both households and firms. The potential for adverse interactions, in which weaker economic activity could lead to a worsening of financial conditions and a reduced availability of credit, which in turn could further damp economic growth, was viewed as an especially worrisome possibility.

Regarding risks to the inflation outlook, several participants pointed to the possibility that real activity could rebound less vigorously than projected, leading to more downward pressure on costs and prices than anticipated. However, participants also saw a number of upside risks to inflation. In particular, the pass-through of recent increases in energy and commodity prices as well as of past dollar depreciation to consumer prices could be greater than expected. In addition, participants recognized a risk that inflation expectations could become less firmly anchored if the current elevated rates of inflation persisted for longer than anticipated or if the recent substantial easing in monetary policy was misinterpreted as reflecting less resolve among Committee members to maintain low and stable inflation. On balance, a larger number of participants than in October viewed the risks to their inflation forecasts as broadly balanced, although several participants continued to indicate that their inflation projections were skewed to the upside.

The ongoing financial market turbulence and tightening of credit conditions had increased participants' uncertainty about the outlook for economic activity. Most participants judged that the uncertainty attending their January projections for real GDP growth and for the unemployment rate was above typical levels seen in the past. (Table 2 provides an estimate of average ranges of forecast uncertainty for GDP growth, unemployment, and inflation over the past twenty years.[5]) In contrast, the uncertainty attached to participants' inflation projections was generally viewed as being broadly in line with past experience, although several participants judged that the degree of uncertainty about inflation was higher than normal.

5. The box "Forecast Uncertainty" at the end of this summary discusses the sources and interpretation of uncertainty in economic forecasts and explains the approach used to assess the uncertainty and risks attending participants' projections.

Table 2. Average Historical Projection Error Ranges

Percentage points

	2008	2009	2010
Real GDP[1]	±1.2	±1.4	±1.4
Unemployment rate[2]	±0.5	±0.8	±1.0
Total consumer prices[3]	±1.0	±1.0	±0.9

NOTE: Error ranges shown are measured as plus or minus the root mean squared error of projections that were released in the winter from 1986 through 2006 for the current and following two years by various private and government forecasters. As described in the box "Forecast Uncertainty," under certain assumptions, there is about a 70 percent probability that actual outcomes for real GDP, unemployment, and consumer prices will be in ranges implied by the average size of projection errors made in the past. Further information is in David Reifschneider and Peter Tulip (2007), "Gauging the Uncertainty of the Economic Outlook from Historical Forecasting Errors," Finance and Economics Discussion Series #2007-60 (November).

1. Projection is percent change, fourth quarter of the previous year to fourth quarter of the year indicated.

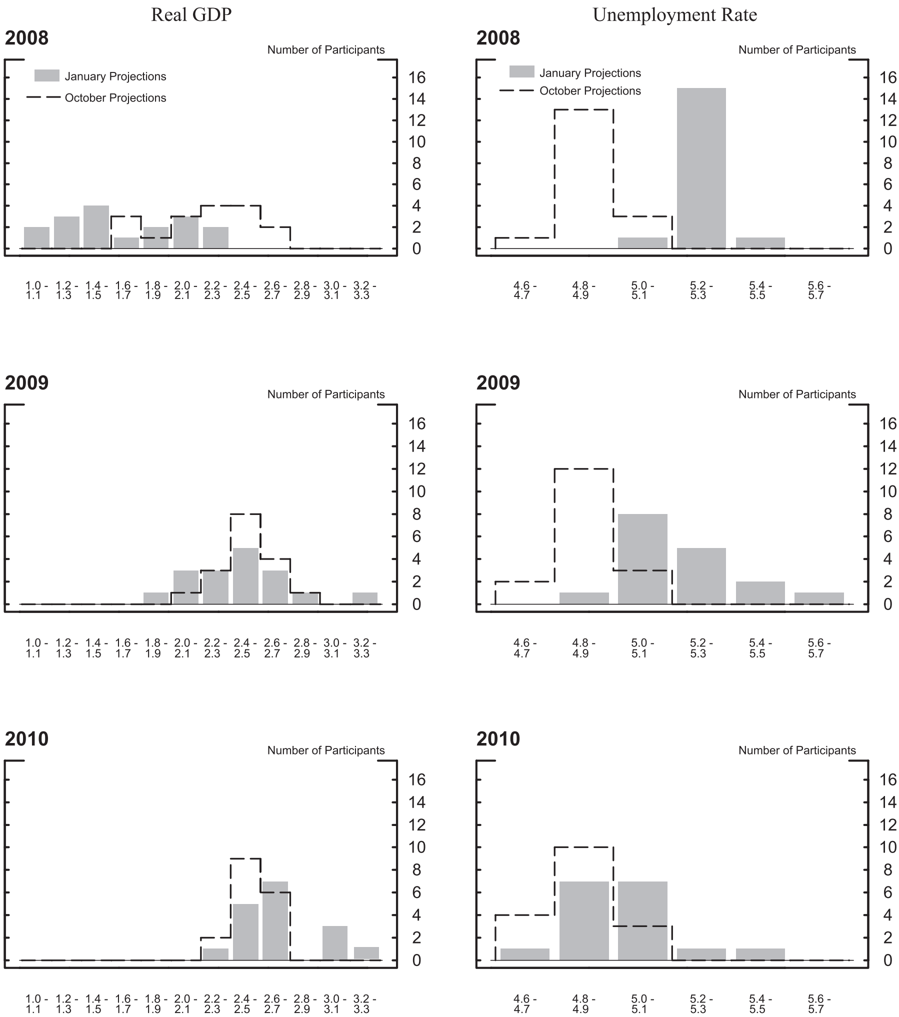
2. Projection is the fourth quarter average of the civilian unemployment rate (percent).

3. 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. The slightly narrower estimated width of the confidence interval for inflation in the third year compared with those for the second and third years is likely the result of using a limited sample period for computing these statistics.

Diversity of Participants' Views

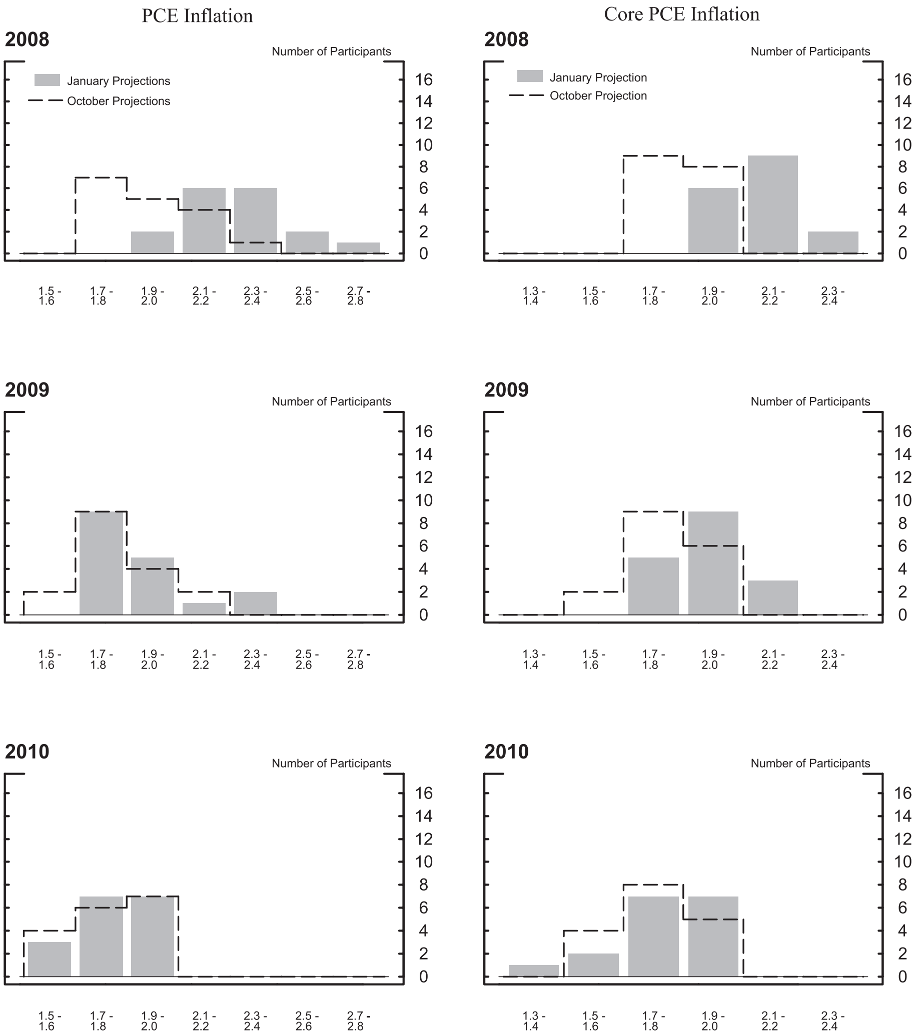
Charts 2(a) and 2(b) provide more detail on the diversity of participants' views. The dispersion of participants' projections for real GDP growth was markedly wider than in the forecasts submitted in October, which in turn were considerably more diverse than those submitted in conjunction with the June FOMC meeting and included in the Board's *Monetary Policy Report to the Congress* in July. Mirroring the increase in diversity of views on real GDP growth, the dispersion of participants' projections for the rate of unemployment also widened notably, particularly for 2009 and 2010. The dispersion of projections for output and employment seemed largely to reflect differing assessments of the effect of financial

Chart 2(a). Distribution of Participants' Projections (percent)



market conditions on real activity, the speed with which credit conditions might improve, and the depth and duration of the housing market contraction. The dispersion of participants' longer-term projections was also affected to some degree by differences in their judgments about the economy's trend growth rate and the unemployment rate that would be consistent over time with maximum employment. Views also differed about the pace at which output and employment would recover toward those levels over the forecast horizon and beyond, given appropriate monetary policy. The dispersion of the projections for PCE inflation in the near term partly reflected different views on the extent to which recent increases in energy and other commodity prices

Chart 2(b). Distribution of Participants' Projections (percent)



would pass through into higher consumer prices and on the influence that inflation expectations would exert on inflation over the short and medium run. Participants' inflation projections further out were influenced by their views of the rate of inflation consistent with the Federal Reserve's dual objectives and the time it would take to achieve these goals given current economic conditions and appropriate policy.

Forecast Uncertainty

The economic projections provided by the members of the Board of Governors and the presidents of the Federal Reserve Banks help shape monetary policy 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 Federal Reserve Board 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 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 might imply a probability of about 70 percent that actual GDP would expand between 1.8 percent to 4.2 percent in the current year, and 1.6 percent to 4.4 percent in the second and third years. The corresponding 70 percent confidence intervals for overall inflation would be 1 percent to 3 percent in the current and second years, and 1.1 percent to 2.9 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, 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.

Meeting Held on March 18, 2008

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, 2008 at 8:30 a.m.

Present:

Mr. Bernanke, Chairman
Mr. Geithner, Vice Chairman
Mr. Fisher
Mr. Kohn
Mr. Kroszner
Mr. Mishkin
Ms. Pianalto
Mr. Plosser
Mr. Stern
Mr. Warsh

Messrs. Evans, Lacker, and Lockhart, and Ms. Yellen, Alternate Members of the Federal Open Market Committee

Messrs. Hoenig and Rosengren, Presidents of the Federal Reserve Banks of Kansas City and Boston, respectively

Mr. Sapenaro, First Vice President, Federal Reserve Bank of St. Louis

Mr. Madigan, Secretary and Economist
Ms. Danker, Deputy Secretary
Mr. Skidmore, Assistant Secretary
Ms. Smith, Assistant Secretary
Mr. Alvarez, General Counsel
Mr. Ashton, Assistant General Counsel
Mr. Sheets, Economist
Mr. Stockton, Economist

Messrs. Connors, English, and Kamin, Ms. Mester, Messrs. Rolnick, Rosenblum, Slifman, Sniderman, and Wilcox, Associate Economists

Mr. Dudley, Manager, System Open Market Account

Mr. Struckmeyer, Deputy Staff Director, Office of Staff Director for Management, Board of Governors

Mr. Parkinson, Deputy Director, Division of Research and Statistics, Board of Governors

Ms. Bailey, Deputy Director, Division of Banking Supervision and Regulation, Board of Governors

Mr. Clouse, Deputy Director, Division of Monetary Affairs, Board of Governors

Ms. Liang and Messrs. Reifschneider and Wascher, Associate Directors, Division of Research and Statistics, Board of Governors

Mr. Gagnon, Visiting Associate Director, Division of Monetary Affairs, Board of Governors

Mr. Blanchard, Assistant to the Board, Office of Board Members, Board of Governors

Mr. Carpenter, Assistant Director, Division of Monetary Affairs, Board of Governors

Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors

Mr. Luecke, Section Chief, Division of Monetary Affairs, Board of Governors

Ms. Low, Open Market Secretariat Specialist, Division of Monetary Affairs, Board of Governors

Mr. Judd, Executive Vice President, Federal Reserve Bank of San Francisco

Messrs. Altig, Rasche, Sellon, and Sullivan, Senior Vice Presidents, Federal Reserve Banks of Atlanta, St. Louis, Kansas City, and Chicago, respectively

Mr. Olivei, Vice President, Federal Reserve Bank of Boston

Mr. Pesenti, Assistant Vice President, Federal Reserve Bank of New York

Mr. Hetzel, Senior Economist, Federal Reserve Bank of Richmond

The Manager of the System Open Market Account reported on recent developments in foreign exchange markets. There were no open market operations in foreign currencies for the System's account in the period since the previous meeting. The Manager also reported on developments in domestic financial markets and on System open market operations in government securities and federal agency obligations during the period since the previous meeting. By unanimous vote, the Committee ratified these transactions.

The information reviewed at the March meeting indicated that economic activity had continued to decelerate in recent months. The contraction in homebuilding intensified, consumer spending appeared to be weakening, and survey measures of both consumer and business sentiment were at depressed levels. Industrial production fell in February, and private payroll employment posted a third consecutive monthly decline. After having increased in recent months through January, both headline and core inflation as measured by the consumer price index (CPI) dropped noticeably in February. In early March, however, prices of oil and other commodities rose sharply.

Labor demand softened markedly in recent months. The decline in private payroll employment that began last December steepened through February. Although employment by firms in the nonbusiness services sector and in state and local governments continued to rise, declines elsewhere were widespread. Losses were greatest in the manufacturing, construction, and retail trade sectors. Aggregate hours of private production or nonsupervisory workers fell slightly in the first two months of the year. The unemployment rate edged down to 4.8 percent in February, but was still up from the 4.5 percent rate of a year earlier. The labor force participation rate declined in February.

Industrial production declined in February after edging up slightly in the previous two months. The output of utilities dropped back after a weather-related surge in January, while mining output fell somewhat in the first two months of the year on average. Manufacturing production edged down after having flattened out in January. The motor vehicle and construction-related industries continued to hold down overall manufacturing output even as high-tech production posted moderate increases. The factory utilization rate edged down in February to a level noticeably below its recent high in the third quarter of 2007.

Real consumer spending appeared to have stalled in recent months. Real outlays for nondurable and durable consumer goods, including automobiles, were estimated to have declined, on average, in January and February. Real disposable personal income was unchanged in the fourth quarter, held down by higher food and energy prices, and moved up only slightly in January. Further declines in house prices led to a noticeable decrease in the ratio of household wealth to disposable income in the fourth quarter. The downturn in equity prices since December further reduced household wealth in the first quarter. Readings on consumer sentiment dropped sharply in February from already low levels, and the Reuters/University of Michigan survey remained at a depressed level in early March.

The contraction in residential construction continued into early 2008. Single-family housing starts fell in both January and February. After having dropped especially sharply in December, multifamily housing starts rebounded somewhat in the first two months of the year. New home sales declined again in January, thereby pushing inventories of unsold homes to even higher levels relative to sales. Sales of existing homes held roughly steady in January, and the index of pending sales agreements in that month was consistent with flat sales in February and March. Overall, demand for housing continued to be restrained by tight financing conditions for jumbo and nonprime mortgages.

Real spending on equipment and software rose at a sluggish rate in the fourth quarter. In January, orders and shipments of nondefense capital goods excluding aircraft were above their fourth-quarter levels. However, the overall outlook for capital spending in the first quarter was weak in light of the deterioration in surveys of business conditions and attitudes and the worsening situation in markets for business finance. On the heels of robust gains during most of last year, nominal spending on nonresidential structures decelerated in December and posted an outright decline in January. Although spending in this sector is often volatile, the recent deceleration was consistent with mounting indications of slowing demand for nonresidential buildings and tightening credit conditions.

Real investment in nonfarm inventories excluding motor vehicles remained at a steady pace in the fourth quarter of 2007, but motor vehicle inventories fell sharply. After declining in November, the ratio of manufacturing and trade book-value inventories (excluding motor vehicles) to sales ticked up in December and held steady in January, but this ratio remained well below its average value in 2007.

The U.S. international trade deficit narrowed substantially in December and was about unchanged in January. Exports rose sharply in both months, while imports dipped in December before recovering in January. Increases in exports were broadly based except for automotive exports, which dropped sharply in December and remained low in January. Imports of services were up moderately. Oil imports soared, reflecting increases in both prices and volumes. Most other categories of imports dropped in December and January on net, with especially large declines in imports of automotive and consumer goods.

In the major advanced foreign economies, the rate of growth of real gross domestic product (GDP) generally declined in the fourth quarter. The source of the slowdown varied substantially across economies. In the euro area and in the United Kingdom, output was restrained by a softening in domestic demand. In contrast, Canadian domestic demand continued to increase at a very strong pace, but because of an offsetting steep decline in net exports, real GDP rose only modestly. Japan was the exception among the advanced foreign economies to the pattern of slower growth; real GDP there strengthened in the fourth quarter with higher domestic spending and continued strength in exports. Japanese exports to the United States, however, declined. Available first-quarter economic indicators for the advanced foreign economies were mixed, but, on balance, they pointed to slowing growth. Real activity also appeared to have slowed a bit in emerging markets, though it continued to advance at a fairly strong rate. In emerging Asia, the pace of real GDP growth picked up in the fourth quarter in China and South Korea, but it softened in most other countries. The rate of increase in economic activity slowed in Brazil, Mexico, and several other countries in Latin America in the fourth quarter, but remained generally strong.

In the United States, the headline CPI continued to rise rapidly in January but was flat in February. For those two months on average, the rate of headline inflation was down significantly from its elevated level in the fourth quarter of 2007, as retail energy prices stopped rising and core inflation moderated a bit; these two factors more than offset an acceleration of food prices. However, the increase in world petroleum prices in early March pointed to a renewed burst of energy price inflation in the near term. Available information, including producer prices for February, suggested that prices of core personal consumption expenditures (PCE) moved up a bit more slowly than the core CPI in January and somewhat faster than the core CPI in February. Household survey measures of expectations for year-ahead inflation jumped in March to their highest levels in about two years; in contrast, survey measures of longer-term inflation expectations were unchanged or up slightly. Average hourly earnings increased at a somewhat slower rate in January and February than they had in November and December. Over the twelve months that ended in February, this wage measure rose a bit more slowly than in the previous twelve months.

At its January 30 meeting, the FOMC lowered its target for the federal funds rate 50 basis points, to 3 percent. In addition, the Board of Governors approved a decrease of 50 basis points in the discount rate, to 3½ percent. The Committee's statement noted that financial markets remained under considerable stress and that credit had tightened further for some businesses and households. Moreover, incoming information indicated a deepening of the housing contraction as well as some softening in labor markets. The Committee expected inflation to moderate in coming quarters but said that it would be necessary to continue to monitor inflation developments carefully. The Committee indicated that its action, combined with the policy actions taken earlier, should help to promote moderate growth over time and to mitigate the risks to economic activity. However, the Committee noted that downside risks to growth remained. The Committee stated that it would continue to assess the effects of financial and other developments on economic prospects and would act in a timely manner as needed to address these risks.

Over the intermeeting period, conditions in some short-term funding markets worsened. Spreads in interbank funding markets widened, as did spreads on lower-rated commercial paper. Obtaining credit through repurchase agreements backed by agency and private-label mortgage-backed securities (MBS) also became more difficult amid reports of larger "haircuts" being applied by lenders and news that some market participants missed margin calls on positions as a result. Concerns over the health of financial guarantors caused dislocations in the markets for municipal securities, and the ratios of municipal bond yields to those on comparable-maturity Treasuries climbed to historically high levels. In longer-term corporate markets, yields on investment-grade and speculative-grade corporate bonds rose, pushing their spreads relative to Treasuries to the highest levels since 2002 or even earlier in some cases. Nonetheless, gross bond issuance in January and February remained solid for investment-grade firms.

Commercial bank credit decelerated in January and February, damped by a reduction in merger and acquisition activity, weak business spending, fewer previously committed loan deals coming onto banks' books, and slower residential mortgage lending. Commercial real estate lending at banks, however, continued to advance briskly in January and February, while the rise in consumer loans was moderate. Over the intermeeting period, spreads on conforming and jumbo residential mortgages over comparable-maturity Treasury securities jumped, and credit default swap premiums for the government-sponsored enterprises increased to record highs. Issuance of conforming MBS continued to be strong, while credit availability for jumbo and nonprime mortgage borrowers remained tight. Broad stock price indexes fell further over the intermeeting period on negative economic news as well as concerns about the outlook for many financial institutions.

Similar stresses were again evident in the financial markets of major foreign economies. However, economic news in these economies was generally less downbeat than in the United States, leading to expectations of greater monetary easing in the United States than elsewhere. The trade-weighted foreign exchange value of the dollar against major currencies declined notably.

M2 increased strongly in January and February, boosted primarily by heightened demands for the relative safety and liquidity of money market mutual funds. The decline in opportunity costs associated with monetary policy easing also supported rapid growth of liquid deposits.

In the two weeks prior to the March meeting, the Federal Reserve announced several measures to bolster liquidity and promote orderly functioning in financial markets. On March 7, the Federal Reserve announced that it would initiate a series of term repurchase transactions that would facilitate funding of primary dealers' assets and that the volume of lending through the Term Auction Facility (TAF) would be increased. On March 11, the Federal Reserve, in coordination with other central banks, announced the expansion and extension of the reciprocal currency arrangements that were established in December as well as the creation of a Term Securities Lending Facility (TSLF) under which the Federal Reserve would lend Treasury securities to primary dealers for longer terms than in the existing program and based on a broader range of collateral. On March 14, the Federal Reserve Board approved the temporary financing arrangement announced that morning by JPMorgan Chase & Co. and The Bear Stearns Companies Inc. On March 16, the Federal Reserve announced the creation of a lending facility to improve the ability of primary dealers to provide financing to participants in securitization markets. In addition, the Federal Reserve lowered the primary credit rate, or discount rate, 25 basis points to 3.25 percent, and extended the maximum maturity of primary credit loans to ninety days from thirty days. It also approved the longer-term financing arrangement announced that evening by JPMorgan Chase and Bear Stearns in conjunction with the acquisition of Bear Stearns by JPMorgan Chase.

Over the intermeeting period, the expected path of monetary policy over the next year as measured by money market futures rates moved down sharply, largely in response to softer-than-expected economic data releases and deteriorating financial market conditions. The Committee's action at the January 30 meeting had been viewed by market participants as the most likely outcome, but near-term futures rates declined a few basis points as investors had placed some probability on a smaller policy move. Neither the subsequent release of the minutes of the meeting nor the March 7 Federal Reserve announcements elicited significant market reaction. The March 11 TSLF announcement was followed by a step-up in money market futures rates as liquidity concerns eased somewhat and market participants evidently concluded that less policy easing would be needed than previously anticipated. However, liquidity concerns reemerged subsequently, prompting a further drop in money market futures rates. Consistent with the shift in the economic outlook, the revision in policy expectations, and the reduction in the target federal funds rate, yields on short- and medium-term nominal Treasury coupon securities declined substantially after the January 30 FOMC meeting. However, yields on long-term Treasuries fell much less than those on shorter-term instruments, and the yield curve steepened significantly. Inflation compensation—the difference between yields on nominal Treasury securities and those on inflation-indexed issues—was little changed on balance for shorter-term issues, but longer-term inflation compensation rose.

In the forecast prepared for this meeting, the staff substantially revised down its projection for the pace of real GDP throughout 2008. Although the available data on spending and production early in the first quarter were not materially weaker than the staff's expectations, many other indicators of real activity were more negative. Payroll employment declined substantially; oil prices surged again, crimping real household incomes; and measures of consumer and business sentiment deteriorated sharply. Moreover, house prices fell by more than anticipated, and conditions in a broad range of debt markets became more restrictive. The staff projection showed a contraction of real GDP in the first half of 2008 followed by a slow rise in the second half. The recently enacted fiscal stimulus package was expected to boost real GDP in the second half of 2008, but that effect was projected to unwind in 2009. The forecast showed real GDP rising at a rate somewhat above the growth rate of its potential in 2009, in response to the impetus from cumulative monetary policy easing, continued strength in net exports, a lessening drag from high oil prices, and a relaxation of financial market strains. Even with this pickup in growth in 2009, resource utilization was anticipated to follow a lower trajectory than in the previous forecast.

The forecast for core PCE price inflation over the first half of 2008 was raised in response to elevated readings in recent months. In addition, the forecast for headline PCE price inflation incorporated a much higher rate of increase for energy prices for the first half of the year; as a result, headline PCE price inflation was expected to substantially exceed core PCE price inflation in 2008. By 2009, the forecasts for both the headline and core PCE price indexes showed inflation receding from its 2008 level, in line with the previous forecasts.

In their discussion of the economic situation and outlook, FOMC participants noted that prospects for both economic activity and near-term inflation had deteriorated in view of increasingly fragile financial markets and tighter credit conditions, rising prices for oil and other commodities, and the deepening contraction in the housing sector. Home prices had declined more steeply than anticipated, and the weakening housing market, combined with a softening in labor markets, appeared to be weighing on consumer sentiment. Businesses also were seen as becoming more pessimistic and cautious, despite a strong foreign demand for U.S. goods. Strains in financial markets had increased, portending a possible further tightening in the availability of credit to households and businesses. Against this backdrop, many participants thought some contraction in economic activity in the first half of 2008 now appeared likely. The economy was expected to begin to recover in the second half of the year, supported by recent monetary policy easing and fiscal stimulus. Accommodative monetary policy and a recovery in financial markets along with an abatement of the downdraft in housing activity were expected to help foster a further pickup in economic growth in 2009. However, considerable uncertainty surrounded this forecast, and some participants expressed concern that falling house prices and stresses in financial markets could lead to a more severe and protracted downturn in activity than currently anticipated. Participants noted that recent readings on inflation had generally been elevated, that energy prices had risen sharply, and that some indicators of inflation expectations had risen. Most participants anticipated that a flattening of oil and other commodity prices and easing pressures on resources would contribute to some moderation in inflation pressures. Nonetheless, uncertainties about the outlook for inflation had risen.

Stresses in financial markets had intensified noticeably since the January meeting. Several meeting participants noted that price discovery for mortgage-related financial assets had become increasingly difficult in an environment of declining house prices and considerable uncertainty as to the ultimate extent of such declines. With the magnitude and distribution of losses on mortgage assets quite unclear and many financial institutions experiencing significant balance sheet pressures, many lenders pulled back from risk taking—notably by increasing collateral margins on secured lending—and liquidity diminished in a number of financial markets. In these circumstances, many market participants were experiencing greater difficulties obtaining funding, and meeting participants regarded financial markets as unusually fragile. The new liquidity facilities recently introduced by the Federal Reserve would probably be helpful in bolstering market liquidity and promoting orderly market functioning, but even so, the ongoing strains were likely to raise the price and reduce the availability of credit to businesses and households. Evidence that an adverse feedback loop was under way, in which a restriction in credit availability prompts a deterioration in the economic outlook that, in turn, spurs additional tightening in credit conditions, was discussed. Several participants noted that the problems of declining asset values, credit losses, and strained financial market conditions could be quite persistent, restraining credit availability and thus economic activity for a time and having the potential subsequently to delay and damp economic recovery.

Participants noted that the contraction in the housing sector had deepened and that considerable uncertainty surrounded the outlook for housing. Although some stabilization in housing markets was likely needed to help underpin an economic recovery in coming quarters, there was little indication that that process had yet begun. Elevated rates of foreclosures and large inventories of unsold property were likely to depress home prices for some time. Lower home prices would eventually buoy home buying, but in the mean-time the prospect of continued price declines could lead potential homebuyers to defer purchases for a time, further damping housing activity and adding to downward pressure on home values. Participants noted that the trajectory of house prices was a major source of uncertainty in their economic outlook.

Recent data and anecdotal reports from business contacts suggested that consumer spending was decelerating noticeably, though it apparently had not yet actually declined substantially. Participants noted that private payroll employment had fallen in February for the third consecutive month, and suggested that increasing concerns among workers about prospects for employment and income likely were holding down consumer outlays. Rising energy prices were also damping growth in real incomes. One participant reported that lenders were restricting draws on home equity lines, and the tightening of credit availability more generally was probably starting to constrain consumer spending. Also, the continued fall in home prices and declines in equity prices were weighing on household wealth, with a depressing effect on spending.

The outlook for business spending had also dimmed since the time of the January meeting. Anecdotal reports from many regions of the country pointed to a retrenchment in capital spending in response to increased pessimism about economic prospects and heightened caution on the part of business managers. The tightening supply of credit was seen as exacerbating this softness in business outlays and contributing particularly to a pullback from nonresidential construction projects. However, investment spending on agricultural equipment was reported to be quite strong, spurred by soaring crop prices. Reports on inventories were mixed but, overall, inventories appeared to be roughly in balance with desired levels.

In discussing the external sector of the economy, some participants indicated that net exports remained a notable source of support for the economy. Growth in exports was being supported by strength in foreign economies as well as declines in the foreign exchange value of the dollar. However, some of the recent increase in net exports resulted from weaker imports, which reflected softer domestic spending. Some participants saw somewhat slower global economic growth as a possible consequence of the problems in financial markets and weakness in the United States and noted that such a development could potentially limit the support that exports would provide to the U.S. economy going forward.

The recent information on inflation was seen as disappointing. With the exception of the February report on consumer prices, readings on inflation had generally been elevated. Agricultural prices were rising at a substantial clip, partly in response to strong global demand, lean supplies, and a lower foreign exchange value of the dollar. Other commodity prices also were climbing rapidly, and crude oil prices were near record levels. Several participants stated that business contacts had emphasized that their input costs were rising and that they were seeking to pass on higher costs to their customers. Some participants, however, expressed the view that emerging economic slack would limit the extent to which firms could pass on their higher costs and could serve to damp inflation more generally. Moreover, available data and anecdotal reports suggested that unit labor costs were rising only modestly, and thus were seen as unlikely to exert significant upward pressure on prices. Weaker growth, both in the United States and abroad, should also contribute to a flattening of oil and other commodity prices over time, which would also reduce price pressures and the threat of rising inflation expectations. On balance, most participants still expected inflation to moderate later this year and in 2009. However, the recent depreciation of the dollar could boost import prices and thus contribute to higher inflation. Moreover, with both core and headline inflation having been somewhat elevated, participants expressed some concern that inflation expectations might become less firmly anchored. Indeed, some indicators suggested that inflation expectations had edged higher of late. In view of these considerations, significant uncertainty attended the near-term outlook for price pressures. On balance, however, participants emphasized that appropriate monetary policy, combined with effective communication of the Committee's commitment to price stability, would foster price stability over time.

In the Committee's discussion of monetary policy for the intermeeting period, most members judged that a substantial easing in the stance of monetary policy was warranted at this meeting. The outlook for economic activity had weakened considerably since the January meeting, and members viewed the downside risks to economic growth as having increased. Indeed, some believed that a prolonged and severe economic downturn could not be ruled out given the further restriction of credit availability and ongoing weakness in the housing market. Members recognized that monetary policy alone could not address fully the underlying problems in the housing market and in financial markets, but they noted that, through a range of channels, lower short-term real interest rates should help buoy economic activity and ameliorate strains in these markets. Even with a substantial easing at this meeting, most members saw overall inflation as likely to moderate in coming quarters, reflecting a projected leveling-out of energy and commodity prices and an easing of pressures on resource utilization. However, inflation pressures had apparently risen even as the outlook for growth had weakened. With the uncertainties in the outlook for both economic activity and inflation elevated, members noted that appropriately calibrating the stance of policy was difficult, partly because some time would be required to assess the effects of the substantial easing of policy to date. All in all, members judged that a 75 basis point easing of policy at this meeting was appropriate to address the combination of risks of slowing economic growth, inflationary pressures, and financial market disruptions.

The Committee agreed that the statement to be released after the meeting should indicate that economic activity had weakened further, reflecting slower growth in consumer spending and softening in the labor market, that financial markets remained under considerable stress, and that the tightening of credit conditions and the deepening of the housing market contraction were likely to weigh on economic growth over the next few quarters. Given recent developments, the Committee concurred that the statement should note that inflation had been elevated and that some indicators of inflation expectations had risen, but agreed that the announcement should also reiterate that inflation was expected to moderate in coming quarters. As in recent statements, the Committee emphasized that it would continue to monitor inflation developments carefully. The Federal Reserve had implemented a number of measures to foster market liquidity in recent weeks, and members thought that the statement should note that policy actions taken today and earlier, including those liquidity measures, would promote moderate growth over time. In light of the uncertainties regarding the housing sector and financial market developments, however, the Committee repeated its recent indications that downside risks to growth remained. The Committee agreed on the need to act in a timely manner to promote its dual objectives of sustainable economic growth and price stability.

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

> The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with reducing the federal funds rate to an average of around 2¼ percent.

The vote encompassed approval of the statement below to be released at 2:15 p.m.:

> The Federal Open Market Committee decided today to lower its target for the federal funds rate 75 basis points to 2¼ percent.
>
> Recent information indicates that the outlook for economic activity has weakened further. Growth in consumer spending has slowed and labor markets have softened. Financial markets remain under considerable stress, and the tightening of credit conditions and the deepening of the housing contraction are likely to weigh on economic growth over the next few quarters.
>
> Inflation has been elevated, and some indicators of inflation expectations have risen. The Committee expects inflation to moderate in coming quarters, reflecting a projected leveling-out of energy and other commodity prices and an easing of pressures on resource utilization. Still, uncertainty about the inflation outlook has increased. It will be necessary to continue to monitor inflation developments carefully.
>
> Today's policy action, combined with those taken earlier, including measures to foster market liquidity, should help to promote moderate growth over time and to mitigate the risks to economic activity. However, downside risks to growth remain. The Committee will act in a timely manner as needed to promote sustainable economic growth and price stability.

> Votes for this action: Messrs. Bernanke, Geithner, Kohn, Kroszner, and Mishkin, Ms. Pianalto, Messrs. Stern and Warsh. Votes against this action: Messrs. Fisher and Plosser.

Messrs. Fisher and Plosser dissented because, in light of heightened inflation risks, they favored easing policy less aggressively. Incoming data suggested a weaker near-term outlook for economic growth, but the Committee's earlier policy moves had already reduced the target federal funds rate by 225 basis points to address risks to growth, and the full effect of those rate cuts had yet to be felt. While financial markets remained under stress, the Federal Reserve had already taken separate, significant actions to address liquidity issues in markets. In fact, Mr. Fisher felt that focusing on measures targeted at relieving liquidity strains would improve economic prospects more quickly and lastingly than would further reductions in the federal funds rate at this point; he believed that alleviating these strains would increase the efficacy of the earlier rate cuts. Both Messrs. Fisher and Plosser were concerned that inflation expectations could potentially become unhinged should the Committee continue to lower the funds rate in the current environment. They pointed to measures of inflation and indicators of inflation expectations that had risen, and Mr. Fisher stressed the international influences on U.S. inflation rates. Mr. Plosser noted that the Committee could not afford to wait until there was clear evidence that inflation expectations were no longer anchored, as by then it would be too late to prevent a further increase in inflation pressures.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, April 29–30, 2008.

The meeting adjourned at 1:15 p.m.

Notation Vote

By notation vote completed on February 19, 2008, the Committee unanimously approved the minutes of the FOMC meeting held on January 29–30, 2008.

Conference Call

On March 10, 2008, the Committee met to review financial market developments and to consider proposals aimed at supporting the liquidity and orderly functioning of those markets. In light of the sharp further deterioration of some key money and credit markets, and against the backdrop of a weaker economic outlook, meeting participants discussed the potential usefulness and risks of instituting a Term Securities Lending Facility, under which primary dealers would be able to borrow Treasury securities for a term of approximately one month against any collateral eligible for open market operations and the highest-quality private mortgage securities. Most participants concluded that offering this facility was an appropriate step that could help alleviate pressures in the financing markets for Treasury and some mortgage-backed securities. By improving conditions in funding markets, the measure was expected to help restore the functioning of financial markets more generally and thereby promote the effective conduct of monetary policy as well as macroeconomic stability. During the discussion, participants expressed concerns that establishment of the facility could be viewed as setting a precedent and thus raise expectations of other actions in the future, and they also noted some uncertainty about how effective the facility would be in practice. On balance, the Committee decided that the facility could prove useful in preventing an escalation of an unhealthy dynamic that was developing in money and credit markets, in which liquidity and collateral concerns were spreading. In addition, the Committee agreed to expand and extend the existing reciprocal currency agreements with the European Central Bank and the Swiss National Bank.

The Committee voted to approve the following resolutions:

Term Securities Lending Facility

In addition to the current authorization granted to the Federal Reserve Bank of New York to engage in overnight securities lending transactions, and 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 up to $200 billion of U.S. Government securities held in the System Open Market Account to primary dealers for a term that does not exceed 35 days at rates that shall be determined by competitive bidding.

These lending transactions may be against pledges of U.S. Government securities, other assets that the Reserve Bank is specifically authorized to buy and sell under section 14 of the Federal Reserve Act (including federal agency residential-mortgage-backed securities

(MBS)), and non-agency AAA-rated residential MBS.

The Federal Reserve Bank of New York shall set a minimum lending fee consistent with the objectives of the program and apply reasonable limitations on the total amount of a specific issue that may be auctioned and on the amount of securities that each dealer may borrow.

The Federal Reserve Bank of New York may reject bids which could facilitate a dealer's ability to control a single issue as determined solely by the Federal Reserve Bank of New York.

This authority shall expire at such time as determined by the Federal Open Market Committee or the Board of Governors.

Secretary's note: By notation vote completed on March 20, 2008, the Committee unanimously approved a resolution that added non-agency AAA-rated commercial-mortgage-backed securities to the list of collateral acceptable in connection with the Term Securities Lending Facility.

Swap Authorizations

The Federal Open Market Committee directs the Federal Reserve Bank of New York to increase the amount available from the System Open Market Account under the existing reciprocal currency arrangement ("swap" arrangement) with the European Central Bank to an amount not to exceed $30 billion. Within that aggregate limit, draws of up to $15 billion are hereby authorized. The current swap arrangement shall be extended until September 30, 2008, unless further extended by the Federal Open Market Committee.

The Federal Open Market Committee directs the Federal Reserve Bank of New York to increase the amount available from the System Open Market Account under the existing reciprocal currency arrangement ("swap" arrangement) with the Swiss National Bank to an amount not to exceed $6 billion. Draws are authorized up to the full amount of the swap. The current swap arrangement shall be extended until September 30, 2008, unless further extended by the Federal Open Market Committee.

Votes for these actions: Messrs. Bernanke, Geithner, Fisher, Kohn, and Kroszner, Ms. Pianalto, Messrs. Plosser and Warsh, and Ms. Yellen. Votes against these actions: None. Absent and not voting: Mr. Mishkin. Ms. Yellen voted as alternate member.

Brian F. Madigan
Secretary

Meeting Held on April 29–30, 2008

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, 2008 at 2:00 p.m. and continued on Wednesday, April 30, 2008 at 9:00 a.m.

Present:

Mr. Bernanke, Chairman
Mr. Geithner, Vice Chairman
Mr. Fisher
Mr. Kohn
Mr. Kroszner
Mr. Mishkin
Ms. Pianalto
Mr. Plosser
Mr. Stern
Mr. Warsh

Ms. Cumming, Messrs. Evans, Lacker, and Lockhart, and Ms. Yellen, Alternate Members of the Federal Open Market Committee

Messrs. Bullard, Hoenig, and Rosengren, Presidents of the Federal Reserve Banks of St. Louis, Kansas City, and Boston, respectively

Mr. Lyon, First Vice President, Federal Reserve Bank of Minneapolis

Mr. Madigan, Secretary and Economist
Ms. Danker, Deputy Secretary
Mr. Skidmore, Assistant Secretary
Ms. Smith, Assistant Secretary
Mr. Alvarez, General Counsel
Mr. Baxter, Deputy General Counsel
Mr. Sheets, Economist
Mr. Stockton, Economist

Messrs. Connors, English, and Kamin, Ms. Mester, Messrs. Rosenblum, Slifman, Sniderman, and Wilcox, Associate Economists

Mr. Dudley, Manager, System Open Market Account

Ms. J. Johnson,[6] Secretary, Office of the Secretary, Board of Governors

Ms. Roseman,[6] Director, Division of Reserve Bank Operations and Payment Systems, Board of Governors

Mr. Struckmeyer, Deputy Staff Director, Office of Staff Director for Management, Board of Governors

Mr. Blanchard, Assistant to the Board, Office of Board Members, Board of Governors

Mr. Frierson,[6] Deputy Secretary, Office of the Secretary, Board of Governors

Ms. Bailey, Deputy Director, Division of Banking Supervision and Regulation, Board of Governors

Mr. Clouse, Deputy Director, Division of Monetary Affairs, Board of Governors

Messrs. Hammond[6] and Marquardt,[6] Deputy Directors, Division of Reserve Bank Operations and Payment Systems, Board of Governors

Ms. Edwards,[6] Associate Director, Division of Monetary Affairs, Board of Governors

Ms. Shanks,[6] Associate Secretary, Office of the Secretary, Board of Governors

Messrs. Reifschneider and Wascher, Associate Directors, Division of Research and Statistics, Board of Governors

Mr. Gagnon, Visiting Associate Director, Division of Monetary Affairs, Board of Governors

Ms. Martin,[6] Associate General Counsel, Legal Division, Board of Governors

Mr. Carpenter,[6] Assistant Director, Division of Monetary Affairs, Board of Governors

Mr. Dale, Senior Adviser, Division of Monetary Affairs, Board of Governors

Mr. Oliner, Senior Adviser, Division of Research and Statistics, Board of Governors

Ms. Allison,[6] Senior Counsel, Legal Division, Board of Governors

Mr. Gross,[6] Special Assistant to the Board, Office of Board Members, Board of Governors

Ms. Weinbach, Adviser, Division of Monetary Affairs, Board of Governors

Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors

Mr. Luecke, Section Chief, Division of Monetary Affairs, Board of Governors

Ms. Beattie,[6] Assistant to the Secretary, Office of the Secretary, Board of Governors

Ms. Low, Open Market Secretariat Specialist, Division of Monetary Affairs, Board of Governors

Ms. Hughes,[6] Staff Assistant, Office of the Secretary, Board of Governors

6. Attended portion of the meeting relating to the implications of interest on reserves for monetary policy implementation.

Mr. Fuhrer, Executive Vice President, Federal Reserve Bank of Boston

Messrs. Hilton, McAndrews,[6] Rasche, Rudebusch, Steindel, Sullivan, and Weinberg, Senior Vice Presidents, Federal Reserve Banks of New York, New York, St. Louis, San Francisco, New York, Chicago, and Richmond, respectively

Messrs. Clark and Meyer,[6] Vice Presidents, Federal Reserve Banks of Kansas City and Philadelphia, respectively

Mr. Weber, Senior Research Officer, Federal Reserve Bank of Minneapolis

Mr. Roberds, Policy Adviser, Federal Reserve Bank of Atlanta

The Manager of the System Open Market Account reported on recent developments in foreign exchange markets. There were no open market operations in foreign currencies for the System's account in the period since the previous meeting. The Manager also reported on developments in domestic financial markets and on System open market operations in government securities and federal agency obligations during the period since the previous meeting. By unanimous vote, the Committee ratified these transactions.

By unanimous vote, the Committee extended for one year beginning in mid-December 2008 the reciprocal currency ("swap") arrangements with the Bank of Canada and the Banco de Mexico. The arrangement with the Bank of Canada is in the amount of $2 billion equivalent and that with the Banco de Mexico is in the amount of $3 billion equivalent. Both arrangements are associated with the Federal Reserve's participation in the North American Framework Agreement of 1994. The vote to renew the System's participation in the swap arrangements maturing in December was taken at this meeting because of the provision that each party must provide six months' prior notice of an intention to terminate its participation.

In view of continuing strains in interbank and other financial markets, the Committee took up proposals to expand several of the liquidity arrangements that had been put in place in recent months. Chairman Bernanke indicated his intention to increase the overall size of the Term Auction Facility under delegated authority from the Board of Governors, and he proposed increases in the swap lines with the European Central Bank and Swiss National Bank to help address pressures in short-term dollar funding markets. Meeting participants discussed the possible costs and benefits of a proposed broadening of eligible collateral for the Term Securities Lending Facility (TSLF). On balance, the Committee agreed that expanding the range of eligible collateral for the TSLF might help to increase the effectiveness of the facility and so further promote the orderly functioning of financial markets.

By unanimous votes, the Committee approved the following three resolutions:

The Federal Open Market Committee directs the Federal Reserve Bank of New York to increase the amount available from the System Open Market Account under the existing reciprocal currency arrangement ("swap" arrangement) with the European Central Bank to an amount not to exceed $50 billion. Within that aggregate limit, draws of up to $25 billion are hereby authorized. The current swap arrangement shall be extended until January 30, 2009, unless further extended by the Federal Open Market Committee.

The Federal Open Market Committee directs the Federal Reserve Bank of New York to increase the amount available from the System Open Market Account under the existing reciprocal currency arrangement ("swap" arrangement) with the Swiss

National Bank to an amount not to exceed $12 billion. Within that aggregate limit, draws of up to $6 billion are hereby authorized. The current swap arrangement shall be extended until January 30, 2009, unless further extended by the Federal Open Market Committee.

In connection with the Term Securities Lending Facility, the Federal Reserve Bank of New York may accept pledges of AAA-rated asset-backed securities (in addition to the other assets previously authorized by the FOMC) as collateral against loans of U.S. Government securities.

The information reviewed at the April meeting, which included the advance data on the national income and product accounts for the first quarter, indicated that economic growth had remained weak so far this year. Labor market conditions had deteriorated further, and manufacturing activity was soft. Housing activity had continued its sharp descent, and business spending on both structures and equipment had turned down. Consumer spending had grown very slowly, and household sentiment had tumbled further. Core consumer price inflation had slowed in recent months, but overall inflation remained elevated.

Labor demand continued to weaken in March. Private payroll employment fell in March at a rate similar to that in January and February. The reduction in jobs was again widespread, with losses registered at firms in the construction, manufacturing, and professional and business services sectors. Employment at firms in the nonbusiness services sector, which includes health care, continued to rise. Aggregate hours of private production or nonsupervisory workers moved up in March but posted a decline for the first quarter as a whole after having contracted slightly in the first two months of the year. The unemployment rate rose to 5.1 percent in March, significantly above its level a year ago, and the labor force participation rate was little changed.

Although industrial production rose in March, production over the first quarter as a whole was soft, having declined, on average, in January and February. Gains in manufacturing output of consumer and high-tech goods in March were partially offset by a sharp drop in production of motor vehicles and parts and by ongoing weakness in the output of construction-related industries. The output of utilities rebounded in March following a weather-related drop in February, and mining output moved up after exhibiting weakness earlier in the year. The factory utilization rate edged up in March but stayed well below its recent high in the third quarter of 2007.

Real consumer spending expanded slowly in the first quarter. Real outlays on durable goods, including automobiles, were estimated to have declined in March, but expenditures on nondurable goods were thought to have edged up, boosted by a sizable increase in real outlays for gasoline. For the quarter as a whole, however, real expenditures on both durable and nondurable goods declined. Real disposable personal income also grew slowly in the first quarter, restrained by rapidly rising prices for energy and food. The ratio of household wealth to disposable income appeared to have moved down again in the first quarter, damped by the appreciable net decline in broad equity prices over that period and by further reductions in house prices. Measures of consumer sentiment fell sharply in March and April; the April reading of consumer sentiment published in the Reuters/University of Michigan Survey of Consumers was near the low levels posted in the early 1990s.

Residential construction continued its rapid contraction in the first quarter. Single-family housing starts maintained their steep downward trajectory in March, and starts of multifamily homes declined to the lower portion of their recent range. Sales of new single-family homes declined in February to a very low rate and dropped further in March. Even though production cuts by homebuilders helped to reduce the level of inventories at the end of February, the slow pace of sales caused the ratio of unsold new homes to sales to increase further. Sales of existing homes remained weak, on average, in February and March, and the index of pending sales agreements in February suggested continued sluggish activity in coming months. The recent softening in residential housing demand was consistent with reports of tighter credit conditions for both prime and nonprime borrowers.

In the business sector, real spending on equipment and software contracted slightly in the first quarter after having posted a small increase in the fourth quarter. Following declines in both shipments and orders of nondefense capital goods excluding aircraft in January and February, shipments increased in March, but orders were flat. The deteriorating outlook for sales, reduced credit availability, and downbeat readings on business sentiment all pointed to further weakness in capital spending in the near term. Real outlays for nonresidential structures also were estimated to have declined in the first quarter. Indicators suggested that the demand for commercial properties had fallen off substantially from record levels last year, and commercial property prices appeared to be decelerating. Reduced credit availability and less-favorable lending terms had apparently weighed on activity in this sector.

Real investment in nonfarm inventories excluding motor vehicles was estimated to have bounced back to a moderate annual rate in the first quarter, but motor vehicle inventories continued to fall. Some of the drop in motor vehicle stocks was a result of the disruption to production from a labor dispute. The ratio of book-value inventories to sales in the manufacturing and trade sector (excluding motor vehicles) moved up a little, on average, in January and February. Still, outside of categories tied to housing and construction, firms did not appear to be burdened with excess stocks.

The U.S. international trade deficit widened in February. Imports rose sharply, more than offsetting continued robust growth of exports. Most major categories of non-oil imports increased in February, and imports of natural gas, automobiles, and consumer goods surged. Imports of services continued to rise at a robust pace. By contrast, oil imports moved down. Increases in exports in February were concentrated in agricultural goods, automobiles, and industrial supplies, particularly fuels. Exports of capital goods declined for the second consecutive month, with weakness evident across a wide range of products.

Real economic growth in the major advanced foreign economies was estimated to have slowed further in the first quarter and consumer and business sentiment was generally down. In Japan, business sentiment fell significantly and indicators of investment remained weak. In the euro area, growth was estimated to have remained subdued in the first quarter, with Germany and France faring better than Italy and Spain. Growth in the United Kingdom slowed in the first quarter, as credit conditions tightened. Available data for Canada indicated a continued substantial drag from exports in the first quarter, although domestic demand appeared relatively robust. In emerging market economies, economic growth slowed some in the fourth quarter and was estimated to have held about steady in the first quarter. In emerging Asia, real economic growth was estimated to have picked up in the first quarter from a robust pace in the fourth quarter, led by brisk expansions in China and Singapore. Growth in other emerging Asian economies generally remained subdued. The pace of expansion in Latin America likely declined some in the first quarter, largely because the Mexican economy slowed in the wake of softer growth in the United States.

Headline inflation in the United States was elevated in March. Although the increase in food prices slowed in March relative to earlier in the year, energy prices rose sharply. Excluding these categories, core inflation rose at a relatively subdued rate again in March. The core personal consumption expenditures (PCE) price index increased at a somewhat more moderate rate in the first quarter than in the fourth quarter of 2007. Survey measures of households' expectations for year-ahead inflation rose further in early April, but survey measures of longer-term inflation expectations moved relatively little. Average hourly earnings increased in March at a somewhat slower pace than in January and February. This wage measure rose significantly less over the 12 months that ended in March than in the previous 12 months. The employment cost index for hourly compensation continued to rise at a moderate rate in the first quarter.

At its March 18 meeting, the Federal Open Market Committee (FOMC) lowered its target for the federal funds rate 75 basis points, to 2¼ percent. In addition, the Board of Governors approved a decrease of 75 basis points in the discount rate, to 2½ percent. The Committee's statement noted that recent information indicated that the outlook for economic activity had weakened further; growth in consumer spending had slowed, and labor markets had softened. It also indicated that financial markets remained under considerable stress, and that the tightening of credit conditions and the deepening of the housing contraction were likely to weigh on economic growth over the next few quarters. Inflation had been elevated, and some indicators of inflation expectations had risen, but the Committee expected inflation to moderate in coming quarters, reflecting a projected leveling-out of energy and other commodity prices and an easing of pressures on resource utilization. Still, the Committee noted that uncertainty about the inflation outlook had increased, and that it would be necessary to continue to monitor inflation developments carefully. The Committee said that its action, combined with those taken earlier, including measures to foster market liquidity, should help to promote moderate growth over time and to mitigate the risks to economic activity. The Committee noted, however, that downside risks to growth remained, and indicated that it would act in a timely manner as needed to promote sustainable economic growth and price stability.

Conditions in U.S. financial markets improved somewhat, on balance, over the intermeeting period, but strains in some short-term funding markets increased. Pressures on bank balance sheets and capital positions appeared to mount further, reflecting additional losses on asset-backed securities and on business and household loans. Against this backdrop, term spreads in interbank funding markets and spreads on commercial paper issued by financial institutions widened significantly. Financial institutions continued to tap the Federal Reserve's credit programs. Primary credit borrowing picked up noticeably after March 16, when the Federal Reserve reduced the spread between the primary credit rate and the target federal funds rate to 25 basis points. Demand for funds from the Term Auction Facility stayed high over the period. In addition, the Primary Dealer Credit Facility drew substantial demand through late March, although the amount outstanding subsequently declined somewhat. Early in the period, historically low interest rates on Treasury bills and on general-collateral Treasury repurchase agreements indicated a considerable demand for safe-haven assets. However, Federal Reserve actions that increased the availability of Treasury securities to the public apparently helped to improve conditions in those markets. In five weekly auctions beginning on March 27, the Term Securities Lending Facility provided a substantial volume of Treasury securities in exchange for less-liquid assets. Yields on short-term Treasury securities and Treasury repurchase agreements moved higher, on balance, following these auctions; nonetheless, "haircuts" applied by lenders on non-Treasury collateral remained elevated, and in some cases increased somewhat, toward the end of the period.

In longer-term credit markets, yields on investment-grade corporate bonds rose, but their spreads relative to Treasury securities decreased a bit from recent multiyear highs. In contrast, yields on speculative-grade issues dropped, and their spreads relative to Treasury yields narrowed significantly. Gross bond issuance by nonfinancial firms was robust in March and the first half of April and included a small amount of issuance by speculative-grade firms. Supported by increases in business and residential real estate loans, commercial bank credit expanded briskly in March despite the report of tighter lending conditions in the Senior Loan Officer Opinion Survey on Bank Lending Practices conducted in April. Part of the strength in commercial and industrial loans was apparently due to increased utilization of existing credit lines, the pricing of which reflects changes in lending policies only with a lag. Some banks surveyed in April reported that they had started to take actions to limit their exposure to home equity lines of credit, draws on which had grown rapidly in recent months. After having tightened considerably in March, conditions in the conforming segment of the residential mortgage market recovered somewhat. Spreads of rates on conforming residential mortgages over those on comparable-maturity Treasury securities decreased, and credit default swap premiums for the government-sponsored enterprises declined substantially. Broad stock price indexes increased markedly over the intermeeting period, mainly in response to earnings reports and announcements of recapitalizations from major financial institutions that evidently lessened investors' concerns about the possibility of severe difficulties materializing at those firms.

Conditions in the money markets of major foreign economies remained strained, particularly in the United Kingdom and the euro area. Term interbank funding spreads rose in these areas, despite steps taken by their central banks to help ease liquidity pressures. Yields on sovereign debt in the advanced foreign economies moved up in a range that was about in line with the increases in comparable Treasury yields in the United States. The trade-weighted foreign exchange value of the dollar against major currencies rose.

M2 expanded briskly again in March, as households continued to seek the relative liquidity and safety of liquid deposits and retail money market mutual funds. The increases in these components were also supported by declines in opportunity costs stemming from monetary policy easing.

Over the intermeeting period, the expected path of monetary policy over the next year as measured by money market futures rates moved up significantly on net, apparently because economic data releases and announcements by large financial firms imparted greater confidence among investors about the prospects for the economy's performance in coming quarters. Futures rates also moved up in response to both the Committee's decision to lower the target for the federal funds rate by 75 basis points at the March 18 meeting, which was a somewhat smaller reduction than market participants had expected, and the Committee's accompanying statement, which reportedly conveyed more concern about inflation than had been anticipated. The subsequent release of the minutes of the March FOMC meeting elicited limited reaction. Consistent with the higher expected path for policy and easing of safe-haven demands, yields on nominal Treasury coupon securities rose substantially over the period, and the Treasury yield curve flattened. Measures of inflation compensation for the next five years derived from yields on inflation-indexed Treasury securities were quite volatile around the time of the March FOMC meeting and on balance increased somewhat over the intermeeting period, although they remained in the lower portion of their range over the past several months. Measures of longer-term inflation compensation declined, returning to around the middle of their recent elevated range.

In the forecast prepared for this meeting, the staff made little change to its projection for the growth of real gross domestic product (GDP) in 2008 and 2009. The available indicators of recent economic activity had come in close to the staff's expectations and had continued to suggest that a substantial softening in economic activity was under way. The staff projection pointed to a contraction of real GDP in the first half of 2008 followed by a modest rise in the second half of this year, aided in part by the fiscal stimulus package. The forecast showed real GDP expanding at a rate somewhat above its potential in 2009, reflecting the impetus from cumulative monetary policy easing, continued strength in net exports, a gradual lessening in financial market strains, and the waning drag from past increases in energy prices. Despite this pickup in the pace of activity, the trajectory of resource utilization anticipated through 2009 implied noticeable slack. The projection for core PCE price inflation in 2008 as a whole was unchanged; it was reduced a bit over the first half of the year to reflect the somewhat lower-than-expected readings of recent core PCE inflation and raised a bit over the second half of the year to incorporate the spillover from larger-than-anticipated increases in prices of crude oil and non-oil imports since the previous FOMC meeting. The forecast of headline PCE inflation in 2008 was revised up in light of the further run-up in energy prices and somewhat higher food price inflation; headline PCE inflation was expected to exceed core PCE price inflation by a considerable margin this year. In view of the projected slack in resource utilization in 2009 and flattening out of oil and other commodity prices, both core and headline PCE price inflation were projected to drop back from their 2008 levels, in line with the staff's previous forecasts.

In conjunction with the FOMC meeting in April, all meeting participants (Federal Reserve Board members and

Reserve Bank presidents) provided annual projections for economic growth, the unemployment rate, and inflation for the period 2008 through 2010. The projections are described in the Summary of Economic Projections, which is attached as an addendum to these minutes.

In their discussion of the economic situation and outlook, FOMC participants noted that the data received since the March FOMC meeting, while pointing to continued weakness in economic activity, had been broadly consistent with their expectations. Conditions across a number of financial markets were judged to have improved over the intermeeting period, but financial markets remained fragile and strains in some markets had intensified. Although participants anticipated that further improvement in market conditions would occur only slowly and that some backsliding was possible, the generally better state of financial markets had caused participants to mark down the odds that economic activity could be severely disrupted by a further substantial deterioration in the financial environment. Economic activity was anticipated to be weakest over the next few months, with many participants judging that real GDP was likely to contract slightly in the first half of 2008. GDP growth was expected to begin to recover in the second half of this year, supported by accommodative monetary policy and fiscal stimulus, and to increase further in 2009 and 2010. Views varied about the likely pace and vigor of the recovery through 2009, although all participants projected GDP growth to be at or above trend in 2010. Incoming information on the inflation outlook since the March FOMC meeting had been mixed. Readings on core inflation had improved somewhat, but some of this improvement was thought likely to reflect transitory factors, and energy and other commodity prices had increased further since March. Total PCE inflation was projected to moderate from its current elevated level to between 1½ percent and 2 percent in 2010, although participants stressed that this expected moderation was dependent on food and energy prices flattening out and critically on inflation expectations remaining reasonably well anchored.

Conditions across a number of financial markets had improved since the previous FOMC meeting. Equity prices and yields on Treasury securities had increased, volatility in both equity and debt markets had ebbed somewhat, and a range of credit risk premiums had moved down. Participants noted that the better tone of financial markets had been helped by the apparent willingness and ability of financial institutions to raise new capital. Investors' confidence had probably also been buoyed by corporate earnings reports for the first quarter, which suggested that profit growth outside of the financial sector remained solid, and also by the resolution of the difficulties of a major broker-dealer in mid-March. Moreover, the various liquidity facilities introduced by the Federal Reserve in recent months were thought to have bolstered market liquidity and aided a return to more orderly market functioning. But participants emphasized that financial markets remained under considerable stress, noted that the functioning of many markets remained impaired, and expressed concern that some of the recent recovery in markets could prove fragile. Strains in short-term funding markets had intensified over the intermeeting period, in part reflecting continuing pressures on the liquidity positions of financial institutions. Despite a narrowing of spreads on corporate bonds, credit conditions were seen as remaining tight. The Senior Loan Officer Opinion Survey on Bank Lending Practices conducted in April indicated that banks had tightened lending standards and pricing terms on loans to both businesses and households. Participants stressed that it could take some time for the financial system to return to a more normal footing, and a number of participants were of the view that financial headwinds would probably continue to restrain economic activity through much of next year. Even so, the likelihood that the functioning of the financial system would deteriorate substantially further with significant adverse implications for the economic outlook was judged by participants to have receded somewhat since the March FOMC meeting.

The housing market had continued to weaken since the previous meeting, and participants saw little indication of a bottoming out in either housing activity or prices. Housing starts and the demand for new homes had declined further, house prices in many parts of the country were falling faster than they had towards the end of 2007, and inventories of unsold homes remained quite elevated. A small number of participants reported tentative signs that housing activity in a few areas of the country might be beginning to pick up, and a narrowing of credit risk spreads on AAA indexes of sub-prime mortgages in recent weeks was also noted. Nonetheless, the outlook for the housing market remained bleak, with housing demand likely to be affected by restrictive conditions in mortgage markets, fears that house prices would fall further, and weakening labor markets. The possibility that house prices could decline by more than anticipated, and that the effects of such a decline could be amplified through their impact on financial institutions and financial markets, remained a key source of downside risk to participants' projections for economic growth.

Growth in consumer spending appeared to have slowed to a crawl in recent months and consumer sentiment had fallen sharply. The pressure on households' real incomes from higher energy prices and the erosion of wealth resulting from continuing declines in house prices likely contributed to the deceleration in consumer outlays. Reports from contacts in the banking and financial services sectors indicated that the availability of both consumer credit and home equity lines had tightened considerably further in recent months and that delinquency rates on household credit had continued to drift upwards. Consumer sentiment and spending had also been held down by the softening in labor markets—nonfarm payroll employment had fallen for the third consecutive month in March and the unemployment rate had moved up. The restraint on spending emanating from weakness in labor markets was expected to increase over coming quarters, with participants projecting the unemployment rate to pick up further this year and to remain elevated in 2009.

Consumption spending was likely to be supported in the near term by the fiscal stimulus package, which was expected to boost spending temporarily in the middle of this year. Some participants suggested that the weak economic environment could increase the propensity of households to use their tax rebates to pay down existing debt and so might diminish the impact of the package. However, it was also noted that the tightening in credit availability might mean a significant number of households may be credit constrained and this might increase the proportion of the rebates that is spent. The timing and magnitude of the impact of the stimulus package on GDP was also seen as depending on the extent to which the boost to consumption spending is absorbed by a temporary run-down in firms' inventories or by an increase in imports rather than by an expansion in domestic output.

The outlook for business spending remained decidedly downbeat. Indicators of business sentiment were low, and reports from business contacts suggested that firms were scaling back their capital spending plans. Several participants reported that uncertainty about the economic outlook was leading firms to defer spending projects until prospects for economic activity became clearer. The tightening in the supply of business credit was also seen as holding back investment, with some firms apparently reluctant to reduce their liquidity positions in the current environment. Spending on nonresidential construction projects continued to slow, although the extent of that slowing varied across the country. A few participants reported that the commercial real estate market in some areas remained relatively firm, supported by low vacancy rates.

The strength of U.S. exports remained a notable bright spot. Growth in exports, which had been supported by solid advances in foreign economies and by declines in the foreign exchange value of the dollar, had partially insulated the output and profits of U.S. companies, especially those in the manufacturing sector, from the effects of weakening domestic demand. Several participants voiced concern, however, that the pace of activity in the rest of the world could slow in coming quarters, suggesting that the impetus provided from net exports might well diminish.

The information received on the inflation outlook since the March FOMC meeting had been mixed. Recent readings on core inflation had improved somewhat, although participants noted that some of that improvement probably reflected transitory factors. Moreover, the increase in crude oil prices to record levels, together with rapid increases in food and import prices in recent months, was likely to put upward pressure on inflation over the next few quarters. Prices embedded in futures contracts continued to point to a leveling-off of energy and commodity prices. Although these futures contracts probably remained the best basis for projecting movements in commodity prices, participants emphasized the considerable uncertainty attending the likely path of commodity prices and cautioned that commodity prices in recent years had often advanced more quickly than had been implied by futures contracts. Several participants reported that business contacts had expressed growing concerns about the increase in their input costs and that there were signs that an increasing number of firms were seeking to pass on these higher costs to their customers in the form of higher prices. Other participants noted, however, that the extent of the pass-through of higher energy and food prices to core retail prices appeared relatively limited to date, and that profit margins in the nonfinancial sector remained reasonably high, suggesting that there was some scope for firms to absorb cost increases without raising prices. Available data and anecdotal reports indicated that gains in labor compensation remained moderate, and some participants suggested that wage growth was unlikely to pick up sharply in coming quarters if, as anticipated, labor markets remained relatively soft. However, several participants were of the view that wage inflation tended to lag increases in prices and so may not provide a useful guide to emerging price pressures.

On balance, participants expected the recent increases in oil and food prices to continue to boost overall consumer price inflation in the near term; thereafter, total inflation was projected to moderate, with all participants expecting total PCE inflation of between 1½ percent and 2 percent by 2010. Participants stressed that the expected moderation in inflation was dependent on the continued stability of inflation expectations. A number of participants voiced concern that long-term inflation expectations could drift upwards if headline inflation remained elevated for a protracted period or if the recent substantial policy easing was misinterpreted by the public as suggesting that Committee members had a greater tolerance for inflation than previously thought. The possibility that inflation expectations could increase was viewed as a key upside risk to the inflation outlook. However, participants emphasized that appropriate monetary policy, combined with effective communication of the Committee's commitment to price stability, would mitigate this risk.

Participants stressed the difficulty of gauging the appropriate stance of policy in current circumstances. Some participants noted that the level of the federal funds target, especially when compared with the current rate of inflation, was relatively low by historical standards. Even taking account of current financial headwinds, such a low rate could suggest that policy was reasonably accommodative. However, other participants observed that the pronounced strains in banking and financial markets imparted much greater uncertainty to such assessments and meant that measures of the stance of policy based on the real federal funds rate were not likely to provide a reliable guide in the current environment. Several participants expressed the view that the easing in monetary policy since last fall had not as yet led to a loosening in overall financial conditions, but rather had prevented financial conditions from tightening as much as they otherwise would have in response to escalating strains in financial markets. This view suggested that the stimulus from past monetary policy easing would be felt mainly as conditions in financial markets improved.

In the Committee's discussion of monetary policy for the intermeeting period, most members judged that policy should be eased by 25 basis points at this meeting. Although prospects for economic activity had not deteriorated significantly since the March meeting, the outlook for growth and employment remained weak and slack in resource utilization was likely to increase. An additional easing in policy would help to foster moderate growth over time without impeding a moderation in inflation. Moreover, although the likelihood that economic activity would be severely disrupted by a sharp deterioration in financial markets had apparently receded, most members thought that the risks to economic growth were still skewed to the downside. A reduction in interest rates would help to mitigate those risks. However, most members viewed the decision to reduce interest rates at this meeting as a close call. The substantial easing of monetary policy since last September, the ongoing steps taken by the Federal Reserve to provide liquidity and support market functioning, and the imminent fiscal stimulus would help to support economic activity. Moreover, although downside risks to growth remained, members were also concerned about the upside risks to the inflation outlook, given the continued increases in oil and commodity prices and the fact that some indicators suggested that inflation expectations had risen in recent months. Nonetheless, most members agreed that a further, modest easing in the stance of policy was appropriate to balance better the risks to achieving the Committee's dual objectives of maximum employment and price stability over the medium run.

The Committee agreed that the statement to be released after the meeting should take note of the substantial policy easing to date and the ongoing measures to foster market liquidity. In light of these significant policy actions, the risks to growth were now thought to be more closely balanced by the risks to inflation. Accordingly, the Committee felt that it was no longer appropriate for the statement to emphasize the downside risks to growth. Given these circumstances, future policy adjustments would depend on the extent to which economic and financial developments affected the medium-term outlook for growth and inflation. In that regard, several members noted that it was unlikely to be appropriate to ease policy in response to information suggesting that the economy was slowing further or even contracting slightly in the near term, unless economic and financial developments indicated a significant weakening of the economic outlook.

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

> The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with reducing the federal funds rate to an average of around 2 percent.

The vote encompassed approval of the statement below to be released at 2:15 p.m.:

> The Federal Open Market Committee decided today to lower its target for the federal funds rate 25 basis points to 2 percent.
>
> Recent information indicates that economic activity remains weak. Household and business spending has been subdued and labor markets have softened further. Financial markets remain under considerable stress, and tight credit conditions and the deepening housing contraction are likely to weigh on economic growth over the next few quarters.
>
> Although readings on core inflation have improved somewhat, energy and other commodity prices have increased, and some indicators of inflation expectations have risen in recent months. The Committee expects inflation to moderate in coming quarters, reflecting a projected leveling-out of energy and other commodity prices and an easing of pressures on resource utilization. Still, uncertainty about the inflation outlook remains high. It will be necessary to continue to monitor inflation developments carefully.
>
> The substantial easing of monetary policy to date, combined with ongoing measures to foster market liquidity, should help to promote moderate growth over time and to mitigate risks to economic activity. The Committee will continue to monitor economic and financial developments and will act as needed to promote sustainable economic growth and price stability.

> Votes for this action: Messrs. Bernanke, Geithner, Kohn, Kroszner, and Mishkin, Ms. Pianalto, Messrs. Stern and Warsh. Votes against this action: Messrs. Fisher and Plosser.

Messrs. Fisher and Plosser dissented because they preferred no change in the target federal funds rate at this meeting. Although the economy had been weak, it had evolved roughly as expected since the previous meeting. Stresses in financial markets also had continued, but the Federal Reserve's liquidity facilities were helpful in that regard and the more worrisome development in their view was the outlook for inflation. Rising prices for food, energy, and other commodities; signs of higher inflation expectations; and a negative real federal funds rate raised substantial concerns about the prospects for inflation. Mr. Plosser cited the recent rapid growth of monetary aggregates as additional evidence that the economy had ample liquidity after the aggressive easing of policy to date. Mr. Fisher was concerned that an adverse feedback loop was developing by which lowering the funds rate had been pushing down the exchange value of the dollar, contributing to higher commodity and import prices, cutting real spending by businesses and households, and therefore ultimately impairing economic activity. To help prevent inflation expectations from becoming unhinged, both Messrs. Fisher and Plosser felt the Committee should put additional emphasis on its price stability goal at this point, and they believed that another reduction in the funds rate at this meeting could prove costly over the longer run.

In a joint session of the Federal Open Market Committee and the Board of Governors, meeting participants turned to a discussion of the implications of the payment of interest on reserves for monetary policy implementation. Following passage of the Financial Services Regulatory Relief Act of 2006, which will permit the Federal Reserve to reduce reserve requirements and to pay interest on reserves beginning in 2011, the staff had undertaken work to explore and evaluate alternative approaches to monetary policy implementation using these new authorities. After a staff presentation summarizing the work to date, policymakers discussed the potential advantages and disadvantages of several of the alternative approaches. Considerations included reducing the burden and complexity associated with the current system of reserve requirements and ensuring that the Committee's interest rate targets could be reliably achieved. Participants noted that frameworks for monetary policy implementation employed in other countries span a wide range and that the experiences of these countries provided useful information for the Federal Reserve's consideration of alternative approaches. They agreed that further study was required to narrow the range of options under consideration and that it would be important to consult closely with depository institutions and others in the design of a new system.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, June 24–25, 2008.

The meeting adjourned at 1:00 p.m.

Notation Votes

By notation vote completed on March 20, 2008, the Committee unanimously approved a resolution that added non-agency AAA-rated commercial-mortgage-backed securities to the list of collateral acceptable in connection with the Term Securities Lending Facility.

By notation vote completed on April 7, 2008, the Committee unanimously approved the minutes of the FOMC meeting held on March 18, 2008.

Brian F. Madigan
Secretary

Addendum: Summary of Economic Projections

In conjunction with the April 2008 FOMC meeting, the members of the Board of Governors and the presidents of the Federal Reserve Banks, all of whom participate in the deliberations of

Table 1. Economic Projections of Federal Reserve Governors and Reserve Bank Presidents
Percent

	2008	2009	2010
Central Tendency[1]			
Growth of real GDP	0.3 to 1.2	2.0 to 2.8	2.6 to 3.1
January projections	1.3 to 2.0	2.1 to 2.7	2.5 to 3.0
Unemployment rate	5.5 to 5.7	5.2 to 5.7	4.9 to 5.5
January projections	5.2 to 5.3	5.0 to 5.3	4.9 to 5.1
PCE inflation	3.1 to 3.4	1.9 to 2.3	1.8 to 2.0
January projections	2.1 to 2.4	1.7 to 2.0	1.7 to 2.0
Core PCE inflation	2.2 to 2.4	1.9 to 2.1	1.7 to 1.9
January projections	2.0 to 2.2	1.7 to 2.0	1.7 to 1.9
Range[2]			
Growth of real GDP	0.0 to 1.5	1.8 to 3.0	2.0 to 3.4
January projections	1.0 to 2.2	1.8 to 3.2	2.2 to 3.2
Unemployment rate	5.3 to 6.0	5.2 to 6.3	4.8 to 5.9
January projections	5.0 to 5.5	4.9 to 5.7	4.7 to 5.4
PCE inflation	2.8 to 3.8	1.7 to 3.0	1.5 to 2.0
January projections	2.0 to 2.8	1.7 to 2.3	1.5 to 2.0
Core PCE inflation	1.9 to 2.5	1.7 to 2.2	1.3 to 2.0
January projections	1.9 to 2.3	1.7 to 2.2	1.4 to 2.0

NOTE: Projections of the growth of real GDP, of PCE inflation, and of core PCE 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 and the price index for personal consumption expenditures 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.

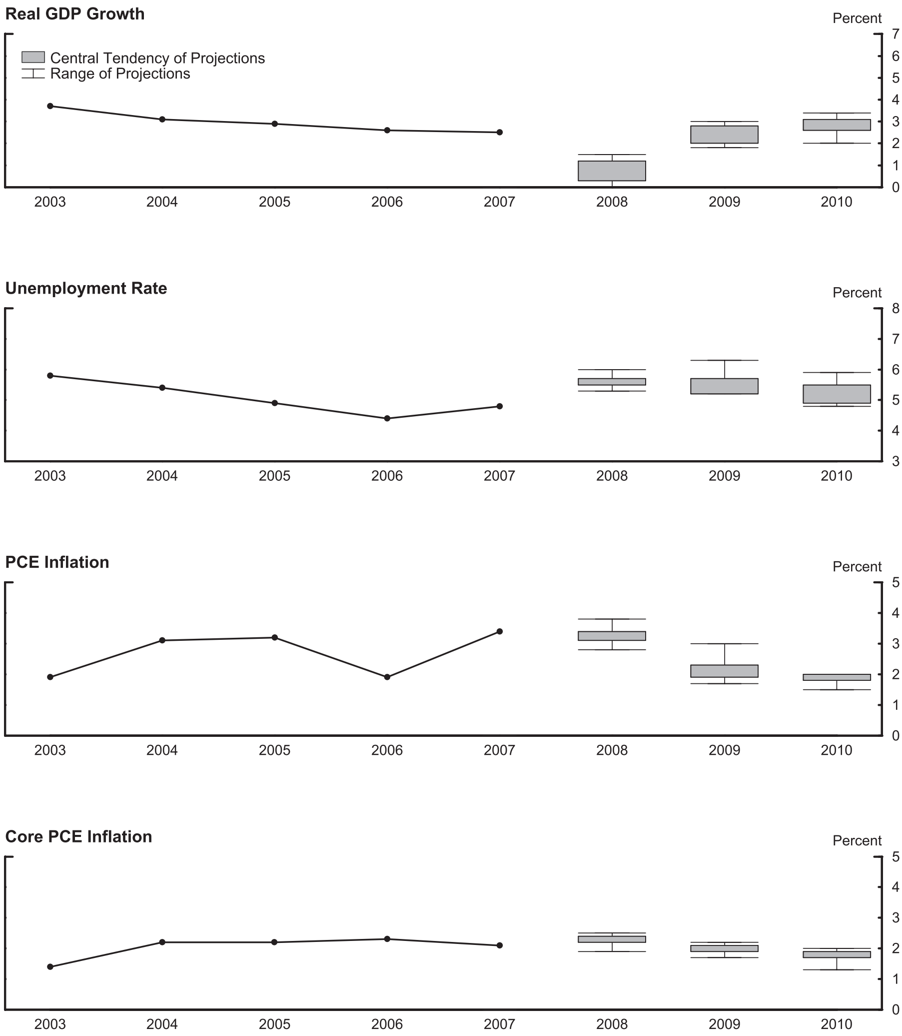
1. The central tendency excludes the three highest and three lowest projections for each variable in each year.

2. The range for a variable in a given year includes all participants' projections, from lowest to highest, for that variable in that year.

the FOMC, provided projections for the rates of economic growth, unemployment, and inflation in 2008, 2009, and 2010. Projections were based on information available through the conclusion of the April meeting, on each participant's assumptions regarding a range of factors likely to affect economic outcomes, and on his or her assessment of appropriate monetary policy. "Appropriate monetary policy" is defined as the future policy that, based on current information, is deemed most likely to foster outcomes for economic activity and inflation that best satisfy the participant's interpretation of the Federal Reserve's dual objectives of maximum employment and price stability.

The projections, which are summarized in table 1 and chart 1, suggest that FOMC participants expected economic growth to be much weaker in 2008 than last year, owing primarily to a continued contraction of housing activity, a reduction in the availability of household and business credit, and rising energy prices. The unemployment rate was expected to increase significantly. However, output growth further ahead was projected to pick up by enough to begin to reverse some of the increase in the unemployment rate by 2010. In light of the recent surge in the prices of oil and other commodities, inflation was expected to remain elevated in 2008. Inflation was projected to moderate in 2009 and 2010 as the prices of crude oil and other commodities level out and economic slack damps cost and price pressures. Most participants judged that the uncertainty around their projections for both output growth and

Chart 1. Central Tendencies and Ranges of Economic Projections*



* See notes to Table 1 for variable definitions.

inflation was greater than normal. Most viewed the risks to output as weighted to the downside. Participants were roughly evenly divided as to whether the risks to the inflation outlook are broadly balanced or skewed to the upside.

The Outlook

The central tendency of participants' projections for real GDP growth in 2008, at 0.3 to 1.2 percent, was considerably lower than the central tendency of the projections provided in conjunction with the January FOMC meeting, which was 1.3 to 2.0 percent. Participants viewed activity as likely to be particularly weak in the first half of 2008; some rebound was anticipated in the second half of the year. Incoming data on spending and employment already indicated a softening economy this year. Real incomes were being held down by higher oil prices; falling house prices had reduced household wealth; and households and businesses were facing tighter credit conditions. Exports were seen as a notable source of strength this year owing to continued economic growth overseas and the depreciation of the dollar over the past year or so. Many participants also said that the substantial easing of monetary policy since last year and the fiscal stimulus package should help to support spending in the second half of the year. Beyond 2008, factors projected to buoy economic growth included the continued effects of an accommodative stance of monetary policy in conjunction with a gradual easing of financial market strains, a stabilization in housing markets, and a leveling-off of oil and commodity prices. Participants were encouraged by steps taken at major financial institutions to bolster their balance sheets and to raise new capital. Some expressed the view that financial market sentiment may have swung excessively to the pessimistic side, and that risk spreads would come down and credit would become more available as risk aversion diminishes. Also, demand and supply in the housing market should become better aligned as the decline in house prices increases the affordability of homeownership and the decline in housing starts reduces the supply of new homes. Most participants expected real GDP to grow roughly at their estimates of its trend rate in 2009 and somewhat above trend in 2010.

With output growth well below trend this year, most participants expected that the unemployment rate would move up. The central tendency of participants' projections for the average rate of unemployment in the fourth quarter of 2008 was 5.5 to 5.7 percent, above the 5.2 to 5.3 percent unemployment rate forecasted in January and consistent with significant slack in labor markets and the economy. Most participants expected the unemployment rate to edge down in 2009 and 2010.

The steep run-up in the prices of oil and other commodities since January was the primary factor leading participants to revise up sharply their projections for overall inflation in the near term. In contrast, the central tendencies of the projections for core PCE inflation in 2008 increased only moderately, from 2.0 to 2.2 percent in January to 2.2 to 2.4 percent in April, reflecting the effects of higher food and energy prices on other goods and services and the rise in import prices associated with the decline in the dollar and higher inflation in our trading partners.

Rates of both overall and core inflation were expected to decline over the next two years, reflecting a flattening out of the prices of oil and other commodities consistent with futures market prices and the effects of significant economic slack. Participants' projections for 2010 were importantly influenced by their judgments about the measured rates of inflation consistent with the Federal Reserve's dual mandate to promote maximum employment and price stability and about the time frame over which policy should aim to attain those rates given current economic conditions. Many participants judged that, given the recent adverse shocks to both aggregate demand and inflation, policy would be able to foster only a gradual return of key macroeconomic variables to their longer-run sustainable or optimal levels. Consequently, the rate of unemployment was projected by many participants to remain above its longer-run sustainable level even in 2010, and inflation was viewed likely still to be a bit above levels that some participants judged would be consistent with the Federal Reserve's dual mandate.

Risks to the Outlook

Most participants viewed the risks to their GDP projections as weighted to the downside and the associated risks to their projections of the unemployment rate as tilted to the upside. The possibility that house prices could decline more steeply than anticipated, putting further downward pressure on residential investment and consumption, was perceived as a significant risk to the outlook for economic growth and employment. Another risk was the possibility that foreign economies might slow more than expected, damping U.S. exports. Financial market conditions continued to pose serious risks—stock prices had declined on net since the January meeting and credit conditions had tightened further for both households and firms. Although several participants noted that financial strains had eased somewhat in April, most agreed that overall financial conditions remained tighter than at the beginning of the year. The potential for adverse interactions, in which weaker economic activity could lead to a worsening of financial conditions and a reduced availability of credit, which in turn could further damp economic growth, continued to be viewed as a worrisome possibility.

Regarding risks to the inflation outlook, participants pointed to the possibility that economic slack could put either more or less downward pressure on costs and prices than anticipated. Some noted that downside risks to aggregate demand implied a risk of greater economic slack and corresponding downside risks to price pressures. However, many participants (noticeably more than in January) saw the upside risks to inflation as greater than the downside risks to inflation. In particular, the pass-through of recent increases in energy and commodity prices as well as of past dollar depreciation to consumer prices could be greater than expected. In addition, some participants expressed concern that commodity prices may not flatten out as implied by futures prices, thus putting further upward pressure on prices. Finally, inflation expectations could become less firmly anchored if the current elevated rates of inflation were to persist for longer than anticipated or if the public were to misinterpret the recent substantial policy easing as reflecting less resolve among Committee members to maintain low and stable inflation.

Participants continued to view uncertainty about the outlook for economic activity as higher than normal, with some noting that economic slowdowns are generally associated with heightened uncertainty as are episodes of unusual credit restraint. In addition, participants expressed notably more uncertainty about their inflation projections than they had in January, reflecting in part the difficulty of assessing the opposing effects of increased economic slack and higher energy prices. (Table 2 provides estimates of average ranges of forecast uncertainty for GDP growth, unemployment, and inflation since 1987.[7])

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7. The box "Forecast Uncertainty" at the end of this summary discusses the sources and interpretation of uncertainty in economic forecasts and explains the approach used to assess the uncertainty and risks attending participants' projections.

Table 2. Average Historical Projection Error Ranges
Percentage points

	2008	2009	2010
Real GDP[1]	±1.0	±1.3	±1.4
Unemployment rate[2]	±0.4	±0.7	±1.0
Total consumer prices[3]	±0.7	±1.0	±1.0

NOTE: Error ranges shown are measured as plus or minus the root mean squared error of projections that were released in the spring from 1987 through 2007 for the current and following two years by various private and government forecasters. As described in the box "Forecast Uncertainty," under certain assumptions, there is about a 70 percent probability that actual outcomes for real GDP, unemployment, and consumer prices will be in ranges implied by the average size of projection errors made in the past. Further information is in David Reifschneider and Peter Tulip (2007), "Gauging the Uncertainty of the Economic Outlook from Historical Forecasting Errors," Finance and Economics Discussion Series #2007-60 (November).

1. Projection is percent change, fourth quarter of the previous year to fourth quarter of the year indicated.

2. Projection is the fourth-quarter average of the civilian unemployment rate (percent).

3. 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.

Diversity of Participants' Views

Charts 2(a) and 2(b) provide more detail on the diversity of participants' views. The dispersions of participants' projections for real GDP growth in 2008 and 2009 were roughly equally wide in January and April, but for 2010 the dispersion was a bit wider in April. Relative to the projections made in June 2007, just before the onset of financial market turbulence, the diversity in views about real activity had widened considerably.[8] This increased dispersion was also apparent in projections for the unemployment rate. The dispersion of projections for output and employment in 2008 seemed largely to reflect differing assessments of the effect of financial market conditions on real activity, the speed with which credit conditions might improve, and the depth and duration of the housing market contraction. For 2009, views differed notably about the pace at which output and employment would recover, with some participants concerned that financial strains could prove more persistent than most participants expected. The dispersion of participants' longer-term projections was also affected to some degree by differences in their judgments about the economy's trend growth rate and the unemployment rate that would be consistent over time with maximum employment. The dispersion of the projections for PCE inflation in 2008 and 2009 had widened somewhat since January, reflecting different views on the extent to which recent increases in the prices of oil and other commodities would pass through into higher consumer prices, on whether the prices of oil and other commodities would flatten out as implied in futures market prices, and on the influence that inflation expectations would exert on inflation over the short and medium run. Participants' inflation projections further out were influenced by their views of the rate of inflation consistent with the Federal Reserve's dual objectives and the time it would take to achieve these goals given current economic conditions and appropriate policy.

8. The June 2007 projections were included in the Board's *Monetary Policy Report to the Congress* in July 2007.

Chart 2(a). Distribution of Participants' Projections (percent)

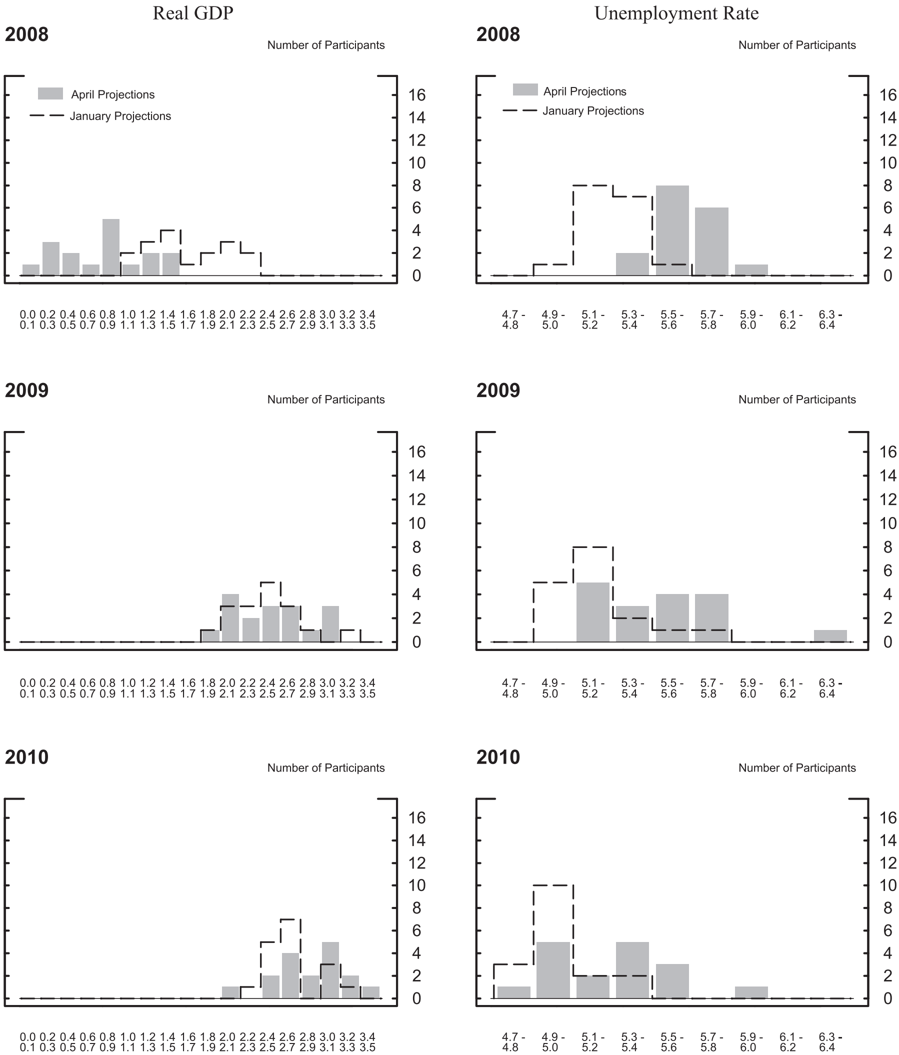
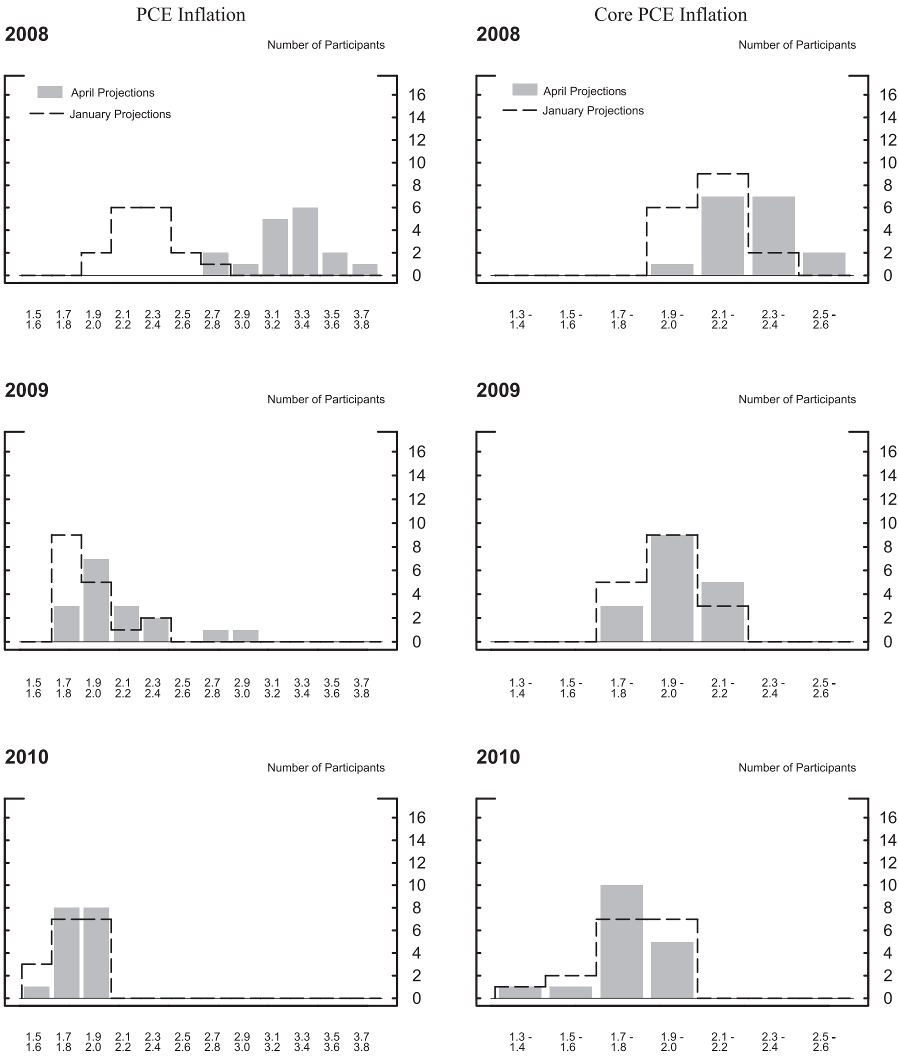


Chart 2(b). Distribution of Participants' Projections (percent)



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 Federal Reserve Board 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 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 between 2.0 percent to 4.0 percent in the current year, 1.7 percent to 4.3 percent in the second year, and 1.6 percent to 4.4 percent in the third year. The corresponding 70 percent confidence intervals for overall inflation would be 1.3 percent to 2.7 percent in the current year and 1.0 percent 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, 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.

Meeting Held on June 24–25, 2008

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 24, 2008 at 2:00 p.m. and continued on Wednesday, June 25, 2008 at 9:00 a.m.

Present:

Mr. Bernanke, Chairman
Mr. Geithner, Vice Chairman
Mr. Fisher
Mr. Kohn
Mr. Kroszner
Mr. Mishkin
Ms. Pianalto
Mr. Plosser
Mr. Stern
Mr. Warsh

Ms. Cumming, Messrs. Evans, Lacker, and Lockhart, and Ms. Yellen, Alternate Members of the Federal Open Market Committee

Messrs. Bullard, Hoenig, and Rosengren, Presidents of the Federal Reserve Banks of St. Louis, Kansas City, and Boston, respectively

Mr. Madigan, Secretary and Economist
Ms. Danker, Deputy Secretary
Mr. Skidmore, Assistant Secretary
Ms. Smith, Assistant Secretary
Mr. Alvarez, General Counsel
Mr. Baxter, Deputy General Counsel
Mr. Sheets, Economist
Mr. Stockton, Economist

Messrs. Connors, English, and Kamin, Ms. Mester, Messrs. Rolnick, Rosenblum, Slifman, Tracy, and Wilcox, Associate Economists

Mr. Dudley, Manager, System Open Market Account

Ms. J. Johnson,[9] Secretary, Office of the Secretary, Board of Governors

Mr. Cole, Director, Division of Banking Supervision and Regulation, Board of Governors

Mr. Struckmeyer, Deputy Staff Director, Office of Staff Director for Management, Board of Governors

Mr. Blanchard, Assistant to the Board, Office of Board Members, Board of Governors

Mr. Frierson,[9] Deputy Secretary, Office of the Secretary, Board of Governors

Ms. Bailey,[9] Deputy Director, Division of Banking Supervision and Regulation, Board of Governors

Mr. Clouse, Deputy Director, Division of Monetary Affairs, Board of Governors

Mr. Parkinson,[9] Deputy Director, Division of Research and Statistics, Board of Governors

Ms. Barger,[9] Deputy Director, Division of Banking Supervision and Regulation, Board of Governors

Mr. Stehm,[9] Associate Director, Division of Reserve Bank Operations and Payment Systems, Board of Governors

Messrs. Reifschneider and Wascher, Associate Directors, Division of Research and Statistics, Board of Governors

Mr. Gagnon,[10] Visiting Associate Director, Division of Monetary Affairs, Board of Governors

Mr. Wright, Deputy Associate Director, Division of Monetary Affairs, Board of Governors

Mr. Zakrajšek, Assistant Director, Division of Monetary Affairs, Board of Governors

Mr. Erceg,[10] Assistant Director, Division of International Finance, Board of Governors

9. Attended portion of the meeting relating to the supervisory report concerning investment banks and related policy issues.

10. Attended portions of the meeting through the policy vote.

Mr. Oliner, Senior Adviser, Division of Research and Statistics, Board of Governors

Mr. Gross,[9] Special Assistant to the Board, Office of Board Members, Board of Governors

Ms. Tevlin,[10] Senior Economist, Division of Research and Statistics, Board of Governors

Mr. Ammer,[10] Senior Economist, Division of International Finance, Board of Governors

Ms. Beechey, Economist, Division of Monetary Affairs, Board of Governors

Ms. Dykes, Project Manager, Division of Monetary Affairs, Board of Governors

Mr. Luecke, Section Chief, Division of Monetary Affairs, Board of Governors

Ms. Beattie,[9] Assistant to the Secretary, Office of the Secretary, Board of Governors

Ms. Low, Open Market Secretariat Specialist, Division of Monetary Affairs, Board of Governors

Ms. Hughes,[9] Staff Assistant, Office of the Secretary, Board of Governors

Mr. Barron, First Vice President, Federal Reserve Bank of Atlanta

Mr. Fuhrer, Executive Vice President, Federal Reserve Bank of Boston

Messrs. Altig, Angulo,[9] Rasche, Schweitzer, Sellon, and Weinberg, Senior Vice Presidents, Federal Reserve Banks of Atlanta, New York, St. Louis, Cleveland, Kansas City, and Richmond, respectively

Messrs. Fernald and Fisher, and Ms. McLaughlin, Vice Presidents, Federal Reserve Banks of San Francisco, Chicago, and New York, respectively

The Manager of the System Open Market Account reported on recent developments in foreign exchange markets. There were no open market operations in foreign currencies for the System's account in the period since the previous meeting. The Manager also reported on developments in domestic financial markets and on System open market operations in government securities and federal agency obligations during the period since the previous meeting. By unanimous vote, the Committee ratified these transactions.

The information reviewed at the June meeting indicated that economic activity had remained soft in recent months. Manufacturing activity had deteriorated, business investment in equipment appeared to have moved down, and residential construction had continued its steep descent. Labor market conditions had weakened further, and consumer sentiment was at historical lows, but despite these developments, consumer spending appeared resilient. Core consumer price inflation had been stable over recent months, but headline inflation had remained elevated because of further substantial increases in food and energy prices.

Labor demand continued to weaken in April and May. Private payroll employment fell at a slower rate than earlier in the year, but the decline in jobs was again widespread, with the exception of nonbusiness services. As a result, aggregate hours of private production or nonsupervisory workers fell, on average, in April and May. The unemployment rate jumped from 5.0 percent in April to 5.5 percent in May and was now about a percentage point above its level of a year ago. The increase from April to May was accompanied by a rise in labor force participation, especially among young people.

Industrial production contracted in April and May at a slightly faster pace than in the first quarter. Manufacturing output also fell in April and was unchanged in May; over the two months, factory production slowed across a broad range of industries. Production in the high-tech sector continued to expand but at only a modest rate. The factory utilization rate edged down further in April and May to a level below its first-quarter average and was well below its recent high in the third quarter of 2007.

The growth of real consumer spending appeared to have picked up moderately from its sluggish pace in the first quarter. Real outlays on goods other than motor vehicles increased at a robust pace, on average, in April and May. However, retail purchases of motor vehicles fell to a low level. More broadly, households' financial conditions appeared to have weakened in recent months. Real disposable personal income had been rising only slowly since last summer, restrained by the gradual deterioration in labor market conditions and sharp increases in food and energy prices. The ratio of household wealth to income had dropped sharply in the first quarter, reflecting substantial net declines in broad equity prices and further depreciation of house prices. Measures of consumer sentiment fell further in April and May; the May readings from the Reuters/University of Michigan Surveys of Consumers and the Conference Board Consumer Confidence Survey were near their low points reached during the early 1990s.

Activity in the housing sector remained very weak in April and May. Single-family housing starts posted further declines, leaving the pace of construction in this sector down about two-thirds from the peak in early 2006; starts of multifamily homes were a bit below their average over the last 10 years. Although production cuts in the single-family housing sector resulted in continued reductions of inventories of unsold new homes, the slow pace of sales left the ratio of unsold new homes to sales at elevated levels not seen since the early 1980s. Sales of existing homes remained little changed through April at a low level. However, the index of pending sales agreements—an indicator of existing home sales in coming months—jumped in April to its highest reading in six months. Conditions in mortgage credit markets remained tight, particularly for nonprime borrowers and for those seeking nonconforming mortgages.

In the business sector, real spending on equipment and software appeared to move down a bit further in April and May following a slight decrease in the first quarter. Business outlays on transportation equipment continued to fall sharply. The data on shipments and orders of nondefense capital goods through May suggested that spending on high-tech equipment and software was expanding sluggishly, while outlays for other equipment remained weak. The slower pace of capital expenditures appeared consistent with a general deterioration of business conditions, including a deceleration of sales, a pessimistic tone across monthly surveys of business conditions, and tighter standards and terms on business credit. Real spending on nonresidential construction continued to rise in the first quarter, but at a substantially slower rate than over the previous two years. The architectural billing index plummeted recently, and vacancy rates for commercial properties ticked up.

Real nonfarm inventories excluding motor vehicles rose only slightly in the first quarter, as firms cut production to keep inventories aligned with the sluggish pace of sales. The ratio of book-value inventories to sales (excluding motor vehicles) ticked down in April and had changed relatively little, on net, since the middle of 2007. Despite sharply lower sales of motor vehicles, the modest pace of production allowed inventories to fall further through May. Production at automakers was restrained by both weak demand and disruptions caused by labor disputes.

The U.S. international trade deficit widened in April, as a jump in imports outweighed a rise in exports. Most categories of goods imports rebounded in April from lower levels in March, especially petroleum products, the prices of which had moved sharply higher. Imports of non-oil industrial supplies, capital goods, and automotive products also surged in April, whereas imports of consumer goods expanded more slowly. The increase in exports was broad-based, with strong increases in exports of industrial supplies, capital and consumer goods, and automotive products.

Economic activity in advanced foreign economies appeared to have expanded moderately in the first quarter, but the pace of that activity varied markedly across economies. In the euro area and Japan, strong investment contributed to a sharp acceleration in output. Economic growth in the United Kingdom moderated because of a slowdown in real estate and business activities. Falling exports and inventories subtracted from Canadian output growth. Recent data pointed to broad softness across the advanced foreign economies in the second quarter, consistent with a weakening of consumer and business confidence. Indicators for emerging market economies pointed to continued solid growth in the first quarter, albeit at a slower pace than last year among Latin American economies. In particular, economic activity in Mexico slowed further in the first quarter, in the wake of weaker growth in the United States. In contrast, real output in China and India appeared to have continued expanding at the rapid rates seen in 2007. Inflation stayed high, on balance, in all regions, as recent price increases for food and energy added to global inflationary pressures.

Headline consumer price inflation in the United States remained elevated in April and May, mostly because of large increases in food and energy prices. Excluding these categories, core prices rose at a relatively subdued rate in these two months. Average hourly earnings increased in April and May at a slower pace than in the first quarter, bringing the change over the 12 months ending in May below the pace over the previous 12 months. The employment cost index for hourly compensation rose moderately in the first quarter and at a similar rate to recent years.

At its April 29–30 meeting, the Federal Open Market Committee (FOMC) lowered its target for the federal funds rate 25 basis points, to 2 percent. In addition, the Board of Governors approved a decrease of 25 basis points in the discount rate, to 2¼ percent. The Committee's statement noted that recent information indicated that economic activity remained weak; household and business spending had been subdued, and labor markets had softened further. Financial markets remained under considerable stress, and tight credit conditions and the deepening housing contraction were likely to weigh on economic growth over the next few quarters. Although readings on core inflation had improved somewhat, energy and other commodity prices had increased, and some indicators of inflation expectations had risen in recent months. The Committee expected inflation to moderate in coming quarters, reflecting a projected leveling-out of energy and other commodity prices and an easing of pressures on resource utilization. Still, uncertainty about the inflation outlook remained high, and the Committee noted that it would be necessary to continue to monitor inflation developments closely. The Committee stated that the substantial easing of monetary policy to date, combined with ongoing measures to foster market liquidity, should help to promote moderate growth over time and to mitigate risks to economic activity. The Committee indicated that it would continue to monitor economic and financial developments and act as needed to promote sustainable economic growth and price stability.

The expected path of monetary policy moved down following the Committee's decision at its April meeting to reduce the target federal funds rate by 25 basis points. Although the decision had largely been anticipated by financial markets, investors had assigned some odds to an unchanged target rate. Subsequently, money market futures rates rose substantially, on net, as stronger-than-expected data on spending and on labor markets along with somewhat improved conditions in financial markets appeared to impart greater confidence about prospects for economic activity. Nominal Treasury yields also rose noticeably, and the Treasury yield curve flattened. Measures of short-term inflation compensation derived from yields on inflation-indexed Treasury securities increased over the intermeeting period, due in part to sharply higher prices for oil and agricultural commodities. Measures of longer-term inflation compensation remained around the middle of their recent elevated range. Some survey measures of households' expectations of near-term inflation rose sharply, while survey measures of longer-term expectations ranged from unchanged to slightly higher.

Conditions eased somewhat in some U.S. financial markets over the intermeeting period but nonetheless remained strained. Functioning of short-term funding markets showed some improvement; spreads in interbank funding markets generally declined, as did spreads on lower-rated commercial paper. However, liquidity in the market for interbank loans at maturities beyond three months remained thin, and the spreads quoted on those instruments were little changed. Demand for funds from the Term Auction Facility remained substantial, but stop-out rates relative to minimum bid rates declined considerably relative to prior auctions, likely in response to increased auction sizes. Depository institutions' use of primary credit borrowing increased, on balance, over the intermeeting period. Credit outstanding through the Primary Dealer Credit Facility declined significantly over the intermeeting period. Conditions in the market for Treasury repurchase agreements appeared to improve somewhat, but conditions were still poor for lower-quality collateral. Supported by sales and redemptions of Treasury securities from the System Open Market Account and exchanges under the Term Securities Lending Facility, yields on overnight Treasury repurchase agreements were around typical spreads to the effective federal funds rate during much of the intermeeting period, but "haircuts" applied by lenders on non-Treasury collateral remained elevated. Term Securities Lending Facility auctions held since the April FOMC meeting were generally undersubscribed.

In longer-term credit markets, yields on investment- and speculative-grade corporate bonds had risen significantly since the end of April but by slightly less than yields on comparable-maturity Treasury securities, implying a further modest narrowing of credit spreads. Corporate bond issuance surged in May, as some nonfinancial firms reduced their reliance on short-term debt in favor of bond financing. Commercial paper outstanding declined, and business lending by banks decelerated, partly reflecting continued low issuance of leveraged loans as well as tighter credit standards and terms at banks. Over the intermeeting period, spreads of rates on conforming residential mortgages over comparable-maturity Treasury securities remained about flat. Spreads on jumbo mortgages, however, widened somewhat and credit availability for jumbo-mortgage borrowers continued to be tight. In the secondary market, issuance of mortgage-backed securities by government-sponsored enterprises was strong, but issuance of securities backed by nonconforming residential mortgages and commercial mortgages remained low. Broad stock prices were somewhat volatile but declined modestly, on net, over the intermeeting period. The surge in oil prices weighed on equity prices outside of the energy sector, and a more pessimistic outlook for future earnings in the financial sector caused stocks of financial institutions to decline significantly.

Conditions in the money markets of many major foreign economies remained strained, showing little improvement since late April despite ongoing activities of foreign central banks aimed at easing liquidity pressures in funding markets. Yields on sovereign debt in the advanced foreign economies moved up approximately in line with increases in comparable Treasury yields in the United States. The trade-weighted foreign exchange value of the dollar against major currencies rose.

M2 rose much more slowly in April and May than in the first quarter. The deceleration seemed to reflect primarily an unwinding of heightened demand for the relative safety and liquidity of money market mutual funds that had boosted M2 in prior months.

In the forecast prepared for the meeting, the staff raised its projection for the growth of real gross domestic product (GDP) for 2008. The available indicators of spending, particularly those for consumption and business investment, suggested that economic activity in the first half of the year had been somewhat firmer than previously expected. The staff projection prepared for the meeting pointed to modest expansion in real GDP in the first half of 2008 followed by a slight slowdown in growth in the second half, when several factors were likely to restrain spending, including lower household wealth, slower real income growth due to sharply higher oil prices, and tight credit conditions. The pace of economic activity was projected to pick up in 2009 as those effects waned and weakness in housing construction abated. Despite this acceleration, the trajectory of economic growth anticipated through 2009 implied noticeable slack in resource utilization.

The staff's projection for price inflation in core personal consumption expenditures (PCE) for 2008 as a whole was unchanged; recent readings on core PCE inflation were better than anticipated and led the staff to lower its projection for the first half of the year. But some of the recent improvement was seen as reflecting transitory factors, and the forecast of core inflation for the second half of this year and next year was marked up to incorporate the likely pass-through of the recent jumps in the prices of energy and other commodities, and the reversal of these transitory factors. The further large increase in energy prices also prompted an upward revision of the forecast of headline PCE inflation in the second half of 2008, and headline inflation was expected to exceed core inflation by a considerable margin this year. However, in view of a projected leveling-out of energy prices and the anticipated slack in resource utilization, headline inflation was expected to decline considerably in 2009 from its pace in the second half of 2008, and core inflation was forecasted to edge lower.

In conjunction with the FOMC meeting in June, all meeting participants (Federal Reserve Board members and Reserve Bank presidents) provided projections for economic growth, the unemployment rate, and inflation for the years 2008 through 2010. The projections are described in the Summary of Economic Projections, which is attached as an addendum to these minutes. A number of participants noted that, given the recent large adverse shocks to output and inflation, their projections even late in the forecast period did not fully reveal their perceptions of longer-run sustainable rates of economic growth and unemployment or the measured rates of inflation that would be consistent with price stability. In this context, participants discussed several possible refinements of the Committee's approach to projections that could provide a clearer indication of participants' views about these variables and agreed to consider this matter further.

In their discussion of the economic situation and outlook, FOMC participants noted that spending in recent months had evidently been less weak than anticipated, leading participants to revise up their assessment of economic growth in the first half of 2008. Nonetheless, most participants judged that the slightly firmer path of spending did not presage a near-term strengthening of the expansion. Economic activity would probably continue to expand slowly over the next several quarters, restrained by a range of factors, including strains in financial markets and institutions and the resulting tightness of credit conditions; ongoing weakness in the housing sector; and the increases in energy and agricultural commodity prices. And, although the incoming data suggested reduced odds that these factors would cause an appreciable contraction of economic activity in the near term, participants continued to see significant downside risks to growth. At the same time, however, the outlook for inflation had deteriorated. Recent increases in energy and some other commodity prices would boost inflation sharply in coming months. A leveling-out of energy prices and continued slack in resource utilization were expected to lead inflation to moderate in 2009 and 2010. However, participants had become more concerned about upside risks to the inflation outlook—including the possibility that persistent advances in energy and food prices could spur increases in long-run inflation expectations.

Although financial market conditions generally appeared to have improved somewhat over the intermeeting period, most participants viewed markets as remaining under considerable stress. Some participants noted that the availability of the liquidity facilities that the Federal Reserve had introduced in recent months had probably bolstered the confidence of investors and lenders and thus was likely responsible for part of the improvement in market functioning. Term spreads in interbank funding markets had declined, but remained elevated by historical standards. The leveraged loan market had improved somewhat and corporate bond issuance had been strong. However, the equity prices of many investment and commercial banks had declined over the intermeeting period, reflecting increased concern about asset quality and the outlook for profits. The deteriorating condition of some financial guarantors and mortgage insurers contributed to worries about banks. Investors remained chary of securitized products, such as mortgage credits not guaranteed by a government-sponsored enterprise or agency. A number of financial institutions had been successful in raising new capital, but reportedly on less favorable terms than before. Participants judged that many financial institutions would need to continue to recapitalize and reduce their leverage. Some anticipated that this process could well be protracted, and that financial intermediation consequently would be impeded for some time, holding back growth well into 2009. Overall, financial market conditions, while better in many respects, appeared to remain fragile, and participants judged that potential further adverse financial market developments still posed downside risks to economic activity.

Recent data pointed to more resilience in consumer spending in the second quarter than had been expected. However, most participants thought that much of the recent strength probably indicated only a more delayed slowing in consumer spending than had been expected rather than a more favorable trend. Falling wealth and real income, tightening credit conditions, rising energy prices, and sharply declining consumer sentiment were seen as likely to restrain consumer spending later this year, particularly after the effects of the fiscal stimulus waned. Lenders were exhibiting greater caution in extending credit to households, partly in response to actual and expected increases in delinquency rates on household credit. Participants reported that second mortgages, automobile loans, and home equity lines of credit were becoming harder to obtain, and some existing home equity lines were being cut, even for consumers with good credit scores. The possibilities that the decline in house prices would be more protracted than previously anticipated, that spillovers from the decline in housing wealth to consumption could be larger than expected, and that the household saving rate might rise more steeply than currently projected were seen as posing downside risks to consumption spending going forward.

Participants judged that the outlook for the housing market remained bleak, with falling prices, slow sales, high inventories of unsold homes, and further declines in construction activity over coming months. Although a few participants saw tentative signs that the housing market might be bottoming out in some parts of the country, most aggregate indicators of housing activity pointed to continued weakness. Also, mortgage rates had increased, and the equity prices of housing-related firms had fallen over the intermeeting period, after having stabilized earlier in the year, suggesting renewed pessimism among investors about prospects for the housing industry. Rising foreclosures were seen as likely to continue to add to downward pressure on house prices.

Business spending was expected to remain sluggish, as tight credit conditions, uncertainty about economic growth, and the rising costs of inputs—especially energy and raw materials—appeared to be making firms quite cautious and inclined to defer capital expenditures. Businesses had been able to raise a considerable volume of funds in bond markets of late, and profits and cash flow were still strong in the nonfinancial business sector. But some regional banks that had experienced substantial credit losses were expected to adopt a significantly more conservative lending posture, further limiting the availability of credit to small businesses. Although the available data indicated that spending on nonresidential construction projects had remained relatively robust in recent months, participants thought that this strength might have reflected projects initiated some time ago, when the economic outlook and credit conditions were more favorable, and they expected poor business sentiment and tighter credit to lead commercial construction to soften later this year and next year. Some anecdotal reports of recently delayed or canceled new construction projects supported this view.

Regarding economic activity in various business sectors, participants reported continued overall softness in manufacturing, especially in the housing-related and motor vehicle sectors. Flooding in the Midwest had disrupted transportation and damaged corn and soybean crops. However, production in the energy and steel sectors appeared to be strengthening, and industry contacts generally reported that demand for exported goods was buoyant. Labor markets in most regions continued to weaken gradually. Most participants anticipated persistent slack in labor markets, with the unemployment rate rising further through next year, before declining slightly in 2010.

The current account deficit had narrowed significantly on balance in recent quarters, and still-solid foreign growth was expected to contribute to a further narrowing of the real U.S. trade deficit in coming quarters. However, a few participants commented that this effect might fade over time, as they expected demand in foreign economies to slow.

Participants were concerned about the inflationary consequences of recent increases in the prices of energy, food, and imports, and they expected headline inflation to rise in the very near term. However, core inflation had been stable of late, and participants anticipated that a leveling-out of energy prices and slack in labor and product markets would contribute to a moderation of inflation pressures over time. Reports on the ability of firms to pass cost increases on to customers were mixed, but some participants commented that the global nature of inflationary pressures could make imports more expensive and give firms greater scope to raise prices. Some participants noted that wage growth had been quite moderate, reinforcing a view that longer-term inflation expectations and labor cost pressures had remained fairly well contained. However, others commented that wages might accelerate with a lag only after inflation expectations had moved higher, and that it would be very costly to subsequently bring those expectations back down. Participants' views of the recent evidence on inflation expectations varied. Some noted that the increase was greatest for short-term survey measures of households' inflation expectations, which may be influenced disproportionately by consumers' perceptions of changes in the prices of food and gasoline; those participants judged that underlying inflation trends had not risen nearly as much and anticipated that such survey measures would reverse their recent increases as headline inflation moderated. However, others saw the signs of a rise in inflation expectations as more broad-based and were concerned that this development could signal an erosion of confidence in the Committee's commitment to price stability and, absent effective action by the Committee, could impart greater momentum to the inflation process. Participants agreed that the possibilities of greater pass-through of cost increases into prices, higher long-run inflation expectations feeding into labor costs and other prices, and further increases in energy prices all posed upside risks to inflation that had intensified since the time of the April FOMC meeting.

Some participants noted that certain measures of the real federal funds rate, especially those using actual or forecasted headline inflation, were now negative, and very low by historical standards. In the view of these participants, the current stance of monetary policy was providing considerable support to aggregate demand and, if the negative real federal funds rate was maintained, it could well lead to higher trend inflation. In this view, a significant portion of the easing in monetary policy since last fall was aimed at providing insurance against the risk of an especially severe weakening in economic activity and, with downside risks having diminished somewhat, some firming in policy would be appropriate very soon, if not at this meeting. However, other participants observed that the high level of risk spreads and the restricted availability of credit suggested that overall financial conditions were not especially accommodative; indeed, borrowing costs for many households and businesses were higher than they had been last summer.

In the Committee's discussion of monetary policy for the intermeeting period, members generally agreed that the risks to growth had diminished somewhat since the time of the last FOMC meeting while the upside risks to inflation had increased. Nonetheless, the risks to growth remained tilted to the downside. Conditions in some financial markets had improved, but many financial institutions continued to experience significant credit losses and balance sheet pressures, and in these circumstances credit availability was likely to remain constrained for some time. At the same time, however, the near-term outlook for inflation had deteriorated, and the risks that underlying inflation pressures could prove to be greater than anticipated appeared to have risen. Members commented that the continued strong increases in energy and other commodity prices would prompt a difficult adjustment process involving both lower growth and higher rates of inflation in the near term. Members were also concerned about the heightened potential in current circumstances for an upward drift in long-run inflation expectations. With increased upside risks to inflation and inflation expectations, members believed that the next change in the stance of policy could well be an increase in the funds rate; indeed, one member thought that policy should be firmed at this meeting. However, in the view of most members, the outlook for both economic activity and price pressures remained very uncertain, and thus the timing and magnitude of future policy actions was quite unclear. Against this backdrop, most members judged that an unchanged federal funds rate at this meeting represented an appropriate balancing of the risks to the economic outlook and was consistent, for now, with a policy path that would support an eventual decline in both inflation and unemployment. Nonetheless, members recognized that circumstances could change quickly and noted that they might need to respond promptly to incoming information about the evolution of risks.

At the conclusion of the discussion, the Committee voted to authorize and direct the Federal Reserve Bank of New York, until it was instructed otherwise, to execute transactions in the System

Account in accordance with the following domestic policy directive:

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining the federal funds rate at an average of around 2 percent.

The vote encompassed approval of the statement below to be released at 2:15 p.m.:

The Federal Open Market Committee decided today to keep its target for the federal funds rate at 2 percent.

Recent information indicates that overall economic activity continues to expand, partly reflecting some firming in household spending. However, labor markets have softened further and financial markets remain under considerable stress. Tight credit conditions, the ongoing housing contraction, and the rise in energy prices are likely to weigh on economic growth over the next few quarters.

The Committee expects inflation to moderate later this year and next year. However, in light of the continued increases in the prices of energy and some other commodities and the elevated state of some indicators of inflation expectations, uncertainty about the inflation outlook remains high.

The substantial easing of monetary policy to date, combined with ongoing measures to foster market liquidity, should help to promote moderate growth over time. Although downside risks to growth remain, they appear to have diminished somewhat, and the upside risks to inflation and inflation expectations have increased. The Committee will continue to monitor economic and financial developments and will act as needed to promote sustainable economic growth and price stability.

Votes for this action: Messrs. Bernanke, Geithner, Kohn, Kroszner, and Mishkin, Ms. Pianalto, Messrs. Plosser, Stern, and Warsh. Votes against this action: Mr. Fisher.

Mr. Fisher dissented because he preferred an increase in the target federal funds rate at this meeting. While the financial system was still frail and downside risks to growth remained, the risk that inflation would fail to moderate as expected by the Committee had increased substantially over the intermeeting period. Relatively strong demand for oil and other commodities abroad, as well as increased labor and other operating costs in the emerging economies, was boosting prices of globally traded goods and services. Mr. Fisher was especially concerned about behavioral changes among business operators that appeared to be accommodating inflationary pressures. In particular, firms increasingly appeared to be planning to pass through their higher input costs to final goods prices in order to protect their profit margins. Overall, Mr. Fisher viewed inflation expectations as becoming less well anchored. To help restrain inflation expectations and inflation, Mr. Fisher felt it would be appropriate for the Committee to tighten the stance of monetary policy.

In a joint session of the Federal Open Market Committee and the Board of Governors, meeting participants turned to a consideration of policy issues regarding investment banks and other primary securities dealers. Participants discussed the financial activities and condition of primary dealers as well as the objectives of, procedures for, and experience to date in administering the Primary Dealer Credit Facility (PDCF) and the Term Securities Lending Facility (TSLF). (The PDCF and the TSLF had been established in March in response to unusual and exigent conditions in financial markets.) In view of the continuing significant strains in financial markets, participants also discussed the possibility of extending the PDCF and the TSLF past year-end. In addition, they reviewed progress in negotiations with staff of the Securities and Exchange Commission regarding a memorandum of understanding intended to govern arrangements for sharing information on broker-dealers and for cooperation in the supervision of primary dealers. Finally, participants exchanged views on longer-run issues regarding appropriate arrangements for supervision and regulation of investment banks and other securities dealers and for the access of such firms to central bank liquidity, as well as on possible measures to strengthen financial market functioning and thus enhance financial stability.

It was agreed that the next meeting of the Committee would be held on Tuesday, August 5, 2008.

The meeting adjourned at 1:15 p.m.

Notation Vote

By notation vote completed on May 20, 2008, the Committee unanimously approved the minutes of the FOMC meeting held on April 29–30, 2008.

Brian F. Madigan
Secretary

Addendum: Summary of Economic Projections

In conjunction with the June 2008 FOMC meeting, the members of the Board of Governors and the presidents of the Federal Reserve Banks, all of whom participate in deliberations of the FOMC, provided projections for economic growth, unemployment, and inflation in 2008, 2009, and 2010. Projections were based on information available through the conclusion of the June meeting, on each participant's assumptions regarding a range of factors likely to affect economic outcomes, and on his or her assessment of appropriate monetary policy. "Appropriate monetary policy" is defined as the future policy that, based on current information, is deemed most likely to foster outcomes for economic activity and inflation that best satisfy the participant's interpretation of the Federal Reserve's dual objectives of maximum employment and price stability.

FOMC participants generally expected that, over the remainder of this year, output would expand at a pace appreciably below its trend rate, owing primarily to continued weakness in housing markets, the substantial rise in energy prices in recent months, and the reduction in the availability of household and business credit resulting from continued strains in financial markets. As indicated in table 1 and figure 1, output growth further ahead was projected to pick up sufficiently to begin to reverse some of the increase in the unemployment rate by 2010. In light of the recent surge in the prices of oil and agricultural commodities, total inflation was expected to rise further in coming months and to be elevated for 2008 as a whole. However, many participants expected that persistent economic slack and a flattening out of energy and other commodity prices in line with futures market prices would cause overall inflation to decline noticeably in 2009 and 2010. Most participants judged that greater-than-normal uncertainty surrounded their projections for both output growth and inflation. A significant majority of participants viewed the risks to their forecasts for output growth as weighted to the downside, and a similar number saw the risks to the inflation outlook as skewed to the upside.

The Outlook

The central tendency of participants' projections for real GDP growth in 2008, at 1.0 percent to 1.6 percent, was

Table 1. Economic Projections of Federal Reserve Governors and Reserve Bank Presidents, June 2008
Percent

Variable	2008	2009	2010
Central tendency[1]			
Change in real GDP	1.0 to 1.6	2.0 to 2.8	2.5 to 3.0
April projection	0.3 to 1.2	2.0 to 2.8	2.6 to 3.1
Unemployment rate	5.5 to 5.7	5.3 to 5.8	5.0 to 5.6
April projection	5.5 to 5.7	5.2 to 5.7	4.9 to 5.5
PCE inflation	3.8 to 4.2	2.0 to 2.3	1.8 to 2.0
April projection	3.1 to 3.4	1.9 to 2.3	1.8 to 2.0
Core PCE inflation	2.2 to 2.4	2.0 to 2.2	1.8 to 2.0
April projection	2.2 to 2.4	1.9 to 2.1	1.7 to 1.9
Range[2]			
Change in real GDP	0.9 to 1.8	1.9 to 3.0	2.0 to 3.5
April projection	0.0 to 1.5	1.8 to 3.0	2.0 to 3.4
Unemployment rate	5.5 to 5.8	5.2 to 6.1	5.0 to 5.8
April projection	5.3 to 6.0	5.2 to 6.3	4.8 to 5.9
PCE inflation	3.4 to 4.6	1.7 to 3.0	1.6 to 2.1
April projection	2.8 to 3.8	1.7 to 3.0	1.5 to 2.0
Core PCE inflation	2.0 to 2.5	1.8 to 2.3	1.5 to 2.0
April projection	1.9 to 2.5	1.7 to 2.2	1.3 to 2.0

NOTE: Projections of change in real gross domestic product (GDP) and of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy.

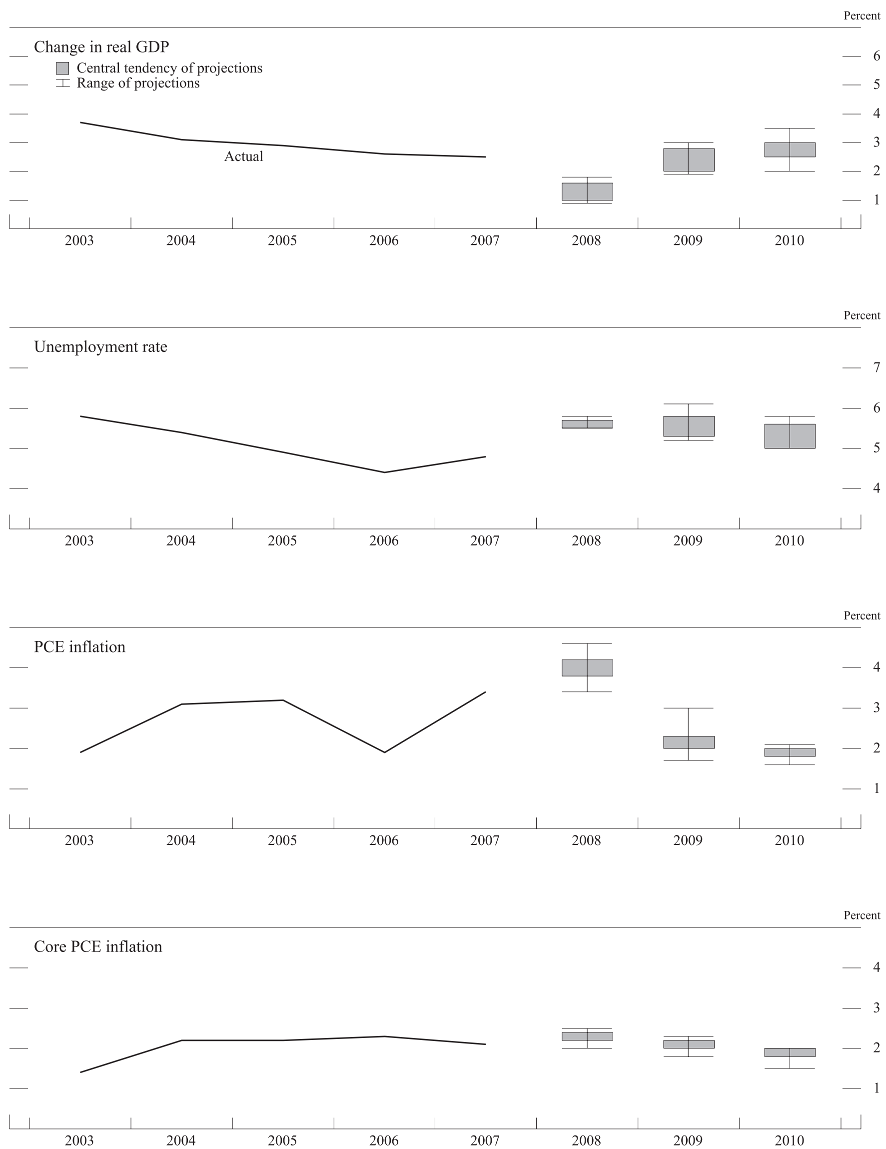
1. The central tendency excludes the three highest and three lowest projections for each variable in each year.

2. The range for a variable in a given year includes all participants' projections, from lowest to highest, for that variable in that year.

noticeably higher than the central tendency of the projections provided in conjunction with the April FOMC meeting, which was 0.3 percent to 1.2 percent. The upward revision to the 2008 outlook stemmed primarily from better-than-expected data on consumer and business spending received between the April and June FOMC meetings. Nonetheless, several participants noted that the recent firmness in consumer spending could well prove transitory and that the ongoing housing market correction, tight credit conditions, and elevated energy prices would damp domestic demand in the second half of this year. Still, the substantial easing of monetary policy since last year and the continued strength in exports should help to support economic growth; in addition, strains had eased somewhat in some financial markets since April. Real GDP growth was expected to increase in 2009 as the adjustment in the housing sector ran its course, financial markets gradually resumed more-normal functioning, and the downward pressure on real incomes stemming from increases in energy and food prices in the first half of 2008 began to fade. In 2010, economic activity was projected to expand at or a little above participants' estimates of the rate of trend growth.

With output growth continuing to run below trend in the second half of 2008, most participants expected that the unemployment rate would move up somewhat over the remainder of this year. The central tendency of participants' projections for the average rate of unemployment in the fourth quarter of

Figure 1. Central Tendencies and Ranges of Economic Projections, 2008–10



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

2008 was 5.5 percent to 5.7 percent, unchanged from the central tendency of projections that were provided in conjunction with the April FOMC meeting and consistent with some slack in resource utilization. The central tendency of participants' projections was for the unemployment rate to stabilize in 2009 and to edge down in 2010 as output and employment growth pick up.

The surge in the prices of oil and agricultural commodities since April led participants to revise up noticeably their projections for total inflation in the near term. However, the central tendency of participants' projections for core PCE inflation in 2008 was 2.2 percent to 2.4 percent, unchanged from the central tendency in April, as lower-than-expected rates of core inflation over recent months offset the expectations of some pass-through of the recent surge in energy prices into core inflation over the next few months. Rates of both overall and core inflation were expected to decline over the next two years, reflecting a flattening out of the prices of oil and other commodities consistent with futures market prices, slack in resource utilization, and longer-term inflation expectations that were expected to remain generally well anchored.

The contour of participants' projections for output growth, unemployment, and inflation was importantly shaped by their judgments about the measured rates of inflation consistent with the Federal Reserve's dual mandate to promote maximum employment and price stability and about the time horizon over which policy should aim to attain those rates given current economic conditions. Most participants judged that it might take a substantial period of time for output and inflation to recover from the recent shocks, which had elevated inflation and damped economic activity. A number of participants projected that the rate of unemployment might remain slightly above its longer-run sustainable level even in 2010; total inflation in 2010 was also judged likely to continue to run a bit above levels that most participants saw as consistent with the price stability objective of the Federal Reserve's dual mandate. Most participants saw further declines in both unemployment and inflation as likely in the period beyond the forecast horizon.

Risks to the Outlook

Most participants viewed the risks to their projections for GDP growth as weighted to the downside and the associated risks to their projections for the unemployment rate as tilted to the upside. The possibility that house prices could decline more steeply than anticipated, further reducing households' wealth, restricting their access to credit, and eroding the capital of lending institutions, continued to be perceived as a significant downside risk to the outlook for economic growth. Although financial markets had shown some further improvement since April, conditions in those markets remained strained; a number of participants also pointed to the risk that further improvement could be quite slow and subject to relapse. The potential for current tight credit conditions to exert an unexpectedly large restraint on household and business spending was also viewed as a significant downside risk to economic activity. An adverse feedback loop, in which weaker economic activity led to a further worsening of financial conditions, which in turn could damp economic growth even further, continued to be viewed as a worrisome possibility, though less so than in April. Indeed, some participants pointed to the apparent resilience of the U.S. economy in the face of recent financial distress and suggested that the adverse effects of financial developments on economic activity outside of the housing sector could prove to be more modest than anticipated.

Most participants viewed the risks to their inflation projections as weighted to the upside. Recent sharp increases in energy and food prices and the pass-through of dollar depreciation into import prices could boost inflation in the near term by more than currently anticipated. Although participants generally assumed that commodity prices will flatten out, roughly in line with the trajectory implied by futures prices, the fact that futures markets had persistently underpredicted commodity prices in recent experience was viewed as an upside risk to the outlook for inflation. Participants also saw a risk that inflation expectations could become less firmly anchored, particularly if the current elevated rates of headline inflation did not moderate as quickly as they expected.

Participants continued to view uncertainty about the outlook for economic activity as higher than normal, with a number pointing to uncertainty about the duration and effects of the ongoing financial strains on real activity. In addition, participants expressed noticeably more uncertainty about their inflation projections than they had in January and April, a shift in perception that they attributed importantly to increased uncertainty about the future course of energy and food prices and to greater uncertainty about the extent of pass-through of changes in those prices into core inflation. (Table 2 provides estimates of forecast uncertainty for real GDP growth, unemployment, and inflation since 1987.[11])

11. The box "Forecast Uncertainty" at the end of this summary discusses the sources and interpretation of uncertainty in economic forecasts and explains the approach used to assess the uncertainty and risks attending participants' projections.

Table 2. Average Historical Projection Error Ranges

Percentage points

Variable	2008	2009	2010
Change in real GDP[1]	±0.9	±1.3	±1.4
Unemployment rate[1]	±0.3	±0.7	±1.0
Total consumer prices[2] ...	±0.6	±1.0	±1.0

NOTE: Error ranges shown are measured as plus or minus the root mean squared error of projections that were released in the summer from 1987 through 2007 for the current and following two years by various private and government forecasters. As described in the box "Forecast Uncertainty," under certain assumptions, there is about a 70 percent probability that actual outcomes for real GDP, unemployment, and consumer prices will be in ranges implied by the average size of projection errors made in the past. Further information is in David Reifschneider and Peter Tulip (2007), "Gauging the Uncertainty of the Economic Outlook from Historical Forecasting Errors," Finance and Economics Discussion Series 2007-60 (Board of Governors of the Federal Reserve System, November).

1. For definitions, refer to general note in table 1.

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

Diversity of Participants' Views

Figures 2.A and 2.B provide more detail on the diversity of participants' views regarding likely economic outcomes over the projection period. The dispersion of participants' projections for real GDP growth in 2008 was noticeably narrower than in the forecasts provided in April, reflecting primarily the accumulation of data about the actual performance of the economy in the first half of the year; their views about output growth in coming quarters and in 2009 continued to exhibit appreciable dispersion. The dispersion of participants' projections for real activity next year seemed largely to reflect differing assessments of the effects of adverse financial market conditions on economic growth, the speed with which credit conditions might improve, and the depth and duration of the correction in the housing market. Indeed, views differed notably on the pace at which

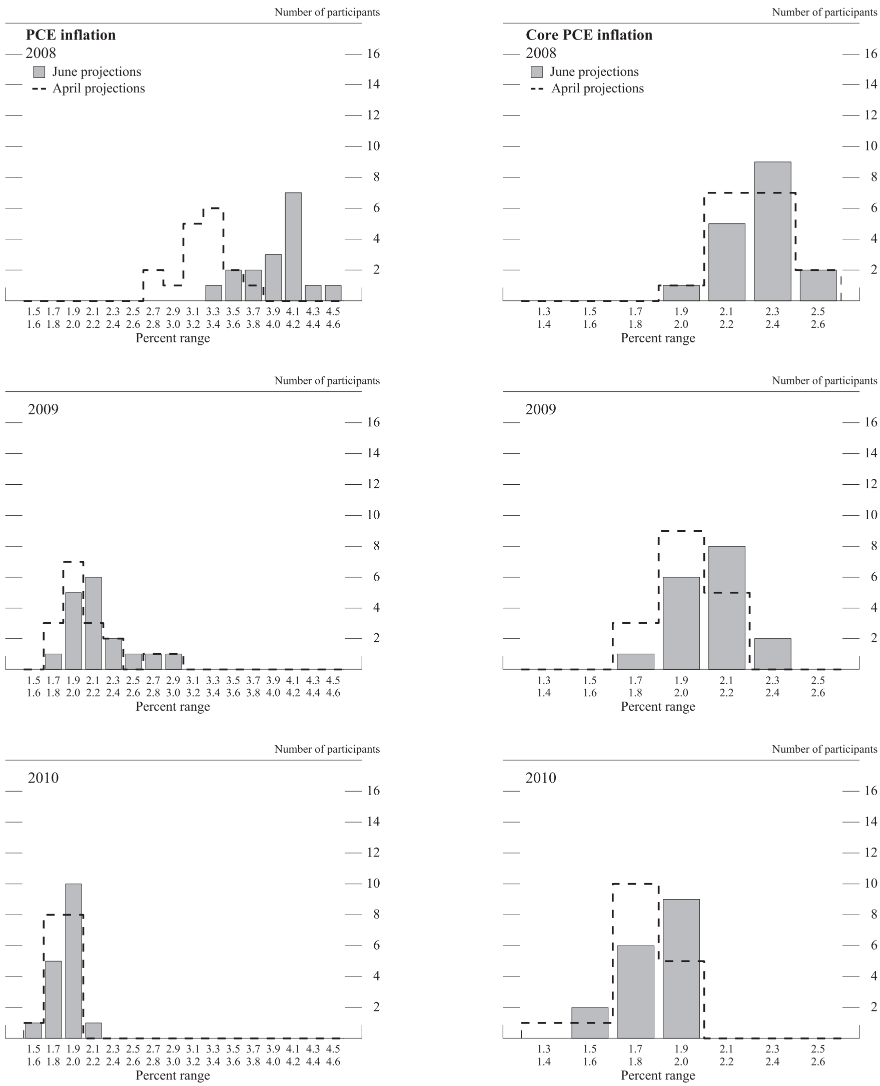
Figure 2.A. Distribution of Participants' Projections for the Change in Real GDP and for the Unemployment Rate, 2008-10

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

output and employment would recover in 2009, with some participants expressing a concern that growth might be constrained by the persistence of financial strains over a considerable period.

The dispersion of participants' longer-term projections was also affected to some degree by differences in their judgments about the economy's trend growth rate and the unemployment rate

Figure 2.B. Distribution of Participants' Projections for PCE Inflation and for Core PCE Inflation, 2008-10



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

that would be consistent over time with maximum employment. The dispersion of the projections for PCE inflation in the near term reflected in large part differing views on the extent to which recent increases in energy and food prices would pass through into higher consumer prices. In addition, participants held differing views on the degree to which inflation expectations were an-

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 Federal Reserve Board 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 2.1 percent to 3.9 percent in the current year, 1.7 percent to 4.3 percent in the second year, and 1.6 percent to 4.4 percent in the third year. The corresponding 70 percent confidence intervals for overall inflation would be 1.4 percent to 2.6 percent in the current year and 1.0 percent 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, 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.

chored and the role that expectations might play in the inflation process over the short and medium term. Participants' inflation projections further ahead were shaped by the views of the rate of inflation consistent with the Federal Reserve's dual objectives and the time it would take to achieve these goals given current economic conditions and appropriate policy.

Meeting Held on August 5, 2008

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, August 5, 2008 at 8:30 a.m.

Present:

Mr. Bernanke, Chairman
Mr. Geithner, Vice Chairman
Ms. Duke
Mr. Fisher
Mr. Kohn
Mr. Kroszner
Mr. Mishkin
Ms. Pianalto
Mr. Plosser
Mr. Stern
Mr. Warsh

Messrs. Evans, Lacker, and Lockhart, and Ms. Yellen, Alternate Members of the Federal Open Market Committee

Messrs. Bullard, Hoenig, and Rosengren, Presidents of the Federal Reserve Banks of St. Louis, Kansas City, and Boston, respectively

Mr. Madigan, Secretary and Economist
Ms. Danker, Deputy Secretary
Mr. Skidmore, Assistant Secretary
Ms. Smith, Assistant Secretary
Mr. Alvarez, General Counsel
Mr. Ashton, Assistant General Counsel
Mr. Sheets, Economist

Messrs. Connors, English, Kamin, Sniderman, and Wilcox, Associate Economists

Mr. Dudley, Manager, System Open Market Account

Mr. Blanchard, Assistant to the Board, Office of Board Members, Board of Governors

Ms. Bailey, Deputy Director, Division of Banking Supervision and Regulation, Board of Governors

Mr. Struckmeyer, Deputy Staff Director, Office of Staff Director for Management, Board of Governors

Ms. Liang, Messrs. Reifschneider and Wascher, Associate Directors, Division of Research and Statistics, Board of Governors

Mr. Levin, Deputy Associate Director, Division of Monetary Affairs, Board of Governors

Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors

Mr. Luecke, Section Chief, Division of Monetary Affairs, Board of Governors

Ms. Wei, Economist, Division of Monetary Affairs, Board of Governors

Ms. Low, Open Market Secretariat Specialist, Division of Monetary Affairs, Board of Governors

Mr. Connolly, First Vice President, Federal Reserve Bank of Boston

Messrs. Fuhrer and Judd, Executive Vice Presidents, Federal Reserve Banks of Boston and San Francisco, respectively

Messrs. Altig, Hakkio, Rasche, and Sullivan, Senior Vice Presidents, Federal Reserve Banks of Atlanta, Kansas City, St. Louis, and Chicago, respectively

Messrs. Danzig and Duca, Vice Presidents, Federal Reserve Banks of New York and Dallas, respectively

Mr. Weber, Senior Research Officer, Federal Reserve Bank of Minneapolis

Mr. Hetzel, Senior Economist, Federal Reserve Bank of Richmond

Mr. Sill, Economic Advisor, Federal Reserve Bank of Philadelphia

Mr. Del Negro, Officer, Federal Reserve Bank of New York

The Manager of the System Open Market Account reported on recent developments in foreign exchange markets. There were no open market operations in foreign currencies for the System's account in the period since the previous meeting. The Manager also reported on developments in domestic financial markets and on System open market operations in government securities and federal agency obligations during the period since the previous meeting. By unanimous vote, the Committee ratified these transactions.

The information reviewed at the August meeting indicated that the economy expanded at a moderate pace in the second quarter, but recent financial market developments highlighted some of the stresses that the economy faced going forward. Both consumer and business spending recorded gains in the second quarter, and net exports contributed importantly to the rise in real gross domestic product (GDP). However, residential construction continued to fall sharply, the labor market weakened further, and industrial production declined. Core consumer price inflation remained relatively stable, while headline inflation was elevated as a result of large increases in food and energy prices.

Labor demand continued to contract in July. Private nonfarm payroll employment fell in July at a pace only a bit less than the average monthly rate during the first six months of the year. By industry, the pattern of job losses was roughly similar to those earlier in the year, although July's report showed a smaller decline in construction than earlier. Nonbusiness services, which include health and education, remained the only notable source of net additions to employment. Both the average workweek and aggregate hours edged down in July. The unemployment rate rose in July and was about 1 percentage point above its level of a year earlier, while the labor force participation rate was about unchanged.

Industrial production declined in the second quarter after having been flat over the previous two quarters. Motor vehicle assemblies tumbled in the second quarter because of soft demand and the effects of strikes. Production of high-tech equipment continued to expand at a moderate pace; however, the available indicators of high-tech manufacturing activity pointed to slower production in the current quarter. The output of other manufacturing industries contracted, on balance, in the second quarter, and indicators of near-term production generally pointed to further declines, including a sizable retrenchment in the scheduled production of motor vehicles. The factory utilization rate held steady in June at a rate below its long-run average but was still well above its low rate from 2001 through 2002.

Real personal consumption expenditures (PCE) rose modestly in the second quarter after posting weak gains in the previous two quarters. However, real outlays for goods other than motor vehicles dropped noticeably in June after three months of robust gains. Sales of motor vehicles, which had begun to weaken earlier in the year, fell sharply in June and again in July. Tax rebates provided a notable, albeit temporary boost to income since the end of April, but real disposable income excluding rebates was essentially flat in the second quarter. The ratio of wealth to income likely declined again in the second quarter, as equity prices declined, on balance, and house prices continued to fall. Consumer sentiment rose a bit in July but remained at a depressed level.

Residential construction activity continued to descend rapidly but at a somewhat slower pace than during the second half of last year. Single-family housing starts fell further in June, leaving the pace of construction in this sector well below its December reading. Starts of multifamily homes jumped in June to a level well above the range of readings seen over the past two years. However, available information suggested that this increase could be traced to more-stringent building codes that took effect in New York City on July 1, which apparently led developers to move up some planned apartment projects. Even though cuts in new construction continued to trim the level of new home inventories, the months' supply of new homes remained quite high because of the ongoing reductions in the demand for new houses. Sales of existing single-family homes fell in June. Tight conditions in the mortgage credit markets continued to restrain housing demand, particularly for borrowers seeking nonconforming mortgages. House prices remained on a downward trajectory.

In the business sector, real spending on equipment and software declined in the second quarter as outlays on transportation equipment dropped sharply. Spending on computers and software rose at a moderate rate in the second quarter, while outlays on other equipment improved a bit last quarter after having declined in the preceding two quarters. Data through June continued to show a robust increase in nonresidential construction activity. However, vacancy rates for commercial properties ticked up in the first quarter, and the architectural billings index registered a string of weak readings from February to June.

Real nonfarm inventories excluding motor vehicles fell sharply in the second quarter. The ratio of book-value inventories to sales (excluding motor vehicles) ticked down again in May.

The U.S. international trade deficit narrowed in May, as a large increase in exports of goods and services more than offset a moderate increase in imports. Most major categories of non-oil imports rose in May; imports of consumer goods increased rapidly. In contrast, the value of petroleum imports fell back despite higher prices, and imports of automotive products also fell. The increase in exports was supported by strong exports of industrial supplies, particularly petroleum products, and services.

Across the advanced foreign economies, information received since the last meeting pointed to subdued growth in the second quarter and increasing inflation pressures. Weak second-quarter data on industrial production and sentiment in the euro area as well as on consumer expenditures and exports in Japan suggested that the first-quarter strength in output growth was not sustained. Conditions worsened considerably in the United Kingdom, with a deepening slump in the housing sector. In all the major advanced foreign economies, rising food and fuel prices continued to drive overall inflation to recent highs, but core measures of inflation generally rose only modestly. Recent indicators for emerging market economies pointed to some slowing of growth in the second quarter. Real GDP growth in China moderated but remained strong. Incoming data suggested further slowing elsewhere in emerging Asia, and second-quarter activity appeared to have remained sluggish in Mexico. Headline inflation rose further in much of the developing world, largely owing to higher food and energy prices, and several countries continued to face upward pressure on core inflation as well.

Headline consumer price inflation in the United States stepped up in recent months, largely as a result of sizable increases in food and energy prices. Excluding these categories, core consumer price inflation was elevated in June but, on balance, was running this year at about the same rate as last year. Some survey-based measures of year-ahead inflation expectations moved up sharply in recent months; longer-term inflation expectations were little changed recently but remained above their levels at the end of 2007. Excluding food and energy, sharp increases in the prices of products and services at earlier stages of processing continued to put upward pressures on business costs and consumer prices. Unit labor costs apparently continued to increase at a restrained pace during the second quarter, reflecting only moderate gains in worker compensation and relatively strong productivity performance, with little sign of higher overall inflation passing through to higher worker compensation.

At its June 24–25 meeting, the Federal Open Market Committee (FOMC) kept its target for the federal funds rate at 2 percent. The Committee's statement noted that recent information indicated that overall economic activity continued to expand, partly because of some firming in household spending. However, labor markets softened further and financial markets remained under considerable stress. Tight credit conditions, the ongoing housing contraction, and the rise in energy prices were likely to weigh on economic growth over the next few quarters. The Committee expected inflation to moderate later this year and next. However, in light of the continued increases in the prices of energy and some other commodities and the elevated state of some indicators of inflation expectations, uncertainty about the inflation outlook remained high. The Committee stated that the substantial easing of monetary policy to date, combined with ongoing measures to foster market liquidity, should help promote moderate growth over time. Although downside risks to growth remained, they appeared to have diminished somewhat, and the upside risks to inflation and inflation expectations increased. The Committee indicated that it would continue to monitor economic and financial developments and would act as needed to promote sustainable economic growth and price stability.

The market's expected path of monetary policy moved down following the announcement of the Committee's decision at its June meeting to leave the target federal funds rate unchanged. Although the decision was largely anticipated, the policy statement was reportedly viewed by investors as placing more emphasis on the downside risks to growth than they had anticipated. Subsequently, the semiannual *Monetary Policy Report to the Congress* and the accompanying testimony also led investors to mark down the expected path for the federal funds rate, as did intensifying concerns about the health of financial institutions and the outlook for the housing-related government-sponsored enterprises (GSEs). Consistent with the revision in policy expectations, yields on short- and medium-term nominal Treasury coupon securities fell over the intermeeting period. Yields on long-term Treasury securities declined less than those on shorter-term instruments, and the yield curve steepened. Measures of shorter-horizon inflation compensation derived from yields on inflation-indexed Treasury securities dropped over the intermeeting period as energy prices reversed some of their earlier rise, while measures of longer-term inflation compensation rose slightly.

Functioning in the interbank funding markets remained strained over the intermeeting period. Spreads of the

London interbank offered rate, or Libor, over comparable-maturity overnight index swap rates were unchanged to slightly higher, and spreads on lower-rated nonfinancial and asset-backed commercial paper remained well above historical norms. Depository institutions' use of both overnight and term primary credit borrowing continued to be strong during the intermeeting period, peaking in late June amid quarter-end pressures. However, new extensions of credit through the Primary Dealer Credit Facility (PDCF) were negligible during July. On July 30, the Board of Governors and the FOMC announced enhancements to existing liquidity facilities, including extension of the PDCF and the Term Securities Lending Facility through January 30, 2009. Conditions in the market for Treasury repurchase agreements were fairly stable, although there was some deterioration of conditions in the market for agency collateral.

In longer-term credit markets, yields on both investment- and speculative-grade corporate bonds rose over the intermeeting period even though comparable-maturity Treasury yields declined slightly, which resulted in a widening of already elevated spreads. Corporate bond issuance slowed further, as did lending by banks to businesses and households, and issuance of leveraged loans remained very weak. Broad equity price indexes were volatile and declined modestly, on net, between the June and August FOMC meetings. Stock prices of financial firms fell sharply in mid-July but subsequently recouped most of those losses. Energy sector stocks significantly underperformed the broad indexes owing to recent declines in oil prices.

Uncertainties about the financial condition of Fannie Mae and Freddie Mac added to market worries about the potential consequences of financial strains for the broader economy over the intermeeting period. On July 13, the Treasury Department proposed a plan to support the liquidity and solvency of the two GSEs, and the Board of Governors of the Federal Reserve System announced that the Federal Reserve Bank of New York was authorized to lend to the two institutions if necessary, reducing somewhat market concerns about the GSEs. Concerns eased further as Congress passed legislation, which was subsequently signed by the President, authorizing the Treasury to provide liquidity and capital to the GSEs. Over the intermeeting period, spreads of rates on conforming residential mortgages over those on comparable-maturity Treasury securities moved higher. Offer rates on 30-year jumbo mortgages also rose, and credit for nonconforming mortgages remained difficult to obtain. In the secondary market, issuance of mortgage-backed securities by GSEs appeared to have slowed in July from its strong second-quarter pace, while issuance of securities backed by nonconforming loans and of commercial mortgage-backed securities remained nil.

Pressures in the money markets of many major foreign economies eased slightly over the intermeeting period. Yields on sovereign debt in the advanced foreign economies fell, mainly because of declines in inflation compensation. The trade-weighted index of the dollar against the currencies of major trading partners rose a bit on net.

M2 expanded at a moderate pace in July, reversing the deceleration in May and June. The expansion was broad based, reflecting an acceleration in liquid deposits as well as renewed inflows to retail money market mutual funds and small time deposits.

In the forecast prepared for the meeting, the staff marked down its forecast of real GDP growth in the second half of 2008 and in 2009. Although the increase in real GDP in the second quarter was a bit faster than anticipated at the time of the June meeting, the labor market continued to weaken significantly, financial conditions remained unfavorable, consumer and business confidence was downbeat, and manufacturing activity was contracting. All told, the staff continued to expect that real GDP would rise at less than its potential rate through the first half of next year. Nonetheless, real GDP growth was anticipated to return to its potential rate in the second half of 2009 as housing activity leveled out and financial conditions became less restrictive. Core PCE price inflation was expected to pick up somewhat in the second half of this year, mostly as a result of the upward pressures from this year's run-ups in prices of energy and imports. Core inflation was then expected to edge down in 2009 as the impetus from prior increases in the prices of imports, energy, and other commodities abated and the margin of slack in resource use widened.

In their discussion of the economic situation and outlook, many FOMC participants noted that recent developments suggested that economic activity was likely to remain damped for several quarters. Although economic growth in the second quarter had apparently been boosted by fiscal stimulus, resilience in consumption spending even before tax rebates were distributed, and robust gains in exports, recent indicators pointed to a near-term deceleration in household spending and to softer export demand. Moreover, increasing concerns about financial institutions had contributed to a widening of some risk spreads and a further tightening of credit to households and businesses. Growth in overall economic activity was generally expected to be weak during the remainder of 2008 before recovering modestly next year, and nearly all meeting participants saw continuing downside risks to growth. Recent readings on inflation had been high, but growth in unit labor costs had remained subdued and commodity prices had declined of late. Accordingly, most participants anticipated that inflation would moderate in coming quarters. However, participants also expressed significant concerns about the upside risks to inflation, particularly the risk that longer-term inflation expectations could become unmoored.

Many participants referred to the adverse financial sector developments that had occurred over the intermeeting period. Heightened investor apprehension about the viability of Fannie Mae and Freddie Mac had eased following legislative action, but pressures on these firms continued. Reflecting these strains, interest rates on residential mortgages had moved upward, a development that was seen as potentially exacerbating the contraction in the housing sector. Commercial banks had reported that terms and standards had been tightened on nearly all categories of loans. Declining mortgage asset values increased capital pressures on lenders exposed to real estate markets. While some financial institutions had strengthened their balance sheets with new capital issues, raising new capital had become increasingly difficult. Moreover, broad equity price indexes had declined and borrowing costs for nonfinancial firms had increased, including a recent rise in corporate bond yields across most risk categories. Many participants believed that these developments were likely to restrain aggregate demand and economic growth. Others, however, thought that the extent of such adverse effects was likely to be limited, noting that bank lending had continued to grow at a moderate pace and that consumption and business capital spending had increased in the second quarter despite the tightening of credit terms.

While consumer spending had been bolstered temporarily by the effects of the tax rebates, retail sales had weakened during late spring and auto sales had dropped sharply in both June and July. The unemployment rate jumped during the intermeeting period, and participants generally anticipated that payroll employment would decline further in coming months. For example, automotive parts suppliers in one District had reported plans for laying off workers, idling production, and closing several plants. Lower equity prices and the ongoing deterioration in house prices had reduced household wealth significantly, while real incomes had been diminished by earlier increases in the prices of food and energy. All of these factors—in conjunction with tightened access to auto loans, home equity lines of credit, and other consumer loans—were viewed as pointing towards weak growth in personal consumption expenditures during the second half of 2008.

The weaker outlook for consumer demand, along with tighter credit conditions for businesses, was expected to weigh on business spending going forward. Moreover, some signs of weakness in the commercial real estate sector were seen as suggesting a slower pace of investment in nonresidential structures over coming quarters, although that deceleration might be gradual due to the lags in the planning and execution of such projects. However, the elevated level of energy prices was boosting investment in the oil-producing industry.

Growth in exports had provided substantial impetus to overall demand in the second quarter. However, many participants observed that decelerating activity in some foreign economies would tend to dampen export gains going forward. Indeed, recent indications of a slowing global economy may have contributed to the marked declines in the prices of oil and some other commodities over the intermeeting period.

Participants pointed to potential interactions between financial stresses and the housing market contraction as the primary source of continuing downside risks to growth. Many participants noted that the financial system remained fragile, with some expressing continued concern about the possibility of an adverse feedback loop in which tighter conditions in the mortgage market would contribute to further declines in the housing sector and additional losses for lenders, leading to further tightening of lending terms and standards. In contrast, several other participants suggested that risks to the financial system had receded, partly as a result of the implementation by the Federal Reserve of special liquidity facilities, and that prevailing credit conditions were broadly consistent with the typical patterns observed during periods of weak growth or recession.

Headline inflation was generally expected to moderate in coming quarters, reflecting importantly an anticipated leveling-out of prices for energy and other commodities. Although measures of core inflation might well edge up later this year, given the pass-through to final goods prices of earlier increases in the prices of energy and other inputs, most participants anticipated that core inflation would edge back down during 2009. Some participants reported that firms were increasingly using various pricing strategies—such as escalation clauses or the imposition of fuel surcharges—to pass higher costs on to their customers, who were apparently becoming less resistant to such price adjustments. However, one participant mentioned the difficult pricing decisions of manufacturers who face a combination of elevated input costs along with weakening demand for their products. And a number of participants noted that the outlook for slack in resource utilization should tend to limit the extent of pass-through, contain the degree of inflation spillover to goods and services without high commodity content, and reinforce the anticipated moderation in inflation.

Participants expressed significant concerns about the upside risks to inflation, especially the risk that persistently high headline inflation could result in an unmooring of long-run inflation expectations. Some viewed the upside risks to inflation as having diminished modestly over the intermeeting period, mainly as a result of the drop in the prices of oil and some other commodities as well as the greater likelihood of persistent economic slack. However, others viewed these risks as having increased, particularly in light of continued elevated readings on headline inflation, the low level of the real federal funds rate, anecdotal information suggesting that firms were having more success in passing higher costs on to their customers, and some signs of an upward drift over recent months in investors' expectations and uncertainty regarding inflation over the longer run; moreover, the recent decline in energy prices might well be reversed in coming months. A number of participants worried about the possibility that core inflation might fail to moderate next year unless the stance of monetary policy was tightened sooner than currently anticipated by financial markets.

In the Committee's discussion of monetary policy for the intermeeting period, members agreed that labor markets had softened further, that financial markets remained under considerable stress, and that these factors—in conjunction with still-elevated energy prices and the ongoing housing contraction—would likely weigh on economic growth in coming quarters. In addition, members saw continuing downside risks to this outlook, particularly reflecting possible further deterioration in financial conditions. Members generally anticipated that inflation would moderate; however, they emphasized the risks to the inflation outlook posed by persistent high readings on headline inflation and a possible unmooring of inflation expectations. Against this backdrop, nearly all members judged that leaving the federal funds rate unchanged at this meeting was appropriate and would most effectively promote progress toward the Committee's dual objectives of maximum employment and price stability. Most members did not see the current stance of policy as particularly accommodative, given that many households and businesses were facing elevated borrowing costs and reduced credit availability due to the effects of financial market strains as well as macroeconomic risks. Although members generally anticipated that the next policy move would likely be a tightening, the timing and extent of any change in policy stance would depend on evolving economic and financial developments and the implications for the outlook for economic growth and inflation.

At the conclusion of the discussion, the Committee voted to authorize and direct the Federal Reserve Bank of New York, until it was instructed otherwise, to execute transactions in the System

Account in accordance with the following domestic policy directive:

> The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining the federal funds rate at an average of around 2 percent.

The vote encompassed approval of the statement below to be released at 2:15 p.m.:

> The Federal Open Market Committee decided today to keep its target for the federal funds rate at 2 percent.
>
> Economic activity expanded in the second quarter, partly reflecting growth in consumer spending and exports. However, labor markets have softened further and financial markets remain under considerable stress. Tight credit conditions, the ongoing housing contraction, and elevated energy prices are likely to weigh on economic growth over the next few quarters. Over time, the substantial easing of monetary policy, combined with ongoing measures to foster market liquidity, should help to promote moderate economic growth.
>
> Inflation has been high, spurred by the earlier increases in the prices of energy and some other commodities, and some indicators of inflation expectations have been elevated. The Committee expects inflation to moderate later this year and next year, but the inflation outlook remains highly uncertain.
>
> Although downside risks to growth remain, the upside risks to inflation are also of significant concern to the Committee. The Committee will continue to monitor economic and financial developments and will act as needed to promote sustainable economic growth and price stability.

Votes for this action: Messrs. Bernanke and Geithner, Ms. Duke, Messrs. Kohn, Kroszner, and Mishkin, Ms. Pianalto, Messrs. Plosser, Stern, and Warsh. Votes against this action: Mr. Fisher.

Mr. Fisher dissented because he favored an increase in the target federal funds rate to help restrain inflation and inflation expectations, which were at risk of drifting higher. While the financial system remained fragile and economic growth was sluggish and could weaken further, he saw a greater risk to the economy from upward pressures on inflation. In his view, businesses had become more inclined to raise prices to pass on the higher costs of imported goods and higher energy costs, the latter of which were well above their levels of late 2007. Accordingly, he supported a policy tightening at this meeting.

It was agreed that the next meeting of the Committee would be held on Tuesday, September 16, 2008.

The meeting adjourned at 1:50 p.m.

Conference Call

On July 24, 2008, the Federal Open Market Committee met in a joint session with the Board of Governors to consider several proposals to extend or enhance Federal Reserve System liquidity facilities. In light of continued significant stresses in financial markets and the experience to date with the Term Auction Facility (TAF), the Term Securities Lending Facility (TSLF), and the Primary Dealer Lending Facility (PDCF), the staff proposed modifications to these programs. The modifications included auctioning options on up to an additional $50 billion of TSLF loans and lengthening the term to maturity of all loans made under the TAF to 84 days. Contingent upon Board approval of the change to TAF loans, the Committee was asked to consider an expansion of the existing currency swap arrangement with the European Central Bank to facilitate a similar change in the term of dollar credits auctioned by the ECB. Finally, policymakers were asked to vote on extending the availability of the TSLF and PDCF past the year-end, a topic that had been discussed on a preliminary basis at the joint Board/FOMC meeting on June 25, 2008.

In the discussion, meeting participants exchanged views on issues entailed in administering the TAF and term primary discount window credit. Issues regarding credit risk and collateral requirements received particular attention.

Some participants raised questions about the net benefit of approving and announcing the proposed changes at this time, asking, for example, whether such an announcement could suggest that the Federal Reserve saw financial markets as more fragile than expected or whether adjustments to the liquidity facilities could cause market analysts to infer that the System intended to keep the facilities in place permanently. Most participants expressed general support for the proposals as improving the System's tools for supporting market liquidity. However, there was considerable sentiment for altering the TAF proposal to allow for both 28- and 84-day credits, and the Chairman directed the staff to confer, to consult further with policymakers, and to revise the proposal accordingly for notation votes in the near future by the Board and the FOMC.

At this meeting, the Committee unanimously approved the following resolution:

TSLF Extension Authorization

The FOMC extends until January 30, 2009, its authorizations for the Federal Reserve Bank of New York to engage in transactions with primary dealers through the Term Securities Lending Facility, subject to the same collateral, interest rate and other conditions previously established by the Committee.

With Mr. Plosser dissenting, the Committee voted to approve the resolution below. Mr. Plosser dissented because he viewed the net benefit of the TSLF options as being insufficient to justify adding them to the support already being provided to market liquidity.

TSLF Options Authorization

In addition to the current authorizations granted to the Federal Reserve Bank of New York to engage in term securities lending transactions, the Federal Open Market Committee authorizes the Federal Reserve Bank of New York to offer options on up to $50 billion in additional draws on the Facility, subject to the other terms and conditions previously established for the Facility.

Mr. Lockhart voted as alternate member at this meeting.

Notation Votes

By notation vote completed on July 14, 2008, the Committee unanimously approved the minutes of the FOMC meeting held on June 24–25, 2008.

By notation vote completed on July 29, 2008, the Committee unanimously approved the following resolution:

Swap Authorization

The Federal Open Market Committee directs the Federal Reserve Bank of New York to increase the amount available from the System Open Market Account under the existing reciprocal currency arrangement ("swap" arrangement) with the European Central Bank to an amount not to exceed $55 billion. Within that aggregate limit, draws of up to $25 billion are hereby authorized. The swap arrangement continues to be authorized through January 30, 2009, unless extended by the Federal Open Market Committee.

Brian F. Madigan
Secretary

Meeting Held on September 16, 2008

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, 2008 at 8:30 a.m.

Present:

Mr. Bernanke, Chairman
Ms. Duke
Mr. Fisher
Mr. Kohn
Mr. Kroszner
Ms. Pianalto
Mr. Plosser
Mr. Stern
Mr. Warsh

Ms. Cumming, Messrs. Evans, Lacker, and Lockhart, and Ms. Yellen, Alternate Members of the Federal Open Market Committee

Messrs. Bullard, Hoenig, and Rosengren, Presidents of the Federal Reserve Banks of St. Louis, Kansas City, and Boston, respectively

Mr. Madigan, Secretary and Economist
Ms. Danker, Deputy Secretary
Mr. Skidmore, Assistant Secretary
Ms. Smith, Assistant Secretary
Mr. Alvarez, General Counsel
Mr. Sheets, Economist
Mr. Stockton, Economist

Messrs. Connors, English, Kamin, Rolnick, Rosenblum, Slifman, Tracy, and Wilcox, Associate Economists

Mr. Dudley, Manager, System Open Market Account

Mr. Cole, Director, Division of Banking Supervision and Regulation, Board of Governors

Mr. Blanchard, Assistant to the Board, Office of Board Members, Board of Governors

Mr. Clouse, Deputy Director, Division of Monetary Affairs, Board of Governors

Mr. Parkinson, Deputy Director, Division of Research and Statistics, Board of Governors

Mr. Struckmeyer, Deputy Staff Director, Office of Staff Director for Management, Board of Governors

Mr. Gagnon, Visiting Associate Director, Division of Monetary Affairs, Board of Governors

Messrs. Reifschneider and Wascher, Associate Directors, Division of Research and Statistics, Board of Governors

Mr. Oliner, Senior Adviser, Division of Research and Statistics, Board of Governors

Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors

Mr. Luecke, Section Chief, Division of Monetary Affairs, Board of Governors

Mr. Carlson, Economist, Division of Monetary Affairs, Board of Governors

Ms. Low, Open Market Secretariat Specialist, Division of Monetary Affairs, Board of Governors

Mr. Moore, First Vice President, Federal Reserve Bank of San Francisco

Mr. Judd, Executive Vice President, Federal Reserve Bank of San Francisco

Mr. Altig, Ms. Baum, Messrs. Rasche, Schweitzer, Sellon, and Tootell, Senior Vice Presidents, Federal Reserve Banks of Atlanta, New York, St. Louis, Cleveland, Kansas City, and Boston, respectively

Mr. Krane, Vice President, Federal Reserve Bank of Chicago

Mr. Chatterjee, Senior Economic Adviser, Federal Reserve Bank of Philadelphia

Mr. Wolman, Senior Economist, Federal Reserve Bank of Richmond

The Manager of the System Open Market Account reported on recent developments in foreign exchange markets. There were no open market operations in foreign currencies for the System's account in the period since the previous meeting. The Manager also reported on developments in domestic financial markets and on System open market operations in government securities and federal agency obligations during the period since the previous meeting. By unanimous vote, the Committee ratified these transactions.

In light of severe stresses in dollar funding markets, the Committee considered a proposal intended to provide the flexibility necessary to respond promptly to requests from foreign central banks to engage in temporary reciprocal currency ("swap") arrangements to be used in supporting dollar liquidity in their jurisdictions. After the discussion, the Committee voted unanimously to authorize its Foreign Currency Subcommittee to direct the Federal Reserve Bank of New York as needed to expand existing swap arrangements and to enter into new arrangements with foreign central banks to address strains in money markets. This authority extends through January 30, 2009.

The information reviewed at the September meeting indicated that economic activity decelerated considerably in recent months. The labor market deteriorated further in August as private payrolls declined and the unemployment rate moved markedly higher. Industrial output was little changed in July, but fell sharply in August. Consumer spending weakened noticeably in recent months. Meanwhile, residential investment continued to decline steeply through midyear. In contrast, business investment in equipment and structures generally held up through July. On the inflation front, overall consumer prices rose rapidly for a third straight month in July but then edged down in August, because of a sharp drop in energy prices. Core consumer price inflation remained elevated in July and eased somewhat in August.

The labor market continued to weaken. According to the August employment report, private payroll employment fell by a bit more than the average seen earlier this year. Most major industry groups shed jobs; manufacturing posted a particularly noticeable loss. Job losses in the construction industry diminished over July and August despite the ongoing contraction in residential investment. Hiring in nonbusiness services, which include the education and health industries, and in natural resources and mining increased in line with recent trends. The average workweek held steady and aggregate hours edged lower. The unemployment rate jumped 0.4 percentage point, to 6.1 percent, in August, while the labor force participation rate held steady.

Industrial production fell sharply in August after edging up in July. Motor vehicle assemblies dropped in August as automakers scaled back production following a sharp decline in vehicle sales in July. The output of high-tech equipment rose at a moderate rate in the first half of the year, but indicators of production gains in the high-tech sector pointed toward relatively subdued growth in the third quarter. The output of other manufacturing sectors declined for a third consecutive month in August, and indicators of near-term production suggested that the industrial sector was likely to remain soft over the next few months. For most major industry groups, factory utilization rates in August remained below their long-run averages.

Real personal consumption expenditures (PCE) turned down in June and declined more noticeably in July; over the two months, outlays for motor vehicles dropped markedly and spending on other goods weakened substantially. The recent weakness in consumer spending on goods excluding motor vehicles contrasted sharply with solid growth in the spring. Outlays for services were reported to have increased modestly in June and July. Total nominal retail sales decreased in August. Real disposable income was boosted significantly by the tax rebates in the second quarter; excluding the temporary rebates, real disposable income fell in that quarter and continued to move lower in July. Early September readings on consumer sentiment rose from the low levels recorded over the past several months.

Residential construction activity continued to decline steeply through midyear. In July, both single-family housing starts and permit issuance fell further. In the multifamily sector, starts dropped back in July to a rate more in line with its historical range. June's spike in multifamily starts was related to more-stringent building codes that took effect in New York City on July 1, which apparently led developers to pull forward the start date of some planned apartment projects. Recent cutbacks in new residential construction reduced the level of new home inventories, and the relative stability in sales of new homes allowed those inventory reductions to begin to bring down the months' supply of new homes for sale. Even so, the months' supply of new homes for sale remained extremely elevated relative to the level that prevailed before the downturn in the housing market. Sales of existing single-family homes were relatively flat since the end of last year. Tight conditions in mortgage markets over the summer continued to restrain housing demand, especially for borrowers seeking nonconforming mortgages. Several indexes indicated that house prices had declined substantially over the past 12 months, and these prices appeared to remain on a downward trajectory.

In the business sector, investment in equipment and software fell in the second quarter, largely reflecting a sharp drop in spending on motor vehicles. In contrast, growth of real outlays for nontransportation equipment posted a moderate gain. The data on nominal orders and shipments of nondefense capital goods excluding aircraft rose substantially in July, although some of the gain in nominal shipments may have reflected unusually large price increases. Moreover, as in previous months, orders and shipments were likely supported in July by increased foreign demand. Real nonresidential investment increased at a robust rate in the second quarter; however, nominal expenditures declined in July, and forward-looking indicators remained downbeat. Vacancy rates for commercial properties moved higher in the first half of the year and the architectural billings index continued to register weak readings.

Real nonfarm inventories excluding motor vehicles fell in the second quarter. The book value of manufacturing and trade inventories (excluding motor vehicles) stepped up modestly in July from the second-quarter level, but the ratio of these inventories to sales held steady.

The U.S. international trade deficit widened in July, as a surge in the value of imports of goods and services more than offset strong growth in exports. Imports in July were led by a rapid increase in imports of oil, reflecting both higher volumes and higher prices, and were supported by a rise in imports of industrial supplies, capital goods, and services. The strength in exports was broadly based but benefited in particular from robust exports of automotive products.

Economic indicators pointed to a marked deceleration of economic activity in the advanced foreign economies. In the second quarter, gross domestic product (GDP) was flat in Canada and the United Kingdom and fell in both Japan and the euro area. In July, employment continued to weaken in Japan, and retail sales fell in the euro area. Headline inflation in the major advanced foreign economies stayed elevated. Data received over the intermeeting period showed a further slowing of growth in emerging market economies. For Mexico, anemic growth in the second quarter followed a slight contraction in the first. In Asia, output decelerated significantly in the second quarter, as growth moderated in China and weakened more sharply in several other economies. Headline inflation rose in some developing countries but fell in others.

Headline consumer prices in the United States declined slightly in August after having risen rapidly during the preceding three months. Energy prices dropped steeply, and the rate of increase in food prices moderated somewhat. Core consumer prices rose a bit more slowly in August than they had in June and July. Excluding food and energy, producer prices rose modestly in August, although prices for capital goods other than motor vehicles and high-tech equipment posted a large increase. During recent months, some cost pressures eased as the prices of crude oil and other commodities declined and non-oil import prices decelerated. Some measures of inflation expectations were down notably over the intermeeting period. Measures of hourly labor compensation continued to increase moderately with no sign of acceleration.

At its August meeting, the Federal Open Market Committee (FOMC) kept the target federal funds rate unchanged at 2 percent. The Committee's statement noted that economic activity expanded in the second quarter, partly reflecting growth in consumer spending and exports. However, labor markets had softened further and financial markets remained under considerable stress. Tight credit conditions, the ongoing housing contraction, and elevated energy prices were likely to weigh on economic growth over the next few quarters. The Committee stated that, over time, the substantial easing of monetary policy, combined with ongoing measures to foster market liquidity, should help to promote moderate economic growth. Inflation had been high, spurred by the earlier increases in the prices of energy and some other commodities, and some indicators of inflation expectations had been elevated. The Committee expected inflation to moderate later this year and next year, but the inflation outlook remained highly uncertain. Although downside risks to growth remained, the upside risks to inflation were also of significant concern to the Committee. The Committee indicated that it would continue to monitor economic and financial developments and would act as needed to promote sustainable economic growth and price stability.

Over the intermeeting period, investors marked down considerably their expectations for the path of monetary policy. Policy expectations were largely unaffected by the outcome of the August FOMC meeting, as the Committee's decision to leave the target federal funds rate unchanged was broadly anticipated and the accompanying statement was reportedly in line with investor expectations. Subsequently, the expected future path of monetary policy dropped amid increasing concerns about the health of financial institutions. The market's expectation for the onset of policy tightening was also pushed back as labor market conditions weakened and oil prices declined further, developments that were seen as tempering inflation pressures. Yields on nominal Treasury coupon securities declined over the intermeeting period while yields on inflation-indexed Treasury securities were roughly unchanged, which left inflation compensation noticeably lower. The decrease in inflation compensation was most pronounced at shorter horizons, likely reflecting the drop in oil prices.

Conditions in short-term funding markets remained strained for most of the intermeeting period and deteriorated considerably just before the FOMC meeting. The spreads of London interbank offered rates, or Libor, over comparable-maturity overnight index swap rates, especially those beyond the one-month horizon, moved up from already-high levels. In the commercial paper market, spreads on lower-rated nonfinancial and asset-backed commercial paper fluctuated in an elevated range, as did spreads on financial paper. Depository institutions continued to bid aggressively for 28-day funds at the Term Auction Facility (TAF) during the intermeeting period, and demand for funds was strong at both of the 84-day TAF auctions. The amount of overnight primary credit outstanding was about unchanged at a high level, while term primary credit continued to rise. No credit was extended through the Primary Dealer Credit Facility until the final week of the intermeeting period. Conditions in markets for repurchase agreements, or repos, against some types of collateral deteriorated over the intermeeting period, and liquidity in non-Treasury, nonagency term repo markets remained poor.

In longer-term credit markets, yields on investment-grade corporate bonds were not much changed, but yields on speculative-grade bonds rose somewhat. Risk spreads on corporate bonds jumped, as comparable-maturity Treasury yields dropped; most of the increase in risk spreads occurred late in the intermeeting period. Corporate bond issuance moderated a bit further in August, while growth of bank lending to businesses was tepid. Broad equity indexes declined over the intermeeting period. Financial sector equity indexes were volatile and ended the period down sharply.

Liquidity conditions in the money markets of major foreign economies deteriorated over the intermeeting period. Sovereign bond yields moved down, mainly reflecting declines in inflation compensation. On a trade-weighted basis, the dollar rose against the currencies of our major trading partners.

M2 contracted slightly in August following a generally weak performance over the previous few months. The August data showed a considerable reallocation among the components of M2. Liquid deposits and retail money funds fell while small time deposits surged as some banks and thrifts bid aggressively for these deposits.

On September 7, the Treasury Department and the Federal Housing Finance Agency announced that Fannie Mae and Freddie Mac had been placed into conservatorship and that Treasury would establish a backstop lending facility for the government-sponsored enterprises (GSEs), purchase preferred stock in the GSEs as necessary to ensure that they maintain a positive net worth, and initiate a program to purchase mortgage-backed securities (MBS). Following the announcement, spreads on Fannie Mae and Freddie Mac debt and on agency MBS narrowed, while share prices for their common and preferred stock fell. Auctions of GSE debt following the conservatorship announcement reportedly attracted heavy demand, but market participants indicated that liquidity in the secondary market for GSE debt remained somewhat lower than normal. Before the conservatorship announcement, interest rates on 30-year fixed-rate mortgages had declined less than those on comparable-maturity Treasury securities, leaving mortgage spreads at the top of their range of the past two decades. Following the Treasury announcement, rates and spreads on new conforming fixed-rate mortgages dropped sharply.

In the days immediately before the FOMC meeting, Lehman Brothers Holdings filed for bankruptcy, Bank of America announced that it would acquire Merrill Lynch, and market concerns about the health of other financial institutions increased. To address potential liquidity pressures in financial markets associated with these developments, the Federal Reserve announced several additional initiatives, including an expansion of collateral eligible for the Primary Dealer Credit Facility and the Term Securities Lending Facility (TSLF), increases in the size and frequency of TSLF auctions, and a temporary relaxation of the limitations on brokerdealers' access to funding from affiliated depository institutions. In addition, a consortium of 10 major banks announced the creation of a liquidity pool from which participants could draw collateralized loans. Despite these enhanced liquidity measures, short-term funding markets remained severely strained, reflecting investors' heightened concerns about the financial condition of other large financial firms, including American International Group, a prominent insurance and financial services company. To further support market liquidity and to help keep the federal funds rate near its target, the Federal Reserve conducted very large reserve- adding open market operations the day before and the morning of the FOMC meeting. Market expectations for the path of monetary policy moved down sharply. Yields on nominal Treasury securities dropped steeply, and credit spreads on corporate bonds widened significantly. Equity markets were volatile and equity prices dropped considerably.

In the forecast prepared for the meeting, the staff left its projection for real GDP growth in the second half of 2008 little changed from the previous meeting, but it marked down its forecast for 2009 slightly. Real GDP was estimated to have increased at a solid pace in the second quarter; however, the available indicators pointed to a sharp deceleration in economic activity in the third quarter. Consumer spending softened appreciably in recent months, and housing construction remained on a steep downtrend. Some of the weakness in the household sector appeared to reflect the ongoing deterioration in the labor market, but the effects of the earlier run-up in oil prices, weakened balance sheets, and restrictive financial conditions also likely put the finances of many households and businesses under pressure. The staff continued to expect that real GDP would advance slowly in the fourth quarter of 2008 and at a faster rate in 2009, but still less than that of its potential. Real GDP growth was expected to pick up to slightly above the rate of potential growth in 2010, as the restraint on household and business spending associated with financial market turmoil gradually eases and the contraction in the housing sector comes to an end. The staff's outlook for both core and overall PCE inflation over the next two years also changed little. The staff continued to project that core inflation would edge lower in 2009 and 2010 as the prices of imports, energy, and other commodities decelerate and the margin of resource slack remains relatively wide.

In their discussion of the economic situation and outlook, FOMC participants noted that financial market strains had intensified in the days before the meeting and that these strains could potentially weigh further on economic activity. Participants agreed that economic growth was likely to be sluggish in the second half of 2008. Several participants had marked down their near-term outlook for economic activity and some judged that downside risks had increased, but most continued to expect a gradual recovery in 2009. Despite concern that recent high inflation readings suggested that price pressures could persist, participants generally thought that the outlook for inflation had improved, mainly reflecting the recent declines in the prices of oil and other commodities, the stronger foreign exchange value of the dollar, and the weakening of the labor market.

Participants noted that stresses on financial markets and institutions had increased. The announcement of government support for Fannie Mae and Freddie Mac appeared to have had a positive impact on financial markets, most importantly on the primary and secondary markets for residential mortgages. However, the bankruptcy of Lehman Brothers and market concerns about other financial institutions were causing a wide variety of financial firms to experience increasing difficulty in obtaining funding and raising capital, a development that was likely to lead to a further tightening of credit availability to households and firms. Meeting participants were highly uncertain about future financial developments and their implications for the broader economy. There was agreement that the liquidity facilities established by the Federal Reserve over the past year had been helpful in ameliorating strains in financial markets, but it was also noted that the capital of banks and other financial institutions would need to be bolstered in order to strengthen the functioning of the financial system and ease constraints on credit.

Strains on the financial system, and their interactions with housing developments and the real economy more broadly, continued to restrain aggregate demand and pose substantial downside risks to the expected path for economic activity. The fall in employment in August highlighted concerns that an adverse dynamic was taking hold, in which economic weakness increased financial firms' losses, leading to tighter credit conditions and thus causing a further softening in economic activity. However, some participants cited indications that the pace of decline in house prices might begin to slow in coming months, which would serve to limit the strains on lenders. Mortgage rates had fallen after action on the GSEs, inventories of houses for sale had fallen, and reports from contacts in some parts of the nation suggested a possible bottoming of the housing sector might not be far off, although the differences in the prospects for housing across states and regions seemed to be large. All in all, the contraction in the housing sector and the adverse implications for the performance of mortgage-related financial assets continued to represent a drag on economic performance.

Recent readings on consumer spending had been weak despite the tax rebates, which were mostly paid out by mid-July; these indicators suggested that consumption may remain soft as the effects of the stimulus fade over the near term. Falling real estate prices were likely to continue to reduce household wealth, and the eroding quality of consumer loans had the potential to lead to a further tightening of credit conditions. Many participants worried that the deterioration in labor market conditions over the summer would damp the growth of income and depress consumer confidence, further holding back consumption.

Business spending had held up well over the summer, and inventories appeared to be well managed. However, reports from business contacts suggested that new commercial real estate projects were difficult to finance. With credit conditions generally tight and economic prospects relatively uncertain, investment spending was likely to be on the soft side going forward.

Foreign economic growth had slowed in recent months and the dollar had risen broadly; both of these developments suggested that the contributions to U.S. GDP growth from net exports would likely be less strong than it had been of late. Some participants noted that financial strains were increasing in many foreign countries. However, a beneficial side effect of the global slowdown was the falling prices of oil and other commodities, which would help to bolster real incomes of U.S. households.

Participants generally were somewhat more confident about the outlook for some moderation in inflation over the forecast horizon. Recent substantial declines in the prices of oil and other commodities should help to contain broader price pressures in coming quarters. In addition, the effects of the stronger dollar on import prices along with increased economic slack would tend to damp inflation. Various measures of inflation expectations had declined since the last meeting, and nominal wage increases had continued to be moderate. Indeed, with solid growth in productivity, unit labor costs had been well contained. Still, reports from business contacts suggested that firms were continuing to attempt to pass through to their customers previous increases in the costs of energy and other raw materials and would resist reversing previous price increases. Participants noted that recent readings on core and headline inflation had been elevated, and they expressed concern that high inflation might become embedded in expectations and retain considerable momentum.

Members agreed that keeping the federal funds rate unchanged at this meeting was appropriate. The current low real federal funds rate appeared necessary to provide adequate counterweight to the restraining effects of tight credit conditions and of continued declines in the housing market on spending and output. Committee members generally saw the current stance of monetary policy as consistent with a gradual strengthening of economic growth beginning next year, although they recognized that recent financial developments had boosted the downside risks to the economic outlook. Inflation risks appeared to have diminished in response to the declines in the prices of energy and other commodities, the recent strengthening of the dollar, and the outlook for somewhat greater economic slack, and Committee members were a bit more optimistic that inflation would moderate in coming quarters. However, the possibility that core inflation would not moderate as anticipated was still a significant concern. With substantial downside risks to growth and persisting upside risks to inflation, members judged that leaving the federal funds rate unchanged at this time suitably balanced the risks to the outlook. Some members emphasized that if intensifying financial strains led to a significant worsening of the growth outlook, a policy response could be required; however, such a response was not called for at this meeting. Indeed, it was noted that, with elevated inflation still a concern and growth expected to pick up next year if financial strains diminish, the Committee should also remain prepared to reverse the policy easing put in place over the past year in a timely fashion.

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

> The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining the federal funds rate at an average of around 2 percent.

The vote encompassed approval of the statement below to be released at 2:15 p.m.:

> The Federal Open Market Committee decided today to keep its target for the federal funds rate at 2 percent.
>
> Strains in financial markets have increased significantly and labor markets have weakened further. Economic growth appears to have slowed recently, partly reflecting a softening of household spending. Tight credit conditions, the ongoing housing contraction, and some slowing in export growth are likely to weigh on economic growth over the next few quarters. Over time, the substantial easing of monetary policy, combined with ongoing measures to foster market liquidity, should help to promote moderate economic growth.
>
> Inflation has been high, spurred by the earlier increases in the prices of energy and some other commodities. The Committee expects inflation to moderate later this year and next year, but the inflation outlook remains highly uncertain.
>
> The downside risks to growth and the upside risks to inflation are both of significant concern to the Committee. The Committee will monitor economic and financial developments carefully and will act as needed to promote sustainable economic growth and price stability.

> Votes for this action: Mr. Bernanke, Mses. Cumming and Duke, Messrs. Fisher, Kohn, and Kroszner, Ms. Pianalto, Messrs. Plosser, Stern, and Warsh. Votes against this action: None. Ms. Cumming voted as the alternate for Mr. Geithner.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, October 28–29, 2008.

The meeting adjourned at 12:30 p.m.

Notation Vote

By notation vote completed on August 25, 2008, the Committee unanimously approved the minutes of the FOMC meeting held on August 5, 2008.

Brian F. Madigan
Secretary

Meeting Held on October 28–29, 2008

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, 2008 at 2:00 p.m. and continued on Wednesday, October 29, 2008 at 9:00 a.m.

Present:

Mr. Bernanke, Chairman
Mr. Geithner, Vice Chairman

Ms. Duke
Mr. Fisher
Mr. Kohn
Mr. Kroszner
Ms. Pianalto
Mr. Plosser
Mr. Stern
Mr. Warsh

Ms. Cumming, Messrs. Evans, Lacker, and Lockhart, and Ms. Yellen, Alternate Members of the Federal Open Market Committee

Messrs. Bullard, Hoenig, and Rosengren, Presidents of the Federal Reserve Banks of St. Louis, Kansas City, and Boston, respectively

Mr. Madigan, Secretary and Economist
Ms. Danker, Deputy Secretary
Mr. Skidmore, Assistant Secretary
Ms. Smith, Assistant Secretary
Mr. Alvarez, General Counsel
Mr. Baxter, Deputy General Counsel
Mr. Sheets, Economist
Mr. Stockton, Economist

Messrs. Connors, English, and Kamin, Ms. Mester, Messrs. Rosenblum, Slifman, Sniderman, and Wilcox, Associate Economists

Mr. Dudley, Manager, System Open Market Account

Ms. Bailey, Deputy Director, Division of Banking Supervision and Regulation, Board of Governors

Mr. Clouse, Deputy Director, Division of Monetary Affairs, Board of Governors

Mr. Struckmeyer,[12] Deputy Staff Director, Office of Staff Director for Management, Board of Governors

Mr. Blanchard, Assistant to the Board, Office of Board Members, Board of Governors

Messrs. Reifschneider and Wascher, Associate Directors, Division of Research and Statistics, Board of Governors

Messrs. Levin and Nelson, Associate Directors, Division of Monetary Affairs, Board of Governors

Ms. Kole, Assistant Director, Division of International Finance, Board of Governors

Mr. McCarthy, Visiting Reserve Bank Officer, Division of Monetary Affairs, Board of Governors

Mr. Oliner, Senior Adviser, Division of Research and Statistics, Board of Governors

Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors

Messrs. Bassett and Luecke, Section Chiefs, Division of Monetary Affairs, Board of Governors

Mr. Morin, Senior Economist, Division of Research and Statistics, Board of Governors

Ms. Low, Open Market Secretariat Specialist, Division of Monetary Affairs, Board of Governors

Mr. Moore, First Vice President, Federal Reserve Bank of Cleveland

Mr. Fuhrer, Executive Vice President, Federal Reserve Bank of Boston

Messrs. Altig and McAndrews, Ms. Mosser, Messrs. Rasche, Sullivan, and Williams, Senior Vice Presidents, Federal Reserve Banks of Atlanta, New York, New York, St. Louis, Chicago, and San Francisco, respectively

Messrs. Clark and Hornstein, Vice Presidents, Federal Reserve Banks of Kansas City and Richmond, respectively

Mr. Weber, Senior Research Officer, Federal Reserve Bank of Minneapolis

The Manager of the System Open Market Account reported on recent developments in foreign exchange markets. There were no open market operations in foreign currencies for the Sys-

12. Attended Wednesday's session only.

tem's account in the period since the previous meeting. The Manager also reported on developments in domestic financial markets and on System open market operations in government securities and federal agency obligations during the period since the previous meeting. By unanimous vote, the Committee ratified these transactions.

In the discussion of System open market operations over the period, it was noted that reserve management had become more complex as a result of the large provision of reserves associated with the recent expansion of the Federal Reserve's liquidity facilities; in particular, the effective federal funds rate had been persistently below the FOMC's target. While the payment of interest on reserves seemed to be helpful in mitigating downward pressure on the funds rate, a number of institutions evidently were willing to sell funds at interest rates below that paid on excess reserve balances. Anecdotal reports suggested that this was particularly the case for those institutions that are not eligible to receive interest on the balances they maintain at the Federal Reserve. Going forward, however, the interest rate on excess reserve balances could be adjusted, and it might establish a more effective floor on the federal funds rate over time as more depository institutions revise their strategies in the federal funds market in light of the payment of interest on reserves.

In view of a further widening in financial market strains internationally, the Committee considered proposals to establish temporary reciprocal currency ("swap") arrangements with several additional foreign central banks. Members unanimously approved the following resolution, which effectively permitted the Foreign Currency Subcommittee to establish a swap line with the Reserve Bank of New Zealand.

> The FOMC amends paragraph 1.A. of the Authorization for Foreign Currency Operations to include the New Zealand dollar in the list of foreign currencies in which the Federal Reserve Bank of New York may transact for the System Open Market Account.

Meeting participants also discussed a proposal to set up temporary liquidity-related swap arrangements with the central banks of Mexico, Brazil, Korea, and Singapore. In their remarks, participants focused on the outlook for complementarity between these swaps and the new short-term liquidity facility that the International Monetary Fund was considering; on the governance and structure of the swap lines; and on the particular countries included. Several participants pointed to the international reserves held by the countries and the importance of ensuring that these temporary swap lines, like the others that had been established during this period, be used only for the purposes intended. On balance, the Committee concluded that in current circumstances the swap arrangements with these four large and systemically important economies were appropriate, and it unanimously approved the following resolutions.

> The FOMC directs the Federal Reserve Bank of New York to establish and maintain a reciprocal currency arrangement ("swap arrangement") for the System Open Market Account with each of (i) the Banco Central do Brasil, (ii) the Bank of Korea, (iii) the Banco de Mexico, and (iv) the Monetary Authority of Singapore. Each such swap arrangement would be for an aggregate amount not to exceed $30 billion. Drawings under the arrangement require approval. Unless extended by the Committee, each such swap arrangement shall expire on April 30, 2009.
>
> The FOMC amends paragraph 1.A. of the Authorization for Foreign Currency Operations to include the Brazilian real, the Korean won, and the Singapore dollar in the list of foreign currencies in which the Fed-

eral Reserve Bank of New York may transact for the System Open Market Account.

The FOMC delegates to the Foreign Currency Subcommittee the authority to approve individual drawing requests of up to $5 billion under each of the aforementioned swap arrangements with the Banco Central do Brasil, the Bank of Korea, the Banco de Mexico, and the Monetary Authority of Singapore.

A number of adverse financial developments influenced economic and financial market conditions over the intermeeting period. Lehman Brothers Holdings had filed for bankruptcy the day before the meeting of the Committee in September. In large part because of losses on Lehman debt, the net asset value of a major money market mutual fund fell below $1 per share, spurring a substantial outflow from money market mutual funds and straining their liquidity. The rapid deterioration of American International Group, Inc. (AIG), and Wachovia Corporation, along with the closing of Washington Mutual, led to intensified market concerns about the condition of financial institutions. In this environment, investors pulled back from risk-taking, funding markets for terms beyond overnight largely ceased to function at times, credit risk spreads rose sharply, and equity prices registered steep declines.

The information reviewed at the October meeting indicated that economic conditions deteriorated in recent months. The labor market weakened further in September as private payrolls fell at a faster pace than earlier in the year and the unemployment rate remained above 6 percent. Industrial production fell in September, although much of the drop was related to effects of recent hurricanes and a strike at an aircraft manufacturer. Consumer spending declined, reflecting stagnant real income, tighter credit, declining wealth, and concerns about economic conditions. The housing market remained weak, with construction activity, new home sales, and home prices falling further. Business spending on equipment and software appeared to have declined again in the third quarter, and indicators of investment in structures weakened. Economic activity in many foreign economies slowed in recent months. Headline consumer inflation measures, pulled down by declines in consumer energy prices, moderated in August and September. Core consumer inflation measures also eased somewhat in these two months.

The labor market continued to weaken. According to the September labor market report, the unemployment rate remained at 6.1 percent, but private payroll employment fell faster than the average pace earlier in the year. Most major industry groups shed jobs. The manufacturing, construction, and temporary help industries continued to experience sizable losses in employment; meanwhile, retail trade and financial services registered larger declines than earlier in the year. Nonbusiness services added jobs, but at the slowest rate of the year. The average workweek and aggregate hours declined in September, and weekly unemployment insurance claims continued to rise in October.

Industrial production dropped sharply in September. Although much of the decline was due to the effects of the recent hurricanes and a strike at an aircraft manufacturer, most major industries experienced slow or declining output in recent months. Motor vehicle assemblies were unchanged in the third quarter at a low level. The pace of high-tech equipment production slowed in the third quarter relative to its rate in the first half of the year, reportedly in part because tight credit conditions were restraining demand. Available information suggested that demand and production in this sector were likely to remain relatively subdued over the coming months. The output of other manufacturing sectors declined in the third quarter. While standard indicators of near-term production suggested factory output would decline further over the next few months, the recovery of production in industries affected by the hurricanes was expected to offset these declines to a degree. The factory utilization rate fell in September to well below its long-run average.

Real personal consumption expenditures (PCE) apparently declined in September for the fourth consecutive month. Motor vehicle sales fell back to their very low July pace, and preliminary reports indicated that the slump continued into October, as tighter credit conditions were restraining demand. Purchases of goods other than motor vehicles were estimated to have fallen noticeably. Real outlays on services other than energy increased only modestly in July and August. Real disposable income, excluding the effects of tax rebates and the emergency unemployment benefits, was little changed in July and August from the second-quarter average. Measures of consumer sentiment dropped in October to near or below their low levels of midyear, with the Conference Board measure exceptionally low.

Residential construction activity continued to decline steeply through the third quarter. In September, both single-family housing starts and permit issuance fell. In the multifamily sector, starts edged up in September but remained toward the lower end of their two-year range. New home sales in August and September were at a pace well below that of the first half of the year. Although the cutbacks in homebuilding had reduced the inventory of unsold houses, the slower rate of sales kept the months' supply of new homes very elevated relative to the level that had prevailed before the downturn in the housing market. Sales of existing single-family homes in September were somewhat higher than they had been earlier in the year, likely supported by increases in foreclosure-related sales. Tight conditions in mortgage markets continued to restrain housing demand, especially for borrowers needing nonconforming mortgages. Several indexes indicated that house prices declined substantially over the 12 months through August.

In the business sector, investment in equipment and software appeared to weaken further in the third quarter. Nominal shipments of nondefense capital goods excluding aircraft were flat in the third quarter, while orders for those goods declined. Demand for high-tech equipment appeared to have softened considerably, and spending on non-high-tech, non-transportation equipment was estimated to have fallen. Transportation equipment investment was held down in the third quarter by falling sales for medium and heavy trucks and by a strike-induced drop in aircraft deliveries in September. Nominal expenditures on nonresidential structures declined for the second consecutive month in August. Forward-looking indicators turned more downbeat: Vacancy rates for commercial properties rose further, property values declined, and the architectural billings index fell in September. Furthermore, the latest Senior Loan Officer Opinion Survey on Bank Lending Practices indicated that banks tightened lending standards for commercial real estate loans over the past three months.

The book-value data for manufacturing and trade inventories suggested that the real value of inventories continued to decline over the summer through August, but a number of indicators suggested that stocks in some industries remained above desired levels. The days' supply of light motor vehicles at dealers had risen, on balance, through the year and was rather high in September. The ratio of book-value inventories to sales in the manufacturing and trade sectors, excluding motor vehicles, rose in August, particularly in a number of durable goods sectors. In addition, the index of customers' inventories in the Institute of Supply Management's manufacturing survey indicated that inventories remained above desired levels.

The U.S. international trade deficit narrowed in August, with a decline in the value of imports more than offsetting a fall in the value of exports of goods and services. A drop in the value of petroleum imports, which reflected both lower volumes and a decrease in prices, exceeded an increase in non-oil imports that was driven by a rise in imports of consumer goods and industrial supplies. Exports of automotive products fell sharply in August after a surge in July, and exports of consumer goods, industrial supplies, and services moved down after strong increases in previous months. Aircraft exports surged, but sales of other capital goods declined.

The data for the advanced foreign economies during the intermeeting period generally suggested that economic activity was weakening further, and confidence indicators in these areas declined as the financial crisis worsened. Labor market conditions deteriorated in these economies, with the exception of Canada. Real gross domestic product (GDP) fell in the United Kingdom in the third quarter. Headline inflation continued to be elevated in many economies, but the most recent consumer price indexes for Japan and for the euro area suggested some deceleration in prices.

In emerging market economies, data received over the intermeeting period showed a continued slowing of real activity. Real GDP growth in China moved down in the third quarter. Industrial production contracted in recent months for many countries. External balances deteriorated significantly in many emerging market economies as exports to advanced economies slowed. Headline inflation in emerging market economies eased, reflecting falling oil and food prices.

Headline consumer prices in the United States were estimated to have risen only modestly in September, extending the recent moderation of overall inflation following the rapid increases earlier in the year. Consumer energy prices fell for the second consecutive month, while retail food prices continued to climb at a rapid pace, boosted by the substantial run-up in farm commodity prices through midyear. Core consumer price inflation rose somewhat during the third quarter, reflecting the pass-through of previous increases in the costs of energy and materials and import prices. Those upward price pressures diminished recently: Prices of oil and other commodities fell sharply over the intermeeting period, and non-oil import prices as well as producer prices of intermediate materials excluding food and energy declined in September. Some survey measures of inflation expectations declined during the period. Available measures of hourly labor compensation increased at about the same moderate pace as over the past several years.

At its September meeting, the Federal Open Market Committee (FOMC) kept the target federal funds rate unchanged at 2 percent. The Committee's statement noted that strains in financial markets had increased significantly and that labor markets had weakened further. Economic growth appeared to have slowed recently, which partly reflected a softening of household spending. Tight credit conditions, the ongoing housing contraction, and some slowing in export growth were likely to weigh on economic growth over the next few quarters. The Committee stated that, over time, the substantial easing of monetary policy, combined with ongoing measures to foster market liquidity, should help promote moderate economic growth. Inflation had been high, spurred by the earlier increases in the prices of energy and some other commodities. The Committee expected inflation to moderate later this year and next year, but the inflation outlook remained highly uncertain. The downside risks to growth and the upside risks to inflation were both of significant concern to the Committee. The Committee indicated that it would continue to monitor economic and financial developments carefully and would act as needed to promote sustainable economic growth and price stability.

Over the intermeeting period, market participants marked down their expectations for the path of the federal funds rate for the next two years. The Committee's decision to leave the target federal funds rate unchanged at the September FOMC meeting led some investors to scale back expectations for policy easing over the next year. Subsequently, however, market expectations reversed in response to the heightened financial turmoil and to generally weaker-than-expected economic data. The Committee's decision to reduce the target federal funds rate 50 basis points as part of a coordinated action with other central banks on October 8, along with the accompanying statement, led investors to mark down further the expected path for the federal funds rate. Yields on short-term nominal Treasury coupon securities declined over the intermeeting period, reportedly as a result of substantial flight-to-quality flows and heightened demand for liquidity. In contrast, higher term premiums and expectations of increases in the supply of Treasury securities associated with the Emergency Economic Stabilization Act and other initiatives seemed to put upward pressure on longer-term nominal Treasury yields. Yields on longer-term inflation-indexed Treasury securities, which are relatively illiquid, rose more sharply than did those on nominal securities. Measures of inflation compensation based on differences between nominal and inflation-indexed Treasury yields were quite volatile over the intermeeting period and, because of shifting liquidity premiums, likely provided less information than usual concerning inflation expectations or inflation uncertainty.

In the wake of the failures or near failures of several large financial institutions, short-term funding markets came under significant additional pressure over the intermeeting period, and the Federal Reserve and other central banks took a number of actions to provide liquidity and improve market functioning. In the overnight federal funds market, financial institutions became more selective about the counterparties with whom they were willing to trade. The overnight London interbank offered rate (Libor) rose substantially, and the spread of term Libor rates over comparable-maturity overnight index swap (OIS) rates rose sharply from already-high levels. The demand for commercial paper declined as prime money market mutual funds experienced large net outflows after the net asset value of one such fund fell below $1 per share. As a consequence, risk spreads on commercial paper rose considerably and were very volatile. Amid strong flows into government-only money market mutual funds, the demand for short-dated Treasury bills rose, and these securities traded with very low yields despite sizable new issuance during the period. The market for repurchase agreements (repos) also experienced significant dislocations during the intermeeting period. Partly because of high demand for Treasury securities, the overnight repo rate for Treasury general collateral was near zero for much of the period, and failures to deliver Treasury securities reached record highs. Repo rates on agency collateral also were volatile, and liquidity in non-Treasury, non-agency repo markets was poor. Conditions in short-term funding markets improved somewhat following the announcements of a U.S. government guarantee of certain liabilities of U.S. banking organizations and similar actions by foreign authorities, the expansion of swap arrangements between the Federal Reserve and other central banks, and a number of initiatives by the Federal Reserve and the Treasury to address the pressures on money market mutual funds and the commercial paper market.

In longer-term credit markets, yields and spreads on investment-grade and speculative-grade corporate bonds increased, while indexes of credit default swap (CDS) spreads for investment-grade financial and nonfinancial firms reached unprecedented levels. Liquidity in the corporate bond and CDS markets was strained. Issuance of investment-grade corporate bonds was moderate in September and October, while there was little issuance of speculative-grade bonds. Commercial and industrial loans continued to expand rapidly in early October, as firms drew on existing bank lines of credit. However, conditions deteriorated in the secondary market for syndicated leveraged loans, with prices falling to new lows and bid-asked spreads widening notably. Broad equity price indexes declined sharply over the intermeeting period, and option-implied volatility on the S&P 500 index rose well above its previous record high. The Senior Loan Officer Opinion Survey pointed to further tightening of terms and standards for consumer loans. Consumer credit increased at its slowest pace in more than 15 years during the three months ending in August. Conditions in the municipal bond market were also poor over much of the intermeeting period.

The strains from the banking and credit crisis intensified and took on a more global aspect over the intermeeting period. This development and the related erosion of the economic outlook and reduction in inflationary pressures led many central banks to reduce their policy rates, including in the internationally coordinated action announced on October 8. Liquidity conditions in the money markets of major foreign economies deteriorated further. Spreads between term Libor and OIS rates in euros and sterling rose from already-elevated levels, although by less than in dollars. Sovereign bond yields in the advanced foreign economies were volatile; nominal yield curves in many countries steepened on net. Equity market indexes fell sharply in the advanced economies as well as in emerging market economies, which until recently had not been hit as hard by the financial turmoil. The dollar appreciated against most currencies, with the prominent exception of the Japanese yen.

In the United States, M2 accelerated sharply in September, and it appeared to be on pace for another large increase in October, apparently reflecting a heightened preference by households and firms for safe assets. Liquid deposits expanded strongly in September, but leveled off in early October. Small time deposits increased briskly in September and early October as banks and thrifts reportedly continued to bid aggressively for these deposits. Retail money funds, which were little changed in September, experienced significant net inflows in early October. In contrast, institutional money funds, which are not included in M2, experienced substantial outflows during this period.

In response to the extraordinary stresses in financial markets, the Federal Reserve together with other U.S. government agencies and many foreign central banks and governments implemented a number of unprecedented policy initiatives during the intermeeting period. Early in the period, the condition of AIG, a large complex financial institution, deteriorated rapidly. In view of the likely systemic implications and the potential for significant adverse effects on the economy of a disorderly failure of AIG, the Federal Reserve Board on September 16, with the support of the Treasury, authorized the Federal Reserve Bank of New York to lend up to $85 billion to the firm to assist it in meeting its obligations and to facilitate the orderly sale of some of its businesses. On October 8, the Federal Reserve announced a supplemental liquidity arrangement for AIG.

The Federal Reserve Board also approved a number of new facilities to address strains in short-term funding markets. On September 19, it announced the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF), which extends nonrecourse loans at the primary credit rate to U.S. depository institutions and bank holding companies to finance the purchase of high-quality asset-backed commercial paper (ABCP) from money market mutual funds. On October 7, the Board announced the creation of the Commercial Paper Funding Facility (CPFF), which provides a liquidity backstop to U.S. issuers of highly rated commercial paper through a special-purpose vehicle that purchases three-month unsecured commercial paper and ABCP directly from eligible issuers. On October 21, it publicized the creation of the Money Market Investor Funding Facility (MMIFF), under which the Federal Reserve Bank of New York will provide funding to a series of special-purpose vehicles to facilitate an industry-supported initiative to finance the purchase of certain highly rated certificates of deposit, bank notes, and commercial paper from U.S. money market mutual funds. The AMLF, CPFF, and MMIFF were intended to improve the liquidity in short-term debt markets and ease the strains in credit markets more broadly.

In addition, to address the sizable demand for dollar funding in foreign jurisdictions, the FOMC authorized the expansion of its existing swap lines with the European Central Bank and Swiss National Bank; by the end of the intermeeting period, the formal quantity limits on these lines had been eliminated. The quantity limits were also lifted on new swap lines set up with the Bank of Japan and the Bank of England. The FOMC authorized new swap lines with five other central banks during the period. In domestic markets, the Federal Reserve raised the regular auction amounts of the 28- and 84-day maturity Term Auction Facility (TAF) auctions to $150 billion each. Also, the Federal Reserve announced two forward TAF auctions for $150 billion each, to be conducted in November to provide funding over year-end. In total, up to $900 billion of TAF credit over year-end was authorized.

Despite the substantial provision of liquidity by the Federal Reserve and other central banks, functioning in many credit markets remained very poor, a situation that reflected market participants' uncertainty about their liquidity needs and their future access to funding as well as concerns about the health of many financial institutions. To strengthen confidence in U.S. financial institutions, the Treasury, the Federal Reserve, and the Federal Deposit Insurance Corporation (FDIC) issued a joint statement on October 14, which included several elements. First, the Treasury announced a voluntary capital purchase plan under which eligible financial institutions could sell preferred shares to the U.S. government. Second, the FDIC provided a temporary guarantee of the senior unsecured debt of all FDIC-insured institutions and their holding companies, as well as all balances in non-interest-bearing transaction deposit accounts. The statement included notice that nine major financial institutions had agreed to participate in both the capital purchase program and the FDIC guarantee program. Third, the Federal Reserve announced details of the CPFF, which was scheduled to begin on October 27. After this joint statement and the announcements of similar programs in a number of other countries, financial market pressures appeared to ease somewhat, though conditions remained strained.

The expansion of existing liquidity facilities as well as the creation of new facilities contributed to a notable increase in the size of the Federal Reserve's balance sheet. The amount of primary credit outstanding rose considerably over the intermeeting period, with both foreign and domestic depository institutions making use of the discount window. TAF credit outstanding more than doubled over the period. Credit extended through the Primary Dealer Credit Facility rose rapidly ahead of quarter-end; although it subsided subsequently, the amount of credit outstanding remained well above the levels seen before mid-September. The Term Securities Lending Facility (TSLF) auctions conducted over the intermeeting period had very high demand; in addition, dealers exercised most of the options for TSLF loans spanning the September quarter-end.

Two initiatives were introduced over the intermeeting period to help manage the expansion of the balance sheet and promote control of the federal funds rate. First, on September 17, the Treasury announced a temporary Supplementary Financing Program at the request of the Federal Reserve. Under this program, the Treasury issued short-term bills over and above its regular borrowing program, with the proceeds deposited at the Federal Reserve. This facility helped offset the provision of reserves to the banking system through the various liquidity facilities. Second, employing authority granted under the Emergency Economic Stabilization Act, the Federal Reserve Board announced on October 6 that it would pay interest on required and excess reserve balances beginning on October 9. The payment of interest on excess reserve balances was intended to assist in maintaining the federal funds rate close to the target set by the Committee. Initially, the interest rate on required reserves was set at the average target federal funds rate over each reserve maintenance period less 10 basis points, while the rate on excess reserves was set at the lowest target federal funds rate over each reserve maintenance period less 75 basis points. On October 22, the rate on excess reserves was adjusted to be the lowest target federal funds rate during the maintenance period less 35 basis points.

In the forecast prepared for the meeting, the staff lowered its projection for economic activity in the second half of 2008 as well as in 2009 and 2010. Real GDP appeared to have declined in the third quarter, and the few available indicators that reflected conditions following the intensification of the financial market turmoil in mid-September pointed to another decline in the fourth quarter. The declines in stock-market wealth, low levels of consumer sentiment, weakened household balance sheets, and restrictive credit conditions were likely to hinder household spending over the near term. Business expenditures also probably would be held back by a weaker sales outlook and tighter credit conditions. The staff expected that real GDP would continue to contract somewhat in the first half of 2009 and then rise in the second half, with the result that real GDP would be about unchanged for the year. Although futures markets pointed to a lower trajectory for oil prices than at the time of the September meeting, real activity was expected to be restrained by further contraction in residential investment, reduced household wealth, continued tight credit conditions, and a deterioration of foreign economic performance. In 2010, real GDP growth was expected to pick up to near the rate of potential growth, as the restraints on household and business spending from the financial market tensions were anticipated to begin to ease and the contraction in the housing market to come to an end. With growth below its potential rate for an extended period, the unemployment rate was expected to rise significantly through early 2010. The staff reduced its forecast for both core and overall PCE inflation, as the disinflationary effects of the receding cost pressures of energy, materials, and import prices and of resource slack were expected to be greater than at the time of the September FOMC meeting. Core inflation was projected to slow considerably in 2009 and then to edge down further in 2010.

In conjunction with this FOMC meeting, all participants—that is, Federal Reserve Board members and Reserve Bank presidents—provided annual projections for economic growth, the unemployment rate, and inflation for the period 2008 through 2011. The projections are described in the Summary of Economic Projections, which is attached as an addendum to these minutes.

In their discussion of the economic situation and outlook, FOMC meeting participants indicated that the worsening financial situation, the slowdown in growth abroad, and incoming information on economic activity had led them to mark down significantly their outlook for growth. While economic activity had evidently already been slowing over the summer, the turmoil in recent weeks had apparently resulted in tighter financial conditions and greater uncertainty among businesses and households about economic prospects, further limiting their ability and willingness to make significant spending commitments. Recent measures of business and consumer sentiment had fallen to historical lows. Participants generally expected the economy to contract moderately in the second half of 2008 and the first half of 2009, and agreed that the downside risks to growth had increased. While some expected an improving financial situation to contribute to a recovery in growth by mid-2009, others judged that the period of economic weakness could persist for some time. Several participants indicated that they expected some fiscal stimulus in coming quarters, but they were uncertain about the extent and duration of the resulting support to economic activity. Participants agreed that in coming quarters inflation was likely to move down to levels consistent with price stability, reflecting the recent declines in the prices of energy and other commodities, the appreciation of the dollar, and the expected widening of margins of resource slack. Indeed, some saw a risk that over time inflation could fall below levels consistent with the Federal Reserve's dual objectives of price stability and maximum employment.

Participants noted that financial conditions had worsened significantly over the intermeeting period. The failure or near failure of a number of major financial institutions had deepened market concerns about counterparty credit risk and liquidity risk. As a result, financial intermediaries had cut back on lending to some counterparties, particularly for terms beyond overnight, and in general were conserving liquidity and capital. Moreover, risk aversion of investors increased, driving credit spreads sharply higher. Survey results and anecdotal information also suggested that credit conditions had tightened significantly further for businesses and households. Equity prices had varied widely and were substantially lower, on net. Participants saw the potential for financial strains to intensify if some investors, such as hedge funds, found it necessary to sell assets and as lending institutions built reserves against losses. Participants were concerned that the negative spiral in which financial strains lead to weaker spending, which in turn leads to higher loan losses and a further deterioration in financial conditions, could persist for a while longer. While the global efforts to recapitalize banks and guarantee deposits had helped stabilize the situation, risk spreads remained higher, asset prices lower, and credit conditions tighter than prior to the recent disruptions. Moreover, some participants noted that the specifics and effectiveness of some government programs to support financial markets and institutions remained unclear.

Participants indicated that the increase in financial turmoil had already had an impact on business decisions. Reports from contacts in many parts of the country suggested that the weaker and less certain economic outlook was leading businesses to cancel capital and other discretionary expenditures and lay off workers. Several participants noted that even businesses that had previously been largely unaffected by the financial turbulence were now experiencing difficulties obtaining new credit, and some businesses were said to be drawing down lines of credit preemptively rather than risk the lines becoming unavailable. Contacts indicated that fewer commercial real estate construction projects were being undertaken. Residential construction activity remained extremely subdued, with the stock of unsold homes still very elevated.

Meeting participants noted that real consumer spending had been weakening through the summer, responding to lower employment and tighter credit. Moreover, households, like businesses, were reportedly reacting to the shifting economic circumstances in recent weeks by cutting expenditures further. Spending on consumer durables, such as automobiles, and discretionary items had been particularly hard hit, and retailers anticipated very weak holiday spending.

Participants noted that the financial turmoil had increasingly become an international phenomenon, leading to a marked deterioration in global growth prospects. While advanced foreign economies had already shown signs of slowing, they had been significantly affected by the worsening of financial strains over the intermeeting period. Moreover, a number of emerging market economies, which had heretofore been less influenced by the financial developments in industrial countries, had in recent weeks been significantly affected, as the increasing strains in financial markets led global investors to pull back from exposures to such economies. As a result, interest rates on emerging market debt had shot up and prices of emerging market equity had dropped sharply. Participants saw the stronger dollar and weaker growth abroad as likely to restrain future growth in U.S. exports.

Participants agreed that inflation was likely to diminish materially in coming quarters. Commodity prices had fallen sharply, the dollar had strengthened notably, and considerable economic slack was anticipated. Moreover, some survey measures of inflation expectations had declined as had those derived from inflation-linked Treasury securities, although recent movements in the latter measures were likely influenced in part by increases in the premiums required to hold the relatively illiquid inflation-indexed securities. Some participants indicated that their business contacts had reported reduced pricing power and lower markups. Against this backdrop, participants generally expected inflation to decline to levels consistent with price stability. A few participants noted that disruptions to the credit intermediation process and the inefficiencies associated with shifts of resources among economic sectors could be expected to reduce aggregate supply as well as restrain aggregate demand; as a consequence, such factors could limit the effect of slower output growth on rates of resource slack and inflation. Others, though, saw a risk that if resource utilization remained weak for some time, inflation could fall below levels consistent with the Federal Reserve's dual mandate for promoting price stability and maximum employment, a development that would pose important policy challenges in light of the already-low level of the Committee's federal funds rate target.

Participants discussed a number of issues relating to broader monetary policy strategy. Over the past year, the Federal Reserve's response to the financial turbulence had encompassed substantial monetary policy easing, the provision of large volumes of liquidity through standard and extraordinary means, and facilitating the resolution of troubled, systemically important financial institutions. Participants judged that the policy actions had been helpful and well calibrated to their assessment of the developing situation. Several participants observed that it would be crucial for such policy actions to be unwound appropriately as the financial situation normalized. However, participants also observed that unfolding economic developments could require the FOMC to further lower its target for the federal funds rate in the future and to review the adequacy of its liquidity facilities.

In the discussion of monetary policy for the intermeeting period, Committee members agreed that significant easing in policy was warranted at this meeting in view of the marked deterioration in the economic outlook and anticipated reduction in inflation pressures. The recent substantial tightening in financial conditions, the sharp downshift in spending here and abroad, and the rapid abatement of upside inflation risks all suggested that a forceful policy response would be appropriate. Some members were concerned that the effectiveness of cuts in the target federal funds rate may have been diminished by the financial dislocations, suggesting that further policy action might have limited efficacy in promoting a recovery in economic growth. And some also noted that the Committee had limited room to lower its federal funds rate target further and should therefore consider moving slowly. However, others maintained that the possibility of reduced policy effectiveness and the limited scope for reducing the target further were reasons for a more aggressive policy adjustment; an easing of policy should contribute to a beneficial reduction in some borrowing costs, even if a given rate reduction currently would elicit a smaller effect than in more typical circumstances, and more aggressive easing should reduce the odds of a deflationary outcome. Members also saw the substantial downside risks to growth as supporting a relatively large policy move at this meeting, though even after today's 50 basis point action, the Committee judged that downside risks to growth would remain. Members anticipated that economic data over the upcoming intermeeting period would show significant weakness in economic activity, and some suggested that additional policy easing could well be appropriate at future meetings. In any event, the Committee agreed that it would take whatever steps were necessary to support the recovery of the economy.

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

> The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with reducing the federal funds rate to an average of around 1 percent.

The vote encompassed approval of the statement below to be released at 2:15 p.m.:

> The Federal Open Market Committee decided today to lower its target for the federal funds rate 50 basis points to 1 percent.
>
> The pace of economic activity appears to have slowed markedly, owing importantly to a decline in consumer expenditures. Business equipment spending and industrial production have weakened in recent months, and slowing economic activity in many foreign economies is damping the prospects for U.S. exports. Moreover, the intensification of financial market turmoil is likely to exert additional restraint on spending, partly by further reducing the ability of households and businesses to obtain credit.
>
> In light of the declines in the prices of energy and other commodities and the weaker prospects for economic activity, the Committee expects inflation to moderate in coming quarters to levels consistent with price stability.
>
> Recent policy actions, including today's rate reduction, coordinated interest rate cuts by central banks, extraordinary liquidity measures, and official steps to strengthen financial systems, should help over time to improve credit conditions and promote a return to moderate economic growth. Nevertheless, downside risks to growth remain. The Committee will monitor economic and financial developments carefully and will act as needed to promote sustainable economic growth and price stability.

> Votes for this action: Messrs. Bernanke and Geithner, Ms. Duke, Messrs. Fisher, Kohn, and Kroszner, Ms. Pianalto, Messrs. Plosser, Stern, and Warsh.
> Votes against this action: None.

It was agreed that the next meeting of the Committee would be held on Tuesday, December 16, 2008.

The meeting adjourned at 11:45 a.m.

Conference Calls

On September 29, 2008, the Committee met by conference call to review recent developments and to consider changes to swap arrangements with foreign central banks. Amid signs of growing strains in money markets, the discussion focused on recent Federal Reserve actions and on potential expansions in official liquidity facilities. In light of severe pressures in dollar funding markets abroad, the Committee unanimously approved both extending the liquidity-related swap arrangements with foreign central banks an additional three months, through April 30, 2009, and increasing substantially the sizes of those existing arrangements. The enlarged facilities would support the provision of U.S. dollar liquidity in amounts of up to $30 billion by the Bank of Canada, $80 billion by the Bank of England, $120 billion by the Bank of Japan, $15 billion by Danmarks Nationalbank, $240 billion by the European Central Bank, $15 billion by the Norges Bank, $30 billion by the Reserve Bank of Australia, $30 billion by Sveriges Riksbank, and $60 billion by the Swiss National Bank. In addition, the Committee was briefed on plans for implementation of a provision in pending legislation that would allow the Federal Reserve to begin immediately to pay interest on reserves held by depository institutions, and on the proposed acquisition of Wachovia by Citigroup.

On October 7, 2008, the Committee again met by conference call. Stresses in financial markets had continued to increase: Interest-rate spreads in interbank funding markets had widened markedly, corporate and municipal bond yields had risen, and equity prices had dropped sharply. For the first time in many years, the net asset value of a major money market fund had fallen below $1 per share; this event sparked a flight out of prime money market funds and caused a severe impairment of the functioning of the commercial paper market. Since the September 16 FOMC meeting, indicators of economic activity in both the United States and in major foreign countries had come in weaker than expected. In the United States, automobile sales, capital goods shipments, and private payrolls had fallen notably. Elsewhere, indicators of economic activity and sentiment had deteriorated in a broad range of important foreign economies. Prices of crude oil and other commodities had dropped substantially, and some measures of inflation expectations had declined. Participants agreed that downside risks to economic growth had increased and upside risks to inflation had diminished. Participants discussed the considerable expansion of Federal Reserve liquidity in recent months. Most agreed that these actions to provide liquidity had had a beneficial impact. Nonetheless, financial conditions were exerting considerable restraint on economic activity.

All members judged that a significant easing in policy at this time was appropriate to foster moderate economic growth and to reduce the downside risks to economic activity. Members also welcomed the opportunity to coordinate this policy action with similar measures by the Bank of Canada, the Bank of England, the European Central Bank, Sveriges Riksbank, and the Swiss National Bank. By showing that policymakers around the globe were working closely together, had a similar view of global economic conditions, and were willing to take strong actions to address those conditions, coordinated action could help to bolster consumer and business confidence and so yield greater economic benefits than unilateral action.

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

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with reducing the federal funds rate to an average of around 1½ percent.

The vote encompassed approval of the statement below:

The Federal Open Market Committee has decided to lower its target for the federal funds rate 50 basis points to 1½ percent. The Committee took this action in light of evidence pointing to a weakening of economic activity and a reduction in inflationary pressures.

Incoming economic data suggest that the pace of economic activity has slowed markedly in recent months. Moreover, the intensification of financial market turmoil is likely to exert additional restraint on spending, partly by further reducing the ability of households and businesses to obtain credit. Inflation has been high, but the Committee believes that the decline in energy and other commodity prices and the weaker prospects for economic activity have reduced the upside risks to inflation.

The Committee will monitor economic and financial developments carefully and will act as needed to promote sustainable economic growth and price stability.

Votes for this action: Messrs. Bernanke and Geithner, Ms. Duke, Messrs. Fisher, Kohn, and Kroszner, Ms. Pianalto, Messrs. Plosser, Stern, and Warsh.
Votes against this action: None.

Notation Votes

By notation vote completed September 21, 2008 the Committee unanimously approved the following resolution:

The FOMC amends paragraph 1.A. of the Authorization for Foreign Currency Operations to include Australian dollars in the list of foreign currencies in which the Federal Reserve Bank of New York may transact for the System Open Market Account.

By notation vote completed on October 6, 2008, the Committee unanimously approved the minutes of the FOMC meeting held on September 16, 2008.

By notation vote completed October 11, 2008 the Committee unanimously approved the following resolution:

The Federal Open Market Committee authorizes the Federal Reserve Bank of New York (FRBNY) to increase the amounts available from the System Open Market Account under the existing reciprocal currency arrangements ("swap" arrangements) with the Bank of England, the European Central Bank, the Bank of Japan, and the Swiss National Bank to meet the amounts requested by those central banks in connection with their fixed-rate tender auctions. The FRBNY must report to the Committee each time the aggregate draws by one of these central banks increases the level outstanding for that bank by an increment of $200 billion over the level outstanding on October 10, 2008.

Brian F. Madigan
Secretary

Addendum: Summary of Economic Projections

In conjunction with the October 28–29, 2008 FOMC meeting, the members of the Board of Governors and the presidents of the Federal Reserve Banks, all of whom participate in deliberations of the FOMC, provided projections for economic growth, unemployment, and inflation in 2008, 2009, 2010, and 2011. Projections were based on information available through the conclusion of the meeting, on each participant's assumptions regarding a range of factors likely to affect economic outcomes, and on his or her assessment of appropriate monetary policy. "Appropriate monetary policy" is defined as the future policy that,

Table 1. Economic Projections of Federal Reserve Governors and Reserve Bank Presidents, October 2008

Percent

Variable	2008	2009	2010	2011
Central tendency[1]				
Change in real GDP	0.0 to 0.3	–0.2 to 1.1	2.3 to 3.2	2.8 to 3.6
June projection	1.0 to 1.6	2.0 to 2.8	2.5 to 3.0	n/a
Unemployment rate	6.3 to 6.5	7.1 to 7.6	6.5 to 7.3	5.5 to 6.6
June projection	5.5 to 5.7	5.3 to 5.8	5.0 to 5.6	n/a
PCE inflation	2.8 to 3.1	1.3 to 2.0	1.4 to 1.8	1.4 to 1.7
June projection	3.8 to 4.2	2.0 to 2.3	1.8 to 2.0	n/a
Core PCE inflation	2.3 to 2.5	1.5 to 2.0	1.3 to 1.8	1.3 to 1.7
June projection	2.2 to 2.4	2.0 to 2.2	1.8 to 2.0	n/a
Range[2]				
Change in real GDP	–0.3 to 0.5	–1.0 to 1.8	1.5 to 4.5	2.0 to 5.0
June projection	0.9 to 1.8	1.9 to 3.0	2.0 to 3.5	n/a
Unemployment rate	6.3 to 6.6	6.6 to 8.0	5.5 to 8.0	4.9 to 7.3
June projection	5.5 to 5.8	5.2 to 6.1	5.0 to 5.8	n/a
PCE inflation	2.7 to 3.6	1.0 to 2.2	1.1 to 1.9	0.8 to 1.8
June projection	3.4 to 4.6	1.7 to 3.0	1.6 to 2.1	n/a
Core PCE inflation	2.1 to 2.5	1.3 to 2.1	1.1 to 1.9	0.8 to 1.8
June projection	2.0 to 2.5	1.8 to 2.3	1.5 to 2.0	n/a

NOTE: Projections of change in real gross domestic product (GDP) and of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy.

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.

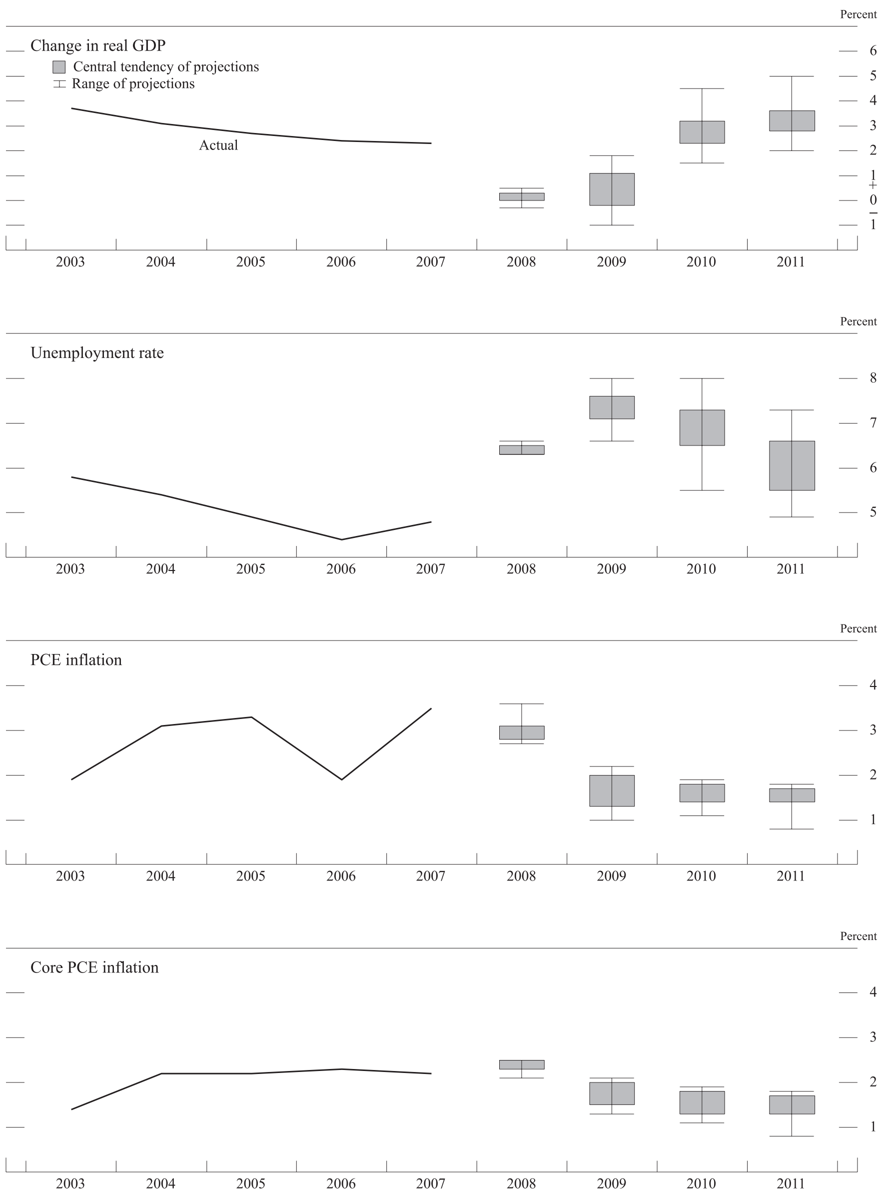
based on current information, is deemed most likely to foster outcomes for economic activity and inflation that best satisfy the participant's interpretation of the Federal Reserve's dual objectives of maximum employment and price stability.

Given the recent intensification and broadening of the global financial crisis, FOMC participants viewed the outlook for economic growth and employment as having worsened significantly since June. As indicated in Table 1 and depicted in Figure 1, participants expected that real GDP growth would remain very weak next year and that the subsequent pace of recovery would be quite slow; they also anticipated that the unemployment rate would increase substantially further. In view of the recent sharp declines in the prices of energy and other commodities and the widening slack in resource utilization, participants expected that inflation would drop markedly in coming quarters. Participants generally judged that the degree of uncertainty surrounding their projections for both economic activity and inflation was greater than historical norms. Most participants viewed the risks to the growth outlook as skewed to the downside, and nearly all of them saw the risks to the inflation outlook as either balanced or tilted to the downside.

The Outlook

Participants' projections for real GDP growth in 2008 had a central tendency of 0 to 0.3 percent, compared with the central tendency of 1 to 1.6 percent for

Figure 1. Central Tendencies and Ranges of Economic Projections, 2008–11



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

the growth projections that were made last June. The downward revisions in their growth forecasts for the year as a whole were due almost entirely to substantial shifts in their views of second-half growth. A number of participants noted that incoming data on consumer spending and employment had been weaker than expected during the summer, even prior to the intensification of the financial crisis. Many participants highlighted the recent decline in consumer confidence and the extent to which households were swiftly curbing their outlays in response to large losses in stock-market and housing wealth and deterioration in labor market conditions. Severe dislocations in credit markets were also seen as weighing heavily on consumer spending and business investment.

Participants' growth projections had a central tendency of –0.2 to 1.1 percent for 2009, 2.3 to 3.2 percent for 2010, and 2.8 to 3.6 percent for 2011, as most participants expected that the near-term weakness in economic activity would continue into next year and that the subsequent recovery would be relatively gradual. Growth in 2009 was likely to be restrained by persistent credit market strains and ongoing adjustments in the housing sector, as well as by weak fundamentals for household and business spending. Indeed, many participants anticipated that financial market stresses would recede only slowly, notwithstanding the extraordinary measures that had been taken to enhance liquidity and stabilize financial markets and institutions. Participants also noted that demand for exports was likely to be damped in coming quarters by the significantly weaker economic outlook for many U.S. trading partners. Participants expected that more robust economic expansion would resume in 2010, and most anticipated that growth would rise further in 2011 to a pace that would temporarily exceed its longer-run sustainable rate and hence would help reduce the degree of slack in resource utilization.

Participants anticipated that labor market conditions would continue to deteriorate over the coming year. Their projections for the unemployment rate during the fourth quarter of this year had a central tendency of 6.3 to 6.5 percent, an upward shift of more than ½ percentage point from their June projections and a further rise from September's unemployment rate of 6.1 percent—which was the latest available figure at the time of the FOMC meeting. Looking further ahead, the central tendency of participants' unemployment rate projections was 7.1 to 7.6 percent for 2009, 6.5 to 7.3 percent for 2010, and 5.5 to 6.6 percent for 2011. Most participants judged that the unemployment rate in 2011 would still be above its longer-run sustainable level and hence would be likely to decline further in the period beyond the forecast horizon.

The central tendency of participants' projections for total PCE inflation in 2008 declined to 2.8 to 3.1 percent, about a percentage point lower than the central tendency of their projections last June. Participants noted that this downward revision in the near-term inflation outlook mainly reflected the recent sharp decline in the prices of energy and other commodities, apparently triggered by the global slowdown in economic activity. Most participants also marked down their forecasts for inflation beyond 2008, reflecting their expectations of widening resource slack over coming quarters as well as gradual pass-through of the drop in the prices of energy and raw materials. The central tendency of participants' projections for total PCE inflation was 1.3 to 2 percent for 2009, 1.4 to 1.8 percent for 2010, and 1.4 to 1.7 percent for 2011. Participants generally projected that inflation at the end of the projection period would be close to or a bit below their assessments of the measured rates of inflation consistent with the Federal Reserve's dual mandate for promoting price stability and maximum employment.

Risks to the Outlook

Participants continued to view uncertainty about the outlook for economic activity as higher than normal.[13] The risks to their projections for GDP growth were judged as being skewed to the downside and the associated risks to their projections for the unemployment rate were tilted to the upside. Participants emphasized the considerable degree of uncertainty about the future course of the financial crisis and its impact on the real economy. Previous episodes of financial market turmoil might not provide much information about the likely trajectory going forward, given the severity of the current crisis and the extraordinary government measures that had been taken. Several participants highlighted the risk of a persistent negative feedback loop between credit markets and economic activity, while others referred to the possibility that financial market functioning might normalize more rapidly and hence that the adverse effects of the crisis might be somewhat smaller than anticipated in their modal outlook. Some participants noted that further monetary policy easing could eventually become constrained by the lower bound of zero on nominal interest rates, in which case an elevated degree of uncertainty might be associated with gauging the magnitude and stimulative effects of other policy tools such as quantitative easing.

As in June, most participants continued to view the uncertainty surrounding their inflation projections as higher than historical norms. The majority of participants judged the risks to the inflation outlook as roughly balanced, and a number of others viewed these risks as skewed to the downside—a marked shift from June, when the risks to inflation were generally seen as tilted to the upside. Many participants noted that their assessments regarding the downside risks to inflation were linked to their judgments regarding the magnitude of downside risks to economic activity. Some participants also noted that heightened volatility of prices for energy and other commodities was contributing to the elevated degree of uncertainty regarding the inflation outlook.

Table 2. Average Historical Projection Error Ranges

Percentage points

Variable	2008	2009	2010	2011
Change in real GDP[1]	±0.6	±1.3	±1.4	±1.4
Unemployment rate[1]	±0.2	±0.6	±0.9	±1.0
Total consumer prices[2] ...	±0.3	±1.0	±1.0	±1.0

NOTE: Error ranges shown are measured as plus or minus the root mean squared error of projections that were released in the autumn from 1987 through 2007 for the current and following three years by various private and government forecasters. As described in the box "Forecast Uncertainty," under certain assumptions, there is about a 70 percent probability that actual outcomes for real GDP, unemployment, and consumer prices will be in ranges implied by the average size of projection errors made in the past. Further information is in David Reifschneider and Peter Tulip (2007), "Gauging the Uncertainty of the Economic Outlook from Historical Forecasting Errors," Finance and Economics Discussion Series 2007-60 (Board of Governors of the Federal Reserve System, November).

1. For definitions, refer to general note in table 1.

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

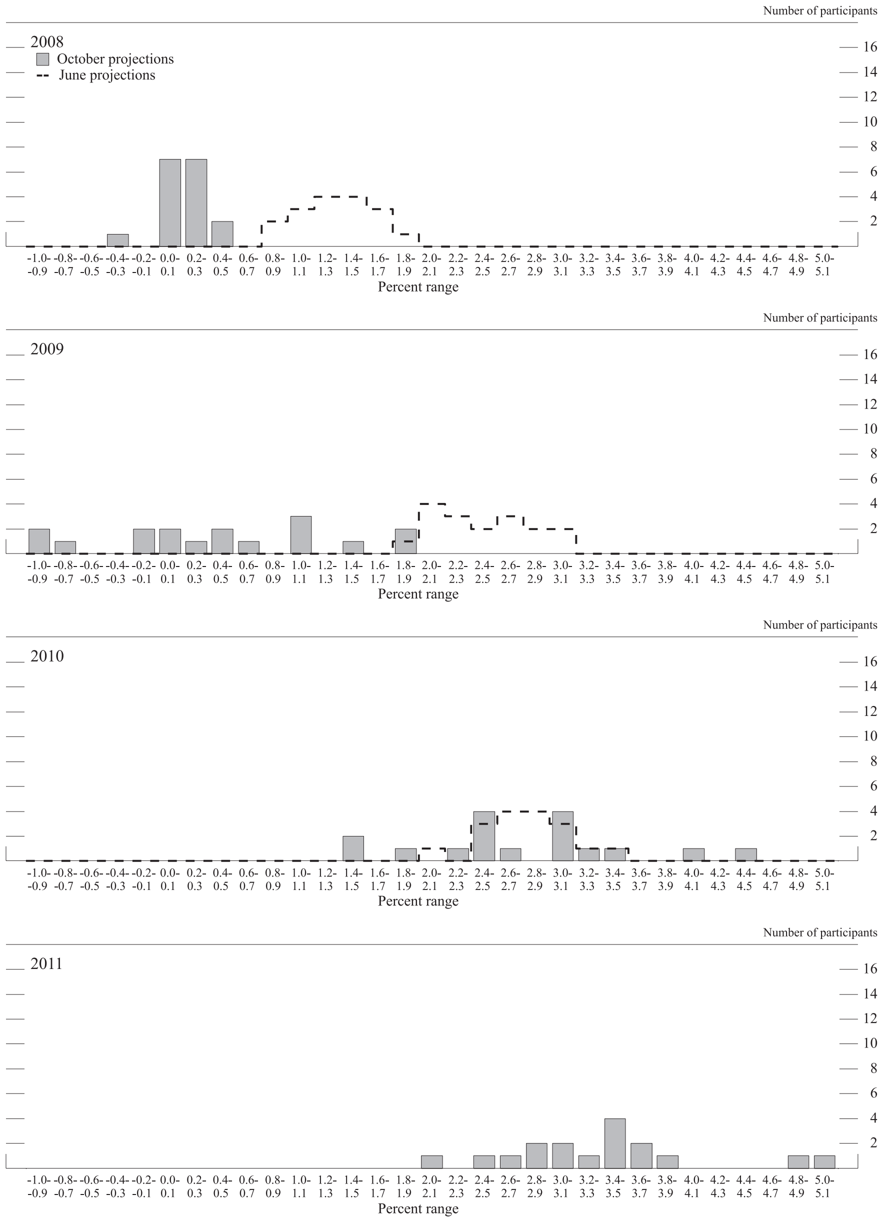
13. Table 2 provides estimates of forecast uncertainty since 1987 for the change in real GDP, the unemployment rate, and total consumer price inflation. At the end of this summary, the box "Forecast Uncertainty" discusses the sources and interpretation of uncertainty in economic forecasts and explains the approach used to assess the uncertainty and risks attending participants' projections.

Diversity of Views

Figures 2.A and 2.B provide further detail on the diversity of participants' views regarding likely outcomes for real GDP growth and the unemployment rate, respectively. For both variables, the dispersion of participants' projections for 2008 was noticeably narrower than in the forecasts provided in June, mainly due to the accumulation of incoming data regarding the performance of the economy to date. In contrast, participants' projections for 2009 and 2010 exhibited substantially greater dispersion than in June, mainly reflecting the diversity of views regarding the duration of the financial crisis and the magnitude and persistence of its impact on the real economy. The dispersion in participants' projections was also affected to some degree by differences in their estimates of the longer-run rates of output growth and unemployment to which the economy would converge under appropriate policy and in the absence of any further shocks.

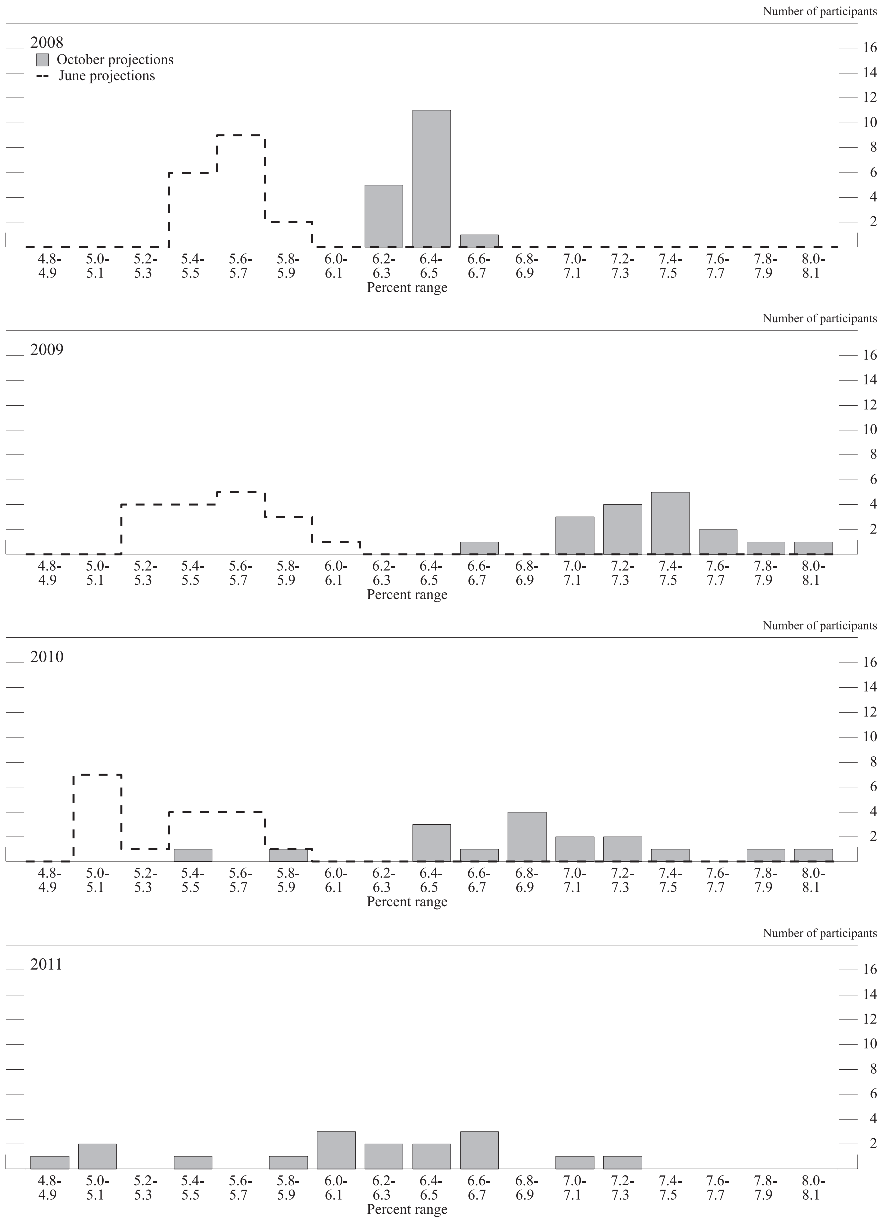
Figures 2.C and 2.D provide corresponding information regarding the diversity of participants' views regarding the inflation outlook. The dispersion in participants' projections for 2009 and 2010 was substantially greater than in June, primarily reflecting differences in their views about how much slack in resource utilization was likely to develop and about the extent to which that slack would place downward pressure on increases in wages and prices. Some participants indicated that their inflation projections for 2011 were roughly in line with their assessments of the measured rate of inflation consistent with the Federal Reserve's dual mandate for promoting price stability and maximum employment; other participants anticipated that inflation in 2011 would be a bit below their assessments of the mandate-consistent inflation rate, mainly reflecting the lagged effects of weak economic activity and the relatively sluggish pace of recovery.

Figure 2.A. Distribution of Participants' Projections for the Change in Real GDP, 2008–11



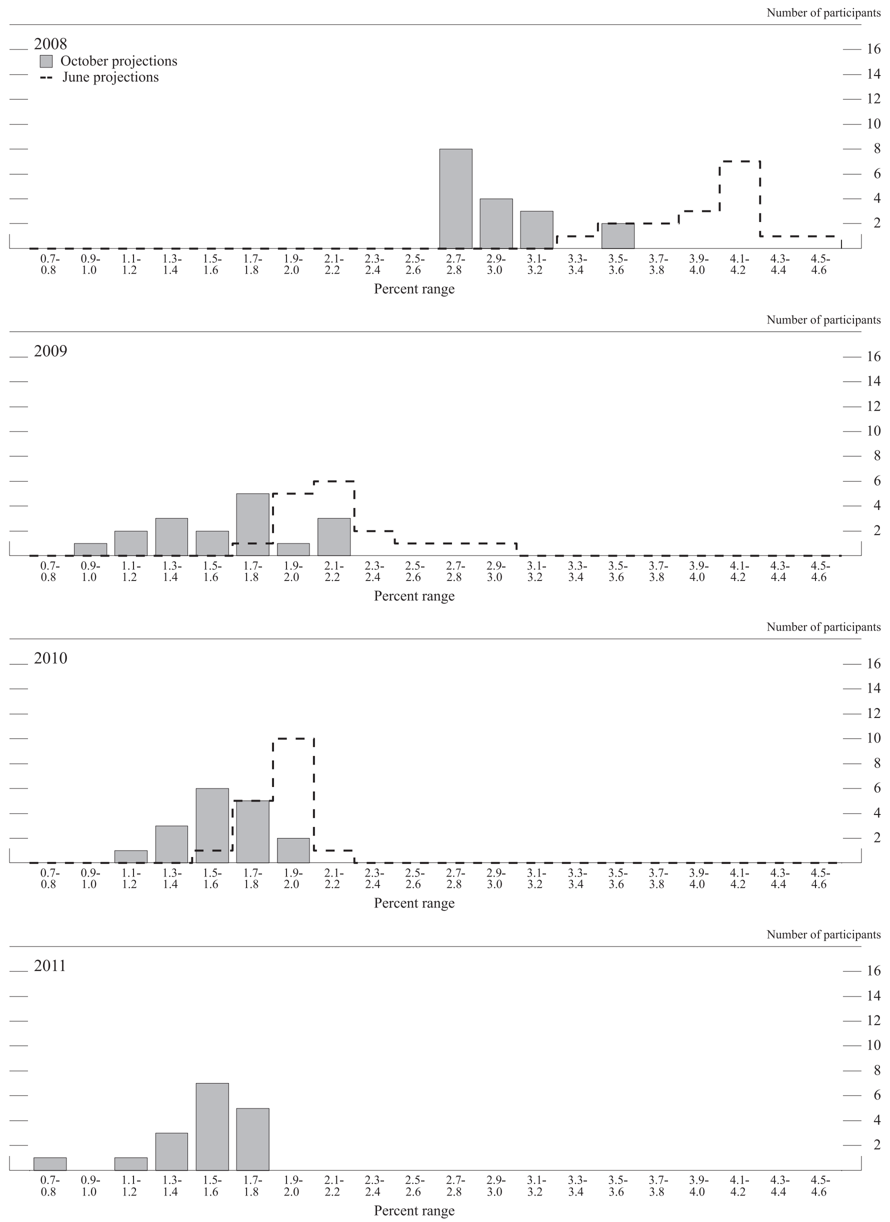
NOTE: Definitions of variables are in the general note to table 1.

Figure 2.B. Distribution of Participants' Projections for the Unemployment Rate, 2008–11



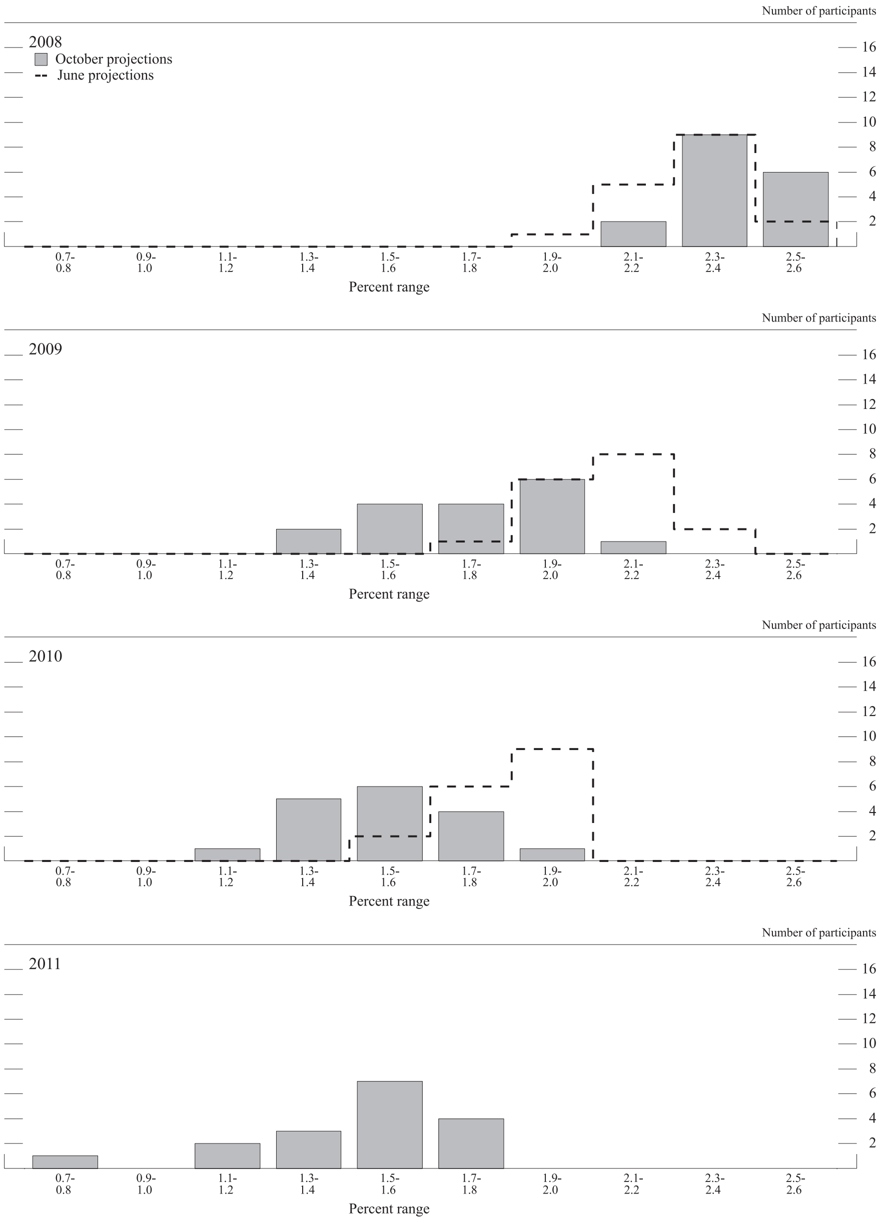
NOTE: Definitions of variables are in the general note to table 1.

Figure 2.C. Distribution of Participants' Projections for PCE Inflation, 2008-11



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

Figure 2.D. Distribution of Participants' Projections for Core PCE Inflation, 2008–11



Note: 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 Federal Reserve Board 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 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 between 2.4 percent to 3.6 percent in the current year, 1.7 percent to 4.3 percent in the second year, and 1.6 percent to 4.4 percent in the third and fourth years. The corresponding 70 percent confidence intervals for overall inflation would be 1.7 percent to 2.3 percent in the current year and 1.0 percent to 3.0 percent in the second, 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, 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.

Meeting Held on December 15–16, 2008

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 Monday, December 15, 2008 at 2:00 p.m. and continued on Tuesday, December 16, 2008 at 9:00 a.m.

Present:

Mr. Bernanke, Chairman
Ms. Duke
Mr. Fisher
Mr. Kohn
Mr. Kroszner
Ms. Pianalto
Mr. Plosser
Mr. Stern
Mr. Warsh

Ms. Cumming, Messrs. Evans, Lacker, and Lockhart, and Ms. Yellen, Alternate Members of the Federal Open Market Committee

Messrs. Bullard, Hoenig, and Rosengren, Presidents of the Federal Reserve Banks of St. Louis, Kansas City, and Boston, respectively

Mr. Madigan, Secretary and Economist
Ms. Danker, Deputy Secretary
Mr. Skidmore, Assistant Secretary
Ms. Smith, Assistant Secretary
Mr. Alvarez, General Counsel
Mr. Ashton,[14] Assistant General Counsel
Mr. Sheets, Economist
Mr. Stockton, Economist

Messrs. Connors, English, and Kamin, Ms. Mester, Messrs. Rolnick, Rosenblum, Slifman, and Wilcox, Associate Economists

Mr. Dudley, Manager, System Open Market Account

Mr. Cole, Director, Division of Banking Supervision and Regulation, Board of Governors

Ms. Johnson,[15] Secretary, Office of the Secretary, Board of Governors

Mr. Struckmeyer, Deputy Staff Director, Office of Staff Director for Management, Board of Governors

Mr. Blanchard, Assistant to the Board, Office of Board Members, Board of Governors

Messrs. Clouse and Parkinson,[14] Deputy Directors, Divisions of Monetary Affairs and Research and Statistics, respectively, Board of Governors

Mr. Frierson,[15] Deputy Secretary, Office of the Secretary, Board of Governors

Messrs. Leahy,[15] Nelson,[16] Reifschneider, and Wascher, Associate Directors, Divisions of International Finance, Monetary Affairs, Research and Statistics, and Research and Statistics, respectively, Board of Governors

Mr. Gagnon,[15] Visiting Associate Director, Division of Monetary Affairs, Board of Governors

Ms. Shanks,[15] Associate Secretary, Office of the Secretary, Board of Governors

Messrs. Perli and Reeve, Deputy Associate Directors, Divisions of Monetary Affairs and International Finance, respectively, Board of Governors

Mr. Covitz, Assistant Director, Division of Research and Statistics, Board of Governors

Ms. Goldberg,[15] Visiting Reserve Bank Officer, Division of International Finance, Board of Governors

14. Attended Tuesday's session.

15. Attended the portion of the meeting relating to the zero lower bound on nominal interest rates.

16. Attended the meeting through the discussion of the zero lower bound on nominal interest rates.

Mr. Zakrajsek,[15] Assistant Director, Division of Monetary Affairs, Board of Governors

Messrs. Meyer[15] and Oliner, Senior Advisers, Divisions of Monetary Affairs and Research and Statistics, respectively, Board of Governors

Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors

Messrs. Ahmed and Luecke, Section Chiefs, Divisions of International Finance and Monetary Affairs, respectively, Board of Governors

Ms. Aaronson, Senior Economist, Division of Research and Statistics, Board of Governors

Messrs. Gapen and McCabe,[15] Economists, Divisions of Monetary Affairs and Research and Statistics, respectively, Board of Governors

Ms. Beattie,[15] Assistant to the Secretary, Office of the Secretary, Board of Governors

Ms. Low, Open Market Secretariat Specialist, Division of Monetary Affairs, Board of Governors

Mr. Werkema, First Vice President, Federal Reserve Bank of Chicago

Mr. Fuhrer, Executive Vice President, Federal Reserve Bank of Boston

Messrs. Altig, Hilton, Potter, Rasche, Rudebusch, Schweitzer, Sellon, Sullivan, and Weinberg, Senior Vice Presidents, Federal Reserve Banks of Atlanta, New York, New York, St. Louis, San Francisco, Cleveland, Kansas City, Chicago, and Richmond, respectively

Mr. Burke,[15] Assistant Vice President, Federal Reserve Bank of New York

Mr. Eggertsson,[15] Senior Economist, Federal Reserve Bank of New York

The Manager of the System Open Market Account reported on recent developments in foreign exchange markets. There were no open market operations in foreign currencies for the System's account in the period since the previous meeting. The Manager also reported on developments in domestic financial markets and on System open market operations in government securities and federal agency obligations during the period since the previous meeting. By unanimous vote, the Committee ratified these transactions.

The information reviewed at the December meeting pointed to a significant contraction in economic activity in the fourth quarter. Conditions in the labor market deteriorated considerably in recent months as most major industry groups shed jobs. Private payrolls continued to fall at a faster pace than earlier in the year, and the unemployment rate rose to 6.7 percent. Industrial production, excluding special hurricane- and strike-related effects, fell further in November, and consumer spending declined across a broad range of spending categories over recent months. The housing market weakened again as construction activity, new home sales, and home prices declined further. In the business sector, investment in equipment and software appeared to continue to contract. Financial markets saw a further pullback in risk-taking, spurred in part by the more pessimistic outlook for economic activity; this situation led to lower equity prices, higher risk spreads, and tighter constraints in credit markets, all of which intensified the decline in real activity. On the inflation front, headline consumer prices declined in recent months, as energy prices continued to fall and consumer food price increases moderated.

The labor market continued to worsen. According to the November employment report, payroll employment fell at a rapid pace over the preceding three months, with substantial losses across a wide range of industry groups, including manufacturing, construction, retail, financial activities, and business services. Indicators of hiring plans also dropped steeply in November, and other labor market indicators suggested that jobs remained in short supply. The unemployment rate climbed to 6.7 percent in November, while the labor force participation rate fell after remaining steady for much of the year. New claims for unemployment insurance rose sharply through early December.

Industrial production, excluding special hurricane- and strike-related effects, fell markedly in November after sizable declines in the preceding two months. The recent contraction in industrial output was broadly based. The steep pace of decline in the production of consumer goods reflected not only cutbacks in motor vehicle assemblies but also drops in the output of other goods, such as appliances, furniture, and products related to home improvement. The production of business equipment was held down by declines in the output of both industrial and high-tech equipment. The output of construction supplies extended its decline after a brief pause in the middle of the year, and the contraction in the production of materials intensified. In particular, steel production plummeted, and the output of organic chemicals contracted noticeably. For most major industry groups, factory utilization rates declined relative to their levels in July and remained below their long-run averages. Available forward-looking indicators pointed to a significant downturn in manufacturing output in coming months.

Real personal consumption expenditures (PCE) fell for the fifth straight month in October, with the slowdown evident in nearly all broad spending categories. Sales of light motor vehicles, which slumped in October, fell further in November, but the available information on retail sales suggested a small increase in real outlays for other consumer goods. The annualized three-month change in spending on services in October was just one-third of the rate registered in the first half of 2008. Preliminary data for October and November suggested that overall fourth-quarter real spending would receive a modest boost from recent price declines for gasoline. Real incomes were also boosted by the reversal in energy prices, though the negative wealth effects of continued declines in equity and house prices likely offset this somewhat. Measures of consumer sentiment released in November and December remained low, and available evidence suggested further tightening in consumer credit conditions in recent months.

Real construction activity continued to decline in November. Single-family housing starts and permit issuance fell further. In the multifamily sector, starts dropped sharply in November while permit issuance remained on a downtrend. Housing demand remained weak, and although the number of unsold new single-family homes continued to move lower, inventories remained elevated relative to the current pace of sales. Sales of existing single-family homes changed little, although a drop in pending home sales in October pointed to further declines in the near term. The comparative strength of existing home sales appeared to be attributable partly to increases in foreclosure-related and other distressed sales. Financing conditions for prime borrowers appeared to ease slightly after the Federal Reserve's announcement that it would purchase agency debt and agency mortgage-backed securities (MBS) to support mortgage financing, while the market for nonconforming loans remained impaired. Several indexes indicated that house prices continued to decline substantially.

In the business sector, investment in equipment and software appeared to be contracting at a faster rate in the fourth quarter than during the third quarter. While the decline in the previous quarter was concentrated in computers and transportation equipment, declines in spending in the fourth quarter were more widespread. Shipments of nondefense capital goods excluding aircraft fell in October, and orders continued to decline sharply. Investment demand seemed to be weighed down by weak fundamentals and increased uncertainty about the state of the economy, while prospects for future investment activity reflected in surveys of business conditions and sentiment worsened in recent months. In addition, credit conditions remained tight. Real nonresidential investment declined in the third quarter after nearly three years of robust expansion, and nominal expenditures edged down further in October. Vacancy rates rose and property values fell in the first three quarters of the year.

Real nonfarm inventories (excluding motor vehicles), which had dropped noticeably in the second quarter, fell again in the third quarter. The book value of manufacturing and wholesale trade inventories (excluding motor vehicles) showed a further drawdown in October. However, the ratio of these inventories to sales increased noticeably in September and October. The purchasing managers survey for November indicated that many purchasing agents saw their customers' inventories as too high.

The U.S. international trade deficit widened in October, as a fall in imports was more than offset by a significant decline in exports. Much of the decline in exports was the result of drops in agricultural goods and industrial supplies, which largely reflected a decrease in the prices of these goods. The decline in imports was led by lower imports of non-oil industrial supplies, capital goods, and automotive products, although these declines were partly offset by an increase in the value of oil imports.

Economic activity in most advanced foreign economies contracted in the third quarter, driven by sharp declines in investment and by significant negative contributions of net exports, as the global recession took hold more strongly. Incoming data pointed to an even weaker pace of activity in the fourth quarter. In Canada, however, real gross domestic product (GDP) increased at a faster-than-expected pace in the third quarter, though consumption and investment continued to soften. In the euro area and the United Kingdom, purchasing managers indexes fell in November to levels associated with severe contractions in economic activity. Labor market conditions in the advanced economies deteriorated further, with most countries experiencing rising unemployment rates. In Japan, real GDP fell in the third quarter as domestic demand declined and private investment fell for the second consecutive quarter. After peaking in the third quarter, consumer price inflation moderated in all advanced foreign economies, primarily as a result of falling energy and food prices. Economic activity in most emerging market economies decelerated sharply in the third quarter, though a surge in agricultural output helped to support activity in Mexico, and the Brazilian economy continued to expand rapidly. In Asia, output decelerated significantly, as the pace of real activity moderated in China and several other economies saw declines in real GDP. Recent readings on production, sales, and exports suggest that emerging market economies weakened further in the current quarter. Headline inflation generally declined across emerging market economies, primarily because of lower food and energy prices and, in some cases, weaker economic activity.

In the United States, headline consumer prices declined in recent months while core consumer price inflation slowed further. With energy prices falling sharply and the rate of increase in food prices moderating, headline PCE prices fell in October, and data from the consumer price index (CPI) indicated that the decline extended into November. Core PCE prices were unchanged in October, and based on the CPI, appeared to have been unchanged again in November. The recent slowing in core consumer price inflation was widespread and likely reflected not only the weak pace of economic activity but also the easing of some earlier cost pressures as the prices of crude oil, gasoline, and other commodities declined. Excluding food and energy, producer prices rose modestly again in November, as prices at earlier stages of processing continued to retreat for the third consecutive month. Measures of inflation expectations continued to fall or hold steady during the intermeeting period. Measures of nominal hourly labor compensation continued to increase moderately in the third quarter.

At its October 28–29 meeting, the Federal Open Market Committee (FOMC) lowered its target for the federal funds rate 50 basis points to 1 percent. The Committee's statement noted that economic activity appeared to have slowed markedly, due importantly to a decline in consumer expenditures. Business equipment spending and industrial production had weakened in recent months, and slowing economic activity in many foreign economies was damping the prospects for U.S. exports. Moreover, the intensification of financial market turmoil was likely to exert additional restraint on spending, partly by further reducing the ability of households and businesses to obtain credit. The Committee noted that, in light of the declines in the prices of energy and other commodities and the weaker prospects for economic activity, it expected inflation to moderate in coming quarters to levels consistent with price stability. The Committee also noted that recent policy actions, including the rate reduction that was approved at the October 28-29 meeting, coordinated interest rate cuts by central banks, extraordinary liquidity measures, and official steps to strengthen financial systems, should help over time to improve credit conditions and promote a return to moderate economic growth. Nevertheless, downside risks to economic activity remained and the Committee indicated that it would monitor economic and financial developments carefully and act as needed to promote sustainable economic growth and price stability.

Over the intermeeting period, investors marked down their expectations for the path of monetary policy. Policy expectations were largely unaffected by the outcome of the October 28-29 FOMC meeting, as the Committee's decision to reduce the target federal funds rate was broadly anticipated and the accompanying statement was reportedly in line with investor expectations. Subsequently, however, the expected future path of monetary policy dropped amid data releases that suggested a weaker outlook for economic activity and lower inflation than had been anticipated, along with continued strains in financial markets that weighed on investor sentiment. Yields on nominal Treasury coupon securities declined significantly over the intermeeting period in response to safe-haven demands as well as the downward revisions in the economic outlook and the expected policy path. Meanwhile, yields on inflation-indexed Treasury securities declined by smaller amounts, leaving inflation compensation lower. Although the decline in inflation compensation occurred amid sharp decreases in inflation measures and energy prices, it was likely amplified by increased investor preference for the greater liquidity of nominal Treasury securities relative to that of inflation-protected Treasury securities.

Conditions in short-term funding markets remained strained for most of the intermeeting period, though some signs of improvement were evident. The spreads of London interbank offered rates, or Libor, over comparable-maturity overnight index swap rates declined noticeably across most maturities early in the intermeeting period; however, some of this decline was reversed once maturities began to lengthen past year-end. Trading in longer-term interbank funding markets reportedly remained thin. Credit outstanding under the Federal Reserve's Term Auction Facility (TAF) increased to about $448 billion because of expanded auction sizes. Recent auctions for both 28-day and 84-day credit from the TAF were undersubscribed, and bidding for the two forward TAF auctions during the intermeeting period was very light. Meanwhile, primary credit outstanding remained high, although it had declined somewhat in recent weeks. Use of the Primary Dealer Credit Facility dropped significantly. A number of the Term Securities Lending Facility (TSLF) auctions were oversubscribed, as was the auction of options for 13-day Schedule 2 TSLF loans straddling the end of the year.

Conditions in markets for repurchase agreements, or repos, arranged using certain types of collateral deteriorated over the intermeeting period, and liquidity for repos backed by non-Treasury, non-agency collateral remained poor. Amid high demand for safe investments, the overnight Treasury general collateral (GC) repo rate remained very low and fell to around zero late in the intermeeting period. Still, failures to deliver in the Treasury market declined substantially from the levels reached in October and overnight securities lending from the System Open Market Account portfolio fell sharply. Heavy demand for safe instruments was also apparent in the Treasury bill market, where yields turned negative at times. During the intermeeting period, the Treasury announced that it would not roll over bills related to the Supplementary Financing Program in order to preserve flexibility in the conduct of debt management policy, and uncertainty about supply reportedly exacerbated poor liquidity conditions in the bill market. Despite the decline in spreads of agency and mortgage-backed repo rates over Treasury GC rates later in the period, strains in these markets remained evident, with bid-asked spreads and haircuts very elevated.

In contrast, conditions in the commercial paper (CP) market improved over the intermeeting period, likely as a reflection of recent measures taken in support of this market. Spreads on 30-day A1/P1 and asset-backed commercial paper (ABCP) continued to narrow after the Commercial Paper Funding Facility (CPFF) became operational on October 27, although spreads subsequently reversed a portion of the declines as maturities crossed over year-end. In contrast, spreads on commercial paper not eligible for purchase under the CPFF remained elevated. The dollar amounts of unsecured financial CP and ABCP outstanding rebounded from their October lows, though issuance into the CPFF more than accounted for this increase. Credit outstanding under the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility fell by more than half over the intermeeting period. The Money Market Investor Funding Facility program registered no activity.

As financial market conditions worsened over the intermeeting period, investors seemed to become more concerned about the likelihood of a deep and prolonged recession. In addition, the Treasury Department's announcement that funds from the Troubled Asset Relief Program would not be used to purchase securities backed by mortgage-related and other assets appeared to prompt negative price reactions in several financial markets. Stock prices of financial corporations fell considerably, while broad equity indexes declined, on net, amid high volatility. Yields on investment-grade bonds moved lower, but risk spreads on these instruments over comparable-maturity Treasury securities widened substantially as yields on Treasury securities fell more. Yields and risk spreads on speculative-grade bonds soared, and credit default swap spreads on speculative-grade, as well as investment-grade, corporate bonds widened further. Gross issuance of bonds by nonfinancial investment-grade companies continued at a solid pace, but issuance of speculative-grade bonds remained at zero. Issuance of leveraged syndicated loans was also extremely weak. Strains were evident in a number of other financial markets as well. The functioning of Treasury markets remained impaired, and premiums for the on-the-run ten-year nominal Treasury security rose from levels that were already elevated. The market for commercial mortgage-backed securities experienced a particularly pronounced selloff.

Reflecting investor concerns about the conditions of financial institutions, spreads on credit default swaps for U.S. banks widened sharply, and those for insurance companies remained elevated. To support market stability, the U.S. government on November 23 entered into an agreement with Citigroup to provide a package of capital, guarantees, and liquidity access. In other developments, banking organizations began to take advantage of the Federal Deposit Insurance Corporation's (FDIC) Temporary Liquidity Guarantee Program; eleven institutions issued bonds under the program.

In view of the tightening of credit conditions for consumers and small businesses, the Federal Reserve announced on November 25 the creation of the Term Asset-Backed Securities Loan Facility to support the markets for asset-backed securities collateralized by student loans, auto loans, credit card loans, and loans guaranteed by the Small Business Administration. The facility, developed jointly with the Treasury, was expected to be operational by February 2009, and discussions with market participants about operational details of this facility were ongoing.

The Federal Reserve also announced on November 25 that, to help reduce the cost and increase the availability of residential mortgage credit, it would initiate a program to purchase up to $100 billion in direct obligations of housing-related government-sponsored enterprises (GSEs) and up to $500 billion in MBS backed by Fannie Mae, Freddie Mac, and Ginnie Mae. Agency debt spreads, which had widened early in the period, narrowed somewhat after the announcement. Subsequent purchases of agency debt by the Open Market Desk at the Federal Reserve Bank of New York led to a further reduction in agency spreads. Likely reflecting in part these developments, conditions in the primary residential mortgage market improved. The interest rate on 30-year fixed-rate conforming mortgages declined, which prompted a noticeable increase in mortgage refinancing.

M2 expanded at a considerably slower rate in November than October. Retail money funds contracted after a surge in October that reflected safe-haven inflows to Treasury-only funds. Small time deposits increased somewhat more slowly than in October, although the rate of expansion remained quite rapid as banks continued to bid aggressively for these deposits. Flows into demand deposits covered by the FDIC's new temporary guarantee program were significant and apparently reflected shifts out of savings accounts as well as redirection of funds by banks' customers away from other money market instruments. Currency continued its strong increase, apparently boosted by solid foreign demand for U.S. banknotes.

Liquidity conditions in the money markets of major foreign economies improved but remained strained over the intermeeting period. Movements in stock prices were mixed in the advanced foreign economies, although equity prices generally rose in emerging market economies. In response to evidence of a slowdown in economic activity and a rapid waning of inflationary pressures, central banks around the world eased policy sharply. Sovereign bond yields fell, reflecting prospects for lower inflation and lower policy rates for an extended period. The dollar declined on balance against the currencies of major U.S. trading partners.

In the forecast prepared for the meeting, the staff revised down sharply its outlook for economic activity in 2009 but continued to project a moderate recovery in 2010. Real GDP appeared likely to decline substantially in the fourth quarter of 2008 as conditions in the labor market deteriorated more steeply than previously anticipated; the decline in industrial production intensified; consumer and business spending appeared to weaken; and financial conditions, on balance, continued to tighten. Rising unemployment, the declines in stock market wealth, low levels of consumer sentiment, weakened household balance sheets, and restrictive credit conditions were likely to continue to hinder household spending over the near term. Homebuilding was expected to contract further. Business expenditures were also likely to be held back by a weaker sales outlook and tighter credit conditions. Oil prices, which dropped significantly during the intermeeting period, were assumed to rise over the next two years in line with the path indicated by futures market prices, but to remain below the levels of October 2008. All told, real GDP was expected to fall much more sharply in the first half of 2009 than previously anticipated, before slowly recovering over the remainder of the year as the stimulus from monetary and assumed fiscal policy actions gained traction and the turmoil in the financial system began to recede. Real GDP was projected to decline for 2009 as a whole and to rise at a pace slightly above the rate of potential growth in 2010. Amid the weaker outlook for economic activity over the next year, the unemployment rate was likely to rise significantly into 2010, to a level higher than projected at the time of the October 28–29 FOMC meeting. The disinflationary effects of increased slack in resource utilization, diminished pressures from energy and materials prices, declines in import prices, and further moderate reductions in inflation expectations caused the staff to reduce its forecast for both core and overall PCE inflation. Core inflation was projected to slow considerably in 2009 and then to edge down further in 2010.

In their discussion of the economic situation and outlook, all meeting participants agreed that the economic downturn had intensified over the fall. Although some financial markets exhibited signs of improved functioning, financial conditions generally remained very strained. Credit conditions continued to tighten for both households and businesses, and ongoing declines in equity prices further reduced household wealth. Conditions in the housing market weakened again and house prices declined further. Against this backdrop, measures of business and consumer confidence fell to new lows, and private spending continued to contract. Employment and production indicators weakened further as businesses responded very rapidly to the fall-off in demand. Participants expected economic activity to contract sharply in the fourth quarter of 2008 and in early 2009. Most projected that the economy would begin to recover slowly in the second half of 2009, aided by substantial monetary policy easing and by anticipated fiscal stimulus. Meeting participants generally agreed that the uncertainty surrounding the outlook was considerable and that downside risks to even this weak trajectory for economic activity were a serious concern. Indeed, the severe ongoing financial market strains, the large reductions in household wealth, and the global nature of the economic slowdown were seen by some participants as suggesting the distinct possibility of a prolonged contraction, although that was not judged to be the most likely outcome. Inflation pressures had diminished appreciably as energy and other commodity prices dropped and economic activity slumped. Looking forward, participants agreed that inflationary pressures looked set to moderate further in coming quarters, reflecting recent declines in commodity prices and rising slack in resource markets, and several saw risks that inflation could drop for a time below rates they viewed as most consistent over time with the Federal Reserve's dual mandate for maximum employment and price stability.

Meeting participants observed that financial strains continued to exert a powerful drag on economic activity and that the adverse feedback loop between financial conditions and economic performance had intensified. Although improvements were evident in some markets, particularly those for highly rated commercial paper and for interbank funds, financial markets generally remained under severe stress. Equity prices continued to drop amid high volatility, further reducing household wealth. Rising risk spreads kept the cost of issuing corporate bonds at a high level—especially for lower-rated firms—even though Treasury yields had declined sharply since the October 28–29 meeting. Securitization markets, which over recent years had been an important channel in credit intermediation, remained largely dysfunctional, with the exception of those for mortgages guaranteed by the GSEs. The sharp drops and unusual volatility in the prices of many financial assets since the beginning of the fourth quarter were likely to cause more losses for financial institutions, and a number of participants noted that loan delinquencies were increasing significantly in the consumer sector, adding to pressures on banks' balance sheets and reinforcing banks' cautious lending stance. As a consequence, credit conditions for both businesses and households had tightened further, with banks generally adopting stricter lending standards and declining to renew or paring back existing credit lines.

Participants observed that the effects of the financial turmoil, increased uncertainty, and drops in confidence and demand were becoming increasingly evident in the business sector. Business contacts across the country expected considerable near-term weakness in sales and declining pricing power. Some meeting participants reported especially sharp drops in new orders in their Districts. Even sectors that had performed relatively well until recently, such as mining and drilling, were experiencing reduced activity, mostly due to the decline in commodity prices. Agricultural activity was also showing signs of weakness. Business sentiment had deteriorated sharply since September, likely contributing to steep drops in employment and production. Participants anticipated that, with the deteriorating economic outlook and tightening of credit conditions, capital expenditures were likely to be soft in coming quarters.

Many participants noted that the decline in household wealth resulting from large drops in equity and house prices, together with tighter credit conditions, rapidly increasing unemployment, and deteriorating consumer sentiment, was contributing to a sharp contraction in consumer spending. Some participants pointed out that reduced consumer wealth and concerns about employment could lead to a further increase in saving, which, although desirable in the longer term, could put additional downward pressure on consumer spending in coming quarters. The latest housing data suggested a continued substantial contraction in that sector. The recent decline in mortgage rates had sparked some refinancing and purchase activity, but the extent of the longer-term impact of lower rates on housing demand remained uncertain.

Meeting participants noted that economic conditions had deteriorated substantially in recent months in both advanced and emerging market economies. As a consequence, demand for U.S. exports had weakened, held back also by the strengthening of the dollar since the summer. Going forward, global demand was expected to remain weak, and thus growth in exports was unlikely to provide much support for U.S. activity. However, the weakness in the global economy was contributing to lower prices of energy and other commodities, which should boost real incomes and provide modest support to household spending.

Participants agreed that falling prices for energy and other commodities and diminished economic activity had resulted in an appreciable reduction in inflationary pressures. Those pressures were seen as likely to continue to abate because of the emergence of substantial slack in resource utilization and diminishing pricing power. Participants were uncertain about the extent to which inflation would fall. Some saw inflation leveling out near desired levels, while others expressed concern that inflation might decline below levels consistent with price stability in the medium term. Participants generally agreed that inflation expectations were an important determinant of future price dynamics. Some noted that those expectations, especially at longer horizons, appeared well anchored. However, some survey evidence suggested that firms expected prices to continue to decline as they had over the previous few months. Several participants observed that monitoring measures of inflation expectations for signs of disinflationary dynamics would be especially important going forward.

In a joint session of the Federal Open Market Committee and the Board of Governors, meeting participants discussed extensively how in current circumstances the Committee could best support the resumption of sustainable economic growth and promote the maintenance of price stability over the medium term. Participants noted that very low levels of the federal funds rate had the potential to help buoy aggregate demand and economic activity, but they also had potential costs in terms of the functioning of certain financial markets and some financial institutions. Most participants judged that the benefits in terms of support for the overall economy of federal funds rates close to, but slightly above, zero probably outweighed the adverse effects. With the federal funds rate already trading at very low levels as a result of the large volume of excess reserves associated with the Federal Reserve's liquidity operations, participants agreed that the Committee would need to focus on other tools to impart additional monetary stimulus to the economy in the near term. One broad class of such tools was the use of FOMC communication with the public to provide more information regarding future policy intentions. In particular, participants judged that communicating the Committee's expectation that short-term interest rates were likely to stay exceptionally low for some time could be useful because it could lead to pricing of longer-term interest rates consistent with the path of monetary policy that policymakers saw as most likely. Participants emphasized the importance of explicitly conditioning communication regarding future policy on the evolution of the economic outlook. Another possible form of communication that participants discussed was a more explicit indication of their views on what longer-run rate of inflation would best promote their goals of maximum employment and price stability. The added clarity in that regard might help forestall the development of expectations that inflation would decline below desired levels, and hence keep real interest rates low and support aggregate demand.

Meeting participants also discussed how best to employ the Federal Reserve's balance sheet to promote monetary policy goals. The Federal Reserve had already adopted a series of programs that were providing liquidity support to a range of institutions and markets, and participants generally agreed that a continued focus on the quantity and the composition of Federal Reserve assets would be necessary and desirable. Specifically, participants discussed the merits of purchasing large quantities of longer-term securities such as agency debt, agency mortgage-backed securities, and Treasury securities. The available evidence indicated that such purchases would reduce yields on those instruments, and lower yields on those securities would tend to reduce borrowing costs for a range of private borrowers, although participants were uncertain as to the likely size of such effects. Participants also generally believed that the special liquidity and lending facilities implemented or announced recently would support the availability of credit to businesses and households and thus help sustain economic activity. Many participants thought that the Federal Reserve should continue to consider whether expanding some of the existing facilities and creating new facilities could be helpful. Participants emphasized that the ultimate objective of special lending facilities and asset purchases was to support overall market functioning, financial intermediation, and economic growth. Participants acknowledged that the effective federal funds rate probably would need to remain very low for some time. However, they also recognized that, as economic activity recovered and financial conditions normalized, the use of certain policy tools would need to be scaled back, the size of the balance sheet and level of excess reserves would need to be reduced, and the Committee's policy framework would return to focus on the level of the federal funds rate.

A number of participants observed that, under the approach of conducting monetary policy by acquiring a variety of assets as needed to address financial and macroeconomic strains, the quantity of excess reserves and the size of the Federal Reserve's balance sheet would be determined by the Federal Reserve's asset purchases and the usage of its lending facilities. It was likely that, during the period of financial turmoil, the size of the Federal Reserve's balance sheet would need to be maintained at a high level. Participants discussed the potential advantages and disadvantages of setting quantitative targets for bank reserves or the monetary base. Some were of the view that quantitative targets for an increasing reserve base could be effective in preventing deflationary dynamics and useful in communicating to the public the Committee's determination to take the steps needed to avoid such an outcome. Several other participants, however, noted that increases in excess reserves or the monetary base, by themselves, might not have a significant stimulative effect on the economy or prices because the normal bank intermediation mechanism appeared to be impaired, and banks may not be willing to lend their excess reserves. Conversely, a decline in excess reserves or the monetary base would not necessarily be contractionary if it occurred in the context of improving financial market conditions. A few of those who supported quantitative base or reserve targets did so because they saw them as helping to coordinate the actions of the Board of Governors, which is responsible for authorizing most special liquidity and lending facilities, and the Committee, which is responsible for open market operations. Most participants, however, were of the view that such coordination would best be achieved by continued close cooperation and consultation between the Committee and the Board. Going forward, consideration will be given to whether various quantitative measures would be useful in calibrating and communicating the stance of monetary policy.

In the discussion of monetary policy for the intermeeting period, Committee members recognized that the large volume of excess reserves had already resulted in federal funds rates significantly below the target federal funds rate and the interest rate on excess reserves. They agreed that maintaining a low level of short-term interest rates and relying on the use of balance sheet policies and communications about monetary policy would be effective and appropriate in light of the sharp deterioration of the economic outlook and the appreciable easing of inflationary pressures. Maintaining that level of the federal funds rate implied a substantial further reduction in the target federal funds rate. Even with the additional use of nontraditional policies, the economic outlook would remain weak for a time and the downside risks to economic activity would be substantial. Moreover, inflation would continue to fall, reflecting both the drop in commodity prices that had already occurred and the buildup of economic slack; indeed some members saw significant risks that inflation could decline and persist for a time at uncomfortably low levels.

Members debated how best to communicate their decisions regarding monetary policy actions. Since the large amount of excess reserves in the system would limit the Federal Reserve's control over the federal funds rate, several members thought that it might be preferable not to set a specific target for the federal funds rate. Indeed, those members felt that lack of an explicit target could be helpful, in that it would focus attention on the shift in the policy framework from targeting the federal funds rate to the use of balance sheet policies and communications about monetary policy as a way of providing further monetary stimulus. A few members stressed that the absence of an explicit federal funds rate target would give banks added flexibility in pricing loans and deposits in the current environment of unusually low interest rates. However, other members noted that not announcing a target might confuse market participants and lead investors to believe that the Federal Reserve was unable to control the federal funds rate when it could, in fact, still influence the effective federal funds rate through adjustments of the interest rate on excess reserves and the primary credit rate. The members decided that it would be preferable for the Committee to communicate explicitly that it wanted federal funds to trade at very low rates; accordingly, the Committee decided to announce a target range for the federal funds rate of 0 to ¼ percent. Members also agreed that the statement should indicate that weak economic conditions were likely to warrant exceptionally low levels of the federal funds rate for some time. The members emphasized that their expectation about the path of the federal funds rate was conditioned on their view of the likely path of economic activity.

Members also discussed how best to communicate the focus of the Federal Reserve's policy going forward. Members agreed that the statement should indicate that all available tools would be employed to promote the resumption of sustainable economic growth and to preserve price stability. They also agreed that the statement should note that it was the Committee's intention to sustain the size of the Federal Reserve's balance sheet at a high level through open market operations and other measures to support financial markets and stimulate the economy. In addition to the already-announced asset purchases and liquidity programs, members concurred that the statement should indicate that the Committee stands ready to expand purchases of agency debt and agency mortgage-backed securities, and that it is evaluating the potential benefits of purchasing longer-term Treasury securities.

In light of the use of additional tools for implementing monetary policy, the Committee revised the form of the directive to the Open Market Desk of the Federal Reserve Bank of New York. In addition to specifying that it now seeks conditions in reserve markets consistent with federal funds trading in a range of 0 to ¼ percent, the Committee instructed the Desk to purchase up to $100 billion in housing-related GSE debt and up to $500 billion in agency-guaranteed MBS by the end of the second quarter of 2009. Members agreed that they should not specify the precise timing of these purchases, but that they should leave discretion to the Desk to intervene depending on market and broader economic conditions. The directive also noted that the Manager of the System Open Market Account and the Secretary of the FOMC would keep the Committee informed of developments regarding the System's balance sheet that could affect the attainment of the Committee's statutory objectives. At the conclusion of the discussion, the Committee voted to authorize and direct the Federal Reserve Bank of New York, until it was instructed otherwise, to execute transactions in the System Account in accordance with the following domestic policy directive:

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range of 0 to ¼ percent. The Committee directs the Desk to purchase GSE debt and agency-guaranteed MBS during the intermeeting period with the aim of providing support to the mortgage and housing markets. The timing and pace of these purchases should depend on conditions in the markets for such securities and on a broader assessment of conditions in primary mortgage markets and the housing sector. By the end of the second quarter of next year, the Desk is expected to purchase up to $100 billion in housing-related GSE debt and up to $500 billion in agency-guaranteed MBS. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

The vote encompassed approval of the statement below to be released at 2:15 p.m.:

The Federal Open Market Committee decided today to establish a target range for the federal funds rate of 0 to ¼ percent.

Since the Committee's last meeting, labor market conditions have deteriorated, and the available data indicate that consumer spending, business investment, and industrial production have declined. Financial markets remain quite strained and credit conditions tight. Overall, the outlook for economic activity has weakened further.

Meanwhile, inflationary pressures have diminished appreciably. In light of the declines in the prices of energy and other commodities and the weaker prospects for economic activity, the Committee expects inflation to moderate further in coming quarters.

The Federal Reserve will employ all available tools to promote the resumption of sustainable economic growth and to preserve price stability. In particular, the Committee anticipates that weak economic conditions are likely to warrant exceptionally low levels of the federal funds rate for some time.

The focus of the Committee's policy going forward will be to support the functioning of financial markets and stimulate the economy through open market operations and other measures that sustain the size of the Federal Reserve's balance sheet at a high level. As previously announced, over the next few quarters the Federal Reserve will purchase large quantities of agency debt and mortgage-backed securities to provide support to the mortgage and housing markets, and it stands ready to expand its purchases of agency debt and mortgage-backed securities as conditions warrant. The Committee is also evaluating the potential benefits of purchasing longer-term Treasury securities. Early next year, the Federal Reserve will also implement the Term Asset-Backed Securities Loan Facility to facilitate the extension of credit to households and small businesses. The Federal Reserve will continue to consider ways of using its balance sheet to further support credit markets and economic activity.

Votes for this action: Mr. Bernanke, Mses. Cumming and Duke, Messrs. Fisher, Kohn, and Kroszner, Ms. Pianalto, Messrs. Plosser, Stern, and Warsh. Votes against this action: None. Ms. Cumming voted as the alternate for Mr. Geithner.

The Committee also continued its discussion of possible refinements to the Committee's approach to projections that could provide additional information about participants' views of longer-run sustainable rates of economic growth and unemployment and the measured rates of inflation that would be consistent with price stability, but it made no decisions regarding these issues. Finally, staff briefed the Committee on the progress of plans for implementing the Federal Reserve's Term Asset-Backed Securities Loan Facility, which had initially been announced on November 25, 2008.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, January 27–28, 2009.

The meeting adjourned at 3:00 p.m. on December 16, 2008.

Notation Votes

By notation vote completed on November 18, 2008, the Committee unanimously approved the minutes of the FOMC meeting held on October 28–29, 2008.

By notation vote completed on November 26, 2008, the Committee unanimously approved the extension until April 30, 2009, of its authorization for the Federal Reserve Bank of New York to engage in transactions with primary dealers through the Term Securities Lending Facility, subject to the same collateral, interest rate, and other conditions previously established by the Committee.

Brian F. Madigan
Secretary

Litigation

During 2008, the Board of Governors was a party in seven lawsuits or appeals filed that year and in four other cases pending from previous years, for a total of eleven cases. In 2007, the Board had been a party in a total of eight cases. As of December 31, 2008, seven cases were pending.

Murray v. Board of Governors, No. 08-cv-15147 (E.D. Michigan, filed December 15, 2008), is a challenge to the constitutionality of federal expenditures relating to American International Group (AIG).

Bumgarner v. Paulson, Bernanke, et al., No. 08-cv-5245 (D. New Jersey, amended complaint filed November 21, 2008), challenges the implementation of the Economic Emergency Stabilization Act of 2008.

Bloomberg, L.P. v. Board of Governors, No. 08-cv-9595 (S.D. New York, filed November 7, 2008), is a case brought under the Freedom of Information Act.

Cobble v. Bernanke, No. 3:08-cv-516-S (W.D. Kentucky, filed September 29, 2008), was a petition and request for injunction barring congressional consideration of federal legislation regarding the credit crisis. On October 6, 2008, the district court denied the injunction, and on November 21, 2008, the court dismissed the action.

Schulz v. United States Federal Reserve System, No. 1:08-cv-991 (N.D. New York, filed September 18, 2008), is an action relating to the Federal Reserve's loan to American International Group. On September 25, 2008, the district court denied plaintiff's request for a temporary restraining order and preliminary injunction. On September 30, 2008, the plaintiff appealed the district court's order to the United States Court of Appeals for the Second Circuit (No. 08-4810).

Smith v. Bernanke, No. 08-6353 (U.S. Supreme Court, filed September 3, 2008), was a petition for certiorari seeking review of the Sixth Circuit's affirmance of the dismissal of plaintiff's complaint relating to his concerns about the closure of his bank account. On October 23, 2008, the petition for certiorari was denied.

Jones v. Greenspan, No. 08-5092 (D.C. Circuit, filed April 21, 2008), is an appeal of district court orders in an employment discrimination case granting the Board's motions for summary judgment and dismissal of the plaintiff's claims (see 402 F. Supp. 2d 294, 445 F. Supp. 2d 52, and 493 F. Supp. 2d 18).

Interactive Media Entertainment and Gaming Association, Inc. v. Federal Reserve System, No. 07-2625 (D. New Jersey, filed June 5, 2007), was an action challenging the implementation of the Unlawful Internet Gambling Enforcement Act of 2006. On March 5, 2008, the court granted the government's motion to dismiss the action.

Chandler v. Bernanke, No. 06-2082 (D. District of Columbia, filed December 6, 2006), is an employment discrimination action.

Barnes v. Greenspan, No. 04-CV-1989 (CKK) (D. District of Columbia, filed November 15, 2004), was a case under the Age Discrimination in Employment Act. The case was dismissed by stipulation of the parties on November 5, 2008.

Artis v. Greenspan, No. 01-0400 (D. District of Columbia, filed February 22, 2001), is an employment discrimination action. An identical action, No. 99-2073 (EGS) (D. District of Columbia, filed August 3, 1999), was consolidated with this action on August 15, 2001. On January 31, 2007, the District Court granted the Board's renewed motion to dismiss the action. 474 F. Supp. 2d 16. The plaintiffs' motion to alter or amend judgment is pending. ■

Federal Reserve System Organization

Board of Governors

December 31, 2008

Members

	Term expires January 31,
Ben S. Bernanke, *Chairman*[1]	2020
Donald L. Kohn, *Vice Chairman*[1]	2016
Kevin M. Warsh	2018
Randall S. Kroszner	2008
Elizabeth A. Duke	2012

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Laricke D. Blanchard, *Assistant to the Board*

Winthrop P. Hambley, *Senior Adviser*

Rosanna Pianalto-Cameron, *Assistant to the Board*

David W. Skidmore, *Assistant to the Board*

Brian J. Gross, *Special Assistant to the Board for Congressional Liaison*

Robert M. Pribble, *Special Assistant to the Board for Congressional Liaison*

Legal Division

Scott G. Alvarez, *General Counsel*

Richard M. Ashton, *Deputy General Counsel*

Kathleen M. O'Day, *Deputy General Counsel*

Stephanie Martin, *Associate General Counsel*

Ann Misback, *Associate General Counsel*

Katherine H. Wheatley, *Associate General Counsel*

Kieran J. Fallon, *Assistant General Counsel*

Stephen H. Meyer, *Assistant General Counsel*

Patricia A. Robinson, *Assistant General Counsel*

Mark E. Van Der Weide, *Assistant General Counsel*

Cary K. Williams, *Assistant General Counsel*

1. The designations as Chairman and Vice Chairman expire on January 31, 2010, and June 22, 2010, respectively, unless the service of these members of the Board terminates sooner.

Office of the Secretary

Jennifer J. Johnson, *Secretary*

Robert deV. Frierson, *Deputy Secretary*

Margaret M. Shanks, *Associate Secretary*

Division of International Finance

D. Nathan Sheets, *Director*

Thomas A. Connors, *Deputy Director*

Steven B. Kamin, *Deputy Director*

Joseph E. Gagnon, *Associate Director*

Michael P. Leahy, *Associate Director*

Ralph W. Tryon, *Associate Director*

Trevor A. Reeve, *Deputy Associate Director*

John Rogers, *Deputy Associate Director*

Christopher Erceg, *Assistant Director*

Linda S. Kole, *Assistant Director*

Dale W. Henderson, *Senior Adviser*

Mark S. Carey, *Adviser*

Jane Haltmaier, *Adviser*

Division of Monetary Affairs

Brian F. Madigan, *Director*

James A. Clouse, *Deputy Director*

Deborah J. Danker, *Deputy Director*

William B. English, *Deputy Director*

Cheryl L. Edwards, *Senior Associate Director*

Andrew T. Levin, *Associate Director*

William Nelson, *Associate Director*

Seth B. Carpenter, *Deputy Associate Director*

Roberto Perli, *Deputy Associate Director*

Gretchen C. Weinbach, *Assistant Director*

Egon Zakrajsek, *Assistant Director*

Stephen A. Meyer, *Senior Adviser*

Gretchen C. Weinbach, *Adviser*

Board of Governors—Continued

Division of Research and Statistics

David J. Stockton, *Director*
Patrick M. Parkinson, *Deputy Director*
David W. Wilcox, *Deputy Director*
Myron L. Kwast, *Senior Associate Director*
Lawrence Slifman, *Senior Associate Director*
J. Nellie Liang, *Associate Director*
David L. Reifschneider, *Associate Director*
Janice Shack-Marquez, *Associate Director*
William L. Wascher III, *Associate Director*
Alice Patricia White, *Associate Director*
Glenn B. Canner, *Senior Adviser*
Matthew J. Eichner, *Senior Adviser*
Stephen D. Oliner, *Senior Adviser*
Michael S. Gibson, *Deputy Associate Director*
S. Wayne Passmore, *Deputy Associate Director*
Daniel E. Sichel, *Deputy Associate Director*
Joyce K. Zickler, *Deputy Associate Director*
Michael S. Cringoli, *Assistant Director*
Karen E. Dynan, *Assistant Director*
Diana Hancock, *Assistant Director*
Michael T. Kiley, *Assistant Director*
Michael G. Palumbo, *Assistant Director*
Robin A. Prager, *Assistant Director*
Mary M. West, *Assistant Director*
Sandra A. Cannon, *Assistant Director and Chief*
Daniel M. Covitz, *Assistant Director and Chief*
Eric M. Engen, *Assistant Director and Chief*
David E. Lebow, *Assistant Director and Chief*

Division of Banking Supervision and Regulation

Roger T. Cole, *Director*
Deborah P. Bailey, *Deputy Director*
Norah M. Barger, *Deputy Director*
Peter J. Purcell, *Deputy Director*
Timothy P. Clark, *Senior Adviser*
Nida Davis, *Senior Adviser*
Michael Foley, *Senior Adviser*
Charles H. Holm, *Senior Adviser*
Kevin J. Clarke, *Adviser*
William F. Treacy, *Adviser*
Sarkis Yoghourtdjian, *Adviser*
Barbara J. Bouchard, *Associate Director*
Betsy Cross, *Associate Director*
Gerald A. Edwards, Jr., *Associate Director*
Jon D. Greenlee, *Associate Director*
Jack P. Jennings II, *Associate Director*
David S. Jones, *Associate Director*
Arthur W. Lindo, *Associate Director*
William C. Schneider, Jr., *Associate Director*
William G. Spaniel, *Associate Director*
Coryann Stefansson, *Associate Director*
Molly S. Wassom, *Associate Director*
David M. Wright, *Associate Director*
Kevin M. Bertsch, *Deputy Associate Director*
James A. Embersit, *Deputy Associate Director*
Philip Aquilino, *Assistant Director*
Robert T. Ashman, *Assistant Director*
Lisa M. DeFerrari, *Assistant Director*
Adrienne T. Haden, *Assistant Director*
Robert T. Maahs, *Assistant Director*
Richard A. Naylor II, *Assistant Director*
Nina A. Nichols, *Assistant Director*
Dana E. Payne, *Assistant Director*
Nancy J. Perkins, *Assistant Director*
Sabeth I. Siddique, *Assistant Director*

Division of Consumer and Community Affairs

Sandra F. Braunstein, *Director*
Glenn E. Loney, *Deputy Director*
Anna Alvarez-Boyd, *Associate Director*
Leonard Chanin, *Associate Director*
Tonda E. Price, *Associate Director*
Maryann F. Hunter, *Senior Adviser*

Board of Governors—Continued

Allen J. Fishbein, *Adviser*
Timothy R. Burniston, *Assistant Director*
Joseph Firschein, *Assistant Director*
Suzanne G. Killian, *Assistant Director*
James A. Michaels, *Assistant Director*

Division of Reserve Bank Operations and Payment Systems

Louise L. Roseman, *Director*
Donald V. Hammond, *Deputy Director*
Jeffrey C. Marquardt, *Deputy Director*
Paul W. Bettge, *Senior Adviser*
Kenneth D. Buckley, *Associate Director*
Dorothy LaChapelle, *Associate Director*
Jeff J. Stehm, *Associate Director*
Jack K. Walton II, *Associate Director*
Gregory L. Evans, *Deputy Associate Director*
Lisa K. Hoskins, *Deputy Associate Director*
Susan V. Foley, *Assistant Director*
Michael J. Lambert, *Assistant Director*
Michael J. Stan, *Assistant Director*
Leonard J. Tanis, *Assistant Director*

Office of Staff Director for Management

Stephen R. Malphrus, *Staff Director for Management*
Charles S. Struckmeyer, *Deputy Staff Director*
Sheila Clark, *Equal Employment Opportunity Programs Director*
Lynn S. Fox, *Senior Adviser*
Adrienne D. Hurt, *Adviser*

Management Division

H. Fay Peters, *Director*
Donald A. Spicer, *Deputy Director*
Michell C. Clark, *Deputy Director*
Todd A. Glissman, *Senior Associate Director*
Billy J. Sauls, *Senior Associate Director*
Christine M. Fields, *Associate Director*
William L. Mitchell, *Associate Director*
James R. Riesz, *Associate Director*
Elaine M. Boutilier, *Deputy Associate Director*
Charles F. O'Malley, *Deputy Associate Director*
Keith F. Bates, *Assistant Director*
Jeffrey R. Peirce, *Assistant Director*
Christopher J. Suma, *Assistant Director*
Tara C. Tinsley-Pelitere, *Assistant Director*
Theresa A. Trimble, *Assistant Director*
Carol A. Sanders, *Adviser*

Division of Information Technology

Maureen T. Hannan, *Director*
Geary L. Cunningham, *Deputy Director*
Sharon L. Mowry, *Deputy Director*
Wayne A. Edmondson, *Associate Director*
Lisa M. Bell, *Assistant Director*
Tillena G. Clark, *Assistant Director*
Glenn S. Eskow, *Assistant Director*
Po Kyung Kim, *Assistant Director*
Susan F. Marycz, *Assistant Director*
Raymond Romero, *Assistant Director*
Kofi A. Sapong, *Assistant Director*

Office of Inspector General

Elizabeth A. Coleman, *Inspector General*
Anthony J. Castaldo, *Assistant Inspector General*
Laurence A. Froehlich, *Assistant Inspector General*
Andrew Patchan, Jr., *Assistant Inspector General*
Harvey Witherspoon, *Assistant Inspector General*

Federal Open Market Committee

December 31, 2008

Members

BEN S. BERNANKE, *Chairman,* Board of Governors

TIMOTHY F. GEITHNER, *Vice Chairman,* President, Federal Reserve Bank of New York

ELIZABETH A. DUKE, Board of Governors

RICHARD W. FISHER, *President,* Federal Reserve Bank of Dallas

DONALD L. KOHN, Board of Governors

RANDALL S. KROSZNER, Board of Governors

SANDRA PIANALTO, *President,* Federal Reserve Bank of Cleveland

CHARLES I. PLOSSER, *President,* Federal Reserve Bank of Philadelphia

GARY H. STERN, *President,* Federal Reserve Bank of Minneapolis

KEVIN M. WARSH, 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

JANET L. YELLEN, *President,* Federal Reserve Bank of San Francisco

Officers

BRIAN F. MADIGAN, *Secretary and Economist*

DEBORAH J. DANKER, *Deputy Secretary*

MICHELLE A. SMITH, *Assistant Secretary*

DAVID W. SKIDMORE, *Assistant Secretary*

SCOTT G. ALVAREZ, *General Counsel*

THOMAS C. BAXTER, JR., *Deputy General Counsel*

RICHARD M. ASHTON, *Assistant General Counsel*

D. NATHAN SHEETS, *Economist*

DAVID J. STOCKTON, *Economist*

THOMAS A. CONNORS, *Associate Economist*

WILLIAM B. ENGLISH, *Associate Economist*

STEVEN B. KAMIN, *Associate Economist*

LORETTA J. MESTER, *Associate Economist*

ARTHUR J. ROLNICK, *Associate Economist*

HARVEY ROSENBLUM, *Associate Economist*

LAWRENCE SLIFMAN, *Associate Economist*

MARK S. SNIDERMAN, *Associate Economist*

JOSEPH S. TRACY, *Associate Economist*

DAVID W. WILCOX, *Associate Economist*

WILLIAM C. DUDLEY, *Manager, System Open Market Account*

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 Reserve Bank presidents, who serve one-year terms on a rotating basis. During 2008 the Federal Open Market Committee held eight regularly scheduled meetings and six conference calls (see "Minutes of Federal Open Market Committee Meetings" in this volume).

Federal Advisory Council

December 31, 2008

Members

District 1—Ellen Alemany, *Chief Executive Officer*, RBS Americas and Citizens Financial Group, Greenwich, Conn.

District 2—Robert P. Kelly, *Chairman and Chief Executive Officer*, The Bank of New York Mellon, New York, N.Y.

District 3—R. Scott Smith, Jr. *Chairman, President, and Chief Executive Officer*, Fulton Financial Corporation, Lancaster, Ohio

District 4—Henry L. Meyer III, *Chairman, President, and Chief Executive Officer*, KeyCorp, Cleveland, Ohio

District 5—Kenneth D. Lewis, *Chairman, President, and Chief Executive Officer*, Bank of America Corporation, Charlotte, N.C.

District 6—Richard G. Hickson, *Chairman and Chief Executive Officer*, Trustmark Corporation, Jackson, Miss.

District 7—William Downe, *President and Chief Executive Officer*, Bank of Montreal, Chicago, Ill.

District 8—Lewis F. Mallory, Jr., *Chairman and Chief Executive Officer*, Cadence Financial Corporation, Starkville, Miss.

District 9—Lyle R. Knight, *President and Chief Executive Officer*, First Interstate BancSystem, Inc., Billings, Mont.

District 10—David C. Boyles, *Chairman and Director*, Columbine Capital Corp., Buena Vista, Colo.

District 11—James Goudge, *Chairman and Chief Executive Officer*, Broadway Bank, San Antonio, Texas

District 12—Russell Goldsmith, *Chairman and Chief Executive Officer*, City National Bank, Beverly Hills, Calif.

Officers

William Downe, *President*

Lyle R. Knight, *Vice President*

James E. Annable, *Secretary*

The Federal Advisory Council—a statutory body established under the Federal Reserve Act—consults with, and advises, the Board of Governors on all matters within the Board's jurisdiction. It is composed of one representative from each Federal Reserve District, chosen by the Reserve Bank in that District. The Federal Reserve Act requires the council to meet in Washington, D.C., at least four times a year. In 2008, it met on February 14–15, May 1–2, September 4–5, and December 4–5. The council met with the Board on February 15, May 2, September 5, and December 5, 2008.

Consumer Advisory Council

December 31, 2008

Members

Dorothy Bridges, *President and Chief Executive Officer,* City First Bank of DC, Washington, D.C.

Michael Calhoun, *President,* Center for Responsible Lending, Durham, N.C.

Alan Cameron, *President and Chief Executive Officer,* Idaho Credit Union League, Boise, Idaho

Jason Engel, *Vice President and Chief Regulatory Counsel,* Experian, Costa Mesa, Calif.

Kathleen Engel, *Associate Professor of Law,* Cleveland-Marshall College of Law, Cleveland, Ohio

Joseph Falk, *Consultant,* Akerman Senterfitt, Miami, Fla.

Louise Gissendaner, *Senior Vice President, Director of Community Development,* Fifth Third Bank, Cleveland, Ohio

Greta Harris, *Vice President-Southeast Region,* Local Initiatives Support Corporation, Richmond, Va.

Patricia A. Hasson, *President,* Consumer Credit Counseling Service of Delaware Valley, Inc., Philadelphia, Pa.

Thomas P. James, *Senior Assistant Attorney General-Consumer Counsel,* Office of the Illinois Attorney General, Consumer Fraud Bureau, Chicago, Ill.

Lorenzo Littles, *Dallas Director,* Enterprise Community Partner, Inc., Dallas, Texas

Sarah Ludwig, *Executive Director,* Neighborhood Economic Development Advocacy Project, New York, N.Y.

Mark K. Metz, *Senior Vice President and Deputy General Counsel,* Wachovia Corporation, Charlotte, N.C.

Lance Morgan, *President,* Ho-Chunk, Incorporated, Winnebago Tribe of Nebraska, Winnebago, Neb.

Saurab Narain, *Chief Fund Advisor,* National Community Investment Fund, Chicago, Ill.

Joshua Peirez, *Chief Payment System Integrity Officer,* MasterCard Worldwide, Purchase, N.Y.

Ronald Phillips, *President,* Coastal Enterprises, Inc., Wiscasset, Maine

Anna McDonald Rentschler, *Vice President, BSA Officer,* Central Bancompany, Jefferson City, Mo.

Kevin Rhein, *Division President,* Wells Fargo Card Services, Minneapolis, Minn.

Faith Arnold Schwartz, *Executive Director,* Hope Now Alliance, The Financial Services Roundtable, Washington, D.C.

Edward Sivak, *Director of Policy and Evaluation,* Enterprise Corporation of the Delta, Jackson, Miss.

Shanna Smith, *President and Chief Executive Officer,* National Fair Housing Alliance, Washington, D.C.

H. Cooke Sunoo, *Director,* Asian Pacific Islander Small Business Program, Los Angeles, Calif.

Jennifer Tescher, *Director,* Center for Financial Services Innovation, Chicago, Ill.

Stergios Theologides, *Executive Vice President, General Counsel,* Saxon Mortgage, Irving, Texas

Linda Tinney, *Vice President,* Community Development, West Metro Region Manager, U.S. Bank, Denver, Colo.

Luz Urrutia, *Chief Executive Officer and President,* El Banco de Nuestra Comunidad, Roswell, Ga.

Alan White, *Assistant Professor,* Valparaiso University Law School, Valparaiso, Ind.

Officers

Tony T. Brown, *Chair, President and Chief Executive Officer,* Uptown Consortium, Inc., Cincinnati, Ohio

Edna Sawady, *Vice Chair, Economic Inclusion Consultant,* New York, New York

The Consumer Advisory Council—a statutory body established pursuant to the 1976 amendments to the Equal Credit Opportunity Act—advises the Board of Governors on consumer financial services. Its members, who are appointed by the Board, are academics, state and local government officials, and representatives of the financial services industry and of consumer and community interests. In 2008, the council met with the Board on March 6, June 19, and October 23.

Thrift Institutions Advisory Council

December 31, 2008

Members

F. Edward Broadwell, Jr., *Chairman and Chief Executive Officer*, HomeTrust Bank, Asheville, N.C.

Robert M. Clements, *Chairman and Chief Executive Officer*, EverBank Financial Corp., Jacksonville, Fla.

William A. Donius, *Chairman and Chief Executive Officer*, Pulaski Bank, St. Louis, Mo.

Joseph R. Ficalora, *Chairman, President, and Chief Executive Officer,* New York Community Bancorp, Westbury, N.Y.

Curtis L. Hage, *Chairman and Chief Executive Officer*, Home Federal Bank, Sioux Falls, S.D.

Christopher T. Jillson, *President and Chief Executive Officer*, Sandia Laboratory Federal Credit Union, Albuquerque, N.M.

Peter L. Judkins, *President and Chief Executive Officer*, Franklin Savings Bank, Farmington, Maine

Harriet May, *President and Chief Executive Officer*, Government Employees Credit Union, El Paso, Texas

Thomas C. Meuser, *Chairman and Chief Executive Officer*, El Dorado Savings Bank, Placerville, Calif.

F. Weller Meyer, *Vice Chairman of the Board of Directors*, Acacia Federal Savings Bank, Falls Church, Va.

Officer

F. Weller Meyer, *President*

The Thrift Institutions Advisory Council was established by the Board of Governors to consult with, and advise, the Board on issues pertaining to the thrift industry and on other matters within the Board's jurisdiction. Its members, who are appointed by the Board, represent credit unions, savings and loan associations, and savings banks. In 2008, the council met with the Board on February 29, June 27, and December 19.

Federal Reserve Banks and Branches
December 31, 2008

Officers

BANK or Branch	Chair[1] / Deputy Chair	President / First Vice President	Officer in charge of Branch
BOSTON[2]	Lisa M. Lynch	Eric S. Rosengren	
	Henri A. Termeer	Paul M. Connolly	
NEW YORK[2]	Stephen Friedman	Timothy F. Geithner	
	Denis M. Hughes	Christine M. Cumming	
PHILADELPHIA	William F. Hecht	Charles I. Plosser	
	Charles P. Pizzi	William H. Stone, Jr.	
CLEVELAND	Tanny B. Crane	Sandra Pianalto	
	Alfred M. Rankin, Jr.	R. Chris Moore	
Cincinnati	James M. Anderson		Barbara B. Henshaw
Pittsburgh	Sunil T. Wadhwani		Robert B. Schaub
RICHMOND	Thomas J. Mackell, Jr.	Jeffrey M. Lacker	
	Lemuel E. Lewis	Sarah G. Green	
Baltimore	Cynthia Collins Allner		David E. Beck
Charlotte	Claude C. Lilly		Jeffrey S. Kane
ATLANTA	V. Larkin Martin	Dennis P. Lockhart	
	D. Scott Davis	Patrick K. Barron	
Birmingham	James H. Sanford		Julius Weyman
Jacksonville	Fassil Gabremariam		Christopher L. Oakley
Miami	Edwin A. Jones, Jr.		Juan del Busto
Nashville	Richard Q. Ford		Lee C. Jones
New Orleans	Christel C. Slaughter		Robert J. Musso
CHICAGO[2]	John A. Canning, Jr.	Charles L. Evans	
	William C. Foote	Gordon Werkema	
Detroit	Timothy M. Manganello		Robert Wiley
ST. LOUIS	Irl F. Engelhardt	William Poole	
	Steven H. Lipstein	David A. Sapenaro	
Little Rock	Cal McCastlain		Robert A. Hopkins
Louisville	Gary A. Ransdell		Maria Gerwing Hampton
Memphis	Nick Clark		Martha Perine Beard
MINNEAPOLIS	James J. Hynes	Gary H. Stern	
	John W. Marvin	James M. Lyon	
Helena	Dean Folkvord		R. Paul Drake

Officers—Continued

BANK or Branch	Chair[1] Deputy Chair	President First Vice President	Officer in charge of Branch
KANSAS CITY	Lu M. Cordova Paul DeBruce	Thomas M. Hoenig Richard K. Rasdall, Jr.	
Denver	Kristy A. Schloss		Alan Barkema (Acting Branch Executive)
Oklahoma City	Richard K. Ratcliffe		Chad Wilkerson
Omaha	Charles R. Hermes		Jason Henderson
DALLAS	James T. Hackett Herb Kelleher	Richard W. Fisher Helen E. Holcomb	
El Paso	Ron C. Helm		Robert W. Gilmer
Houston	Nancy T. Chang		Robert Smith III
San Antonio	J. Dan Bates		Blake Hastings
SAN FRANCISCO[2]	David K.Y. Tang T. Gary Rogers	Janet L. Yellen John F. Moore	
Los Angeles	Andrew J. Sale		Mark L. Mullinix
Portland	James H. Rudd		Mary E. Lee
Salt Lake City	Clark D. Ivory		Andrea P. Wolcott
Seattle	Helvi K. Sandvik		Mark A. Gould

1. The chairman of a Federal Reserve Bank serves, by statute, as Federal Reserve agent.
2. Additional offices of these Banks are located at Windsor Locks, Connecticut; East Rutherford, New Jersey; Des Moines, Iowa; Midway at Bedford Park, Illinois; and Phoenix, Arizona.

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 28 and 29, and on December 3 and 4, 2008.

The members of the executive committee of the Conference of Chairs during 2008 were, V. Larkin Martin, chair; Lisa M. Lynch, vice chair; and David K.Y. Tang, member.

On December 4, the conference elected its executive committee for 2009, naming Lisa M. Lynch as chair; Lemuel E. Lewis as vice chair; and James J. Hynes as the third member.

Conference of Presidents

The presidents of the Federal Reserve Banks are organized into the Conference of Presidents, which meets periodically to consider matters of common interest and to consult with and advise the Board of Governors.

Sandra Pianalto, president of the Federal Reserve Bank of Cleveland, served as chair of the conference in 2008, and Jeffrey M. Lacker, president of the Federal Reserve Bank of Richmond, served as vice chair. Gregory L. Stefani, of the Federal Reserve Bank of Cleveland, served as secretary, and Sandra Tormoen, of the Federal Reserve Bank of Richmond, served as assistant secretary.

On October 21, 2008, the conference elected Jeffrey M. Lacker as chair for 2009–10 and Richard W. Fisher, president of the Federal Reserve Bank of Dallas, as vice chair.

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.

James M. Lyon, first vice president of the Federal Reserve Bank of Minneapolis, served as chair of the conference in 2008, and R. Chris Moore, first vice president of the Federal Reserve Bank of Cleveland, served as vice chair. Sheryl L. Britsch, of the Federal Reserve Bank of Minneapolis, served as secretary, and Diana C. Starks, of the Federal Reserve Bank of Cleveland, served as assistant secretary.

Directors

Each Federal Reserve Bank has a nine member board: three Class A and three Class B directors, who are elected by the stockholding member banks, and three Class C directors, who are appointed by the Board of Governors.

Class A directors represent the stockholding member banks in each Federal Reserve District. Class B and Class C directors represent the public and are chosen with due, but not exclusive, consideration to the interests of agriculture, commerce, industry, services, labor, and consumers; they may not be officers, directors, or employees of any bank or bank holding company. In addition, Class C directors may not be stockholders of any bank or bank holding company.

For the election of Class A and Class B directors, the member banks of each Federal Reserve District are classified into three groups. Each group, which comprises banks with similar capitalization, elects one Class A director and one Class B director. Annually, the Board of Governors designates one of the Class C directors as chair of the board and Federal Reserve agent of each District Bank, and it designates another Class C director as deputy chair.

Federal Reserve Branches have either five or seven directors, a majority of whom are appointed by the parent Federal Reserve Bank; the others are appointed by the Board of Governors. One of the directors appointed by the Board is designated annually as chair of the board of that Branch in a manner prescribed by the parent Federal Reserve Bank.

The chairs and deputy chairs of the Reserve Bank boards of directors, and the chairs of the Branches, are listed in the preceding table, titled "Officers." The directors of the Banks and Branches are listed in the following table. For each director, the class of directorship, the director's principal organizational affiliation, and the date the director's term expires are shown.

Directors
December 31, 2008

BANK OR BRANCH, *Category* Name	Title	Term expires Dec. 31
	DISTRICT 1—BOSTON	
RESERVE BANK		
Class A		
Kathleen C. Marcum	President and Chief Executive Officer, Millbury National Bank, Millbury, Massachusetts	2008
David A. Lentini	Chairman, President, and Chief Executive Officer, The Connecticut Bank and Trust Company, Hartford, Connecticut	2009
James C. Smith	Chairman and Chief Executive Officer, Webster Bank, N.A., Waterbury, Connecticut	2010
Class B		
Michael T. Wedge	Former President and Chief Executive Officer, BJ's Wholesale Club, Inc., Natick, Massachusetts	2008
Stuart H. Reese	Chairman and Chief Executive Officer, MassMutual Financial Group, Springfield, Massachusetts	2009
Robert K. Kraft	Chairman and Chief Executive Officer, The Kraft Group, Foxborough, Massachusetts	2010
Class C		
Henri A. Termeer	Chairman, President, and Chief Executive Officer, Genzyme Corporation, Cambridge, Massachusetts	2008
Lisa M. Lynch	Dean and Professor of Economics, The Heller School for Social Policy and Management, Brandeis University, Waltham, Massachusetts	2009
Kirk A. Sykes	President, Urban Strategy America Fund, L.P., Boston, Massachusetts	2010
	DISTRICT 2—NEW YORK	
RESERVE BANK		
Class A		
Charles V. Wait	President, Chief Executive Officer, and Chairman, The Adirondack Trust Company, Saratoga Springs, New York	2008
James Dimon	Chairman and Chief Executive Officer, JPMorgan Chase & Co., New York, New York	2009
Richard L. Carrión	Chairman, President and Chief Executive Officer, Popular, Inc., San Juan, Puerto Rico	2010
Class B		
Jeffrey R. Immelt	Chairman and Chief Executive Officer, General Electric Company, Fairfield, Connecticut	2008
Indra K. Nooyi	Chairman and Chief Executive Officer, PepsiCo, Inc., Purchase, New York	2009
Vacancy		2010

Directors—Continued

Bank or Branch, *Category* Name	Title	Term expires Dec. 31
Class C		
Denis M. Hughes	President, New York State AFL-CIO, New York, New York	2008
Lee C. Bollinger	President, Columbia University, New York, New York	2009
Stephen Friedman	Chairman, Stone Point Capital, LLC, New York, New York	2010
	DISTRICT 3—PHILADELPHIA	
Reserve Bank		
Class A		
John G. Gerlach	President, Pocono Community Bank, Stroudsburg, Pennsylvania	2008
Aaron L. Groff, Jr.	Chairman, President, and Chief Executive Officer, Ephrata National Bank, Ephrata, Pennsylvania	2009
Ted T. Cecala	Chairman and Chief Executive Officer, Wilmington Trust Corporation, Wilmington, Delaware	2010
Class B		
Michael F. Camardo	Retired Executive Vice President, Lockheed Martin ITS, Cherry Hill, New Jersey	2008
Garry L. Maddox	President and Chief Executive Officer, A. Pomerantz & Company, Philadelphia, Pennsylvania	2009
Keith S. Campbell	Chairman, Mannington Mills, Inc., Salem, New Jersey	2010
Class C		
Charles P. Pizzi	President and Chief Executive Officer, Tasty Baking Company, Philadelphia, Pennsylvania	2008
William F. Hecht	Retired Chairman, President, and Chief Executive Officer, PPL Corporation, Allentown, Pennsylvania	2009
Jeremy Nowak	President and Chief Executive Officer, The Reinvestment Fund, Philadelphia, Pennsylvania	2010
	DISTRICT 4—CLEVELAND	
Reserve Bank		
Class A		
Bick Weissenrieder	Chairman and Chief Executive Officer, Hocking Valley Bank, Athens, Ohio	2008
C. Daniel DeLawder	Chairman and Chief Executive Officer, Park National Bank, Newark, Ohio	2009
James E. Rohr	Chairman and Chief Executive Officer, The PNC Financial Services Group, Inc., Pittsburgh, Pennsylvania	2010
Class B		
Vacancy		2008
V. Ann Hailey	Retired Executive Vice President, Corporate Development, Limited Brands, Columbus, Ohio	2009
Les C. Vinney	Senior Advisor and Immediate Past President and Chief Executive Officer, STERIS Corporation, Mentor, Ohio	2010

Bank or Branch, *Category* Name	Title	Term expires Dec. 31
Class C		
Alfred M. Rankin, Jr.	Chairman, President, and Chief Executive Officer, NACCO Industries, Inc., Cleveland, Ohio	2008
Tanny B. Crane	President and Chief Executive Officer, Crane Group Company, Columbus, Ohio	2009
Roy W. Haley	Chairman and Chief Executive Officer, WESCO International, Inc., Pittsburgh, Pennsylvania	2010
Cincinnati Branch		
Appointed by the Federal Reserve Bank		
Janet B. Reid	Principal Partner, Global Lead Management Consulting, Cincinnati, Ohio	2008
Glenn D. Leveridge	President, Winchester Market, Central Bank and Trust Company, Winchester, Kentucky	2008
Charlotte W. Martin	President and Chief Executive Officer, Great Lakes Bankers Bank, Gahanna, Ohio	2009
Paul R. Poston	Director, Great Lakes District, NeighborWorks® America, Cincinnati, Ohio	2010
Appointed by the Board of Governors		
James M. Anderson	President and Chief Executive Officer, Cincinnati Children’s Hospital Medical Center, Cincinnati, Ohio	2008
Daniel B. Cunningham	President and Chief Executive Officer, Long-Stanton Manufacturing Companies, Cincinnati, Ohio	2009
Peter S. Strange	Chairman and Chief Executive Officer, Messer Construction Company, Cincinnati, Ohio	2010
Pittsburgh Branch		
Appointed by the Federal Reserve Bank		
Howard W. Hanna III	Chairman and Chief Executive Officer, Howard Hanna Real Estate Services, Pittsburgh, Pennsylvania	2008
Georgiana N. Riley	President and Chief Executive Officer, TIGG Corporation, Bridgeville, Pennsylvania	2008
Margaret Irvine Weir	President, NexTier Bank, Butler, Pennsylvania	2009
Todd D. Brice	Chief Executive Officer, S&T Bancorp, Inc., Indiana, Pennsylvania	2010
Appointed by the Board of Governors		
Sunil T. Wadhwani	Co-Chairman, iGATE Corporation, Pittsburgh, Pennsylvania	2008
Robert A. Paul	Chairman and Chief Executive Officer, Ampco-Pittsburgh Corporation, Pittsburgh, Pennsylvania	2009
Glenn R. Mahone	Partner and Attorney at Law, Reed Smith LLP, Pittsburgh, Pennsylvania	2010

Directors—Continued

Bank or Branch, *Category* Name	Title	Term expires Dec. 31
	DISTRICT 5—RICHMOND	
Reserve Bank		
Class A		
Hunter R. Hollar	President and Chief Executive Officer, Sandy Spring Bancorp and Sandy Spring Bank, Olney, Maryland	2008
Dwight V. Neese	Director, President, and Chief Executive Officer, Provident Community Bank and Provident Community Bancshares, Inc., Rock Hill, South Carolina	2009
Robert H. Gilliam, Jr.	President and Chief Executive Officer, The First National Bank of Altavista, Altavista, Virginia	2010
Class B		
Dana S. Boole	President and Chief Executive Officer, Community Affordable Housing Equity Corporation, Raleigh, North Carolina	2008
Kenneth R. Sparks	President and Chief Executive Officer, Ken Sparks Associates LLC, White Stone, Virginia	2009
Patrick C. Graney, III	President, Petroleum Products, Inc., Belle, West Virginia	2010
Class C		
Thomas J. Mackell, Jr.	President, Association of Benefit Administrators, Warrenton, Virginia	2008
Lemuel E. Lewis	President, LocalWeather.com, Suffolk, Virginia	2009
Margaret E. McDermid	Senior Vice President and Chief Information Officer, Dominion Resources, Inc., Richmond, Virginia	2010
Baltimore Branch		
Appointed by the Federal Reserve Bank		
Biana J. Arentz	President and Chief Executive Officer, Hemingway's Inc., Stevensville, Maryland	2008
James T. Brady	Managing Director–Mid-Atlantic, Ballantrae International, Ltd., Ijamsville, Maryland	2009
Michael L. Middleton	Chairman and President, Community Bank of Tri-County, Waldorf, Maryland	2009
William B. Grant	Chairman and Chief Executive Officer, First United Corp. and First United Bank & Trust, Oakland, Maryland	2010
Appointed by the Board of Governors		
Cynthia Collins Allner	Principal, Miles & Stockbridge P.C., Baltimore, Maryland	2008
Ronald Blackwell	Chief Economist, AFL-CIO, Washington, D.C.	2009
William R. Roberts	President – Verizon Maryland/DC, Verizon Maryland Inc., Baltimore, Maryland	2010

BANK OR BRANCH, *Category* Name	Title	Term expires Dec. 31
CHARLOTTE BRANCH		
Appointed by the Federal Reserve Bank		
James H. Speed, Jr.	President and Chief Executive Officer, North Carolina Mutual Life Insurance Company, Durham, North Carolina	2008
Michael C. Miller	Chairman and President, FNB United Corp. and CommunityONE Bank, N.A., Asheboro, North Carolina	2009
Vacancy		2009
Barry L. Slider	President and Chief Executive Officer, First South Bancorp, Inc. and First South Bank, Spartanburg, South Carolina	2010
Appointed by the Board of Governors		
Linda L. Dolny	President, PML Associates, Inc., Greenwood, South Carolina	2008
David J. Zimmerman	President, Southern Shows, Inc., Charlotte, North Carolina	2009
Claude C. Lilly	Dean, Clemson University, College of Business and Behavioral Science, Clemson, South Carolina	2010
	DISTRICT 6—ATLANTA	
RESERVE BANK		
Class A		
James M. Wells III	Chairman and Chief Executive Officer, SunTrust Banks, Inc., Atlanta, Georgia	2008
Rudy E. Schupp	President and Chief Executive Officer, 1st United Bank, West Palm Beach, Florida	2009
James H. McKillop III	President and Chief Executive Officer, Independent Bankers' Bank of Florida, Lake Mary, Florida	2010
Class B		
Egbert L.J. Perry	Chairman and Chief Executive Officer, The Integral Group, LLC, Atlanta, Georgia	2008
Teri G. Fontenot	President and Chief Executive Officer, Woman's Hospital, Baton Rouge, Louisiana	2009
Lee M. Thomas	Chairman, President, and Chief Executive Officer, Rayonier, Jacksonville, Florida	2010
Class C		
V. Larkin Martin	Managing Partner, Martin Farm, Courtland, Alabama	2008
D. Scott Davis	Chairman and Chief Executive Officer, United Parcel Service, Atlanta, Georgia	2009
Carol B. Tomé	Chief Financial Officer and Executive Vice President, The Home Depot, Atlanta, Georgia	2010
BIRMINGHAM BRANCH		
Appointed by the Federal Reserve Bank		
John H. Holcomb III	Vice Chairman, RBC Bank (USA), Birmingham, Alabama	2008

Directors—Continued

Bank or Branch, *Category* Name	Title	Term expires Dec. 31
Samuel F. Dodson	Consultant, International Union of Operating Engineers–Local 312, Birmingham, Alabama	2009
Bobby A. Bradley	Managing Partner, Lewis Properties, LLC and Anderson Investments, LLC, Huntsville, Alabama	2009
C. Richard Moore, Jr.	Chairman, President and Chief Executive Officer, Peoples Southern Bank, Clanton, Alabama	2010
Appointed by the Board of Governors		
James H. Sanford	Chairman of the Board, HOME Place Farms, Inc., Prattville, Alabama	2008
F. Michael Reilly	Chairman, President and Chief Executive Officer, Randall-Reilly Publishing Co., Tuscaloosa, Alabama	2009
Maryam B. Head	President, Ram Tool and Supply Company, Inc., Birmingham, Alabama	2010
Jacksonville Branch *Appointed by the Federal Reserve Bank*		
Alan Rowe	President and Chief Executive Officer, First Commercial Bank of Florida, Orlando, Florida	2008
Wendell A. Sebastian	President and Chief Executive Officer, GTE Federal Credit Union, Tampa, Florida	2009
Ellen S. Titen	President, E.T. Consultants, Winter Park, Florida	2009
Jack B. Healan, Jr.	President, Amelia Island Plantation Company, Amelia Island, Florida	2010
Appointed by the Board of Governors		
Fassil Gabremariam	President and Founder, US–Africa Free Enterprise Education Foundation, Tampa, Florida	2008
Linda H. Sherrer	President and Chief Executive Officer, Prudential Network Realty, Jacksonville, Florida	2009
H. Britt Landrum, Jr.	President and Chief Executive Officer, Landrum Human Resource Companies, Inc., Pensacola, Florida	2010
Miami Branch *Appointed by the Federal Reserve Bank*		
Thomas H. Shea	Chief Executive Officer, Florida Caribbean Region, Right Management, Fort Lauderdale, Florida	2008
Walter Banks	President, Lago Mar Resort and Club, Fort Lauderdale, Florida	2008
Leonard L. Abess	Chairman, President, and Chief Executive Officer, City National Bank of Florida, Miami, Florida	2009
Dennis S. Hudson, III	Chairman and Chief Executive Officer, Seacoast Banking Corporation of Florida, Stuart, Florida	2010

Bank or Branch, *Category* Name	Title	Term expires Dec. 31
Appointed by the Board of Governors		
Edwin A. Jones, Jr.	President, Angus Investments, Inc., Port St. Lucie, Florida	2008
Marvin O'Quinn	President and Chief Executive Officer, Jackson Health System, Miami, Florida	2009
Gay Rebel Thompson	President and Chief Executive Officer, Cement Industries, Inc., Fort Myers, Florida	2010
Nashville Branch		
Appointed by the Federal Reserve Bank		
Michael B. Swain	Chairman, First National Bank, Oneida, Tennessee	2008
Daniel A. Gaudette	Retired Senior Vice President, North American Manufacturing and Supply Chain Management, Nissan North America, Inc., Smyrna, Tennessee	2009
Cordia W. Harrington	President and Chief Executive Officer, Tennessee Bun Company, Nashville, Tennessee	2009
Paul G. Willson	Chairman and Chief Executive Officer, Citizens National Bank, Athens, Tennessee	2010
Appointed by the Board of Governors		
Richard Q. Ford	President, Hylant Group of Nashville, Nashville, Tennessee	2008
David Williams II	Vice Chancellor and General Counsel, Vanderbilt University, Nashville, Tennessee	2009
Debra K. London	President and Chief Executive Officer, Mercy Health Partners, Knoxville, Tennessee	2010
New Orleans Branch		
Appointed by the Federal Reserve Bank		
R. King Milling	Vice Chairman, Whitney Holding Corporation & Whitney National Bank, New Orleans, Louisiana	2008
Matthew G. Stuller, Sr.	Chairman and Chief Executive Officer, Stuller, Inc., Lafayette, Louisiana	2009
Anthony J. Topazi	President and Chief Executive Officer, Mississippi Power, Gulfport, Mississippi	2009
Gerard R. Host	President and Chief Operating Officer, Trustmark National Bank, Jackson, Mississippi	2010
Appointed by the Board of Governors		
Earl L. Shipp	Group President–Basic Chemicals, The Dow Chemical Company, Dubai, United Arab Emirates	2008
Robert S. Boh	President and Chief Executive Officer, Boh Bros. Construction Co., LLC, New Orleans, Louisiana	2009
Christel C. Slaughter	Partner, SSA Consultants, LLC, Baton Rouge, Louisiana	2010

Directors—Continued

Bank or Branch, *Category* Name	Title	Term expires Dec. 31
	DISTRICT 7—CHICAGO	
Reserve Bank		
Class A		
Dennis J. Kuester	Chairman, Marshall & Ilsley Corporation, Milwaukee, Wisconsin	2008
Michael L. Kubacki	Chairman, President, and Chief Executive Officer, Lakeland Financial Corporation, Warsaw, Indiana	2009
Mark C. Hewitt	President and Chief Executive Officer, Clear Lake Bank & Trust Company, Clear Lake, Iowa	2010
Class B		
Anthony K. Anderson	Vice Chair and Midwest Managing Partner, Ernst & Young LLP, Chicago, Illinois	2008
Mark T. Gaffney	President, Michigan AFL-CIO, Lansing, Michigan	2009
Ann D. Murtlow	President and Chief Executive Officer, Indianapolis Power & Light Company, Indianapolis, Indiana	2010
Class C		
John A. Canning, Jr.	Chairman, Madison Dearborn Partners, LLC, Chicago, Illinois	2008
William C. Foote	Chairman and Chief Executive Officer, USG Corporation, Chicago, Illinois	2009
Thomas J. Wilson	Chairman, President and Chief Executive Officer, The Allstate Corporation, Northbrook, Illinois	2010
Detroit Branch		
Appointed by the Federal Reserve Bank		
Roger A. Cregg	Executive Vice President, and Chief Financial Officer, Pulte Homes, Inc., Bloomfield Hills, Michigan	2008
Tommi A. White	Chief Executive Officer, ER-One, Inc., Livonia, Michigan	2008
William R. Hartman	Chairman, President, and Chief Executive Officer, Citizens Republic Bancorp, Flint, Michigan	2009
Michael M. Magee, Jr.	President and Chief Executive Officer, Independent Bank Corporation, Ionia, Michigan	2010
Appointed by the Board of Governors		
Timothy M. Manganello	Chairman and Chief Executive Officer, BorgWarner Incorporated, Auburn Hills, Michigan	2008
Linda S. Likely	Director of Housing and Community Development, Kent County Community Development Department and Housing Commission, Grand Rapids, Michigan	2009
Carl T. Camden	President and Chief Executive Officer, Kelly Services, Inc., Troy, Michigan	2010

Bank or Branch, *Category* Name	Title	Term expires Dec. 31
	DISTRICT 8—ST. LOUIS	
Reserve Bank		
Class A		
J. Thomas May	Chairman and Chief Executive Officer, Simmons First National Corporation, Pine Bluff, Arkansas	2008
David R. Pirsein	President and Chief Executive Officer, First National Bank in Pinckneyville, Pinckneyville, Illinois	2009
Robert G. Jones	President and Chief Executive Officer, Old National Bancorp, Evansville, Indiana	2010
Class B		
Gregory M. Duckett	Senior Vice President and Corporate Counsel, Baptist Memorial Health Care Corporation, Memphis, Tennessee	2008
A. Rogers Yarnell, II	President, Yarnell Ice Cream Co., Inc., Searcy, Arkansas	2009
Paul T. Combs	President, Baker Implement Company, Kennett, Missouri	2010
Class C		
Ward M. Klein	Chief Executive Officer, Energizer Holdings, Inc., Town & Country, Missouri	2008
Steven H. Lipstein	President and Chief Executive Officer, BJC HealthCare, St. Louis, Missouri	2009
Irl F. Engelhardt	Chairman, Patriot Coal Corporation, St. Louis, Missouri	2010
Little Rock Branch		
Appointed by the Federal Reserve Bank		
Robert A. Young, III	Chairman, Arkansas Best Corporation, Fort Smith, Arkansas	2008
Phillip N. Baldwin	President and Chief Executive Officer, Southern Bancorp, Arkadelphia, Arkansas	2008
William C. Scholl	President and Chief Executive Officer, First Security Bancorp, Searcy, Arkansas	2009
Sharon Priest	Executive Director, Downtown Little Rock Partnership, Little Rock, Arkansas	2010
Appointed by the Board of Governors		
Cal McCastlain	Partner, Pender & McCastlain, P.A., Little Rock, Arkansas	2008
C. Sam Walls	Chief Executive Officer, Arkansas Capital Corporation, Little Rock, Arkansas	2009
Sonja Yates Hubbard	Chief Executive Officer, E-Z Mart Stores, Inc., Texarkana, Texas	2010

Directors—Continued

Bank or Branch, *Category* Name	Title	Term expires Dec. 31
Louisville Branch		
Appointed by the Federal Reserve Bank		
L. Clark Taylor, Jr.	Chief Executive Officer, Ephraim McDowell Health, Danville, Kentucky	2008
John C. Schroeder	President, Wabash Plastics, Inc., Evansville, Indiana	2008
Gordon B. Guess	General Manager, Marion Baseball Club, LLC, Marion, Kentucky	2009
Steven E. Trager	Chairman and Chief Executive Officer, Republic Bank & Trust Company, Louisville, Kentucky	2010
Appointed by the Board of Governors		
John L. Huber	Consultant, Louisville, Kentucky	2008
Barbara Ann Popp	Chief Executive Officer, Schuler Bauer Real Estate Services, New Albany, Indiana	2009
Gary A. Ransdell	President, Western Kentucky University, Bowling Green, Kentucky	2010
Memphis Branch		
Appointed by the Federal Reserve Bank		
Susan S. Stephenson	Co-Chairman and President, Independent Bank, Memphis, Tennessee	2008
Hunter Simmons	President and Chief Executive Officer, First South Bank, Jackson, Tennessee	2008
David P. Rumbarger, Jr.	President and Chief Executive Officer, Community Development Foundation, Tupelo, Mississippi	2009
Thomas G. Miller	President, Southern Hardware Company, Inc., West Helena, Arkansas	2010
Appointed by the Board of Governors		
Meredith B. Allen	Vice President, Marketing, Staple Cotton Cooperative Association, Greenwood, Mississippi	2008
Nick Clark	Partner, Clark & Clark, Memphis, Tennessee	2009
Charles S. Blatteis	Partner, Burch, Porter & Johnson PLLC, Memphis, Tennessee	2010
	DISTRICT 9—MINNEAPOLIS	
Reserve Bank		
Class A		
Peter J. Haddeland	President and Chief Executive Officer, First National Bank, Mahnomen, Minnesota	2008
Thomas W. Scott	Chairman of the Board, First Interstate BancSystem, Inc., Billings, Montana	2009
Dorothy J. Bridges	President and Chief Executive Officer, Franklin National Bank, Minneapolis, Minnesota	2010

Bank or Branch, *Category* Name	Title	Term expires Dec. 31
Class B		
Randy Peterson	Facility Director, Lake Superior State University, Sault Ste. Marie, Michigan	2008
William J. Shorma	President, Shur-Co., Yankton, South Dakota	2009
Todd L. Johnson	Chairman, President, and Chief Executive Officer, Reuben Johnson & Son, Inc. and Affiliated Companies, Superior, Wisconsin	2010
Class C		
John W. Marvin	Chairman and Chief Executive Officer, Marvin Windows and Doors, Warroad, Minnesota	2008
James J. Hynes	Executive Administrator, Twin City Pipe Trades Service Association, St. Paul, Minnesota	2009
Mary K. Brainerd	President and Chief Executive Officer, HealthPartners, Minneapolis, Minnesota	2010
Helena Branch		
Appointed by the Federal Reserve Bank		
John L. Franklin	President and Chief Executive Officer, 1st Bank, Sidney, Montana	2008
Timothy J. Bartz	Chief Executive Officer, Anderson ZurMuehlen & Company, P.C., Helena, Montana	2009
Kay Clevidence	President, Farmers State Bank, Victor, Montana	2010
Appointed by the Board of Governors		
Dean Folkvord	General Manager and Chief Executive Officer, Wheat Montana Farms and Bakery, Three Forks, Montana	2008
Joseph F. McDonald	President, Salish Kootenai College, Pablo, Montana	2009
	DISTRICT 10—KANSAS CITY	
Reserve Bank		
Class A		
Rick L. Smalley	Chief Executive Officer, Dickinson Financial Corporation, Kansas City, Missouri	2008
Mark W. Schifferdecker	President and Chief Executive Officer, Girard National Bank, Girard, Kansas	2009
Robert C. Fricke	President and Chief Executive Officer, Farmers & Merchants National Bank, Ashland, Nebraska	2010
Class B		
Dan L. Dillingham	Chief Executive Officer, Dillingham Insurance, Enid, Oklahoma	2008
Kevin K. Nunnink	Chairman, Integra Realty Resources, Westwood, Kansas	2009
Vacancy		2010

Directors—Continued

Bank or Branch, *Category* Name	Title	Term expires Dec. 31
Class C		
Lu M. Cordova	Chief Executive Officer, Corlund Industries, LLC; President and General Manager, Almacen Storage Group, Boulder, Colorado	2008
Paul DeBruce	Chief Executive Officer and Chairman/Founder, DeBruce Grain, Inc., Kansas City, Missouri	2009
Terry L. Moore	President, Omaha Federation of Labor, Omaha, Nebraska	2010
Denver Branch		
Appointed by the Federal Reserve Bank		
Bruce K. Alexander	President and Chief Executive Officer, Vectra Bank Colorado, Denver, Colorado	2008
John D. Pearson	President, Pearson Real Estate Co., Inc., Buffalo, Wyoming	2009
Charles H. Brown III	President, C.H. Brown Co., Wheatland, Wyoming	2009
Vacancy		2010
Appointed by the Board of Governors		
Diane Leavesley	President, Mercy Loan Fund, Denver, Colorado	2008
Barbara Mowry	President, Chief Executive Officer, and Board Member, Silver Creek Systems, Westminster, Colorado	2009
Kristy A. Schloss	President and Chief Executive Officer, Schloss Engineered Equipment, Inc., Aurora, Colorado	2010
Oklahoma City Branch		
Appointed by the Federal Reserve Bank		
Fred M. Ramos	President, RGF, Inc., Oklahoma City, Oklahoma	2008
Vacancy		2009
Terry M. Almon	President, Oklahoma Community Capital Corporation, Broken Arrow, Oklahoma	2010
Douglas E. Tippens	President and Chief Executive Officer, Canadian State Bank, Yukon, Oklahoma	2010
Appointed by the Board of Governors		
James D. Dunn	Chairman of the Board, Mill Creek Lumber & Supply Company, Tulsa, Oklahoma	2008
Richard K. Ratcliffe	Chairman, Ratcliffe's Inc., Weatherford, Oklahoma	2009
Steven C. Agee	President, Agee Energy, LLC, Oklahoma City, Oklahoma	2010

Bank or Branch, *Category* Name	Title	Term expires Dec. 31
Omaha Branch		
Appointed by the Federal Reserve Bank		
Mark A. Sutko	President and Chief Executive Officer, Platte Valley State Bank, Kearney, Nebraska	2008
Rodrigo Lopez	President and Chief Executive Officer, AmeriSphere Multifamily Finance, LLC, Omaha, Nebraska	2009
Todd S. Adams	Chief Executive Officer and Trust Officer, Adams Bank & Trust, Ogallala, Nebraska	2009
JoAnn M. Martin	President and Chief Executive Officer, Ameritas Life Insurance Corp., Lincoln, Nebraska	2010
Appointed by the Board of Governors		
James A. Timmerman	Chief Financial Officer, Timmerman and Sons Feeding Co., Springfield, Nebraska	2008
Charles R. Hermes	President, Dutton-Lainson Company, Hastings, Nebraska	2009
Lyn Wallin Ziegenbein	Executive Director, Peter Kiewit Foundation, Omaha, Nebraska	2010
	DISTRICT 11—DALLAS	
Reserve Bank		
Class A		
Richard W. Evans, Jr.	Chairman and Chief Executive Officer, Cullen/Frost Bankers, Inc., San Antonio, Texas	2008
Pete Cook	President and Chief Executive Officer, First National Bank of Alamogordo, Alamogordo, New Mexico	2009
Joe Kim King	President and Chairman of the Board, Texas Country Bancshares, Inc., Brady, Texas	2010
Class B		
James B. Bexley	Professor, Finance, Sam Houston State University, Huntsville, Texas	2008
Margaret H. Jordan	President and Chief Executive Officer, Dallas Medical Resource, Dallas, Texas	2009
Robert A. Estrada	Chairman, Estrada Hinojosa & Company, Inc., Dallas, Texas	2010
Class C		
James T. Hackett	Chairman, President, and Chief Executive Officer, Anadarko Petroleum Corporation, Houston, Texas	2008
Myron E. Ullman III	Chairman of the Board, J.C. Penney Company, Inc. Plano, Texas	2009
Herb Kelleher	Founder and Chairman Emeritus, Southwest Airlines, Dallas, Texas	2010
El Paso Branch		
Appointed by the Federal Reserve Bank		
Fred J. Loya	Chairman, Fred Loya Insurance, El Paso, Texas	2008

Directors—Continued

Bank or Branch, *Category* Name	Title	Term expires Dec. 31
Laura M. Conniff	Qualifying Broker, Mathers Realty, Inc., Las Cruces New Mexico	2008
Gerald J. Rubin	Chairman, President, and Chief Executive Officer, Helen of Troy Limited, El Paso, Texas	2009
Larry L. Patton	President and Chief Executive Officer, Bank of the West, El Paso, Texas	2010
Appointed by the Board of Governors		
Ron C. Helm	Owner, Helm Land and Cattle Company, Van Horn, Texas	2008
D. Kirk Edwards	President, MacLondon Royalty Company, Odessa, Texas	2009
Cindy J. Ramos-Davidson	President and Chief Executive Officer, El Paso Hispanic Chamber of Commerce, El Paso, Texas	2010
Houston Branch *Appointed by the Federal Reserve Bank*		
S. Reed Morian	Chairman, President, and Chief Executive Officer, DX Service Company, Inc., Houston, Texas	2008
Peter G. Traber, M.D.	President and Chief Executive Officer, Baylor College of Medicine, Houston, Texas	2008
Timothy N. Bryan	Chairman and Chief Executive Officer, The First National Bank of Bryan, Bryan, Texas	2009
Jodie L. Jiles	Managing Director, RBC Capital Markets, Houston, Texas	2010
Appointed by the Board of Governors		
Lupe Fraga	Chairman and Chief Executive Officer, Tejas Office Products, Inc., Houston, Texas	2008
Nancy T. Chang	President, Apex Enterprises, Inc., Houston, Texas	2009
Douglas L. Foshee	President and Chief Executive Officer, El Paso Corporation, Houston, Texas	2010
San Antonio Branch *Appointed by the Federal Reserve Bank*		
Matt F. Gorges	Chairman and Chief Executive Officer, U.S. Packers & Processors, Harlingen, Texas	2008
Guillermo F. Trevino	President, Southern Distributing, Laredo, Texas	2008
Steven R. Vandegrift	Founder and President, SRV Holdings, Austin, Texas	2009
G.P. Singh	Chief Executive Officer, Gur Parsaad Properties, Ltd., San Antonio, Texas	2010
Appointed by the Board of Governors		
Elizabeth Chu Richter	Chairman and Chief Executive Officer, Richter Architects, Corpus Christi, Texas	2008
J. Dan Bates	President, Southwest Research Institute, San Antonio, Texas	2009
Ricardo Romo	President, The University of Texas at San Antonio, San Antonio, Texas	2010

Bank or Branch, *Category* Name	Title	Term expires Dec. 31
	DISTRICT 12—SAN FRANCISCO	
Reserve Bank		
Class A		
Candace H. Wiest	President and Chief Executive Officer, West Valley National Bank, Avondale, Arizona	2008
Kenneth P. Wilcox	President and Chief Executive Officer, SVB Financial Group, Santa Clara, California	2009
Arnold T. Grisham	President and Chief Executive Officer, Alta Alliance Bank, Oakland, California	2010
Class B		
Karla S. Chambers	Vice President and Co-Owner, Stahlbush Island Farms, Inc., Corvallis, Oregon	2008
Blake W. Nordstrom	President, Nordstrom, Inc., Seattle, Washington	2009
William D. Jones	President and Chief Executive Officer, CityLink Investment Corporation, San Diego, California	2010
Class C		
Douglas W. Shorenstein	Chairman and Chief Executive Officer, Shorenstein Properties LLC, San Francisco, California	2008
T. Gary Rogers	Chairman of the Board, Levi Strauss and Co., San Francisco, California	2009
David K.Y. Tang	Managing Partner, Asia, K&L Gates, Seattle, Washington	2010
Los Angeles Branch		
Appointed by the Federal Reserve Bank		
Peter M. Thomas	Managing Partner, Thomas & Mack Co., Las Vegas, Nevada	2008
Eric L. Holoman	President, Magic Johnson Enterprises, Beverly Hills, California	2009
James L. Sanford	Consultant, Northrop Grumman Corporation, Los Angeles, California	2009
Dominic Ng	Chairman, President, and Chief Executive Officer, East West Bank, Pasadena, California	2010
Appointed by the Board of Governors		
Ann E. Sewill	President, Community Foundation Land Trust, California Community Foundation, Los Angeles, California	2008
Andrew J. Sale	Partner, Ernst & Young LLP, Los Angeles, California	2009
Grace Evans Cherashore	President and Chief Executive Officer, Evans Hotels, San Diego, California	2010
Portland Branch		
Appointed by the Federal Reserve Bank		
George J. Puentes	President, Don Pancho Authentic Mexican Foods, Inc., Salem, Oregon	2008
Peggy Y. Fowler	Chief Executive Officer and President, Portland General Electric, Portland, Oregon	2008

Directors—Continued

Bank or Branch, *Category* Name	Title	Term expires Dec. 31
Robert D. Sznewajs	President and Chief Executive Officer, West Coast Bancorp, Lake Oswego, Oregon	2009
Alan V. Johnson	Regional President, Wells Fargo Bank, Portland, Oregon	2010
Appointed by the Board of Governors		
William D. Thorndike, Jr.	Chairman and President, Medford Fabrication, Medford, Oregon	2008
David Y. Chen	Managing Director, Equilibrium Capital Group LLC, Portland, Oregon	2009
James H. Rudd	Chief Executive Officer and Principal, Ferguson Wellman Capital Management, Inc., Portland, Oregon	2010
Salt Lake City Branch		
Appointed by the Federal Reserve Bank		
A. Scott Anderson	President and Chief Executive Officer, Zions Bank, Salt Lake City, Utah	2008
Deborah S. Bayle	President and Chief Executive Officer, United Way of Salt Lake, Salt Lake City, Utah	2008
Carol Carter	President and Chief Executive Officer, Industrial Compressor Products, Inc., Salt Lake City, Utah	2009
Michael M. Mooney	President, Idaho Region, Bank of the Cascades, Boise, Idaho	2010
Appointed by the Board of Governors		
Clark D. Ivory	Chief Executive Officer, Ivory Homes, Ltd., Salt Lake City, Utah	2008
Edwin E. Dahlberg	President and Chief Executive Officer, St. Luke's Health System, Boise, Idaho	2009
Scott L. Hymas	Chief Executive Officer, RC Willey, Salt Lake City, Utah	2010
Seattle Branch		
Appointed by the Federal Reserve Bank		
Kenneth M. Kirkpatrick	President, Washington State, U.S. Bank, Seattle, Washington	2008
H. Stewart Parker	President and Chief Executive Officer, Targeted Genetics Corporation, Seattle, Washington	2008
Carol K. Nelson	President and Chief Executive Officer, Cascade Financial Corporation, Everett, Washington	2009
Richard Galanti	Executive Vice President and Chief Financial Officer, Costco Wholesale Corporation, Issaquah, Washington	2010
Appointed by the Board of Governors		
James R. Gill	President, Pacific Northwest Title Holding Co., Seattle, Washington	2008
Helvi K. Sandvik	President, NANA Development Corporation, Anchorage, Alaska	2009
William S. Ayer	Chairman, President, and Chief Executive Officer, Alaska Air Group, Seattle, Washington	2010

Members of the Board of Governors, 1913–2008

Appointed Members

Name	Federal Reserve District	Date initially took oath of office	Other dates[1]
Charles S. Hamlin	Boston	Aug. 10, 1914	Reappointed in 1916 and 1926. Served until Feb. 3, 1936.[2]
Paul M. Warburg	New York	Aug. 10, 1914	Term expired Aug. 9, 1918.
Frederic A. Delano	Chicago	Aug. 10, 1914	Resigned July 21, 1918.
W.P.G. Harding	Atlanta	Aug. 10, 1914	Term expired Aug. 9, 1922.
Adolph C. Miller	San Francisco	Aug. 10, 1914	Reappointed in 1924. Reappointed in 1934 from the Richmond District. Served until Feb. 3, 1936.[2]
Albert Strauss	New York	Oct. 26, 1918	Resigned Mar. 15, 1920.
Henry A. Moehlenpah	Chicago	Nov. 10, 1919	Term expired Aug. 9, 1920.
Edmund Platt	New York	June 8, 1920	Reappointed in 1928. Resigned Sept. 14, 1930.
David C. Wills	Cleveland	Sept. 29, 1920	Term expired Mar. 4, 1921.
John R. Mitchell	Minneapolis	May 12, 1921	Resigned May 12, 1923.
Milo D. Campbell	Chicago	Mar. 14, 1923	Died Mar. 22, 1923.
Daniel R. Crissinger	Cleveland	May 1, 1923	Resigned Sept. 15, 1927.
George R. James	St. Louis	May 14, 1923	Reappointed in 1931. Served until Feb. 3, 1936.[3]
Edward H. Cunningham	Chicago	May 14, 1923	Died Nov. 28, 1930.
Roy A. Young	Minneapolis	Oct. 4, 1927	Resigned Aug. 31, 1930.
Eugene Meyer	New York	Sept. 16, 1930	Resigned May 10, 1933.
Wayland W. Magee	Kansas City	May 18, 1931	Term expired Jan. 24, 1933.
Eugene R. Black	Atlanta	May 19, 1933	Resigned Aug. 15, 1934.
M.S. Szymczak	Chicago	June 14, 1933	Reappointed in 1936 and 1948. Resigned May 31, 1961.
J.J. Thomas	Kansas City	June 14, 1933	Served until Feb. 10, 1936.[2]
Marriner S. Eccles	San Francisco	Nov. 15, 1934	Reappointed in 1936, 1940, and 1944. Resigned July 14, 1951.
Joseph A. Broderick	New York	Feb. 3, 1936	Resigned Sept. 30, 1937.
John K. McKee	Cleveland	Feb. 3, 1936	Served until Apr. 4, 1946.[2]
Ronald Ransom	Atlanta	Feb. 3, 1936	Reappointed in 1942. Died Dec. 2, 1947.
Ralph W. Morrison	Dallas	Feb. 10, 1936	Resigned July 9, 1936.
Chester C. Davis	Richmond	June 25, 1936	Reappointed in 1940. Resigned Apr. 15, 1941.
Ernest G. Draper	New York	Mar. 30, 1938	Served until Sept. 1, 1950.[2]
Rudolph M. Evans	Richmond	Mar. 14, 1942	Served until Aug. 13, 1954.[2]
James K. Vardaman, Jr.	St. Louis	Apr. 4, 1946	Resigned Nov. 30, 1958.
Lawrence Clayton	Boston	Feb. 14, 1947	Died Dec. 4, 1949.
Thomas B. McCabe	Philadelphia	Apr. 15, 1948	Resigned Mar. 31, 1951.
Edward L. Norton	Atlanta	Sept. 1, 1950	Resigned Jan. 31, 1952.
Oliver S. Powell	Minneapolis	Sept. 1, 1950	Resigned June 30, 1952.
Wm. McC. Martin, Jr.	New York	Apr. 2, 1951	Reappointed in 1956. Term expired Jan. 31, 1970.
A.L. Mills, Jr.	San Francisco	Feb. 18, 1952	Reappointed in 1958. Resigned Feb. 28, 1965.
J.L. Robertson	Kansas City	Feb. 18, 1952	Reappointed in 1964. Resigned Apr. 30, 1973.
C. Canby Balderston	Philadelphia	Aug. 12, 1954	Served through Feb. 28, 1966.
Paul E. Miller	Minneapolis	Aug. 13, 1954	Died Oct. 21, 1954.

Appointed Members—Continued

Name	Federal Reserve District	Date initially took oath of office	Other dates[1]
Chas. N. Shepardson	Dallas	Mar. 17, 1955	Retired Apr. 30, 1967.
G.H. King, Jr.	Atlanta	Mar. 25, 1959	Reappointed in 1960. Resigned Sept. 18, 1963.
George W. Mitchell	Chicago	Aug. 31, 1961	Reappointed in 1962. Served until Feb. 13, 1976.[2]
J. Dewey Daane	Richmond	Nov. 29, 1963	Served until Mar. 8, 1974.[2]
Sherman J. Maisel	San Francisco	Apr. 30, 1965	Served through May 31, 1972.
Andrew F. Brimmer	Philadelphia	Mar. 9, 1966	Resigned Aug. 31, 1974.
William W. Sherrill	Dallas	May 1, 1967	Reappointed in 1968. Resigned Nov. 15, 1971.
Arthur F. Burns	New York	Jan. 31, 1970	Term began Feb. 1, 1970. Resigned Mar. 31, 1978.
John E. Sheehan	St. Louis	Jan. 4, 1972	Resigned June 1, 1975.
Jeffrey M. Bucher	San Francisco	June 5, 1972	Resigned Jan. 2, 1976.
Robert C. Holland	Kansas City	June 11, 1973	Resigned May 15, 1976.
Henry C. Wallich	Boston	Mar. 8, 1974	Resigned Dec. 15, 1986.
Philip E. Coldwell	Dallas	Oct. 29, 1974	Served through Feb. 29, 1980.
Philip C. Jackson, Jr.	Atlanta	July 14, 1975	Resigned Nov. 17, 1978.
J. Charles Partee	Richmond	Jan. 5, 1976	Served until Feb. 7, 1986.[2]
Stephen S. Gardner	Philadelphia	Feb. 13, 1976	Died Nov. 19, 1978.
David M. Lilly	Minneapolis	June 1, 1976	Resigned Feb. 24, 1978.
G. William Miller	San Francisco	Mar. 8, 1978	Resigned Aug. 6, 1979.
Nancy H. Teeters	Chicago	Sept. 18, 1978	Served through June 27, 1984.
Emmett J. Rice	New York	June 20, 1979	Resigned Dec. 31, 1986.
Frederick H. Schultz	Atlanta	July 27, 1979	Served through Feb. 11, 1982.
Paul A. Volcker	Philadelphia	Aug. 6, 1979	Resigned Aug. 11, 1987.
Lyle E. Gramley	Kansas City	May 28, 1980	Resigned Sept. 1, 1985.
Preston Martin	San Francisco	Mar. 31, 1982	Resigned Apr. 30, 1986.
Martha R. Seger	Chicago	July 2, 1984	Resigned Mar. 11, 1991.
Wayne D. Angell	Kansas City	Feb. 7, 1986	Served through Feb. 9, 1994.
Manuel H. Johnson	Richmond	Feb. 7, 1986	Resigned Aug. 3, 1990.
H. Robert Heller	San Francisco	Aug. 19, 1986	Resigned July 31, 1989.
Edward W. Kelley, Jr.	Dallas	May 26, 1987	Resigned Dec. 31, 2001.
Alan Greenspan	New York	Aug. 11, 1987	Resigned Jan. 31, 2006.
John P. LaWare	Boston	Aug. 15, 1988	Resigned Apr. 30, 1995.
David W. Mullins, Jr.	St. Louis	May 21, 1990	Resigned Feb. 14, 1994.
Lawrence B. Lindsey	Richmond	Nov. 26, 1991	Resigned Feb. 5, 1997.
Susan M. Phillips	Chicago	Dec. 2, 1991	Served through June 30, 1998.
Alan S. Blinder	Philadelphia	June 27, 1994	Term expired Jan. 31, 1996.
Janet L. Yellen	San Francisco	Aug. 12, 1994	Resigned Feb. 17, 1997.
Laurence H. Meyer	St. Louis	June 24, 1996	Term expired Jan. 31, 2002.
Alice M. Rivlin	Philadelphia	June 25, 1996	Resigned July 16, 1999.
Roger W. Ferguson, Jr.	Boston	Nov. 5, 1997	Resigned Apr. 28, 2006.
Edward M. Gramlich	Richmond	Nov. 5, 1997	Resigned Aug. 31, 2005.
Susan S. Bies	Chicago	Dec. 7, 2001	Resigned Mar. 30, 2007.
Mark W. Olson	Minneapolis	Dec. 7, 2001	Resigned June 20, 2006.
Ben S. Bernanke	Atlanta	Aug. 5, 2002	Resigned June 21, 2005.
Donald L. Kohn	Kansas City	Aug. 5, 2002	
Ben. S. Bernanke	Atlanta	Feb. 1, 2006	
Kevin M. Warsh	New York	Feb. 24, 2006	
Randall S. Kroszner	Richmond	Mar. 1, 2006	
Frederic S. Mishkin	Boston	Sept. 5, 2006	Resigned Aug. 31, 2008.
Elizabeth A. Duke	Philadelphia	Aug. 5, 2008	

Appointed Members—Continued

Name	Term
Chairmen[3]	
Charles S. Hamlin	Aug. 10, 1914–Aug. 9, 1916
W.P.G. Harding	Aug. 10, 1916–Aug. 9, 1922
Daniel R. Crissinger	May 1, 1923–Sept. 15, 1927
Roy A. Young	Oct. 4, 1927–Aug. 31, 1930
Eugene Meyer	Sept. 16, 1930–May 10, 1933
Eugene R. Black	May 19, 1933–Aug. 15, 1934
Marriner S. Eccles	Nov. 15, 1934–Jan. 31, 1948[4]
Thomas B. McCabe	Apr. 15, 1948–Mar. 31, 1951
Wm. McC. Martin, Jr.	Apr. 2, 1951–Jan. 31, 1970
Arthur F. Burns	Feb. 1, 1970–Jan. 31, 1978
G. William Miller	Mar. 8, 1978–Aug. 6, 1979
Paul A. Volcker	Aug. 6, 1979–Aug. 11, 1987
Alan Greenspan	Aug. 11, 1987–Jan. 31, 2006[5]
Ben Bernanke	Feb. 1, 2006–
Vice Chairmen[3]	
Frederic A. Delano	Aug. 10, 1914–Aug. 9, 1916
Paul M. Warburg	Aug. 10, 1916–Aug. 9, 1918
Albert Strauss	Oct. 26, 1918–Mar. 15, 1920
Edmund Platt	July 23, 1920–Sept. 14, 1930
J.J. Thomas	Aug. 21, 1934–Feb. 10, 1936
Ronald Ransom	Aug. 6, 1936–Dec. 2, 1947
C. Canby Balderston	Mar. 11, 1955–Feb. 28, 1966
J.L. Robertson	Mar. 1, 1966–Apr. 30, 1973
George W. Mitchell	May 1, 1973–Feb. 13, 1976
Stephen S. Gardner	Feb. 13, 1976–Nov. 19, 1978
Frederick H. Schultz	July 27, 1979–Feb. 11, 1982
Preston Martin	Mar. 31, 1982–Apr. 30, 1986
Manuel H. Johnson	Aug. 4, 1986–Aug. 3, 1990
David W. Mullins, Jr.	July 24, 1991–Feb. 14, 1994
Alan S. Blinder	June 27, 1994–Jan. 31, 1996
Alice M. Rivlin	June 25, 1996–July 16, 1999
Roger W. Ferguson, Jr.	Oct. 5, 1999–Apr. 28, 2006
Donald L. Kohn	June 23, 2006–

NOTE: Under the original Federal Reserve Act, the Federal Reserve Board was composed of five appointed members, the Secretary of the Treasury (ex officio chairman of the Board), and the Comptroller of the Currency. The original term of office was ten years; the five original appointed members had terms of two, four, six, eight, and ten years. In 1922 the number of appointed members was increased to six, and in 1933 the term of office was raised to twelve years. The Banking Act of 1935 changed the name to the Board of Governors of the Federal Reserve System and provided that the Board be composed of seven appointed members; that the Secretary of the Treasury and the Comptroller of the Currency continue to serve until Feb. 1, 1936; that the appointed members in office on Aug. 23, 1935, continue to serve until Feb. 1, 1936, or until their successors were appointed and had qualified; and that thereafter the terms of members be fourteen years and that the designation of Chairman and Vice Chairman of the Board be for four years.

1. Date following "Resigned" and "Retired" denotes final day of service.
2. Successor took office on this date.
3. Before Aug. 23, 1935, Chairmen and Vice Chairmen were designated Governor and Vice Governor.
4. Served as Chairman Pro Tempore from Feb. 3, 1948, to Apr. 15, 1948.
5. Served as Chairman Pro Tempore from Mar. 3, 1996, to June 20, 1996.

Ex Officio Members

Name	Term
Secretaries of the Treasury	
W.G. McAdoo	Dec. 23, 1913–Dec. 15, 1918
Carter Glass	Dec. 16, 1918–Feb. 1, 1920
David F. Houston	Feb. 2, 1920–Mar. 3, 1921
Andrew W. Mellon	Mar. 4, 1921–Feb. 12, 1932
Ogden L. Mills	Feb. 12, 1932–Mar. 4, 1933
William H. Woodin	Mar. 4, 1933–Dec. 31, 1933
Henry Morgenthau, Jr.	Jan. 1, 1934–Feb. 1, 1936
Comptrollers of the Currency	
John Skelton Williams	Feb. 2, 1914–Mar. 2, 1921
Daniel R. Crissinger	Mar. 17, 1921–Apr. 30, 1923
Henry M. Dawes	May 1, 1923–Dec. 17, 1924
Joseph W. McIntosh	Dec. 20, 1924–Nov. 20, 1928
J.W. Pole	Nov. 21, 1928–Sept. 20, 1932
J.F.T. O'Connor	May 11, 1933–Feb. 1, 1936

Statistical Tables

1. Federal Reserve Open Market Transactions, 2008

Millions of dollars

Type of security and transaction	Jan.	Feb.	Mar.	Apr.
U.S. Treasury Securities[1]				
Outright transactions[2]				
Treasury bills				
Gross purchases	0	0	0	0
Gross sales	0	0	81,398	0
Exchanges	35,011	58,896	23,501	20,060
For new bills	35,011	58,896	23,501	20,060
Redemptions	27,481	0	25,977	22,667
Others within 1 year				
Gross purchases	0	0	0	0
Gross sales	0	0	0	0
Maturity shifts	0	0	0	0
Exchanges	0	0	0	0
Redemptions	0	0	0	0
1 to 5 years				
Gross purchases	0	0	0	0
Gross sales	0	0	14,958	20,001
Maturity shifts	0	0	0	0
Exchanges	0	0	0	0
5 to 10 years				
Gross purchases	0	0	0	0
Gross sales	0	0	0	0
Maturity shifts	0	0	0	0
Exchanges	0	0	0	0
More than 10 years				
Gross purchases	0	0	0	0
Gross sales	0	0	0	0
Maturity shifts	0	0	0	0
Exchanges	0	0	0	0
All maturities				
Gross purchases	0	0	0	0
Gross sales	0	0	96,356	20,001
Redemptions	27,481	0	25,977	22,667
Net change in U.S. Treasury securities	–27,481	0	–122,333	–42,668

For notes see end of table.

1.—Continued

May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
0	0	0	0	0	0	0	0	0
13,719	1,510	0	0	0	0	0	0	96,627
0	5,361	7,320	12,859	19,944	23,596	28,197	27,578	262,323
0	5,361	7,320	12,859	19,944	23,596	28,197	27,578	262,323
26,529	6,819	0	0	3,317	0	0	0	112,790
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
1,926	0	0	0	0	0	0	0	1,926
0	0	0	0	0	0	0	0	0
15,000	0	0	0	0	0	0	0	49,959
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
4,999	0	0	0	0	0	0	0	4,999
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
33,718	1,510	0	0	0	0	0	0	151,585
28,455	6,819	0	0	3,317	0	0	0	114,716
–62,173	–8,329	0	0	–3,317	0	0	0	–266,302

1. Federal Reserve Open Market Transactions, 2008—Continued

Millions of dollars

Type of security and transaction	Jan.	Feb.	Mar.	Apr.
FEDERAL AGENCY OBLIGATIONS				
Outright transactions [2]				
Gross purchases	0	0	0	0
Gross sales	0	0	0	0
Redemptions	0	0	0	0
Net change in federal agency obligations	0	0	0	0
TEMPORARY TRANSACTIONS				
Repurchase agreements [3]				
Gross purchases	203,500	256,250	233,750	386,500
Gross sales	224,500	220,000	219,500	347,000
Reverse repurchase agreements [4]				
Gross purchases	830,931	770,268	861,490	875,902
Gross sales	826,520	773,973	862,311	872,505
Net change in temporary transactions	–16,589	32,545	13,429	42,897
Total net change in System Open Market Account	**–44,069**	**32,545**	**–108,905**	**229**

NOTE: Sales, redemptions, and negative figures reduce holdings of the System Open Market Account; all other figures increase such holdings. Components may not sum to totals because of rounding.

1. Transactions exclude changes in compensation for the effects of inflation on the principal of inflation-indexed securities. Transactions include the rollover of inflation compensation into new securities.

2. Excludes the effect of temporary transactions—repurchase agreements and reverse repurchase agreements (RRPs).

3. Cash value of agreements, which are collateralized by U.S. government and federal agency securities.

4. Cash value of agreements, which are collateralized by U.S. Treasury securities.

1.—Continued

May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
0	0	0	0	14,500	0	0	15,031	29,531
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	14,500	0	0	15,031	29,531
345,500	347,250	353,000	276,000	450,500	120,000	80,000	100,000	3,152,250
347,250	346,500	348,500	277,500	477,000	123,000	80,000	100,000	3,110,750
813,259	850,374	940,787	912,593	1,142,836	2,057,805	1,777,834	1,957,897	13,791,976
811,255	855,495	942,387	909,781	1,178,163	2,074,400	1,781,862	1,972,690	13,861,342
253	–4,372	2,900	1,312	–61,827	–19,595	–4,027	–14,794	–27,868
–61,920	**–12,700**	**2,900**	**1,312**	**–50,644**	**–19,595**	**–4,027**	**237**	**–264,637**

2. Federal Reserve Bank Holdings of U.S. Treasury and Federal Agency Securities, December 31, 2006–2008

Millions of dollars

Description	December 31			Change	
	2008	2007	2006	2007 to 2008	2006 to 2007
U.S. Treasury Securities					
Held outright[1]	**475,921**	**740,611**	**778,915**	**–264,690**	**–38,304**
By remaining maturity					
Bills					
1–90 days	18,423	153,829	193,034	–135,406	–39,205
91 days to 1 year	0	74,012	83,985	–74,012	–9,973
Notes and bonds					
1 year or less	85,011	101,447	129,594	–16,432	–28,147
More than 1 year through 5 years	173,328	240,562	224,177	–67,234	16,385
More than 5 years through 10 years	97,325	81,947	67,645	15,378	14,302
More than 10 years	101,834	88,814	80,479	13,020	8,335
By type					
Bills	18,423	227,841	277,019	–209,418	–49,178
Notes	334,779	401,776	402,367	–66,997	–591
Bonds	122,719	110,995	99,528	11,724	11,467
Federal Agency Securities					
Held outright[1]	**19,708**	**0**	**0**	**19,708**	**0**
By remaining maturity					
1 year or less	4,707	0	0	4,707	0
More than 1 year through 5 years	11,361	0	0	11,361	0
More than 5 years though 10 years	3,640	0	0	3,640	0
More than 10 years	0	0	0	0	0
By issuer					
Federal Home Loan Mortgage Corporation	9,556	0	0	9,556	0
Federal National Mortgage Association	7,091	0	0	7,091	0
Federal Home Loan Banks	3,061	0	0	3,061	0
Temporary Transactions					
Repurchase agreements[2]	**80,000**	**46,500**	**40,750**	**33,500**	**5,750**
Reverse repurchase agreements[3]	**88,352**	**43,985**	**29,615**	**44,367**	**14,370**
Foreign official and international accounts	88,352	43,985	29,615	44,367	14,370
Dealers	0	0	0	0	0

Note: Components may not sum to totals because of rounding.

1. Excludes the effect of temporary transactions—repurchase agreements and reverse repurchase agreements (RRPs).

2. Cash value of agreements, which are collateralized by U.S. government and federal agency securities.

3. Cash value of agreements, which are collateralized by U.S. Treasury securities.

3. Federal Reserve Bank Interest Rates on Loans to Depository Institutions

Percent

A. Rates on Selected Loans as of December 31, 2008[1]

Reserve Bank	Primary credit	Secondary credit	Seasonal credit
All Banks	.50	1.00	1.05

1. For details on rate changes over the course of 2008, see the section on discount rates in the chapter "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. On March 16, 2008, the Board announced a temporary change to the Reserve Banks' discount window lending practices to allow the provision of term financing for as long as 90 days. *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.

B. Rates on Term Auction Facility Loans Outstanding on December 31, 2008[2]

Reserve Bank	Auction date	Rate
All Banks	Oct. 6, 2008	1.390
	Nov. 3, 2008	0.600
	Nov. 10, 2008	0.528
	Nov. 24, 2008	0.380
	Dec. 1, 2008	0.420
	Dec. 15, 2008	0.280

2. Under the Term Auction Facility (TAF), the Federal Reserve auctions term funds to depository institutions that are in generally sound financial condition and are eligible to borrow under the primary credit program. Loans from six auctions were outstanding on December 31, 2008.

4. Reserve Requirements of Depository Institutions, December 31, 2008

Type of deposit	Requirements	
	Percentage of deposits	Effective date
Net transaction accounts [1]		
$0 million–$9.3 million [2]	0	12-20-07
More than $9.3 million–$43.9 million [3]	3	12-20-07
More than $43.9 million	10	12-20-07
Nonpersonal time deposits	0	12-27-90
Eurocurrency liabilities	0	12-27-90

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 that is a member of the Federal Reserve System must hold that deposit directly with a Reserve Bank; an institution that is not a member of the System can maintain 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 consists of demand deposits, automatic transfer service (ATS) accounts, NOW accounts, share draft accounts, telephone or preauthorized transfer accounts, ineligible banker's 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 at www.federalreserve.gov/boarddocs/reportforms/.

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.

5. Banking Offices and Banks Affiliated with Bank Holding Companies in the United States, December 31, 2007 and 2008

Type of office	Total	Commercial banks[1]					State-chartered savings banks
		Total	Member			Nonmember	
			Total	National	State		
	All banking offices						
BANKS							
Number, Dec. 31, 2007	**7,601**	**7,241**	**2,489**	**1,615**	**874**	**4,752**	**360**
Changes during 2008							
New banks	101	99	23	11	12	76	2
Banks converted into branches	–244	–238	–111	–66	–45	–127	–6
Ceased banking operations[2]	–57	–50	–20	–14	–6	–30	–7
Other[3]	0	–3	–3	–25	22	0	3
Net change	–200	–192	–111	–94	–17	–81	–8
Number, Dec. 31, 2008	**7,401**	**7,049**	**2,378**	**1,521**	**857**	**4,671**	**352**
BRANCHES AND ADDITIONAL OFFICES							
Number, Dec. 31, 2007	**82,050**	**78,873**	**56,064**	**42,002**	**14,062**	**22,809**	**3,177**
Changes during 2008							
New branches	3,021	2,952	2,233	1,868	365	719	69
Branches converted from banks	244	239	133	75	58	106	5
Discontinued[2]	–2,848	–2,760	–2,305	–1,900	–405	–455	–88
Other[3]	0	93	–233	–366	133	326	–93
Net change	417	524	–172	–323	151	696	–107
Number, Dec. 31, 2008	**82,467**	**79,397**	**55,892**	**41,679**	**14,213**	**23,505**	**3,070**
	Banks affiliated with bank holding companies						
BANKS							
Number, Dec. 31, 2007	**6,120**	**5,995**	**2,203**	**1,426**	**777**	**3,792**	**125**
Changes during 2008							
BHC-affiliated new banks	120	115	27	16	11	88	5
Banks converted into branches	–222	–218	–107	–64	–43	–111	–4
Ceased banking operations[2]	–44	–42	–20	–14	–6	–22	–2
Other[3]	0	–2	–8	–22	14	6	2
Net change	–146	–147	–108	–84	–24	–39	1
Number, Dec. 31, 2008	**5,974**	**5,848**	**2,095**	**1,342**	**753**	**3,753**	**126**

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.

6A. Reserves of Depository Institutions, Federal Reserve Bank Credit, and Related Items, Year-End 1984–2008 and Month-End 2008

Millions of dollars

Period	Factors supplying reserve funds								
	Federal Reserve Bank credit outstanding						Gold stock	Special drawing rights certificate account	Treasury currency outstanding[4]
	Securities held outright[1]	Repurchase agreements[2]	Loans and other credit extensions[3]	Float	Other Federal Reserve assets	Total			
1984	167,612	2,015	3,577	833	12,347	186,384	11,096	4,618	16,418
1985	186,025	5,223	3,060	988	15,302	210,598	11,090	4,718	17,075
1986	205,454	16,005	1,565	1,261	17,475	241,760	11,084	5,018	17,567
1987	226,459	4,961	3,815	811	15,837	251,883	11,078	5,018	18,177
1988	240,628	6,861	2,170	1,286	18,803	269,748	11,060	5,018	18,799
1989	233,300	2,117	481	1,093	39,631	276,622	11,059	8,518	19,628
1990[r]	241,431	18,354	190	2,222	39,897	302,091	11,058	10,018	20,402
1991[r]	272,531	15,898	218	731	34,567	323,945	11,059	10,018	21,014
1992[r]	300,423	8,094	675	3,253	30,020	342,464	11,056	8,018	21,447
1993[r]	336,654	13,212	94	909	33,035	383,904	11,053	8,018	22,095
1994[r]	368,156	10,590	223	–716	33,634	411,887	11,051	8,018	22,994
1995[r]	380,831	13,862	135	107	33,303	428,239	11,050	10,168	24,003
1996[r]	393,132	21,583	85	4,296	32,896	451,992	11,048	9,718	24,966
1997[r]	431,420	23,840	2,035	719	31,452	489,466	11,047	9,200	25,543
1998[r]	452,478	30,376	17	1,636	36,966	521,475	11,046	9,200	26,270
1999[r]	478,144	140,640	233	–237	35,321	654,100	11,048	6,200	28,013
2000[r]	511,833	43,375	110	901	36,467	592,686	11,046	2,200	31,643
2001[r]	551,685	50,250	34	–23	37,658	639,604	11,045	2,200	33,017
2002[r]	629,416	39,500	40	418	39,083	708,457	11,043	2,200	34,597
2003[r]	666,665	43,750	62	–319	40,848	751,006	11,043	2,200	35,468
2004[r]	717,819	33,000	43	925	42,219	794,007	11,045	2,200	36,434
2005[r]	744,215	46,750	72	885	39,611	831,532	11,043	2,200	36,540
2006[r]	778,915	40,750	67	–333	39,895	859,294	11,041	2,200	38,206
2007[r]	740,611	46,500	72,636	–19	41,945	901,674	11,041	2,200	38,681
2008	495,629	80,000	1,605,848	–1,494	43,568	2,223,552	11,041	2,200	38,674

For notes see end of table.

6A.—Continued

Factors absorbing reserve funds									Reserve balances with Federal Reserve Banks
Currency in circulation	Reverse repurchase agreements[5]	Treasury cash holdings[6]	Deposits with Federal Reserve Banks, other than reserve balances				Required clearing balances	Other Federal Reserve liabilities and capital	
			Treasury general account	Treasury supplementary financing account	Foreign	Other			
183,796	0	513	5,316	. . .	253	867	1,126	5,952	20,693
197,488	0	550	9,351	. . .	480	1,041	1,490	5,940	27,141
211,995	0	447	7,588	. . .	287	917	1,812	6,088	46,295
230,205	0	454	5,313	. . .	244	1,027	1,687	7,129	40,097
247,649	0	395	8,656	. . .	347	548	1,605	7,683	37,742
260,456	0	450	6,217	. . .	589	1,298	1,618	8,486	36,713
286,963	0	561	8,960	. . .	369	528	1,960	8,147	36,081
307,756	0	636	17,697	. . .	968	1,869	3,946	8,113	25,051
334,701	0	508	7,492	. . .	206	653	5,897	7,984	25,544
365,271	0	377	14,809	. . .	386	636	6,332	9,292	27,967
403,843	0	335	7,161	. . .	250	1,143	4,196	11,959	25,061
424,244	0	270	5,979	. . .	386	2,113	5,167	12,342	22,960
450,648	0	249	7,742	. . .	167	1,178	6,601	13,829	17,310
482,327	0	225	5,444	. . .	457	1,171	6,684	15,500	23,447
517,484	0	85	6,086	. . .	167	1,869	6,780	16,354	19,164
628,359	0	109	28,402	. . .	71	1,644	7,481	17,256	16,039
593,694	0	450	5,149	. . .	216	2,478	6,332	17,962	11,295
643,301	0	425	6,645	. . .	61	1,356	8,525	17,083	8,469
687,518	21,091	367	4,420	. . .	136	1,266	10,534	18,977	11,988
724,187	25,652	321	5,723	. . .	162	995	11,829	19,793	11,055
754,877	30,783	270	5,912	. . .	80	1,285	9,963	26,378	14,137
794,014	30,505	202	4,573	. . .	83	2,144	8,651	30,466	10,678
820,176	29,615	252	4,708	. . .	98	972	6,842	36,231	11,847
828,938	43,985	259	16,120	. . .	96	1,830	6,614	41,622	14,132
889,898	88,352	259	106,123	259,325	1,365	21,221	4,387	48,921	855,614

6A. Reserves of Depository Institutions, Federal Reserve Bank Credit, and Related Items, Year-End 1984–2008 and Month-End 2008—Continued

Millions of dollars

Period	Factors supplying reserve funds								
	Federal Reserve Bank credit outstanding						Gold stock	Special drawing rights certificate account	Treasury currency outstanding [4]
	Securities held outright [1]	Repurchase agreements [2]	Loans and other credit extensions [3]	Float	Other Federal Reserve assets	Total			
2008									
Jan	713,382	25,500	84,038	–2,352	44,548	865,117	11,041	2,200	38,680
Feb	713,353	61,750	60,770	–1,085	41,357	876,145	11,041	2,200	38,680
Mar	591,234	76,000	172,035	–555	43,524	882,237	11,041	2,200	38,679
Apr	548,692	115,500	165,763	–1,724	43,761	871,992	11,041	2,200	38,735
May	486,901	113,750	236,449	–1,150	41,926	877,876	11,041	2,200	38,805
Jun	478,841	114,500	267,613	–638	40,323	900,639	11,041	2,200	38,677
Jul	479,240	119,000	258,629	–2,178	43,813	898,503	11,041	2,200	38,676
Aug	479,702	117,500	260,352	–1,470	39,897	895,980	11,041	2,200	38,675
Sep	491,127	83,000	878,541	–954	40,915	1,492,629	11,041	2,200	38,675
Oct	490,087	80,000	1,454,137	–1,290	42,517	2,065,451	11,041	2,200	38,674
Nov	488,622	80,000	1,514,182	–898	40,124	2,122,030	11,041	2,200	38,674
Dec	495,629	80,000	1,605,848	–1,494	43,568	2,223,552	11,041	2,200	38,674

6A.—Continued

Factors absorbing reserve funds									Reserve balances with Federal Reserve Banks
Currency in circulation	Reverse repurchase agreements [5]	Treasury cash holdings [6]	Deposits with Federal Reserve Banks, other than reserve balances				Required clearing balances	Other Federal Reserve liabilities and capital	
			Treasury general account	Treasury supplementary financing account	Foreign	Other			
810,821	39,574	288	5,773	. . .	114	315	6,812	42,497	10,845
815,028	43,279	261	4,424	. . .	96	258	6,750	44,347	13,622
815,219	44,101	331	5,552	. . .	98	238	7,047	45,043	16,527
814,089	40,704	281	4,955	. . .	106	285	7,091	43,179	13,279
822,884	38,700	282	4,620	. . .	99	248	7,070	44,332	11,687
826,362	43,822	279	4,978	. . .	211	284	7,053	45,439	24,129
831,862	45,422	318	5,256	. . .	103	327	7,016	43,981	16,135
835,129	42,610	281	4,681	. . .	99	298	7,086	44,968	12,744
838,253	77,937	270	32,988	299,491	121	26,277	7,566	47,168	214,474
859,150	94,531	272	43,998	558,851	184	14,639	5,999	44,432	495,311
872,317	98,559	241	66,385	434,107	187	6,504	4,956	53,352	637,336
889,898	88,352	259	106,123	259,325	1,365	21,221	4,387	48,921	855,614

NOTE: Components may not sum to totals because of rounding.

1. Includes U.S. Treasury and federal agency securities. U.S. Treasury securities include securities lent to dealers, which are fully collateralized by U.S. Treasury securities, federal agency securities, and other highly rated debt securities. Federal agency securities are included at face value.

2. Cash value of agreements, which are collateralized by U.S. Treasury and federal agency securities.

3. Refer to table 6B for detail.

4. Includes currency and coin (other than gold) issued directly by the U.S. Treasury. The largest components are fractional and dollar coins. For details refer to "U.S. Currency and Coin Outstanding and in Circulation," *Treasury Bulletin.*

5. Cash value of agreements, which are collateralized by U.S. Treasury securities.

6. Coin and paper currency held by the Treasury, as well as gold in excess of the gold certificates issued to the Reserve Bank.

. . . Not applicable.

r Revised.

6B. Loans and Other Credit Extensions, by Type, Year-End 1984–2008 and Month-End 2008

Millions of dollars

Period	Total	Primary, secondary, and seasonal credit[1]	Primary Dealer Credit Facility[2]	Term auction credit	AMLF[3]	AIG[4]	MMIFF and CPFF[5]	Other LLCs[6]	Central bank liquidity swaps
1984	3,577	3,577	...	...	...	...	...	...	...
1985	3,060	3,060	...	...	...	...	...	...	...
1986	1,565	1,565	...	...	...	...	...	...	...
1987	3,815	3,815	...	...	...	...	...	...	...
1988	2,170	2,170	...	...	...	...	...	...	...
1989	481	481	...	...	...	...	...	...	...
1990	190	190	...	...	...	...	...	...	...
1991	218	218	...	...	...	...	...	...	...
1992	675	675	...	...	...	...	...	...	...
1993	94	94	...	...	...	...	...	...	...
1994	223	223	...	...	...	...	...	...	...
1995	135	135	...	...	...	...	...	...	...
1996	85	85	...	...	...	...	...	...	...
1997	2,035	2,035	...	...	...	...	...	...	...
1998	17	17	...	...	...	...	...	...	...
1999	233	233	...	...	...	...	...	...	...
2000	110	110	...	...	...	...	...	...	...
2001	34	34	...	...	...	...	...	...	...
2002	40	40	...	...	...	...	...	...	...
2003	62	62	...	...	...	...	...	...	...
2004	43	43	...	...	...	...	...	...	...
2005	72	72	...	...	...	...	...	...	...
2006	67	67	...	...	...	...	...	...	...
2007	72,636	8,636	...	40,000	...	...	...	...	24,000
2008	1,605,848	93,791	37,404	450,219	23,765	38,914	334,102	73,925	553,728

6B.—Continued

Millions of dollars

Period	Total	Primary, secondary, and seasonal credit[1]	Primary Dealer Credit Facility[2]	Term auction credit	AMLF[3]	AIG[4]	MMIFF and CPFF[5]	Other LLCs[6]	Central bank liquidity swaps
2008									
Jan	84,038	38	. . .	60,000	. . .	. . .	. . .	. . .	24,000
Feb	60,770	770	. . .	60,000	. . .	. . .	. . .	. . .	0
Mar	172,035	11,291	39,743	100,000	. . .	. . .	. . .	. . .	21,000
Apr	165,763	11,988	17,775	100,000	. . .	. . .	. . .	. . .	36,000
May	236,449	16,300	8,150	150,000	. . .	. . .	. . .	. . .	62,000
Jun	267,613	24,189	1,455	150,000	. . .	. . .	. . .	29,970	62,000
Jul	258,629	17,529	0	150,000	. . .	. . .	. . .	29,099	62,000
Aug	260,352	19,104	0	150,000	. . .	. . .	. . .	29,247	62,000
Sep	878,541	51,020	148,701	149,000	151,070	61,080	. . .	29,407	288,263
Oct	1,454,137	112,694	79,137	301,363	94,539	79,453	226,539	26,848	533,564
Nov	1,514,182	91,533	57,072	406,508	52,842	55,943	295,338	48,127	506,819
Dec	1,605,848	93,791	37,404	450,219	23,765	38,914	334,102	73,925	553,728

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 and credit extended to certain other broker-dealers.

3. Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility.

4. Credit extended to American International Group, Inc. Excludes credit extended to consolidated LLCs.

5. Money Market Investor Funding Facility and Commercial Paper Funding Facility, net portfolio holdings of the LLCs. No credit was extended through the MMIFF in 2008.

6. Includes the net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC.

. . . Not applicable.

6C. Reserves of Depository Institutions, Federal Reserve Bank Credit, and Related Items, Year-End 1918–1983

Millions of dollars

Period	Factors supplying reserve funds									
	Federal Reserve Bank credit outstanding							Gold stock [6]	Special drawing rights certificate account	Treasury currency outstanding [7]
	Securities held outright [1]	Repurchase agreements [2]	Loans	Float [3]	All other [4]	Other Federal Reserve assets [5]	Total			
1918	239	0	1,766	199	294	0	2,498	2,873	. . .	1,795
1919r	300	0	2,215	201	575	0	3,292	2,707	. . .	1,707
1920	287	0	2,687	119	262	0	3,355	2,639	. . .	1,709
1921	234	0	1,144	40	146	0	1,563	3,373	. . .	1,842
1922	436	0	618	78	273	0	1,405	3,642	. . .	1,958
1923	80	54	723	27	355	0	1,238	3,957	. . .	2,009
1924	536	4	320	52	390	0	1,302	4,212	. . .	2,025
1925	367	8	643	63	378	0	1,459	4,112	. . .	1,977
1926	312	3	637	45	384	0	1,381	4,205	. . .	1,991
1927	560	57	582	63	393	0	1,655	4,092	. . .	2,006
1928	197	31	1,056	24	500	0	1,809	3,854	. . .	2,012
1929	488	23	632	34	405	0	1,583	3,997	. . .	2,022
1930	686	43	251	21	372	0	1,373	4,306	. . .	2,027
1931	775	42	638	20	378	0	1,853	4,173	. . .	2,035
1932	1,851	4	235	14	41	0	2,145	4,226	. . .	2,204
1933	2,435	2	98	15	137	0	2,688	4,036	. . .	2,303
1934	2,430	0	7	5	21	0	2,463	8,238	. . .	2,511
1935	2,430	1	5	12	38	0	2,486	10,125	. . .	2,476
1936	2,430	0	3	39	28	0	2,500	11,258	. . .	2,532
1937	2,564	0	10	19	19	0	2,612	12,760	. . .	2,637
1938	2,564	0	4	17	16	0	2,601	14,512	. . .	2,798
1939	2,484	0	7	91	11	0	2,593	17,644	. . .	2,963
1940r	2,184	0	3	80	8	0	2,274	21,995	. . .	3,087
1941	2,254	0	3	94	10	0	2,361	22,737	. . .	3,247
1942	6,189	0	6	471	14	0	6,679	22,726	. . .	3,648
1943r	11,543	0	5	681	10	0	12,239	21,938	. . .	4,094
1944	18,846	0	80	815	4	0	19,745	20,619	. . .	4,131
1945r	24,262	0	249	578	2	0	25,091	20,065	. . .	4,339
1946	23,350	0	163	580	1	0	24,093	20,529	. . .	4,562
1947	22,559	0	85	535	1	0	23,181	22,754	. . .	4,562
1948	23,333	0	223	541	1	0	24,097	24,244	. . .	4,589
1949r	18,885	0	78	534	2	0	19,499	24,427	. . .	4,598
1950	20,725	53	67	1,368	3	0	22,216	22,706	. . .	4,636
1951	23,605	196	19	1,184	5	0	25,009	22,695	. . .	4,709
1952	24,034	663	156	967	4	0	25,825	23,187	. . .	4,812
1953	25,318	598	28	935	2	0	26,880	22,030	. . .	4,894
1954	24,888	44	143	808	1	0	25,885	21,713	. . .	4,985
1955	24,391	394	108	1,585	29	0	26,507	21,690	. . .	5,008
1956	24,610	305	50	1,665	70	0	26,699	21,949	. . .	5,066
1957	23,719	519	55	1,424	66	0	25,784	22,781	. . .	5,146
1958	26,252	95	64	1,296	49	0	27,755	20,534	. . .	5,234
1959	26,607	41	458	1,590	75	0	28,771	19,456	. . .	5,311

For notes see end of table.

6C.—Continued

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]				
		Treasury	Foreign	Other				With Federal Reserve Banks	Currency and coin [10]	Required [11]	Excess [11, 12]
4,951	288	51	96	25	118	0	0	1,636	...	1,585	51
5,091	385	31	73	28	208	0	0	1,890	...	1,822	68
5,325	218	57	5	18	298	0	0	1,781	...	...	...
4,403	214	96	12	15	285	0	0	1,753	...	1,654	99
4,530	225	11	3	26	276	0	0	1,934	...	...	...
4,757	213	38	4	19	275	0	0	1,898	...	1,884	14
4,760	211	51	19	20	258	0	0	2,220	...	2,161	59
4,817	203	16	8	21	272	0	0	2,212	...	2,256	−44
4,808	201	17	46	19	293	0	0	2,194	...	2.250	−56
4,716	208	18	5	21	301	0	0	2,487	...	2,424	63
4,686	202	23	6	21	348	0	0	2,389	...	2,430	−41
4,578	216	29	6	24	393	0	0	2,355	...	2,428	−73
4,603	211	19	6	22	375	0	0	2,471	...	2,375	96
5,360	222	54	79	31	354	0	0	1,961	...	1,994	−33
5,388	272	8	19	24	355	0	0	2,509	...	1,933	576
5,519	284	3	4	128	360	0	0	2,729	...	1,870	859
5,536	3,029	121	20	169	241	0	0	4,096	...	2,282	1,814
5,882	2,566	544	29	226	253	0	0	5,587	...	2,743	2,844
6,543	2,376	244	99	160	261	0	0	6,606	...	4,622	1,984
6,550	3,619	142	172	235	263	0	0	7,027	...	5,815	1,212
6,856	2,706	923	199	242	260	0	0	8,724	...	5,519	3,205
7,598	2,409	634	397	256	251	0	0	11,653	...	6,444	5,209
8,732	2,213	368	1,133	599	284	0	0	14,026	...	7,411	6,615
11,160	2,215	867	774	586	291	0	0	12,450	...	9,365	3,085
15,410	2,193	799	793	485	256	0	0	13,117	...	11,129	1,988
20,449	2,303	579	1,360	356	339	0	0	12,886	...	11,650	1,236
25,307	2,375	440	1,204	394	402	0	0	14,373	...	12,748	1,625
28,515	2,287	977	862	446	495	0	0	15,915	...	14,457	1,458
28,952	2,272	393	508	314	607	0	0	16,139	...	15,577	562
28,868	1,336	870	392	569	563	0	0	17,899	...	16,400	1,499
28,224	1,325	1,123	642	547	590	0	0	20,479	...	19,277	1,202
27,600	1,312	821	767	750	706	0	0	16,568	...	15,550	1,018
27,741	1,293	668	895	565	714	0	0	17,681	...	16,509	1,172
29,206	1,270	247	526	363	746	0	0	20,056	...	19,667	389
30,433	1,270	389	550	455	777	0	0	19,950	...	20,520	−570
30,781	761	346	423	493	839	0	0	20,160	...	19,397	763
30,509	796	563	490	441	907	0	0	18,876	...	18,618	258
31,158	767	394	402	554	925	0	0	19,005	...	18,903	102
31,790	775	441	322	426	901	0	0	19,059	...	19,089	−30
31,834	761	481	356	246	998	0	0	19,034	...	19,091	−57
32,193	683	358	272	391	1,122	0	0	18,504	...	18,574	−70
32,591	391	504	345	694	841	0	0	18,174	310	18,619	−135

6C. Reserves of Depository Institutions, Federal Reserve Bank Credit, and Related Items, Year-End 1918–1983—Continued

Millions of dollars

Period	Factors supplying reserve funds									
	Federal Reserve Bank credit outstanding							Gold stock [6]	Special drawing rights certificate account	Treasury currency out-standing [7]
	Securities held outright [1]	Repur-chase agree-ments [2]	Loans	Float [3]	All other [4]	Other Federal Reserve assets [5]	Total			
1960	26,984	400	33	1,847	74	0	29,338	17,767	...	5,398
1961r	28,722	159	130	2,300	51	0	31,362	16,889	...	5,585
1962r	30,478	342	38	2,903	110	0	33,871	15,978	...	5,567
1963	33,582	11	63	2,600	162	0	36,418	15,513	...	5,578
1964	36,506	538	186	2,606	94	0	39,930	15,388	...	5,405
1965	40,478	290	137	2,248	187	0	43,340	13,733	...	5,575
1966	43,655	661	173	2,495	193	0	47,177	13,159	...	6,317
1967r	48,980	170	141	2,576	164	0	52,031	11,982	...	6,784
1968	52,937	0	186	3,443	58	0	56,624	10,367	...	6,795
1969r	57,154	0	183	3,440	64	2,743	63,584	10,367	...	6,852
1970r	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
1974r	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
1982r	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; see *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 see "U.S. Currency and Coin Outstanding and in Circulation," *Treasury Bulletin*.

6C.—Continued

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]				
		Treasury	Foreign	Other				With Federal Reserve Banks	Currency and coin[10]	Required[11]	Excess[11, 12]
32,869	377	485	217	533	941	0	0	17,081	2,544	18,988	637
33,918	422	465	279	320	1,044	0	0	17,387	2,823	20,114	96
35,338	380	597	247	393	1,007	0	0	17,454	3,262	20,071	645
37,692	361	880	171	291	1,065	0	0	17,049	4,099	20,677	471
39,619	612	820	229	321	1,036	0	0	18,086	4,151	21,663	574
42,056	760	668	150	355	211	0	0	18,447	4,163	22,848	−238
44,663	1,176	416	174	588	−147	0	0	19,779	4,310	24,321	−232
47,226	1,344	1,123	135	653	−773	0	0	21,092	4,631	25,905	−182
50,961	695	703	216	747	−1,353	0	0	21,818	4,921	27,439	−700
53,950	596	1,312	134	807	0	0	1,919	22,085	5,187	28,173	−901
57,093	431	1,156	148	1,233	0	0	1,986	24,150	5,423	30,033	−460
61,068	460	2,020	294	999	0	0	2,131	27,788	5,743	32,496	1,035
66,516	345	1,855	325	840	0	0	2,143	25,647	6,216	32,044	98[12]
72,497	317	2,542	251	1,419[13]	0	0	2,669	27,060	6,781	35,268	−1,360
79,743	185	3,113	418	1,275[13]	0	0	2,935	25,843	7,370	37,011	−3,798
86,547	483	7,285	353	1,090	0	0	2,968	26,052	8,036	35,197	−1,103[14]
93,717	460	10,393	352	1,357	0	0	3,063	25,158	8,628	35,461	−1,535
103,811	392	7,114	379	1,187	0	0	3,292	26,870	9,421	37,615	−1,265
114,645	240	4,196	368	1,256	0	0	4,275	31,152	10,538	42,694	−893
125,600	494	4,075	429	1,412	0	0	4,957	29,792	11,429	44,217	−2,835
136,829	441	3,062	411	617	0	0	4,671	27,456	13,654	40,558	675
144,774	443	4,301	505	781	0	117	5,261	25,111	15,576	42,145	−1,442
154,908	429	5,033	328	1,033	0	436	4,990	26,053	16,666	41,391	1,328
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.

. . . Not applicable.

r Revised.

7. Principal Assets and Liabilities of Insured Commercial Banks, by Class of Bank, June 30, 2008 and 2007

Millions of dollars, except as noted

Item	Total	Member banks			Nonmember banks
		Total	National	State	
	2008				
ASSETS					
Loans and investments	7,696,410	6,110,998	4,971,837	1,139,161	1,585,412
Loans, gross	6,065,989	4,785,065	3,904,207	880,858	1,280,923
Net	6,063,817	4,783,606	3,902,936	880,670	1,280,210
Investments	1,630,421	1,325,933	1,067,630	258,303	304,489
U.S. Treasury and federal agency securities	183,365	99,129	59,023	40,105	84,236
Other	1,447,056	1,226,804	1,008,606	218,198	220,253
Cash assets, total	299,881	235,910	199,720	36,190	63,971
LIABILITIES					
Deposits, total	5,815,572	4,428,354	3,590,980	837,373	1,387,219
Interbank	98,816	81,379	71,385	9,994	17,436
Other transactions	638,674	462,024	372,790	89,234	176,650
Other nontransactions	5,078,082	3,884,950	3,146,805	738,146	1,193,132
Equity capital	1,146,522	947,198	781,605	165,593	199,324
Number of banks	7,174	2,445	1,582	863	4,729
	2007				
ASSETS					
Loans and investments	7,206,325	5,627,944	4,530,621	1,097,323	1,578,381
Loans, gross	5,605,635	4,349,029	3,514,019	835,010	1,256,607
Net	5,602,798	4,346,962	3,512,160	834,802	1,255,836
Investments	1,600,690	1,278,915	1,016,602	262,313	321,774
U.S. Treasury and federal agency securities	258,877	142,091	90,999	51,092	116,785
Other	1,341,813	1,136,824	925,603	211,221	204,989
Cash assets, total	263,536	210,387	173,716	36,671	53,149
LIABILITIES					
Deposits, total	5,462,123	4,080,697	3,266,189	814,508	1,381,427
Interbank	80,119	65,673	53,472	12,201	14,446
Other transactions	635,390	457,450	365,720	91,731	177,939
Other nontransactions	4,746,614	3,557,573	2,846,997	710,576	1,189,041
Equity capital	1,041,028	831,338	675,049	156,288	209,691
Number of banks	7,322	2,553	1,673	880	4,769

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 2007 have been revised.

8. Initial Margin Requirements under Regulations T, U, and X

Percent of market value

Effective date	Margin stocks	Convertible bonds	Short sales, T only[1]
1934, Oct. 1	25–45	. . .	. . .
1936, Feb. 1	25–55	. . .	. . .
Apr. 1	55	. . .	. . .
1937, Nov. 1	40	. . .	50
1945, Feb. 5	50	. . .	50
July 5	75	. . .	75
1946, Jan. 21	100	. . .	100
1947, Feb. 1	75	. . .	75
1949, Mar. 3	50	. . .	50
1951, Jan. 17	75	. . .	75
1953, Feb. 20	50	. . .	50
1955, Jan. 4	60	. . .	60
Apr. 23	70	. . .	70
1958, Jan. 16	50	. . .	50
Aug. 5	70	. . .	70
Oct. 16	90	. . .	90
1960, July 28	70	. . .	70
1962, July 10	50	. . .	50
1963, Nov. 6	70	. . .	70
1968, Mar. 11	70	50	70
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 brokers and dealers.

. . . Not applicable.

9A. Statement of Condition of the Federal Reserve Banks, by Bank, December 31, 2008 and 2007

Millions of dollars

Item	Total		Boston	
	2008	2007	2008	2007
ASSETS				
Gold certificate account	11,037	11,037	424	449
Special drawing rights certificate account	2,200	2,200	115	115
Coin	1,688	1,179	56	36
Loans and securities				
Term auction credit	450,220	40,000	16,150	. . .
Primary, secondary, and seasonal loans	93,790	8,636	243	178
Primary dealer credit facility[1]	37,404	. . .	. . .	. . .
Asset-backed commercial paper money market mutual fund liquidity facility	23,765	. . .	23,765	. . .
Credit extended to American International Group, Inc.[2]	38,914	. . .	. . .	. . .
Securities purchased under agreements to resell (tri-party)[3]	80,000	46,500	3,356	2,143
Federal agency and government-sponsored enterprise obligations bought outright	19,708	. . .	827	. . .
U.S. Treasury securities bought outright[4]	475,921	740,611	19,962	34,132
Total loans and securities	1,219,722	835,748	64,302	36,453
Net portfolio holdings of consolidated variable interest entities:[5]				
Commercial Paper Funding Facility LLC[6]	334,910	. . .	. . .	. . .
Maiden Lane LLC[7]	30,635	. . .	. . .	. . .
Maiden Lane II LLC[7]	19,195	. . .	. . .	. . .
Maiden Lane III LLC[7]	27,256	. . .	. . .	. . .
Money Market Investor Funding Facility LLCs[8]	0	. . .	. . .	. . .
Denominated in foreign currencies[9]	24,804	22,914	1,411	592
Central bank liquidity swaps[10]	553,728	24,000	31,498	629
Other assets				
Items in process of collection	1,377	2,220	41	82
Bank premises	2,194	2,144	123	120
All other[11]	19,789	16,944	842	823
Interdistrict settlement account	0	0	–10,264	–1,356
Total assets	**2,248,534**	**918,384**	**88,547**	**37,942**
LIABILITIES				
Federal Reserve notes outstanding (issued to Bank)	1,022,850	1,010,262	38,282	38,832
Less: Notes held by Federal Reserve Bank	169,682	218,571	5,409	5,886
Federal Reserve notes, net	853,168	791,691	32,872	32,946
Securities sold under agreements to repurchase[3]	88,352	43,985	3,706	2,027
Deposits				
Depository institutions	860,000	20,767	49,810	531
U.S. Treasury, general account	106,123	16,120	. . .	. . .
U.S. Treasury, supplementary financing account[12]	259,325	. . .	. . .	. . .
Foreign, official accounts	1,365	96	2	1
Other[13]	21,226	2,020	246	31
Total deposits	1,248,039	39,003	50,057	563
Deferred credit items	2,868	2,227	69	92
Consolidated variable interest entities - other liabilities	5,813	. . .	. . .	. . .
Other liabilities and accrued dividends[14]	8,143	4,577	154	215
Total liabilities	**2,206,382**	**881,484**	**86,859**	**35,843**
CAPITAL ACCOUNTS				
Capital paid in	21,076	18,450	844	1,049
Surplus (including accumulated other comprehensive loss)	21,076	18,450	844	1,049
Total liabilities and capital accounts	**2,248,534**	**918,384**	**88,547**	**37,942**

For notes see end of table.

9A.—Continued

New York		Philadelphia		Cleveland		Richmond	
2008	2007	2008	2007	2008	2007	2008	2007
3,935	4,053	453	455	423	428	891	869
874	874	83	83	104	104	147	147
76	55	137	88	136	113	233	134
220,434	33,957	38,300	. . .	15,575	12	75,130	775
80,231	5,888	329	0	48	841	452	130
37,404	. . .	. . .	. . .	. . .	. . .	. . .	. . .
0	. . .	. . .	. . .	. . .	. . .	. . .	. . .
38,914	. . .	. . .	. . .	. . .	. . .	. . .	. . .
28,464	16,838	3,493	2,057	3,034	1,903	7,254	4,029
7,012	. . .	860	. . .	747	. . .	1,787	. . .
169,330	268,173	20,779	32,765	18,047	30,308	43,156	64,168
581,788	324,856	63,762	34,822	37,450	33,064	127,779	69,102
334,910	. . .	. . .	. . .	. . .	. . .	. . .	. . .
30,635	. . .	. . .	. . .	. . .	. . .	. . .	. . .
19,195	. . .	. . .	. . .	. . .	. . .	. . .	. . .
27,256	. . .	. . .	. . .	. . .	. . .	. . .	. . .
0	. . .	. . .	. . .	. . .	. . .	. . .	. . .
6,209	5,573	2,438	2,707	1,736	1,625	6,717	6,120
138,622	5,570	54,424	2,877	38,749	1,727	149,945	6,505
. . .	42	237	317	164	268	41	154
212	216	65	64	147	153	233	186
8,791	6,707	812	716	693	752	1,919	1,454
110,091	–12,606	–66,458	794	16,708	–741	–163,991	–1,177
1,262,593	**335,338**	**55,952**	**42,924**	**96,310**	**37,494**	**123,914**	**83,494**
357,738	356,941	41,218	41,729	46,503	39,353	80,772	80,552
46,609	74,297	5,013	7,564	7,240	7,130	11,552	13,767
311,129	282,644	36,205	34,165	39,263	32,223	69,220	66,785
31,435	15,927	3,858	1,946	3,350	1,800	8,012	3,811
509,858	9,158	10,565	2,664	49,963	447	34,057	1,780
106,123	16,120	. . .	. . .	. . .	. . .	. . .	. . .
259,325	. . .	. . .	. . .	. . .	. . .	. . .	. . .
1,335	66	4	5	3	3	11	11
20,536	698	15	92	3	12	82	503
897,177	26,042	10,584	2,760	49,969	461	34,150	2,294
0	51	515	215	456	200	172	112
5,813	. . .	. . .	. . .	. . .	. . .	. . .	. . .
5,823	1,437	160	211	168	228	401	500
1,251,378	**326,101**	**51,322**	**39,297**	**93,206**	**34,912**	**111,954**	**73,502**
5,607	4,619	2,315	1,813	1,552	1,291	5,980	4,996
5,607	4,619	2,315	1,813	1,552	1,291	5,980	4,996
1,262,593	**335,338**	**55,952**	**42,924**	**96,310**	**37,494**	**123,914**	**83,494**

9A. Statement of Condition of the Federal Reserve Banks, by Bank, December 31, 2008 and 2007—Continued

Millions of dollars

Item	Atlanta		Chicago	
	2008	2007	2008	2007
ASSETS				
Gold certificate account	1,221	1,117	913	903
Special drawing rights certificate account	166	166	212	212
Coin	214	153	194	137
Loans and Securities				
Term auction credit	17,222	25	5,094	1,080
Primary, secondary, and seasonal loans	483	0	1,828	1,259
Primary dealer credit facility[1]	...	...	...	...
Asset-backed commercial paper money market mutual fund liquidity facility	...	...	...	...
Credit extended to American International Group, Inc.[2]	...	...	...	...
Securities purchased under agreements to resell (tri-party)[3]	7,960	4,313	7,061	3,900
Federal agency and government-sponsored enterprise obligations bought outright	1,961	...	1,739	...
U.S. Treasury securities bought outright[4]	47,353	68,690	42,005	62,120
Total loans and securities	74,979	73,028	57,726	68,359
Net portfolio holdings of consolidated variable interest entities:[5]				
Commercial Paper Funding Facility LLC[6]	...	...	...	...
Maiden Lane LLC[7]	...	...	...	...
Maiden Lane II LLC[7]	...	...	...	...
Maiden Lane III LLC[7]	...	...	...	...
Money Market Investor Funding Facility LLCs[8]	...	...	...	...
Denominated in foreign currencies[9]	1,910	1,908	1,100	1,283
Central bank liquidity swaps[10]	42,641	2,028	24,559	1,364
Other assets				
Items in process of collection	325	229	111	155
Bank premises	225	230	209	205
All other[11]	1,578	1,475	1,316	1,260
Interdistrict settlement account	20,108	3,909	34,760	6,133
Total assets	**143,366**	**84,243**	**121,100**	**80,010**
LIABILITIES				
Federal Reserve notes outstanding (issued to Bank)	129,432	111,626	83,073	86,265
Less: Notes held by Federal Reserve Bank	24,156	36,017	12,938	13,560
Federal Reserve notes, net	105,276	75,609	70,135	72,705
Securities sold under agreements to repurchase[3]	8,791	4,080	7,798	3,689
Deposits				
Depository institutions	25,593	975	41,013	910
U.S. Treasury, general account	...	...	...	...
U.S. Treasury, supplementary financing account[12]	...	...	...	...
Foreign, official accounts	3	3	2	2
Other[13]	13	166	133	161
Total deposits	25,610	1,144	41,147	1,073
Deferred credit items	158	143	323	516
Consolidated variable interest entities - other liabilities	...	...	...	...
Other liabilities and accrued dividends[14]	307	418	290	396
Total liabilities	**140,143**	**81,393**	**119,693**	**78,381**
CAPITAL ACCOUNTS				
Capital paid in	1,612	1,425	703	814
Surplus (including accumulated other comprehensive loss)	1,612	1,425	703	814
Total liabilities and capital accounts	**143,366**	**84,243**	**121,100**	**80,010**

9A.—Continued

St. Louis		Minneapolis		Kansas City		Dallas		San Francisco	
2008	2007	2008	2007	2008	2007	2008	2007	2008	2007
344	326	199	203	349	335	636	613	1,249	1,286
71	71	30	30	66	66	98	98	234	234
43	50	54	45	114	72	180	130	252	165
4,698	1,050	5,737	. . .	2,740	. . .	4,335	1,400	44,805	1,701
454	0	123	3	4,570	7	692	0	4,338	330
. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
2,765	1,486	1,510	928	2,937	1,505	3,318	2,043	8,849	5,355
681	. . .	372	. . .	724	. . .	818	. . .	2,180	. . .
16,446	23,671	8,985	14,777	17,475	23,974	19,742	32,540	52,642	85,293
25,044	26,207	16,727	15,708	28,446	25,486	28,905	35,983	112,814	92,680
. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
242	249	477	412	261	264	489	317	1,815	1,864
5,401	264	10,641	438	5,825	280	10,908	336	40,517	1,981
17	13	76	97	14	214	152	126	199	522
132	115	112	113	273	269	251	257	213	218
538	515	327	317	566	513	661	690	1,746	1,722
3,210	3,742	–9,656	2,140	5,080	5,239	11,155	–2,425	49,257	–3,651
35,041	**31,551**	**18,987**	**19,503**	**40,993**	**32,740**	**53,434**	**36,124**	**208,296**	**97,021**
29,317	32,982	17,523	19,219	29,868	33,316	55,888	57,270	113,237	112,177
3,405	3,770	2,839	2,790	3,536	3,212	20,767	24,860	26,219	25,719
25,912	29,212	14,684	16,429	26,332	30,103	35,121	32,410	87,018	86,459
3,053	1,406	1,668	878	3,244	1,424	3,665	1,933	9,773	5,066
5,446	289	1,614	1,104	10,769	449	13,533	635	107,779	1,823
. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
0	0	1	1	0	0	1	1	3	3
14	55	38	38	14	45	104	59	29	161
5,460	344	1,652	1,143	10,784	495	13,638	695	107,810	1,987
47	38	235	223	102	157	296	129	495	353
. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
150	192	99	122	116	172	172	230	302	456
34,622	**31,192**	**18,338**	**18,794**	**40,578**	**32,352**	**52,892**	**35,397**	**205,398**	**94,321**
210	180	324	355	208	194	271	363	1,449	1,350
210	180	324	355	208	194	271	363	1,449	1,350
35,041	**31,551**	**18,987**	**19,503**	**40,993**	**32,740**	**53,434**	**36,124**	**208,296**	**97,021**

9A. Statement of Condition of the Federal Reserve Banks, by Bank, December 31, 2008 and 2007—Continued

NOTE: Components may not sum to totals because of rounding.

1. Includes credit extended to primary dealers and certain London-based primary dealer affiliates.

2. Excludes credit extended to Maiden Lane II LLC and Maiden Lane III LLC.

3. Contract amount of the agreements.

4. 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—and excludes securities purchased under agreements to resell.

5. The Federal Reserve Bank of New York is the primary beneficiary of Commercial Paper Funding Facility LLC, Maiden Lane LLC, Maiden Lane II LLC, Maiden Lane III LLC and Money Market Investor Funding Facility LLCs 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.

6. Book value, which includes amortized cost and related fees.

7. Fair value.

8. There were no material transactions in the money market investor funding facility for the period ended December 31, 2008.

9. Valued daily at market exchange rates.

10. 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.

11. Includes accrued interest, premium on securities, and depository institution overdrafts, in the amounts of $7,279 million, $8,049 million, and $4 million, respectively, for 2008; and $6,410 million, $7,988 million, and $6 million, respectively, for 2007.

12. Represents amounts deposited by the U.S. Treasury that result from a temporary supplementary program that offsets, in part, the reserve impact of the Reserve Banks' lending and liquidity initiatives.

13. Includes deposits of government-sponsored enterprises of $20,020 million and $5 million for 2008 and 2007, respectively, and international organizations of $146 million and $144 million for 2008 and 2007, respectively. These deposits are primarily held by the Federal Reserve Bank of New York.

14. Includes other entities' beneficial interests in the consolidated variable interest entities of $2,824 million at December 31, 2008.

. . . Not applicable.

9B. Statement of Condition of the Federal Reserve Banks, December 31, 2008 and 2007

Supplemental Information—Collateral Held against Federal Reserve Notes: Federal Reserve Agents' Accounts

Millions of dollars

Item	2008	2007
Federal Reserve notes outstanding	1,022,850	1,010,262
Less: Notes held by Federal Reserve Banks not subject to collateralization	169,682	218,571
Collateralized Federal Reserve notes	**853,168**	**791,691**
Collateral for Federal Reserve notes		
Gold certificate account	11,037	11,037
Special drawing rights certificate account	2,200	2,200
U.S. Treasury, federal agency, and government-sponsored enterprise securities [1]	496,733	743,063
Other eligible assets	343,198	35,391
Total collateral	**853,168**	**791,691**

1. Includes face value of U.S. Treasury, federal agency, and mortgage-backed securities held outright; compensation to adjust for the effect of inflation on the original face value of inflation-indexed securities; cash value of repurchase agreements; and par value of reverse repurchase agreements.

10. Income and Expenses of the Federal Reserve Banks, by Bank, 2008

Thousands of dollars

Item	Total	Boston	New York	Philadelphia	Cleveland
CURRENT INCOME					
Term auction, primary, secondary, and seasonal credit	3,816,527	83,827	2,441,981	54,619	131,399
Other loans[1]	3,347,774	470,165	2,877,609	...	...
U.S. Treasury, federal agency, and government-sponsored enterprise securities[2]	27,522,160	1,195,251	9,854,409	1,207,368	1,073,264
Foreign currencies	623,313	33,862	155,675	62,282	43,666
Central bank liquidity swaps[3]	3,606,068	202,346	902,113	356,203	252,431
Priced services	773,354	...	60,740	...	...
Compensation received for services provided[4]	511,857	31,219	10,670	39,739	68,367
Securities lending fees	765,339	32,338	272,663	33,449	29,193
Other	79,190	845	66,858	448	994
Total	**41,045,582**	**2,049,852**	**16,642,718**	**1,754,108**	**1,599,313**
CURRENT EXPENSES					
Personnel					
Salaries and other personnel expenses	1,548,408	83,950	324,685	75,095	92,313
Retirement and other benefits	496,406	23,647	100,718	26,059	36,562
Net periodic pension expense[5]	160,486	1,441	148,157	767	569
Interest expense on securities sold under agreements to repurchase	737,276	32,150	264,184	32,362	28,846
Interest on reserves[6]	816,738	55,147	457,314	8,527	27,857
Earnings credit costs	84,619	4,368	27,228	2,940	4,174
Fees	132,057	3,809	17,716	2,825	4,400
Travel	72,223	3,080	10,502	2,723	4,183
Postage and other shipping costs	72,993	1,202	1,464	2,098	6,043
Communications	45,612	930	4,017	552	983
Materials and supplies	67,727	3,724	8,245	5,870	5,987
Building					
Taxes on real estate	37,571	5,603	4,829	1,640	2,028
Property depreciation	108,250	7,643	16,888	4,582	11,678
Utilities	43,968	4,631	9,108	2,981	2,842
Rent	42,958	1,013	15,048	660	155
Other	43,769	1,335	6,446	2,605	3,266
Equipment/Software					
Purchases	29,419	2,180	5,406	1,017	1,021
Rentals	3,289	229	1,256	424	64
Depreciation	95,236	4,753	8,751	6,868	4,631
Repairs and maintenance	74,659	4,324	7,486	4,650	5,210
Software	160,942	4,095	23,113	8,726	23,864
Compensation paid for service costs incurred[4]	511,857	...	29,835	...	...
Other	89,296	17,234	73,802	12,856	13,900
Recoveries	–122,959	–16,786	–15,686	–4,264	–4,031
Expenses capitalized[7]	–21,191	–2,388	–10,154	–548	–762
Total	**5,331,610**	**247,312**	**1,540,355**	**202,015**	**275,783**
Reimbursements	–461,236	–26,820	–114,357	–32,443	–62,707
Net expenses	4,870,374	220,493	1,425,998	169,573	213,075

For notes see end of table.

10.—Continued

Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
388,963	141,995	77,617	48,452	46,588	35,910	56,789	308,388
. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
2,455,841	2,671,804	2,385,849	925,459	530,178	967,664	1,165,875	3,089,196
168,598	48,322	28,243	6,136	11,915	6,607	11,976	46,029
976,162	278,254	160,980	35,270	69,186	38,020	70,508	264,596
. . .	649,143	63,470	. . .	. . .	. . .	. . .	. . .
47,699	428	57,173	15,230	76,023	66,538	42,599	56,174
69,169	75,765	67,298	26,299	14,510	27,854	31,887	84,915
2,657	428	676	170	62	230	222	5,601
4,109,089	**3,866,139**	**2,841,306**	**1,057,016**	**748,463**	**1,142,823**	**1,379,856**	**3,854,900**
221,564	144,017	113,206	76,972	80,253	97,054	88,289	151,009
73,797	48,459	35,818	26,081	25,069	22,601	30,873	46,721
1,295	1,264	1,093	883	707	1,446	674	2,190
65,661	71,360	63,775	24,710	14,237	25,785	31,310	82,899
133,125	20,400	28,502	3,330	1,722	9,288	9,396	62,130
15,975	4,803	7,097	1,618	1,627	2,192	2,451	10,145
61,207	11,481	8,384	8,326	1,817	6,191	2,236	3,664
10,753	7,969	7,798	4,212	3,321	4,795	4,001	8,886
3,021	39,217	4,048	1,658	2,365	2,275	4,532	5,069
27,494	1,936	1,802	1,339	1,613	1,520	1,648	1,778
7,011	7,517	6,990	2,566	4,041	4,289	5,131	6,356
2,361	3,250	2,852	575	3,373	3,500	3,631	3,928
10,276	10,662	12,547	5,409	3,901	6,756	9,178	8,729
4,302	4,284	2,208	1,918	2,039	2,184	4,076	3,396
17,853	484	2,042	1,736	284	2,316	204	1,164
4,119	3,779	5,829	2,032	2,079	1,245	8,034	3,000
4,465	5,434	1,351	1,101	1,556	1,860	1,928	2,101
216	462	291	126	8	74	30	108
33,463	9,723	4,073	2,324	1,932	5,726	6,085	6,909
16,955	8,378	5,695	2,361	2,684	3,424	5,355	8,137
59,343	7,407	4,298	5,287	4,527	5,457	8,712	7,607
. . .	471,099	10,924	. . .	. . .	. . .	. . .	. . .
–285,645	52,969	55,041	75,439	22,847	10,529	21,838	18,485
–33,552	–11,236	–9,177	–2,737	–1,275	–5,405	–11,873	–6,938
–1,934	–1,225	–449	–628	–1,884	–840	–605	266
453,125	**923,894**	**376,038**	**246,637**	**178,845**	**214,263**	**237,135**	**436,206**
–31,490	–13,868	–4,487	–110,184	–27,256	–10,413	–15,319	–11,892
421,635	910,026	371,551	136,453	151,589	203,850	221,816	424,314

10. Income and Expenses of the Federal Reserve Banks, by Bank, 2008—Continued

Thousands of dollars

Item	Total	Boston	New York	Philadelphia	Cleveland
PROFIT AND LOSS					
Current net income	36,175,209	1,829,359	15,216,720	1,584,535	1,386,238
Additions to (+) and deductions from (-) current net income					
Profits on sales of U.S. Treasury, federal agency, and government-sponsored enterprise securities	3,769,021	168,418	1,356,717	166,005	150,411
Profits on foreign exchange transactions	1,266,386	55,565	313,236	135,003	89,116
Other additions[8]	88	2	28	2	2
Total additions	5,035,495	223,985	1,669,981	301,010	239,530
Net loss from consolidated variable interest entities[9]	–1,693,955	...	–1,693,955	...	...
Provision for loan losses	0	0	0	0	0
Other deductions[10]	–906	0	–461	0	0
Total deductions	–1,694,862	0	–1,694,416	0	0
Net addition to (+) or deduction from (–) current net income	3,340,634	223,984	–24,436	301,010	239,529
Cost of unreimbursed Treasury services	6	0	6	0	0
Assessments by Board					
Board expenditures[11]	352,291	18,518	88,125	36,435	24,687
Cost of currency	500,372	28,441	110,293	29,271	24,452
Net income before distributions	38,663,174	2,006,386	14,993,861	1,819,839	1,576,629
Change in funded status of benefit plans[12]	–3,158,808	–6,666	–3,133,423	–4,723	909
Comprehensive income before distributions	35,504,366	1,999,719	11,860,438	1,815,116	1,577,537
Dividends paid	1,189,626	54,587	301,216	127,551	84,464
Payments to U.S. Treasury (interest on Federal Reserve notes)	31,688,688	2,150,331	10,570,502	1,185,837	1,232,048
Transferred to/from surplus and change in accumulated other comprehensive income	2,626,053	–205,198	988,720	501,729	261,026
Surplus, January 1	18,449,821	1,049,471	4,618,706	1,813,329	1,291,070
Surplus, December 31	21,075,873	844,272	5,607,427	2,315,058	1,552,095

NOTE: Components may not sum to totals because of rounding.

1. Represents interest income on primary dealer credit facility, asset-backed commercial paper money market mutual fund liquidity facility, and credit extended to American International Group, Inc.

2. Includes interest income on securities purchased under agreements to resell.

3. Represents interest income recognized on swap agreements with foreign central banks.

4. The Federal Reserve Bank of Atlanta has overall responsibility for managing the Reserve Banks' provision of check and ACH services and recognizes total System revenue for these services. The Federal Reserve Bank of New York 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 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 Federal Reserve Bank of Atlanta, the Federal Reserve Bank of New York, and the Federal Reserve Bank of Chicago compensate the other Reserve Banks for the costs incurred in providing these services.

10.—Continued

Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
3,687,455	2,956,112	2,469,756	920,562	596,873	938,973	1,158,040	3,430,585
331,702	358,174	321,720	123,770	73,832	127,548	162,468	428,256
340,971	100,852	62,346	12,931	23,687	13,845	21,825	97,010
14	14	3	3	6	2	2	11
672,686	459,039	384,069	136,705	97,525	141,395	184,294	525,277
. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
0	0	0	0	0	0	0	0
0	0	0	–444	0	0	–1	0
0	0	0	–444	0	0	–1	0
672,686	459,039	384,069	136,261	97,525	141,395	184,293	525,276
0	0	0	0	0	0	0	0
94,372	27,280	17,514	3,374	6,481	3,697	6,303	25,507
45,512	70,937	43,952	18,709	13,097	23,106	18,514	74,088
4,220,257	3,316,935	2,792,359	1,034,741	674,821	1,053,565	1,317,516	3,856,267
3,108	2,455	–4,562	–2,665	–3,803	–5,861	–380	–3,197
4,223,366	3,319,389	2,787,796	1,032,076	671,018	1,047,704	1,317,137	3,853,069
317,735	93,984	65,778	11,154	19,859	12,224	17,045	84,027
2,921,456	3,038,572	2,833,018	991,185	681,319	1,021,626	1,392,550	3,670,247
984,175	186,833	–110,999	29,737	–30,160	13,854	–92,459	98,795
4,995,979	1,424,838	814,459	179,950	354,533	194,068	363,431	1,349,988
5,980,154	1,611,672	703,459	209,686	324,373	207,922	270,972	1,448,783

5. Reflects the effect of the Financial Accounting Standards Board's Statement of Financial Accounting Standards No. 87, *Employers' Accounting for Pensions* (SFAS 87). The System Retirement Plan for employees is recorded on behalf of the System on the books of the Federal Reserve Bank of New York. Net pension expense for the System, which was $137,599 thousand, is recorded in the books of the Federal Reserve Bank of New York. The Retirement Benefit Equalization Plan and the Supplemental Employee Retirement Plan are recorded by each Federal Reserve Bank.

6. In October 2008, the Reserve Banks began to pay interest to depository institutions on qualifying balances held at the Federal Reserve Banks.

7. Includes expenses for labor and materials capitalized and depreciated or amortized as charges to activities in the periods benefited.

8. Includes reimbursement from the U.S. Treasury for uncut sheets of Federal Reserve notes and stale Reserve Bank checks that are written off

9. Represents the portion of the consolidated variable interest entities' net income (loss) recorded by the Federal Reserve Bank of New York. The amount includes interest income, interest expense, realized and unrealized gains and losses, and professional fees.

10. Includes losses on sale of Reserve Bank buildings.

11. For additional details, see Board of Governors Financial Statements in the "Federal Reserve System Audits" section.

12. The funded status of the System Retirement Plan decreased in 2008 due to a reduction in asset values and an increase in the projected benefits obligation, which resulted from plan amendments.

. . . Not applicable.

11. Income and Expenses of the Federal Reserve Banks, 1914–2008

Thousands of dollars

Federal Reserve Bank and period	Current income	Net expenses	Net additions or deductions (−)[1]	Assessments by Board of Governors		Change in funded status of benefit plans
				Board expenditures	Costs of currency	
All Banks						
1914–15	2,173	2,018	6	302	...	...
1916	5,218	2,082	−193	192	...	...
1917	16,128	4,922	−1,387	238	...	...
1918	67,584	10,577	−3,909	383	...	...
1919	102,381	18,745	−4,673	595	...	...
1920	181,297	27,549	−3,744	710	...	...
1921	122,866	33,722	−6,315	741	...	...
1922	50,499	28,837	−4,442	723	...	...
1923	50,709	29,062	−8,233	703	...	...
1924	38,340	27,768	−6,191	663	...	...
1925	41,801	26,819	−4,823	709	...	...
1926	47,600	24,914	−3,638	722	1,714	...
1927	43,024	24,894	−2,457	779	1,845	...
1928	64,053	25,401	−5,026	698	806	...
1929	70,955	25,810	−4,862	782	3,099	...
1930	36,424	25,358	−93	810	2,176	...
1931	29,701	24,843	311	719	1,479	...
1932	50,019	24,457	−1,413	729	1,106	...
1933	49,487	25,918	−12,307	800	2,505	...
1934	48,903	26,844	−4,430	1,372	1,026	...
1935	42,752	28,695	−1,737	1,406	1,477	...
1936	37,901	26,016	486	1,680	2,178	...
1937	41,233	25,295	−1,631	1,748	1,757	...
1938	36,261	25,557	2,232	1,725	1,630	...
1939	38,501	25,669	2,390	1,621	1,356	
1940	43,538	25,951	11,488	1,704	1,511	...
1941	41,380	28,536	721	1,840	2,588	...
1942	52,663	32,051	−1,568	1,746	4,826	...
1943	69,306	35,794	23,768	2,416	5,336	...
1944	104,392	39,659	3,222	2,296	7,220	...
1945	142,210	41,666	−830	2,341	4,710	...
1946	150,385	50,493	−626	2,260	4,482	...
1947	158,656	58,191	1,973	2,640	4,562	...
1948	304,161	64,280	−34,318	3,244	5,186	...
1949	316,537	67,931	−12,122	3,243	6,304	...
1950	275,839	69,822	36,294	3,434	7,316	...
1951	394,656	83,793	−2,128	4,095	7,581	...
1952	456,060	92,051	1,584	4,122	8,521	...
1953	513,037	98,493	−1,059	4,100	10,922	...
1954	438,486	99,068	−134	4,175	6,490	...
1955	412,488	101,159	−265	4,194	4,707	...
1956	595,649	110,240	−23	5,340	5,603	...
1957	763,348	117,932	−7,141	7,508	6,374	...
1958	742,068	125,831	124	5,917	5,973	...
1959	886,226	131,848	98,247	6,471	6,384	...

For notes see end of table.

11.—Continued

Dividends paid	Payments to U.S. Treasury		Transferred to/from surplus[3]	Transferred to/from surplus and change in accumulated other comprehensive income[6]
	Statutory transfers[2]	Interest on Federal Reserve notes		
217	. . .	. . .	. . .	. . .
1,743	. . .	. . .	. . .	. . .
6,804	1,134	. . .	. . .	1,134
5,541	. . .	. . .	. . .	48,334
5,012	2,704	. . .	. . .	70,652
5,654	60,725	. . .	. . .	82,916
6,120	59,974	. . .	. . .	15,993
6,307	10,851	. . .	. . .	−660
6,553	3,613	. . .	. . .	2,546
6,682	114	. . .	. . .	−3,078
6,916	59	. . .	. . .	2,474
7,329	818	. . .	. . .	8,464
7,755	250	. . .	. . .	5,044
8,458	2,585	. . .	. . .	21,079
9,584	4,283	. . .	. . .	22,536
10,269	17	. . .	. . .	−2,298
10,030	. . .	. . .	. . .	−7,058
9,282	2,011	. . .	. . .	11,021
8,874	. . .	. . .	. . .	−917
8,782	. . .	. . .	−60	6,510
8,505	298	. . .	28	607
7,830	227	. . .	103	353
7,941	177	. . .	67	2,616
8,019	120	. . .	−419	1,862
8,110	25	. . .	−426	4,534
8,215	82	. . .	−54	17,617
8,430	141	. . .	−4	571
8,669	198	. . .	50	3,554
8,911	245	. . .	135	40,327
9,500	327	. . .	201	48,410
10,183	248	. . .	262	81,970
10,962	67	. . .	28	81,467
11,523	36	75,284	87	8,366
11,920	. . .	166,690	. . .	18,523
12,329	. . .	193,146	. . .	21,462
13,083	. . .	196,629	. . .	21,849
13,865	. . .	254,874	. . .	28,321
14,682	. . .	291,935	. . .	46,334
15,558	. . .	342,568	. . .	40,337
16,442	. . .	276,289	. . .	35,888
17,712	. . .	251,741	. . .	32,710
18,905	. . .	401,556	. . .	53,983
20,081	. . .	542,708	. . .	61,604
21,197	. . .	524,059	. . .	59,215
22,722	. . .	910,650	. . .	−93,601

11. Income and Expenses of the Federal Reserve Banks, 1914–2008—Continued

Thousands of dollars

Federal Reserve Bank and period	Current income	Net expenses	Net additions or deductions (−)[1]	Assessments by Board of Governors		Change in funded status of benefit plans
				Board expenditures	Costs of currency	
1960	1,103,385	139,894	13,875	6,534	7,455	. . .
1961	941,648	148,254	3,482	6,265	6,756	. . .
1962	1,048,508	161,451	−56	6,655	8,030	. . .
1963	1,151,120	169,638	615	7,573	10,063	. . .
1964	1,343,747	171,511	726	8,655	17,230	. . .
1965	1,559,484	172,111	1,022	8,576	23,603	. . .
1966	1,908,500	178,212	996	9,022	20,167	. . .
1967	2,190,404	190,561	2,094	10,770	18,790	. . .
1968	2,764,446	207,678	8,520	14,198	20,474	. . .
1969	3,373,361	237,828	−558	15,020	22,126	. . .
1970	3,877,218	276,572	11,442	21,228	23,574	. . .
1971	3,723,370	319,608	94,266	32,634	24,943	. . .
1972	3,792,335	347,917	−49,616	35,234	31,455	. . .
1973	5,016,769	416,879	−80,653	44,412	33,826	. . .
1974	6,280,091	476,235	−78,487	41,117	30,190	. . .
1975	6,257,937	514,359	−202,370	33,577	37,130	. . .
1976	6,623,220	558,129	7,311	41,828	48,819	. . .
1977	6,891,317	568,851	−177,033	47,366	55,008	. . .
1978	8,455,309	592,558	−633,123	53,322	60,059	. . .
1979	10,310,148	625,168	−151,148	50,530	68,391	. . .
1980	12,802,319	718,033	−115,386	62,231	73,124	. . .
1981	15,508,350	814,190	−372,879	63,163	82,924	. . .
1982	16,517,385	926,034	−68,833	61,813	98,441	. . .
1983	16,068,362	1,023,678	−400,366	71,551	152,135	. . .
1984	18,068,821	1,102,444	−412,943	82,116	162,606	. . .
1985	18,131,983	1,127,744	1,301,624	77,378	173,739	. . .
1986	17,464,528	1,156,868	1,975,893	97,338	180,780	. . .
1987	17,633,012	1,146,911	1,796,594	81,870	170,675	. . .
1988	19,526,431	1,205,960	−516,910	84,411	164,245	. . .
1989	22,249,276	1,332,161	1,254,613	89,580	175,044	. . .
1990	23,476,604	1,349,726	2,099,328	103,752	193,007	. . .
1991	22,553,002	1,429,322	405,729	109,631	261,316	. . .
1992	20,235,028	1,474,531	−987,788	128,955	295,401	. . .
1993	18,914,251	1,657,800	−230,268	140,466	355,947	. . .
1994	20,910,742	1,795,328	2,363,862	146,866	368,187	. . .
1995	25,395,148	1,818,416	857,788	161,348	370,203	. . .
1996	25,164,303	1,947,861	−1,676,716	162,642	402,517	. . .
1997	26,917,213	1,976,453	−2,611,570	174,407	364,454	. . .
1998	28,149,477	1,833,436	1,906,037	178,009	408,544	. . .
1999	29,346,836	1,852,162	−533,557	213,790	484,959	. . .
2000	33,963,992	1,971,688	−1,500,027	188,067	435,838	. . .
2001	31,870,721	2,084,708	−1,117,435	295,056	338,537	. . .
2002	26,760,113	2,227,078	2,149,328	205,111	429,568	. . .
2003	23,792,725	2,462,658	2,481,127	297,020	508,144	. . .
2004	23,539,942	2,238,705	917,870	272,331	503,784	. . .
2005	30,729,357	2,889,544	−3,576,903	265,742	477,087	. . .
2006	38,410,427	3,263,844	−158,846	301,014	491,962	. . .
2007	42,576,025	3,510,206	198,417	296,125	576,306	324,481
2008	41,045,582	4,870,374	3,340,628	352,291	500,372	−3,158,808
Total, 1914–2008	**794,511,249**	**61,727,836**	**7,580,841**	**5,353,216**	**9,908,690**	**−2,834,327**

11.—Continued

Dividends paid	Payments to U.S. Treasury		Transferred to/from surplus[3]	Transferred to/from surplus and change in accumulated other comprehensive income[6]
	Statutory transfers[2]	Interest on Federal Reserve notes		
23,948	. . .	896,816	. . .	42,613
25,570	. . .	687,393	. . .	70,892
27,412	. . .	799,366	. . .	45,538
28,912	. . .	879,685	. . .	55,864
30,782	. . .	1,582,119	. . .	− 465,823
32,352	. . .	1,296,810	. . .	27,054
33,696	. . .	1,649,455	. . .	18,944
35,027	. . .	1,907,498	. . .	29,851
36,959	. . .	2,463,629	. . .	30,027
39,237	. . .	3,019,161	. . .	39,432
41,137	. . .	3,493,571	. . .	32,580
43,488	. . .	3,356,560	. . .	40,403
46,184	. . .	3,231,268	. . .	50,661
49,140	. . .	4,340,680	. . .	51,178
52,580	. . .	5,549,999	. . .	51,483
54,610	. . .	5,382,064	. . .	33,828
57,351	. . .	5,870,463	. . .	53,940
60,182	. . .	5,937,148	. . .	45,728
63,280	. . .	7,005,779	. . .	47,268
67,194	. . .	9,278,576	. . .	69,141
70,355	. . .	11,706,370	. . .	56,821
74,574	. . .	14,023,723	. . .	76,897
79,352	. . .	15,204,591	. . .	78,320
85,152	. . .	14,228,816	. . .	106,663
92,620	. . .	16,054,095	. . .	161,996
103,029	. . .	17,796,464	. . .	155,253
109,588	. . .	17,803,895	. . .	91,954
117,499	. . .	17,738,880	. . .	173,771
125,616	. . .	17,364,319	. . .	64,971
129,885	. . .	21,646,417	. . .	130,802
140,758	. . .	23,608,398	. . .	180,292
152,553	. . .	20,777,552	. . .	228,356
171,763	. . .	16,774,477	. . .	402,114
195,422	. . .	15,986,765	. . .	347,583
212,090	. . .	20,470,011	. . .	282,122
230,527	. . .	23,389,367	. . .	283,075
255,884	5,517,716	14,565,624	. . .	635,343
299,652	20,658,972	0	. . .	831,705
343,014	17,785,942	8,774,994	. . .	731,575
373,579	. . .	25,409,736	. . .	479,053
409,614	. . .	25,343,892	. . .	4,114,865
428,183	. . .	27,089,222	. . .	517,580
483,596	. . .	24,495,490	. . .	1,068,598
517,705	. . .	22,021,528	. . .	466,796
582,402	. . .	18,078,003	. . .	2,782,587
780,863	. . .	21,467,545	. . .	1,271,672
871,255	. . .	29,051,678	. . .	4,271,828
992,353	. . .	34,598,401	. . .	3,125,533
1,189,626	. . .	31,688,688	. . .	2,626,053
10,920,756	**44,113,958**	**640,215,049**	**–4**	**27,018,262**[4]

11. Income and Expenses of the Federal Reserve Banks, 1914–2008—Continued

Thousands of dollars

Federal Reserve Bank and period	Current income	Net expenses	Net additions or deductions (−)[1]	Assessments by Board of Governors: Board expenditures	Assessments by Board of Governors: Costs of currency	Change in funded status of benefit plans
Aggregate for each Bank, 1914–2008						
Boston	41,806,512	3,787,169	146,460	233,312	578,384	–3,070
New York	281,528,702	10,475,097[5]	640,996	1,330,501	3,014,949	–2,904,855
Philadelphia	29,996,655	3,072,341	582,136	269,354	436,425	201
Cleveland	45,975,609	3,654,296	598,493	388,375	562,942	6,254
Richmond	62,692,353	5,269,152	1,721,186	840,715	822,497	25,628
Atlanta	48,739,538	8,356,244	759,949	402,946	809,823	8,171
Chicago	91,737,928	7,152,719	954,372	559,527	1,105,699	10,149
St. Louis	26,615,072	2,848,658	145,598	121,698	359,988	872
Minneapolis	13,868,849	2,837,702	226,770	152,265	184,209	6,824
Kansas City	27,983,635	3,781,396	213,274	153,881	368,313	–2,314
Dallas	35,625,178	3,854,592	475,375	229,126	486,971	13,156
San Francisco	87,941,218	6,638,471	1,116,232	671,516	1,178,492	4,657
Total	**794,511,249**	**61,727,836**	**7,580,841**	**5,353,216**	**9,908,690**	**–2,834,327**

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. 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.

11.—Continued

Dividends paid	Payments to U.S. Treasury		Transferred to/from surplus[3]	Transferred to/from surplus and change in accumulated other comprehensive income[6]
	Statutory transfers[2]	Interest on Federal Reserve notes		
499,946	2,579,504	33,233,050	135	1,038,401
2,730,899	17,307,161	236,368,535	–433	8,038,135
643,766	1,312,118	22,363,737	291	2,480,961
799,631	2,827,043	36,487,524	–10	1,860,555
1,984,830	3,083,928	45,377,319	–72	7,060,798
789,709	2,713,230	34,503,372	5	1,932,330
1,035,232	4,593,811	77,133,320	12	1,122,130
229,858	1,833,837	21,034,097	–27	333,432
296,210	416,227	9,733,301	65	482,465
271,373	1,249,703	22,039,597	–9	330,341
384,875	1,510,802	29,208,319	55	438,968
1,254,425	4,686,594	72,732,880	–17	1,899,745
10,920,756	**44,113,958**	**640,215,049**	**–4**	**27,018,262[4]**

3. Transfers are made under section 13b of the Federal Reserve Act.

4. The $27,018,262 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); $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 transfer of $11,131 thousand from reserves for contingencies (1955); leaving a balance of $21,075,873 thousand on December 31, 2008.

5. This amount is reduced by $2,952,824 thousand for expenses of the System Retirement Plan. See note 5, table 10.

6. 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.

. . . Not applicable.

12. Operations in Principal Departments of the Federal Reserve Banks, 2005–2008

Operation	2008	2007	2006	2005
Millions of pieces				
Currency processed	33,256	35,653	37,694	36,463
Currency destroyed	6,517	6,509	6,766	6,551
Coin received	64,438	63,255	59,705	56,080
Checks handled				
U.S. government checks[1]	269	214	222	216
Postal money orders	146	164	171	176
All other	9,545	10,001	11,083	12,228
Securities transfers[2]	25	24	22	22
Funds transfers	131	135	134	132
Automated clearinghouse transactions				
Commercial	10,040	9,363	8,231	7,339
Government	1,132	1,027	992	964
Millions of dollars				
Currency processed	604,882	642,168	664,592	639,832
Currency destroyed	148,460	104,082	84,742	83,187
Coin received	6,286	6,124	5,779	5,412
Checks handled				
U.S. government checks[1]	316,713	256,994	269,073	252,192
Postal money orders	25,544	31,626	28,066	28,395
All other	15,216,147	14,841,249[3]	16,442,820	15,684,615
Securities transfers[2]	419,347,256	435,577,505	377,258,592	368,896,819
Funds transfers	754,974,633	670,665,569	572,645,790	518,546,733
Automated clearinghouse transactions				
Commercial	15,662,805	14,547,234	13,124,434	12,801,914
Government	4,008,022	3,716,928	3,474,364	3,156,556

1. Includes government checks handled electronically (electronic checks).

2. In 2006, the title of this category changed from previous years, but the composition of the category remained the same. Therefore, the data are comparable with data reported in previous years.

3. Restatement.

13. Number and Annual Salaries of Officers and Employees of the Federal Reserve Banks, December 31, 2008

Federal Reserve Bank (including Branches)	President[1]	Other officers		Employees			Total	
	Salary (dollars)[2]	Number	Salaries (dollars)[2]	Number, Full-time	Number, Part-time	Salaries (dollars)[2]	Number	Salaries (dollars)[2]
Boston	306,400	67	12,419,036	763	39	60,411,988	870	73,137,424
New York[3]	411,200	311	69,392,898	2,385	45	223,220,934	2,742	293,025,032
Philadelphia	294,400	55	9,207,852	892	31	55,785,600	979	65,287,852
Cleveland	298,200	59	9,866,600	1,322	20	75,244,815	1,402	85,409,615
Richmond	327,500	74	12,099,500	1,548	34	99,858,199	1,657	112,285,199
Atlanta	293,000	78	14,645,730	1,702	27	109,592,118	1,808	124,530,848
Chicago	294,400	86	14,847,011	1,224	51	89,501,375	1,362	104,642,786
St. Louis	266,800	78	12,883,520	856	29	55,642,777	964	68,793,097
Minneapolis	398,400	47	7,654,580	1,030	59	63,551,296	1,137	71,604,276
Kansas City	361,000	75	13,426,560	1,135	18	69,259,897	1,229	83,047,457
Dallas	329,100	63	10,431,790	1,128	18	67,523,960	1,210	78,284,850
San Francisco	392,600	73	14,735,945	1,592	28	121,356,540	1,694	136,485,085
Federal Reserve Information Technology	...	42	7,022,145	822	3	75,264,665	867	82,286,810
Office of Employee Benefits	...	9	1,989,000	35	0	3,164,077	44	5,153,077
Total	**3,973,000**	**1,117**	**210,622,167**	**16,434**	**402**	**1,169,378,242**	**17,965**	**1,383,973,408**

NOTE: Components may not sum to totals because of rounding.

1. Under current policies, appointment salaries for Federal Reserve Bank presidents are normally 85 percent of the salary-range midpoint (an 85 compa-ratio), with the exception of the New York Reserve Bank president, whose appointment salary normally is set at a 95 compa-ratio. The Board has discretion to approve a higher starting salary if requested by a Reserve Bank's board of directors.

On January 1 of each year, all presidents receive salary increases equal to the percentage increase in the midpoint of their respective salary ranges. In addition, on every third-year anniversary of his or her initial appointment (through year 9), each president receives a salary increase that results in a compa-ratio as follows: year 3, 95 (for the New York Bank, 105); year 6, 105 (New York, 115); year 9, 115 (New York, 125).

There continue to be tiered salary ranges for Reserve Bank officers, including presidents, reflecting differences in the costs of labor in the head-office cities. The Board reviews Reserve Bank officer salary ranges and Reserve Bank placement in the salary tiers annually. In 2008, New York and San Francisco were in tier 1, which had a midpoint for presidents' salaries of $413,300. Boston, Philadelphia, Chicago, Minneapolis, and Dallas were in tier 2, which had a midpoint for presidents' salaries of $346,400. Cleveland, Richmond, Atlanta, St. Louis, and Kansas City were in tier 3, which had a midpoint for presidents' salaries of $319,900. Salaries for Reserve Bank officers, including presidents, are limited by compensation caps established for each tier. In 2008, the caps were $411,200 for tier 1; $400,000 for tier 2; and $392,400 for tier 3.

2. Annualized salary liability (excluding outside agency costs) based on salaries in effect on December 31, 2008.

3. In January 2009, the Board of Governors, at the request of the Federal Reserve Bank of New York's board of directors, approved a special separation payment of $434,686 to Bank president Timothy Geithner.

. . . Not applicable.

14. Acquisition Costs and Net Book Value of the Premises of the Federal Reserve Banks and Branches, December 31, 2008

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	144,564	30,073	201,929	123,212	. . .
NEW YORK	20,103	271,973	69,961	362,036	212,000	. . .
PHILADELPHIA	7,343	93,389	15,254	115,985	64,669	
CLEVELAND	4,219	123,401	29,050	156,671	107,505	. . .
Cincinnati	2,806	29,468	14,858	47,132	19,938	. . .
Pittsburgh	2,360	19,640	15,807	37,808	19,690	. . .
RICHMOND	25,902	141,602	45,906	213,410	153,488	. . .
Baltimore	9,393	35,988	11,690	57,070	37,319	. . .
Charlotte	3,130	47,389	7,859	58,377	41,889	. . .
ATLANTA	22,847	150,034	17,181	190,061	160,138	. . .
Birmingham	5,347	12,766	1,465	19,578	12,327	. . .
Jacksonville	1,779	22,215	4,078	28,072	17,237	. . .
Miami	4,254	24,975	5,469	34,697	21,152	. . .
Nashville	603	6,126	3,542	10,271	4,572	. . .
New Orleans	3,785	9,651	5,174	18,609	9,560	. . .
CHICAGO	4,512	179,653	22,807	206,972	121,339	. . .
Detroit	10,138	73,057	10,690	93,885	87,218	. . .
ST. LOUIS	9,377	127,271	14,763	151,411	118,899	. . .
Memphis	2,472	14,127	5,162	21,761	13,125	. . .
MINNEAPOLIS	15,826	106,497	14,293	136,615	102,534	. . .
Helena	2,890	10,000	1,050	13,940	9,383	. . .
KANSAS CITY	38,322	198,440	27,570	264,332	259,564	. . .
Denver	3,511	9,170	4,622	17,303	7,713	. . .
Omaha	3,559	7,303	1,673	12,535	6,098	. . .
DALLAS	36,185	112,124	24,689	172,998	117,738	. . .
El Paso	262	3,426	1,843	5,531	1,084	. . .
Houston	23,699	104,515	8,756	136,970	126,395	7,204
San Antonio	826	8,407	2,491	11,724	5,687	. . .
SAN FRANCISCO	20,988	103,483	23,938	148,409	84,844	. . .
Los Angeles	6,306	72,900	14,807	94,013	56,762	. . .
Salt Lake City	1,294	4,800	1,455	7,549	2,891	. . .
Seattle	12,329	52,552	4,915	69,797	68,212	9,633
Total	**333,657**	**2,320,905**	**462,890**	**3,117,452**	**2,194,183**	**16,837**

NOTE: Components may not sum to totals because of rounding.

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 for future Bank use and Bank premises formerly occupied and being held pending sale.

. . . Not applicable.

Federal Reserve System Audits

Audits of the Federal Reserve System

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 its compliance with laws and regulations affecting those statements, are audited annually by an outside auditor retained by the Board's Office of Inspector General. The Office of Inspector General also conducts audits, reviews, and investigations relating to the Board's programs and operations as well as to Board functions delegated to the Reserve Banks.

The Reserve Banks' financial statements are audited annually by an independent outside auditor retained by the Board of Governors. In addition, the Reserve Banks are subject to annual examination by the Board. As discussed in the chapter "Federal Reserve Banks," the Board's examination includes a wide range of ongoing oversight activities conducted onsite and offsite by staff of the Board's Division of Reserve Bank Operations and Payment Systems.

Federal Reserve operations are also subject to review by the Government Accountability Office. ■

Board of Governors Financial Statements

The financial statements of the Board Governors for 2008 and 2007 were audited by Deloitte & Touche LLP, independent auditors.

Deloitte.

INDEPENDENT AUDITORS' REPORT

The Board of Governors of the Federal Reserve System:

We have audited the accompanying balance sheets of the Board of Governors of the Federal Reserve System (the "Board") as of December 31, 2008 and 2007, and the related statements of revenues and expenses and changes in the cumulative results of operations, and cash flows for the years then ended. These financial statements are the responsibility of the Board's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the respective financial statements are free of material misstatement. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Board's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the respective financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such financial statements present fairly, in all material respects, the financial position of the Board of Governors of the Federal Reserve System as of December 31, 2008 and 2007, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

In accordance with *Government Auditing Standards,* we have also issued our report dated March 23, 2009, on our consideration of the Board's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in assessing the results of our audit.

Deloitte + Touche LLP

McLean, VA
March 23, 2009

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

BALANCE SHEETS

	As of December 31, 2008	2007
Assets		
Current Assets:		
Cash	$ 58,255,990	$ 44,613,728
Accounts receivable	2,975,478	2,996,318
Prepaid expenses and other assets	4,817,719	4,653,684
Total current assets	66,049,187	52,263,730
Noncurrent Assets:		
Property and equipment, net (Note 4)	148,875,490	153,350,880
Other assets	2,187,395	166,119
Total noncurrent assets	151,062,885	153,516,999
Total assets	$217,112,072	$205,780,729
Liabilities and Cumulative Results of Operations		
Current Liabilities:		
Accounts payable and accrued liabilities	$ 13,312,600	$ 20,400,282
Accrued payroll and related taxes	9,313,237	5,647,053
Accrued annual leave	22,234,106	18,429,601
Capital lease payable (current portion) (Note 4)	471,266	108,755
Unearned revenues and other liabilities	1,843,058	702,122
Total current liabilities	47,174,267	45,287,813
Long-term Liabilities:		
Capital lease payable (non-current portion) (Note 4)	1,183,466	0
Accumulated retirement benefit obligation (Note 5)	10,866,659	2,201,675
Accumulated postretirement benefit obligation (Note 6)	8,527,800	7,972,469
Accumulated postemployment benefit obligation (Note 7)	13,900,000	8,855,613
Other long-term liabilities	648,534	0
Total long-term liabilities	35,126,459	19,029,757
Total liabilities	82,300,726	64,317,570
Cumulative Results of Operations:		
Working capital	19,346,186	7,084,672
Unfunded long-term liabilities	(24,020,297)	(17,542,943)
Net investment in noncurrent assets	148,759,619	153,408,244
Accumulated other comprehensive income (loss) (Note 8)	(9,274,162)	(1,486,814)
Total cumulative results of operations	134,811,346	141,463,159
Total liabilities and cumulative results of operations	$217,112,072	$205,780,729

See accompanying notes to financial statements.

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

STATEMENTS OF REVENUES AND EXPENSES AND CHANGES IN CUMULATIVE RESULTS OF OPERATIONS

	For the years ended December 31, 2008	2007
Board Operating Revenues:		
Assessments levied on Federal Reserve Banks for Board operating expenses and capital expenditures	$352,290,700	$296,124,700
Other revenues	9,059,232	10,365,414
Total operating revenues	361,349,932	306,490,114
Board Operating Expenses:		
Salaries	219,752,842	197,656,442
Retirement and insurance	48,394,723	39,451,541
Contractual services and professional fees	29,901,374	36,300,185
Depreciation, amortization, and net losses on disposals	13,782,449	13,557,498
Utilities	9,977,809	8,998,496
Travel	9,414,877	8,619,615
Software	7,277,995	6,678,514
Postage and supplies	5,802,368	8,836,143
Repairs and maintenance	3,214,203	3,890,191
Printing and binding	1,825,119	1,976,765
Other expenses	10,870,638	7,861,901
Total operating expenses	360,214,397	333,827,291
Results of Operations	1,135,535	(27,337,177)
Currency Costs:		
Assessments levied on Federal Reserve Banks for currency costs	500,356,895	576,306,073
Expenses for costs related to currency (Note 9)	500,356,895	576,306,073
Currency Assessments over (under) Expenses	0	0
Total Results of Operations	1,135,535	(27,337,177)
Cumulative Results of Operations, Beginning of period	141,463,159	168,631,344
Other Comprehensive Income (Note 8)		
Prior service credit (cost) arising during the year	(5,059,307)	0
Amortization of prior service (credit) cost	73,867	(23,831)
Amortization of net actuarial (gain) loss	131,578	113,142
Net actuarial gain (loss) arising during the year	(3,183,688)	79,681
Curtailment effects - prior service credit (cost)	250,202	0
Total Other Comprehensive Income (Loss)	(7,787,348)	168,992
Cumulative Results of Operations, End of period	$134,811,346	$141,463,159

See accompanying notes to financial statements.

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

STATEMENTS OF CASH FLOWS

	For the years ended December 31, 2008	2007
CASH FLOWS FROM OPERATING ACTIVITIES		
RESULTS OF OPERATIONS	$ 1,135,535	$(27,337,177)
Adjustments to reconcile results of operations to net cash provided by (used in) operating activities:		
Depreciation	13,946,960	13,433,306
Net loss (gain) on disposal of property and equipment	(164,511)	124,192
Decrease (increase) in assets:		
Accounts receivable, prepaid expenses and other assets	(2,164,471)	(929,708)
Increase (decrease) in liabilities:		
Accounts payable and accrued liabilities	(7,087,682)	9,449,812
Accrued payroll and related taxes	3,666,184	225,387
Accrued annual leave	3,804,505	2,095,089
Unearned revenues and other liabilities	1,140,936	335,818
Accumulated retirement benefit obligation	8,664,984	847,013
Accumulated postretirement benefit obligation	555,331	(139,360)
Accumulated postemployment benefit obligation	5,044,387	2,340,312
Other long-term liabilities	648,534	0
Accumulated other comprehensive income	(7,787,348)	168,992
Net cash provided by (used in) operating activities	21,403,344	613,676
CASH FLOWS FROM INVESTING ACTIVITIES		
Proceeds from disposals	0	65,988
Capital expenditures	(9,307,059)	(15,768,979)
Net cash provided by (used in) investing activities	(9,307,059)	(15,702,991)
CASH FLOWS FROM FINANCING ACTIVITIES		
Capital lease payments	1,545,977	(327,663)
Net cash provided by (used in) financing activities	1,545,977	(327,663)
NET INCREASE (DECREASE) IN CASH	13,642,262	(15,416,978)
CASH BALANCE, Beginning of period	44,613,728	60,030,706
CASH BALANCE, End of period	$58,255,990	$ 44,613,728

See accompanying 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, 2008 AND 2007

(1) Structure

The Federal Reserve System (System) was established by Congress in 1913 and consists of the Board of Governors (Board), the Federal Open Market Committee, the twelve regional Federal 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 supported by Washington, DC based staff numbering approximately 2,000, as it carries out its responsibilities in conjunction with other components of the Federal Reserve System.

The Board is required by the Federal Reserve 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 Federal Reserve Bank and to publish each week a statement of the financial condition of each such Reserve Bank and a consolidated 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 Federal Reserve Banks are included in the Board's annual report to the Speaker of the House of Representatives.

(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 other components of the Federal Reserve System. The Board also supervises and regulates the operations of the Federal Reserve Banks, exercises broad responsibility in the nation's payments system, and administers most of the nation's laws regarding consumer credit protection. 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 Federal 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 Federal Reserve System, bank holding companies, foreign activities of member banks, and U.S. activities of foreign banks.

(3) Significant Accounting Policies

Basis of Accounting — The Board prepares its financial statements in accordance with accounting principles generally accepted in the United States.

Revenues — The Board assesses the Federal Reserve Banks for operating expenses and additions to property, which are based on expected cash needs.

Currency Costs — Federal Reserve Banks issue new and fit currency to the public and destroy currency already in circulation as it becomes unfit or when a new design is issued. Each year, the Board orders new currency from the U.S. Department of Treasury's Bureau of Engraving and Printing. The Board incurs expenses and assesses the Federal Reserve Banks for costs related to currency. These expenses and assessments are reported separately from the Board's operating transactions in the Board's Statement of Revenues and Expenses and Changes in Cumulative Results of Operations.

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.

Property, Equipment, and Software — The Board's property, buildings, equipment, and software are stated at cost less accumulated depreciation and amortization. Depreciation and amortization are calculated on a straight-line basis over the estimated useful lives of the assets, which range from three to ten years for furniture and equipment, ten to fifty years for building equipment and structures, and two to ten years for software. Upon the sale or other disposition of a depreciable asset, the cost and related accumulated depreciation or amortization are removed from the accounts and any gain or loss is recognized.

The Board complies with Statement of Position 98-1, *Accounting for the Costs of Computer Software Developed or Obtained for Internal Use,* which requires that certain costs incurred in the development of internal use software be capitalized and amortized over its useful life.

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. As permitted by Statement of Financial Accounting Standards (SFAS) No. 116, *Accounting for Contributions Received and Contributions Made,* 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.

Estimates — The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of 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.

(4) Property and Equipment

The following is a summary of the components of the Board's property and equipment, at cost, net of accumulated depreciation and amortization.

	As of December 31, 2008	As of December 31, 2007
Land	$ 18,640,314	$ 18,640,314
Buildings and improvements	150,602,767	149,968,504
Furniture and equipment	56,104,247	55,625,014
Software in use	14,514,315	14,745,157
Software in process	3,832,516	2,064,438
Construction in process	3,818,295	1,550,565
	247,512,454	242,593,992
Less accumulated depreciation and amortization	(98,636,964)	(89,243,112)
Property and equipment, net	$148,875,490	$153,350,880

Construction in process includes costs incurred in 2008 and 2007 for long-term security projects and building enhancements.

In May 2008, the Board received an asset contribution from a federal government agency with an estimated fair market value (FMV) of $80,000. The Board recognized the FMV as revenue and capitalized the asset in June 2008.

The Board entered into capital leases for printing equipment during 2003, which terminated in May 2008. The Board subsequently entered into new capital leases in 2008. Under the new commitments, the capital lease term extends through 2012. Furniture and equipment includes $1,923,000 and $1,230,000 in 2008 and 2007, respectively, for capitalized leases. Accumulated depreciation includes $280,000 and $1,123,000 for capitalized leases as of 2008 and 2007, respectively. The Board paid interest related to these capital leases in the amount of $26,000 and $31,000 as of December 31, 2008 and 2007, 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, 2008, are as follows:

	Year Ending December 31	Amount
	2009	$868,164
	2010	868,164
	2011	868,164
	2012	362,597
Total minimum lease payments		2,967,089
Less: Amount representing maintenance		(1,247,549)
Net minimum lease payments		1,719,540
Less: Amount representing interest		(64,808)
Present value of net minimum lease payments		1,654,732
Less: Current maturities of capital lease payments		(471,266)
Long-term capital lease obligations		$ 1,183,466

(5) Accumulated Retirement Benefits

Substantially all of the Board's employees participate in the Retirement Plan for Employees of the Federal Reserve System (System Plan). The System Plan provides retirement benefits only to employees of the Board, the Federal Reserve Banks, and the Office of Employee Benefits of the Federal Reserve System (OEB). The Federal Reserve Bank of New York (FRB NY), on behalf of the System, recognizes the net asset and costs associated with the System Plan in its financial statements. Costs associated with the System Plan are not redistributed to other participating employers.

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 noncontributory defined benefits program under the System Plan. Contributions to the System Plan are actuarially determined and funded by participating employers. Based on actuarial calculations, it was determined that employer funding contributions were not required for the years 2008 and 2007, and the Board was not assessed a contribution for these years. In late 2008, the Committee on Plan Administration reviewed the System Plan's funding status and recommended additional contributions during 2009. The System began making contributions to the Plan of $20 million per month starting in January 2009; these contributions will continue to be made each month and may be adjusted upon completion of the 2009 actuarial valuation.

Effective January 1, 1996, 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 sections 401(a)(17), 415(b) and 415(e) of the Internal Revenue Code of 1986. Activity for the BEP for 2008 and 2007 is summarized in the following tables:

	As of December 31, 2008	As of December 31, 2007
Change in Projected Benefit Obligation		
Benefit obligation, beginning of year	$2,201,675	$1,354,662
Service cost	589,094	329,282
Interest cost	213,714	87,837
Plan participants' contributions	0	0
Actuarial (gain)/loss	1,137,486	453,526
Gross benefits paid	(35,016)	(23,632)
Plan amendments	484,421	0
Benefit obligation, end of year	$4,591,374	$2,201,675
Accumulated benefit obligation, end of year	$1,267,005	$ 685,170
Weighted-average assumptions used to determine benefit obligation as of December 31:		
Discount rate	6.00%	6.25%
Rate of compensation increase	5.00%	5.00%

	As of December 31, 2008	As of December 31, 2007
Change in Plan Assets		
Fair value of plan assets, beginning of year	$ 0	$ 0
Employer contributions	35,016	23,632
Plan participants' contributions	0	0
Gross benefits paid	(35,016)	(23,632)
Fair value of plan assets, end of year	$ 0	$ 0
Funded Status		
Reconciliation of funded status at end of year:		
Fair value of plan assets	$ 0	$ 0
Benefit obligations	4,591,374	2,201,675
Funded status	(4,591,374)	(2,201,675)
Amount recognized, end of year	$(4,591,374)	$(2,201,675)
Amounts recognized in the statements of financial position consist of:		
Asset	$ 0	$ 0
Liability	(4,591,374)	(2,201,675)
Net amount recognized	$(4,591,374)	$(2,201,675)
Amounts recognized in accumulated other comprehensive income consist of:		
Net actuarial loss/(gain)	$ 2,031,269	$ 1,006,257
Prior service cost/(credit)	256,919	(233,404)
Deferred curtailment (gain)/loss	0	0
	$ 2,288,188	$ 772,853
Expected Cash Flows		
Expected employer contributions:		
2009	$ 117,485	
Expected benefit payments:		
2009	117,485	
2010	139,030	
2011	158,747	
2012	176,977	
2013	193,778	
2014-2018	$ 1,277,706	
Components of net periodic benefit cost:		
Service cost	$ 589,094	$ 329,282
Interest cost	213,714	87,837
Expected return on plan assets	0	0
Amortization:		
Actuarial (gain)/loss	112,474	27,655
Prior service (credit)/cost	(5,902)	(14,013)
Net periodic benefit cost (credit)	$ 909,380	$430,761
Weighted-average assumptions used to determine net periodic benefit cost:		
Discount rate	6.25%*	6.00%
Rate of compensation increase	5.00%	4.50%

*In 2008, amendments to the System Plan were approved. As a result, the actuarially determined net periodic benefit expenses for the year ended December 31, 2008 were re-measured with a discount rate of 7.75% as of November 1.

	As of December 31, 2008	As of December 31, 2007
*Other Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Income***		
Current year prior service (credit)/cost	$ 484,421	$ 0
Current year actuarial (gain)/loss	1,137,486	453,526
Amortization of prior service credit/(cost)	5,902	14,013
Amortization of actuarial gain/(loss)	(112,474)	(27,655)
Total recognized in other comprehensive income	$1,515,335	$439,884
Total recognized in net periodic benefit cost and other comprehensive income	$2,424,715	$870,645

**For Benefit Equalization Plan, Other Changes to Assets and Benefits Recognized in Other Comprehensive Income will be reflected in net periodic cost.

Estimated amounts that will be amortized from accumulated other comprehensive income into net periodic benefit cost (credit) in 2009 are shown below:	
Net actuarial (gain)/loss	$ 159,893
Prior service (credit)/cost	35,257
Total	$ 195,150

On October 30, 2008, the Board approved a non-qualified plan for Officers of the Board. The retirement benefits covered under the Supplemental Employee Retirement Plan (BSERP) increases the pension benefit calculation from 1.8 percent above the Social Security integration level to 2.0 percent. Activity for the BSERP for 2008 is summarized in the following tables:

	As of December 31, 2008
Change in Projected Benefit Obligation:	
Benefit obligation, beginning of year	$ 0
Service cost	37,190
Interest cost	56,010
Plan participants' contributions	0
Actuarial (gain)/loss	1,607,199
Gross benefits paid	0
Plan amendments	4,574,886
Benefit obligation, end of year	$ 6,275,285
Accumulated benefit obligation, end of year	$ 4,530,540
Weighted-average assumptions used to determine benefit obligation as of December 31:	
Discount rate	6.00%
Rate of compensation increase	5.00%
Change in Plan Assets	
Fair value of plan assets, beginning of year	$ 0
Employer contributions	0
Plan participants' contributions	0
Gross benefits paid	0
Fair value of plan assets, end of year	$ 0
Funded Status	
Reconciliation of funded status at end of year:	
Fair value of plan assets	$ 0
Benefit obligations	6,275,285
Funded status	(6,275,285)
Amount recognized, end of year	$(6,275,285)
Amounts recognized in the statements of financial position consist of:	
Asset	$ 0
Liability	(6,275,285)
Net amount recognized	$(6,275,285)
Amounts recognized in accumulated other comprehensive income consist of:	
Net actuarial loss/(gain)	$ 1,607,199
Prior service cost/(credit)	4,482,687
Deferred curtailment (gain)/loss	0
	$ 6,089,886

	As of December 31, 2008
Expected Cash Flows	
Expected employer contributions:	
2009	$ 0
Expected benefit payments:	
2009	$ 0
2010	70,754
2011	103,843
2012	140,233
2013	180,946
2014-2018	1,655,909
Components of net periodic benefit cost:	
Service cost	$ 37,190
Interest cost	56,010
Expected return on plan assets	0
Amortization:	
Actuarial (gain)/loss	0
Prior service (credit)/cost	92,199
Net periodic benefit cost (credit)	$ 185,399
Weighted-average assumptions used to determine net periodic benefit cost:	
Discount rate	7.75%
Rate of compensation increase	5.00%
Other Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Income	
Current year prior service (credit)/cost	$4,574,886
Current year actuarial (gain)/loss	1,607,199
Amortization of prior service credit/(cost)	(92,199)
Amortization of actuarial gain/(loss)	0
Total recognized in other comprehensive income	$6,089,886
Total recognized in net periodic benefit cost and other comprehensive income.	$6,275,285

For Board Supplemental Retirement Plan, Other Changes in Assets and Benefits Recognized in Other Comprehensive Income will be reflected in net periodic cost.

Estimated amounts that will be amortized from accumulated other comprehensive income into net periodic benefit cost (credit) in 2009 are shown below:	
Net actuarial (gain)/loss	$ 118,461
Prior service (credit)/cost	553,191
Total	$ 671,652

The total accumulated retirement benefit obligation for both the Benefits Equalization Plan (BEP) and Supplemental Retirement Plan (BSERP) are as follows:

	As of December 31, 2008	2007
Accumulated retirement benefit obligation		
Benefit obligation, BEP	$ 4,591,374	$2,201,675
Benefit obligation, BSERP	6,275,285	0
Total accumulated retirement benefit obligation	$10,866,659	$2,201,675

A relatively small number of Board employees participate in the Civil Service Retirement System (CSRS) or the Federal Employees' Retirement System (FERS). These defined benefit plans are administered by the U.S. Office of Personnel Management, which determines the required employer contribution levels. The Board's contributions to these plans totaled $305,000 and $316,000 in 2008 and 2007, respectively. The Board has no liability for future payments to retirees under these programs and is not accountable for the assets of the plans.

Employees of the Board may also participate in the Federal Reserve System's Thrift Plan or Roth 401(k). Board contributions to members' accounts are based upon a fixed percentage of each member's basic contribution and were $11,815,000 and $9,542,000 in 2008 and 2007, respectively.

(6) Accumulated Postretirement Benefits

The Board provides certain life insurance programs for its active employees and retirees. Activity for 2008 and 2007 is summarized in the following tables:

	As of December 31, 2008	2007
Change in Projected Benefit Obligation		
Benefit obligation, beginning of year	$7,972,469	$8,111,829
Service cost	176,450	198,791
Interest cost	505,691	479,903
Plan participants' contributions	0	0
Actuarial (gain)/loss	439,003	(533,208)
Gross benefits paid	(315,611)	(284,846)
Plan amendments	0	0
Curtailments	(250,202)	0
Benefit obligation, end of year	$8,527,800	$7,972,469
Weighted-average assumptions used to determine benefit obligation as of December 31:		
Discount rate	6.00%	6.25%

	As of December 31, 2008	2007
Change in Plan Assets		
Fair value of plan assets, beginning of year	$ 0	$ 0
Employer contributions	315,611	284,846
Plan participants' contributions	0	0
Gross benefits paid	(315,611)	(284,846)
Fair value of plan assets, end of year	$ 0	$ 0
Funded Status		
Reconciliation of funded status at end of year:		
Fair value of plan assets	$ 0	$ 0
Benefit obligations	8,527,800	7,972,469
Funded status	(8,527,800)	(7,972,469)
Amount recognized, end of year	$(8,527,800)	$(7,972,469)
Amounts recognized in the statements of financial position consist of:		
Asset	$ 0	$ 0
Liability	(8,527,800)	(7,972,469)
Net amount recognized	$(8,527,800)	$(7,972,469)
Amounts recognized in accumulated other comprehensive income consist of:		
Net actuarial loss/(gain)	$ 1,223,601	$ 803,702
Prior service cost/(credit)	(327,513)	(89,741)
Deferred curtailment (gain)/loss	0	0
	$ 896,088	$ 713,961
Expected Cash Flows		
Expected employer contributions:		
2009	$ 321,938	
Expected benefit payments:		
2009	$ 321,938	
2010	349,910	
2011	368,338	
2012	385,498	
2013	412,373	
2014-2018	2,452,672	
Components of net periodic benefit cost:		
Service cost	$ 176,450	$ 198,791
Interest cost	505,691	479,902
Expected return on plan assets	0	0

	As of December 31, 2008	2007
Amortization:		
Actuarial (gain)/loss ..	19,104	85,487
Prior service (credit)/ cost	(12,430)	(9,818)
Net periodic benefit cost (credit)	$ 688,815	$ 754,362
Weighted-average assumptions used to determine net periodic benefit cost:		
Discount rate	6.25%*	5.75%

*In 2008, amendments to the plan were approved. As a result, the actuarially determined net periodic benefit expenses for the year ended December 31, 2008 were re-measured with a discount rate of 7.75% as of November 1.

	2008	2007
Other Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Income		
Current year prior service (credit)/cost	$ 0	$ 0
Current year actuarial (gain)/loss	439,003	(533,209)
Amortization of prior service credit/ (cost)	12,430	9,818
Amortization of actuarial gain/(loss)	(19,104)	(85,487)
Curtailment effects - prior service (credit)/ cost	(250,202)	0
Total recognized in other comprehensive income	$ 182,127	$(608,878)

Estimated amounts that will be amortized from accumulated other comprehensive income into net periodic benefit cost (credit) in 2009 are shown below:	
Net actuarial (gain)/loss .	$ 48,178
Prior service (credit)/ cost	(25,490)
Total	$ 22,688

(7) Accumulated Postemployment Benefits

The Board provides certain postemployment benefits to eligible former or inactive employees and their dependents during the period subsequent to employment but prior to retirement. Postemployment costs were actuarially determined using a December 31 measurement date and discount rates of 2.50 percent and 5.75 percent as of December 31, 2008 and December 31, 2007, respectively. The accrued postemployment benefit costs recognized by the Board as of December 31, 2008 and December 31, 2007, were $5,974,000 and $3,055,000, respectively.

(8) Accumulated Other Comprehensive Income

Following is a reconciliation of beginning and ending balances of accumulated other comprehensive income.

	Amount Related To Defined Benefit Retirement Plans	Amount Related To Postretirement Benefits Other than Pensions
Balance at January 1, 2007	$ 332,969	$1,322,837
Change in funded status of benefit plans:		
Prior service (credit) cost arising during the year	0	0
Amortization of prior service credit (costs)	14,013	9,818
Amortization of net actuarial gain (loss)	(27,655)	(85,487)
Net actuarial (gain) loss arising during the year	0	0
Curtailment effects - prior service (credit) cost	453,526	(533,207)
Change in funded status of benefit plans - other comprehensive income (loss)	439,884	(608,876)
Balance at December 31, 2007	$ 772,853	$ 713,961
Change in funded status of benefit plans:		
Prior service (credit) cost arising during the year	5,059,307	0
Amortization of prior service credit (costs)	(86,297)	12,430
Amortization of net actuarial gain (loss)	(112,474)	(19,104)
Net actuarial (gain) loss arising during the year	2,744,685	439,003
Curtailment effects—prior service (credit) cost	0	(250,202)
Change in funded status of benefit plans - other comprehensive income (loss)	7,605,221	182,127
Balance at December 31, 2008	$8,378,074	$ 896,088

	Total Accumulated Other Comprehensive Income (Loss)
Balance at January 1, 2007	$(1,655,806)
Change in funded status of benefit plans:	
Prior service (credit) cost arising during the year	0
Amortization of prior service credit (costs)	(23,831)
Amortization of net actuarial gain (loss)	113,142
Net actuarial (gain) loss arising during the year	0
Curtailment effects - prior service (credit) cost	79,681
Change in funded status of benefit plans - other comprehensive income (loss)	168,992
Balance at December 31, 2007	$(1,486,814)
Change in funded status of benefit plans:	
Prior service (credit) cost arising during the year	(5,059,307)
Amortization of prior service credit (costs)	73,867
Amortization of net actuarial gain (loss)	131,578
Net actuarial (gain) loss arising during the year	(3,183,688)
Curtailment effects - prior service (credit) cost	250,202
Change in funded status of benefit plans - other comprehensive income (loss)	(7,787,348)
Balance at December 31, 2008	$(9,274,162)

Additional detail regarding the classification of accumulated other comprehensive income is included in notes 5 and 6.

(9) Federal 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. Activity related to the Board and Reserve Banks is summarized in the following table:

	As of December 31, 2008	2007
Reserve Bank expenses charged to the Board		
Data processing and communication	$ 2,368,144	$ 2,064,110
Contingency site	1,265,618	1,152,166
Total Reserve Bank expenses charged to the Board	$ 3,633,762	$ 3,216,276
Board expenses charged to the Reserve Banks		
Assessments for currency costs		
Printing	$477,927,083	$555,100,837
Shipping	14,984,564	13,710,396
Retirement	3,722,146	3,995,424
Research and Development	3,723,101	3,499,416
Assessments for operating expenses of the Board	352,290,700	296,124,700
Data processing	601,957	704,840
Total Board expenses charged to the Reserve Banks	$853,249,551	$873,135,613
Accounts receivable due from the Reserve Banks	$ 1,016,688	$ 1,270,582
Accounts payable due to the Reserve Banks	295,848	10

The Board contracted for audit services on behalf of entities that are included in the combined financial statements of the Federal Reserve Banks. The entities will reimburse the Board for the cost of the audit services. The Board accrued liabilities of $313,000 in audit services and recorded receivables of $313,000 from the entities as of December 31, 2008.

(10) Federal Financial Institutions Examination Council

The Board is one of the five member agencies of the Council, and currently performs certain management functions for the Council. The five agencies which are represented on the Council are the Board, Federal Deposit Insurance Corporation, National Credit Union Administration, Office of the Comptroller of the Currency, and Office of Thrift Supervision. The Board's financial statements do not include financial data for the Council. Activity related to the Board and Council for 2008 and 2007 is summarized in the following table:

	As of December 31, 2008	2007
Council expenses charged to the Board		
Assessments for operating expenses	$ 164,889	$ 108,163
Central Data Repository	1,352,390	1,167,449
Uniform Bank Performance Report	185,833	192,026
Total Council expenses charged to the Board	$1,703,112	$1,467,638
Board expenses charged to the Council		
Data processing related services	$4,683,363	$4,457,647
Administrative services	190,400	190,800
Total Board expenses charged to the Council	$4,873,763	$4,648,447
Accounts receivable due from the Council	$ 650,672	$ 384,142
Accounts payable due to the Council	373,466	64,087

(11) The Office of Employee Benefits of the Federal Reserve System

The Office of Employee Benefits of the Federal Reserve System (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 $2,867,208 and $2,866,676 as of December 31, 2008 and December 31, 2007, respectively.

(12) Bureau of Engraving and Printing

The Bureau of Engraving and Printing (BEP) is the principal supplier for currency printing and retirement services. The currency costs incurred and outstanding balances owed to BEP as of December 31, 2008 and 2007, are reflected in the following table:

	As of December 31, 2008	2007
Currency expenses charged to the Board		
Printing	$477,927,083	$555,100,837
Retirement	3,722,146	3,995,424
Total currency expenses charged to the Board	$481,649,229	$559,096,261

(13) Commitments and Contingencies

Leases

The Board has entered into several operating leases to secure office, training and warehouse space. Minimum annual payments under the operating leases having an initial or remaining noncancelable lease term in excess of one year at December 31, 2008, are as follows:

2009	$ 2,268,850
2010	6,297,594
2011	6,335,714
2012	6,414,807
After 2012	49,023,488
	$70,340,453

Rental expenses under the operating leases were $2,207,000 and $539,000 as of December 31, 2008 and 2007, respectively.

Deferred Leases

The amount of additional deferred rent is $537,000 and $318,000 for the years ended December 31, 2008 and 2007, respectively.

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 Federal Financial Institutions Examination Council (the Council) to fund a portion of enhancements and maintenance fees for a central data repository project through 2010 with an option to extend maintenance through 2013. The estimated Board expense to support this effort is $7.9 million for the base period and $2.6 million for the option period.

In 2007, the Council began a rewrite of the Home Mortgage Disclosure Act processing system, for which the Board provides data processing services. The estimated total expense to the Council of the rewrite is $3.2 million through 2010. The estimated total Board expense to support this effort with the maintenance extension option is $533,000.

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, individually or in the aggregate, will not have a materially adverse effect on the financial statements.

One case alleges employment discrimination under Title VII of the Civil Rights Act of 1964, as amended, and the Age Discrimination in Employment Act and is pending in the United States Court of Appeals for the District of Columbia Circuit. A second action alleges discrimination on behalf of a class of African American secretaries at the Board and was dismissed by the United States District Court for the District of Columbia on January 31, 2007, and the plaintiffs' motion to alter or amend judgment was denied by that court on March 2, 2009. The plaintiffs have until May 1, 2009, to appeal the matter to the United States Court of Appeals. The Board has substantial defenses for both cases and intends to defend the matters vigorously. Management believes that the likelihood of an adverse judgment for both cases is small.

The estimated contingent liabilities related to business contracts were $69,720 and $0 as of December 31, 2008 and December 31, 2007, respectively.

Deloitte.

INDEPENDENT AUDITORS' REPORT ON COMPLIANCE AND ON INTERNAL CONTROL OVER FINANCIAL REPORTING 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 the financial statements of The Board of Governors of the Federal Reserve System (the "Board") as of and for the year ended December 31, 2008, and have issued our report thereon dated March 23, 2009. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards,* issued by the Comptroller General of the United States.

Internal Control over Financial Reporting

In planning and performing our audit, we considered the Board's internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements and not to provide assurance on the internal control over financial reporting. Our consideration of the internal control over financial reporting would not necessarily disclose all matters in the internal control that might be material weaknesses. A material weakness is a condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. We noted no matters involving the internal control over financial reporting and its operation that we consider to be material weaknesses.

We have communicated to management, in a separate letter dated March 23, 2009, other matters that we identified during our audit.

Compliance

As part of obtaining reasonable assurance about whether the Board's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grants, 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.*

Distribution

This report is intended solely for the information and use of the Board, management, and others within the organization, Office of Inspector General, the United States Congress, and is not intended to be and should not be used by anyone other than these specified parties.

Deloitte + Touche LLP

McLean, VA
March 23, 2009

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, 2008 and 2007.

Deloitte.

REPORT OF INDEPENDENT AUDITORS

To the Board of Governors of the Federal Reserve System
and the Board of Directors of the Federal Reserve Banks:

We have audited the accompanying combined statements of condition of the Federal Reserve Banks (the "Reserve Banks") as of December 31, 2008 and 2007 and the related combined statements of income and comprehensive income and changes in capital for the years then ended, which have been prepared in conformity with accounting principles established by the Board of Governors of the Federal Reserve System. These combined financial statements are the responsibility of the Reserve Banks' management. Our responsibility is to express an opinion on these combined financial statements based on our audits.

We conducted our audits in accordance with the 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 of material misstatement. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the combined Reserve Banks' internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As described in Note 4 to the combined financial statements, the Reserve Banks have prepared these combined financial statements in conformity with accounting principles established by the Board of Governors of the Federal Reserve System, as set forth in the Financial Accounting Manual for Federal Reserve Banks, which is a comprehensive basis of accounting other than accounting principles generally accepted in the United States of America. The effects on such combined financial statements of the differences between the accounting principles established by the Board of Governors of the Federal Reserve System and accounting principles generally accepted in the United States of America are also described in Note 4.

In our opinion, the combined financial statements referred to above present fairly, in all material respects, the combined financial position of the Reserve Banks as of December 31, 2008 and 2007, and the combined results of their operations for the years then ended, on the basis of accounting described in Note 4.

Deloitte & Touche LLP

April 20, 2009

FEDERAL RESERVE BANKS
COMBINED STATEMENTS OF CONDITION

(in millions)

	As of December 31, 2008	As of December 31, 2007
Assets		
Gold certificates	$ 11,037	$ 11,037
Special drawing rights certificates	2,200	2,200
Coin	1,688	1,179
Items in process of collection	979	1,804
Loans to depository institutions	544,010	48,636
Other loans	100,082	0
System Open Market Account:		
Securities purchased under agreements to resell	80,000	46,500
U.S. government, federal agency, and government-sponsored enterprise securities, net	502,189	745,629
Investments denominated in foreign currencies	24,804	22,914
Central bank liquidity swaps	553,728	24,000
Consolidated variable interest entities:		
Investments held by consolidated variable interest entities (of which $74,570 is measured at fair value at December 31, 2008)	411,996	0
Bank premises, equipment, and software, net	2,572	2,539
Prepaid interest on Federal Reserve notes due from U.S. Treasury	2,425	0
Accrued interest receivable	7,389	6,438
Other assets	629	1,900
Total assets	$2,245,728	$914,776
Liabilities and Capital		
Federal Reserve notes outstanding, net	$ 853,168	$791,691
System Open Market Account:		
Securities sold under agreements to repurchase	88,352	43,985
Consolidated variable interest entities:		
Beneficial interest in consolidated variable interest entities	2,824	0
Other liabilities	5,813	0
Deposits:		
Depository institutions	860,000	20,767
U.S. Treasury, general account	106,123	16,120
U.S. Treasury, supplementary financing account	259,325	0
Other deposits	21,671	363
Deferred credit items	2,471	1,811
Interest on Federal Reserve notes due to U.S. Treasury	0	1,532
Interest due to depository institutions	88	0
Accrued benefit costs	3,374	1,281
Other liabilities	367	326
Total liabilities	2,203,576	877,876
Capital paid-in	21,076	18,450
Surplus (including accumulated other comprehensive loss of $4,683 million and $1,524 million at December 31, 2008 and 2007, respectively)	21,076	18,450
Total capital	42,152	36,900
Total liabilities and capital	$2,245,728	$914,776

The accompanying notes are an integral part of these combined financial statements.

FEDERAL RESERVE BANKS
COMBINED STATEMENTS OF INCOME AND COMPREHENSIVE INCOME

(in millions)

	For the year ended December 31, 2008	2007
Interest income:		
Loans to depository institutions	$ 3,817	$ 71
Other loans	3,348	0
System Open Market Account:		
Securities purchased under agreements to resell	1,891	1,591
U.S. government, federal agency, and government-sponsored enterprise securities	25,631	38,707
Investments denominated in foreign currencies	623	547
Central bank liquidity swaps	3,606	28
Consolidated variable interest entities:		
Investments held by consolidated variable interest entities	4,087	0
Total interest income	43,003	40,944
Interest expense:		
System Open Market Account:		
Securities sold under agreements to repurchase	737	1,688
Depository institutions deposits	817	0
Other interest expense	463	0
Total interest expense	2,017	1,688
Net interest income	40,986	39,256
Non-interest income (loss):		
System Open Market Account:		
U.S. government, federal agency and government-sponsored enterprise securities gains, net	3,769	0
Foreign currency gains, net	1,266	1,886
Investments held by consolidated variable interest entities (losses), net	(5,237)	0
Income from services	773	878
Reimbursable services to government agencies	461	458
Other income	899	166
Total non-interest income (loss)	1,931	3,388
Operating expenses:		
Salaries and other benefits	2,184	2,093
Occupancy expense	275	247
Equipment expense	200	203
Assessments by the Board of Governors	853	872
Professional fees related to consolidated variable interest entities	80	0
Other expenses	662	838
Total operating expenses	4,254	4,253
Net income prior to distribution	38,663	38,391
Change in funded status of benefit plans	(3,159)	325
Comprehensive income prior to distribution	$ 35,504	$38,716
Distribution of comprehensive income:		
Dividends paid to member banks	$ 1,189	$ 992
Transferred to surplus and change in accumulated other comprehensive loss	2,626	3,126
Payments to U.S. Treasury as interest on Federal Reserve notes	31,689	34,598
Total distribution	$ 35,504	$38,716

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, 2008 and December 31, 2007

(in millions, except share data)

		Surplus			
	Capital Paid-In	Net Income Retained	Accumulated Other Comprehensive Loss	Total Surplus	Total Capital
Balance at January 1, 2007 (306 million shares)	$15,324	$17,173	$(1,849)	$15,324	$30,648
Net change in capital stock issued (63 million shares)	3,126	0	0	0	3,126
Transferred to surplus and change in accumulated other comprehensive loss	0	2,801	325	3,126	3,126
Balance at December 31, 2007 (369 million shares)	$18,450	$19,974	$(1,524)	$18,450	$36,900
Net change in capital stock issued (53 million shares)	2,626	0	0	0	2,626
Transferred to surplus and change in accumulated other comprehensive loss	0	5,785	(3,159)	2,626	2,626
Balance at December 31, 2008 (422 million shares)	$21,076	$25,759	$(4,683)	$21,076	$42,152

The accompanying notes are an integral part of these combined financial statements.

NOTES TO THE COMBINED FINANCIAL STATEMENTS OF THE FEDERAL RESERVE BANKS

(1) STRUCTURE

The twelve Federal Reserve Banks ("Reserve Banks") are part of the Federal Reserve System ("System") created by Congress under the Federal Reserve Act of 1913 ("Federal Reserve Act"), which established the central bank of the United States. The Reserve Banks are chartered by the federal government and possess a unique set of governmental, corporate, and central bank characteristics.

In accordance with the Federal Reserve Act, supervision and control of each Reserve Bank is exercised by a board of directors. The Federal Reserve Act specifies the composition of the board of directors for each of the Reserve Banks. Each board is composed of nine members serving three-year terms: three directors, including those designated as chairman and deputy chairman, are appointed by the Board of Governors of the Federal Reserve System ("Board of Governors") to represent the public, and six directors are elected by member banks. Banks that are members of the System include all national banks and any state-chartered banks that apply and are approved for membership in the System. 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.

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. Functions include participation in formulating and conducting monetary policy; participation in the payments system, including large-dollar transfers of funds, automated clearinghouse ("ACH") operations, and check collection; distribution of coin and currency; performance of fiscal agency functions for the U.S. Treasury, certain federal agencies, and other entities; serving as the federal government's bank; provision of short-term loans to depository institutions; provision of loans to individuals, partnerships, and corporations in unusual and exigent circumstances; service to consumers and communities by providing educational materials and information regarding consumer laws; and supervision of bank holding companies, state member banks, and U.S. offices of foreign banking organizations. Certain services are provided to foreign and international monetary authorities, primarily by the FRBNY.

The FOMC, in the conduct of monetary policy, establishes policy regarding domestic open market operations, oversees these operations, and annually issues authorizations and directives to the FRBNY to execute transactions. The FRBNY is authorized and directed by the FOMC to conduct operations in domestic markets, including the direct purchase and sale of securities of the U.S. government, federal agencies, and government-sponsored enterprises ("GSEs"); the purchase of these securities under agreements to resell; the sale of these securities under agreements to repurchase; and the lending of these securities. The FRBNY executes these transactions at the direction of the FOMC and holds the resulting securities and agreements in the portfolio known as the System Open Market Account ("SOMA").

In addition to authorizing and directing operations in the domestic securities market, the FOMC authorizes and directs the FRBNY to execute operations in foreign markets in order to counter disorderly conditions in exchange markets or to meet other needs specified by the FOMC in carrying out the System's central bank responsibilities. The FRBNY is authorized by the FOMC to hold balances of, and to execute spot and forward foreign exchange and securities contracts for, fourteen foreign currencies and to invest such foreign currency holdings, ensuring adequate liquidity is maintained. The FRBNY is also authorized and directed by the FOMC to maintain liquidity currency arrangements with fourteen central banks and to "warehouse" foreign currencies for the U.S. Treasury and Exchange Stabilization Fund ("ESF") through the Reserve Banks.

Although the Reserve Banks are separate legal entities, they collaborate in 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 providing the service and the other 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 reimburse other Reserve Banks for services provided to them.

(3) Recent Financial Stability Activities

The System has implemented a number of programs designed to support the liquidity of financial institutions and to foster improved conditions in financial markets. These new programs, which are set forth below, have resulted in significant changes to the combined financial statements.

Expanded Open Market Operations and Support for Mortgage-Related Securities

The Single-Tranche Open Market Operations Program, announced on March 7, 2008, allows primary dealers to initiate a series of term repurchase transactions that are expected to accumulate to $100 billion in total. Under the provisions of the program, these transactions are conducted as 28-day term repurchase agreements for which primary dealers pledge U.S. Treasury and agency securities and agency Mortgage-Backed Securities ("MBS") as collateral. The FRBNY can elect to increase the size of the term repurchase program if conditions warrant. The repurchase transactions are reported as "System Open Market Account: Securities purchased under agreements to resell" in the Combined Statements of Condition.

The GSE and Agency Securities and MBS Purchase Program was announced on November 25, 2008. The primary goal of the program is to provide support to the mortgage and housing markets and to foster improved conditions in financial markets. Under this program, the FRBNY will purchase the direct obligations of housing-related GSEs and MBS backed by the Federal National Mortgage Association ("Fannie Mae"), the Federal Home Loan Mortgage Corporation ("Freddie Mac"), and the Government National Mortgage Association ("Ginnie Mae"). Purchases of the direct obligations of housing-related GSEs began in November 2008, and purchases of GSE and agency MBS began in January 2009. There were no purchases of GSE and agency MBS during the period ended December 31, 2008. The program was initially authorized to purchase up to $100 billion in GSE direct obligations and up to $500 billion in MBS. In March 2009, the FOMC authorized the FRBNY to purchase up to an additional $750 billion of GSE and agency mortgage-backed securities, $100 billion of GSE direct obligations, and $300 billion in longer-term Treasury securities.

The FRBNY holds the resulting securities and agreements in the SOMA portfolio, and the activities of both programs are allocated to the other Reserve Banks.

Central Bank Liquidity Swaps

The FOMC authorized the FRBNY to establish temporary liquidity currency swap arrangements (central bank liquidity swaps) with the European Central Bank and the Swiss National Bank on December 12, 2007, to help provide liquidity in U.S. dollars to overseas markets. Subsequently, the FOMC authorized liquidity currency swap arrangements with additional foreign central banks. Such arrangements are now authorized with the following central banks: the Reserve Bank of Australia, the Banco Central do Brasil, the Bank of Canada, Danmarks Nationalbank, the Bank of England, the European Central Bank, the Bank of Japan, the Bank of Korea, the Banco de Mexico, the Reserve Bank of New Zealand, Norges Bank, the Monetary Authority of Singapore, Sveriges Riksbank, and the Swiss National Bank. The activity related to the program is allocated to the other Reserve Banks. The maximum amount of borrowing permissible under the swap arrangement varies by central bank. The central bank liquidity swap arrangements are authorized through October 30, 2009.

Lending to Depository Institutions

The Term Auction Facility ("TAF") program was announced on December 12, 2007. The goal of TAF is to help promote the efficient dissemination of liquidity, which is achieved by the Reserve Banks injecting term funds through a broader range of counterparties and against a broader range of collateral than open market operations. Under the TAF program, Reserve Banks auction term funds to depository institutions against a wide variety of collateral. All depository institutions that are eligible to borrow under the Reserve Banks' primary credit program are eligible to participate in TAF auctions. All advances must be fully collateralized. The loans are reported as "Loans to depository institutions" in the Combined Statements of Condition.

Lending to Primary Dealers

The Term Securities Lending Facility ("TSLF") announced on March 11, 2008, promotes liquidity in the financing markets for U.S. Treasury securities and other collateral. Under the TSLF, the FRBNY will lend up to an aggregate amount of $200 billion of U.S. Treasury securities to primary dealers for a term of 28 days. Securities loaned are collateralized by a pledge of other securities, including federal agency debt, federal agency residential mortgage-backed securities ("RMBS"), and non-agency AAA/Aaa-rated private-label residential mortgage-backed securities and are awarded to primary dealers through a competitive single-price auction. In February 2009, the System announced the extension through October 30, 2009, of TSLF. The fees related to these securities lending transactions are reported as a component of "Non-interest income (loss): Other income" in the Combined Statements of Income and Comprehensive Income.

The Primary Dealer Credit Facility ("PDCF") was announced on March 16, 2008. The goal of the PDCF is to improve the ability of primary dealers to provide financing to participants in the securitization markets. Primary dealers may obtain secured overnight financing under the PDCF, in the form of repurchase transactions. Eligible collateral is that which is eligible for pledge in tri-party funding arrangements. The program became operational on September 12, 2008, and the interest rate charged on the secured financing is the FRBNY's primary credit rate. Participants pay a frequency-based fee if they access the program on more than 45 business days during the term of the program. Secured financing made under the PDCF is made with recourse to the primary dealer. Financing provided under the PDCF is included in "Other loans" in the Consolidated Statements of Condition. In February 2009, the System announced the extension of the facility through October 30, 2009.

The Term Securities Lending Facility Options Program ("TOP") announced on July 30, 2008, offers primary dealers the option to draw upon short-term, fixed-rate TSLF loans in exchange for eligible collateral. The options are awarded through a competitive auction. The program is intended to enhance the effectiveness of the TSLF by ensuring additional securities liquidity during periods of heightened collateral market pressures, such as around quarter-end dates. TOP auction dates are determined by the FRBNY, and the program authorization ends concurrently with the TSLF.

The Transitional Credit Extensions, announced on September 21, 2008, provides liquidity support to broker-dealers that were in the process of transitioning to the bank holding company structure. The credit extensions under this program are aimed at providing the firms with increased liquidity and are collateralized similar to loans made under either the FRBNY's primary credit programs or through the existing PDCF. Financing provided under the Transitional Credit Extensions are included in "Other loans" in the Combined Statements of Condition.

Other Lending Facilities

The Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility ("AMLF"), announced on September 19, 2008, is a lending facility that provides funding under certain conditions to U.S. depository institutions and bank holding companies to finance the purchase of high-quality asset-backed commercial paper ("ABCP") from money market mutual funds. The program is intended to assist money market mutual funds that hold such paper to meet the demands for investor redemptions and to foster liquidity in the ABCP market and in money markets more generally. The Federal Reserve Bank of Boston ("FRBB") administers the AMLF and is authorized to extend these loans to eligible borrowers on behalf of the other Reserve Banks. All loans extended under the AMLF are recorded as assets by the FRBB and, if the borrowing institution settles to a depository account in another Federal Reserve District, the funds are credited to the institution's depository account and settled between the Reserve Banks through the interdistrict settlement account. The credit risk related to the AMLF is assumed by the FRBB. The FRBB is authorized to finance the purchase of commercial paper through October 30, 2009.

The Commercial Paper Funding Facility (the "CPFF Program"), announced on October 7, 2008, provides liquidity to the commercial paper market in the U.S. by increasing the availability of term commercial paper funding to issuers and by providing greater assurance to both issuers and investors that issuers will be able to roll over their maturing commercial paper. The CPFF Program became operational on October 27, 2008, and was originally authorized to purchase commercial paper through April 30, 2009, with authorization subsequently extended through October 30, 2009. The Commercial Paper Funding Facility LLC ("CPFF") is a limited liability company that was formed on October 14, 2008, in connection with the implementation of the CPFF Program to purchase eligible three-month unsecured and asset-backed commercial paper ("ABCP") directly from eligible issuers using the proceeds of loans made to the CPFF. The CPFF is a single-member limited liability company with the FRBNY as the sole and managing member. The FRBNY will continue to provide funding to the CPFF after such date, if necessary, until the CPFF's underlying assets mature.

All loans made by the FRBNY to the CPFF are on a full recourse basis and all the assets in the CPFF serve as collateral. The rate of interest on the loan is the target federal funds rate and is fixed through the life of the loan. If the target federal funds rate is a range, then the rate of interest is set at the maximum rate within such range. Principal and accrued interest are payable, in full, at the maturity date of the commercial paper. The FRBNY's loan to the CPFF is eliminated during consolidation.

To be eligible for purchases by the CPFF, commercial paper must, among other things, be (i) issued by a U.S. issuer (which includes U.S. issuers with a foreign parent company and U.S. branches of foreign banks) and (ii) be rated at least A-1/P-1/F1 by a nationally recognized statistical rating organizations ("NRSRO") or, if rated by multiple NRSROs, at least A-1/P-1/F1 by two or more. The commercial paper must also be U.S. dollar-denominated and have a three-month maturity. Commercial paper purchased by the CPFF is discounted when purchased and carried at amortized cost. The maximum amount of a single issuer's commercial paper that the CPFF may own at any time (the "maximum face value") will be the greatest amount of U.S. dollar-denominated commercial paper the issuer had outstanding on any day between January 1 and August 31, 2008. The CPFF will not purchase additional commercial paper from an issuer whose total commercial paper outstanding to all investors (including the CPFF) equals or exceeds the issuer's maximum face value limit.

All issuers must pay a non-refundable facility fee upon registration with the CPFF equal to 10 basis points of the issuer's maximum face value. CPFF Program participants that issue unsecured commercial paper to the CPFF are required to pay a surcharge of 100 basis points per annum of the face value. The CPFF is authorized to reinvest cash in short-term and highly liquid assets, which includes U.S. Treasury and agency securities (excluding mortgage-backed securities), money market funds, repurchase agreements collateralized by U.S. Treasury and agency securities as well as U.S. dollar-denominated overnight deposits. In January 2009, the FRBNY announced that ABCP issuers that were inactive prior to the creation of the CPFF Program are ineligible for participation in the program. An issuer is considered inactive if it did not issue ABCP to institutions other than the sponsoring institution for any consecutive period of three months or longer between January 1 and August 31, 2008.

The Money Market Investor Funding Facility ("MMIFF"), announced on October 21, 2008, supports a private-sector initiative designed to provide liquidity to U.S. money market investors. Under the MMIFF, the FRBNY provides senior secured funding to a series of limited liability companies ("LLC") that were established by the private sector to finance the purchase of eligible assets from eligible investors. Eligible assets include U.S. dollar-denominated certificates of deposit and commercial paper issued by highly-rated financial institutions with remaining maturities of 90 days or less. During 2008, only U.S. money market mutual funds were eligible investors. The MMIFF will purchase these assets by issuing subordinated ABCP equal to 10 percent of the asset's purchase price and by borrowing, on a secured basis, 90 percent of the price. The MMIFF may purchase up to $600 billion in money market instruments, with up to $540 billion of the funding provided by the FRBNY. MMIFF purchases will be recorded at amortized cost. Although there were no material transactions in the MMIFF for the period ended December 31, 2008, the MMIFF LLCs are consolidated on the FRBNY's financial statements. In January 2009, the System announced that the set of institutions eligible to participate in MMIFF would be expanded from U.S. money market mutual funds to also include a number of other money market investors. The newly eligible participants include U.S.-based securities-lending cash-collateral reinvestment funds, portfolios, and accounts (securities lenders) and U.S.-based investment funds that operate in a manner similar to money market mutual funds, such as certain local government investment pools, common trust funds, and collective investment funds. Additionally, the System authorized the adjustment of several of the economic parameters of the MMIFF, including the minimum yield on assets eligible to be sold to the MMIFF. In February 2009, the System announced the extension of MMIFF through October 30, 2009.

The Board of Governors announced the creation of the Term Asset-Backed Securities Loan Facility ("TALF") on November 25, 2008. The goal of the TALF is to help market participants meet the credit needs of households and small businesses by supporting the issuance of asset-backed securities ("ABS") collateralized by student loans, auto loans, credit card loans, and loans guaranteed by the Small Business Administration ("SBA"). Under the TALF, the FRBNY will lend up to $200 billion on a non-recourse basis to holders of certain AAA-rated ABS backed by newly and recently originated consumer and small business loans. ABS accepted as collateral for the loans extended by the FRBNY are assigned a lending value (fair value reduced by a margin) deemed appropriate by the FRBNY. The Treasury, under the Troubled Assets Relief Program ("TARP") of the Emergency Economic Stabilization Act of 2008, will provide $20 billion of credit protection to the FRBNY in connection with the TALF. All U.S. persons that own eligible collateral may participate in the TALF. The TALF will cease making new loans on December 31, 2009, unless the Board of Governors agrees to extend it. There were no transactions during the period ended December 31, 2008. On February 10, 2009, the Board of Governors announced that it is prepared to expand the size of the TALF to as much as $1 trillion and potentially broaden the eligible collateral to encompass other types of newly issued AAA-rated ABS, such as ABS backed by commercial mortgages or private-label ABS backed by residential mortgages. If the size of the TALF is expanded, the U.S. Treasury will increase its credit protection to the FRBNY. On March 23, 2009, the U.S. Treasury, in conjunction with the Federal Deposit Insurance Corporation ("FDIC") and Federal Reserve, announced the Public-Private Investment Program for Legacy Assets. One part of the program, the Legacy Securities Program, would involve an expansion of the TALF program to include the provision of non-recourse loans to fund purchases of eligible legacy securitization assets, including certain non-agency RMBS that were originally rated AAA and certain collateralized mortgage-backed securities ("CMBS") and other ABS that are rated AAA.

Support for Specific Institutions

In connection with and to facilitate the merger of The Bear Stearns Companies, Inc. ("Bear Stearns") and JPMorgan Chase & Co. ("JPMC"), the FRBNY formed Maiden Lane LLC ("ML"). Credit was extended to ML on June 26, 2008. ML is a limited liability company formed by the FRBNY to acquire certain assets of Bear Stearns and to manage those assets over time, in order to maximize the repayment of credit extended to ML and to minimize disruption to the financial markets. The assets acquired by ML were valued at $29.9 billion as of March 14, 2008, the date that the FRBNY committed to the transaction, and largely consisted of mortgage-related securities, mortgage loans and the associated hedges, which included credit and interest rate derivatives, as well as mortgage commitments ("To Be Announced" or

"TBAs"). The FRBNY extended approximately a $28.8 billion senior loan and JPMC extended a $1.15 billion subordinated loan to finance the acquisition of assets. The loans are collateralized by all of the assets of ML. The FRBNY is the sole and managing member of the ML. The FRBNY is the controlling party of the assets of ML and will remain as such as long as the FRBNY retains an economic interest. The interest rate on the senior loan is the primary credit rate in effect from time to time. JPMC will bear the first $1.2 billion of any losses associated with the portfolio through its subordinated loan and any realized gains will accrue to the FRBNY. The interest on the JPMC subordinated loan is the FRBNY's primary credit rate plus 450 basis points. The FRBNY consolidates ML.

The Board of Governors announced on September 16, 2008, that the FRBNY was authorized to lend to American International Group, Inc. ("AIG"). Initially, the FRBNY provided AIG with a line of credit collateralized by the pledge of a substantial portion of the assets of AIG. Under the provisions of the original agreement, the FRBNY was authorized to lend up to $85 billion to AIG for two years at a rate of the three-month London Interbank Offered Rate ("LIBOR") plus 850 basis points. In addition, AIG was assessed a one-time commitment fee of 200 basis points on the full amount of the commitment and a fee of 850 basis points per annum on the undrawn credit line. A condition of the credit agreement was that AIG would issue to a trust, for the sole benefit of the federal treasury, preferred shares convertible to approximately seventy-eight percent of the issued and outstanding shares of the common stock of AIG. The AIG Credit Facility Trust was formed on January 16, 2009, and the preferred shares were issued to the Trust on March 4, 2009. The Trust has three independent trustees who control the trust's voting and consent rights. The FRBNY cannot exercise voting or consent rights.

On October 8, 2008, the FRBNY began providing cash collateral to certain AIG insurance subsidiaries in connection with AIG's domestic securities lending program.

On November 10, 2008, the FRBNY and the U.S. Treasury announced a restructuring of the government's financial support to AIG. As part of the restructuring, the U.S. Treasury purchased $40 billion of newly issued AIG preferred shares under the Troubled Asset Relief Program ("TARP"). TARP funds were used to pay down the majority of AIG's debt to the FRBNY, and the terms of the original agreement were modified. The restructuring also reduced the line of credit to $60 billion, reduced the interest rate to the three-month LIBOR (subject to a floor of 350 basis points), reduced the fee on undrawn funds to 75 basis points, and extended the length of the agreement to five years. The other material terms of the funding were unchanged. These revised terms were more consistent with terms granted to other entities with similar credit risk. Financing provided under the line of credit is included in "Other loans" in the Combined Statements of Condition.

Concurrent with the November 10, 2008, announcement of the restructuring of its financial support to AIG, the FRBNY announced the planned formation of two special purpose vehicles ("SPVs"). On December 12, 2008, the FRBNY extended credit to Maiden Lane II LLC ("ML II"), a limited liability company formed to purchase RMBS from the reinvestment pool of the securities lending portfolio of several regulated U.S. insurance subsidiaries of AIG. ML II borrowed $19.5 billion from the FRBNY and (after certain adjustments including payments on the RMBS totaling $0.3 billion between October 31, 2008, and December 12, 2008) used the proceeds to purchase from AIG's domestic insurance subsidiaries RMBS, which had an approximate fair value of $20.8 billion as of October 31, 2008. The FRBNY's loan and the fixed deferred purchase price of the AIG subsidiaries are collateralized by all of the assets of ML II. The FRBNY is the sole and managing member of ML II. The FRBNY is the controlling party of the assets of ML II and will remain as such as long as the FRBNY retains an economic interest. Net proceeds received by ML II will be applied to pay the FRBNY's senior loan plus interest at a rate of the one-month LIBOR plus 100 basis points. As part of the agreement, the AIG subsidiaries also became entitled to receive from ML II a fixed deferred purchase price of up to $1 billion, plus interest on any such fixed deferred purchase price outstanding at a rate of the one-month LIBOR plus 300 basis points, payable from net proceeds received by ML II and only to the extent that the FRBNY's senior loan has been paid in full. After ML II has paid the FRBNY's senior loan and the fixed deferred purchase price in full, including accrued and unpaid interest, the FRBNY will be entitled to receive five-sixths of any additional net proceeds received by ML II as contingent interest on the senior loan, and AIG will be entitled to receive one-sixth of any net proceeds received by ML II as variable deferred purchase price. As a result of the formation of ML II, the FRBNY's lending in connection with AIG's securities lending program, initiated on October 8, 2008, was terminated. The FRBNY consolidates ML II.

On November 25, 2008, the FRBNY extended credit to Maiden Lane III LLC ("ML III"), a limited liability company formed to purchase asset-backed securities collateralized debt obligations ("ABS CDOs") from certain third-party counterparties of AIG Financial Products Corp. ("AIGFP"). In connection with the acquisitions, the third-party counterparties agreed to terminate their related credit derivative contracts with AIGFP. In connection with the credit agreement, on November 25, 2008, ML III borrowed approximately $15.1 billion from the FRBNY, and AIG provided an equity contribution of $5 billion to ML III. The proceeds were used to purchase CDOs with a fair value of $21.1 billion as of October 31, 2008. The counterparties received $20.1 billion net of principal, interest received, and finance charges paid.

Subsequently, on December 18, 2008, ML III borrowed an additional $9.2 billion from the FRBNY to fund the acquisition of additional ABS CDOs with a fair value of $8.5 billion as of October 31, 2008. The net payment to counterparties for this subsequent transaction was $6.7 billion. ML III 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 the terminated credit default swaps ("CDS") as compared to ML III's fair value acquisition prices calculated as of October 31, 2008. The FRBNY is the sole and managing member of ML III. The FRBNY is the controlling party of the assets of ML III and will remain as such as long as the FRBNY retains an economic interest in ML III. Net proceeds received by ML

III will be applied to pay the FRBNY's senior loan plus interest at a rate of the one-month LIBOR plus 100 basis points. The FRBNY's senior loan is collateralized by all of the assets of ML III. After payment of principal and interest on the FRBNY's senior loan in full, including accrued and unpaid interest, AIG is entitled to receive from ML III repayment of its equity contribution of $5 billion, plus interest at a rate of the one-month LIBOR plus 300 basis points, payable from net proceeds received by ML III. After ML III has paid the FRBNY's senior loan and AIG's equity contribution in full, the FRBNY will be entitled to receive two-thirds of any additional net proceeds received by ML III as contingent interest on the senior loan, and AIG will be entitled to receive one-third of any net proceeds received by ML III as contingent distributions on its equity interest. The FRBNY consolidates ML III.

On March 2, 2009, the FRBNY and U.S. Treasury announced their intent to restructure the financial assistance provided to AIG. The restructuring is expected to further the U.S. government's commitment to the orderly restructuring of AIG over time in the face of continuing market dislocations and economic deterioration and to provide evidence of its commitment to continue to work with AIG to ensure that the company can meet its obligations as they come due. Under the proposed new agreement, the line of credit would be reduced in exchange for preferred interest in two SPVs created to hold all of the outstanding common stock of American Life Insurance Company (ALICO) and American International Assurance Company Ltd. (AIA), two life insurance holding company subsidiaries of AIG. Although the FRBNY would have certain governance rights to protect its interests, AIG would retain control of ALICO and AIA. The initial valuation of the FRBNY's preferred interests, which may be up to $26 billion, will be a percentage of the fair market value of ALICO and AIA based on measurements of value acceptable to the FRBNY. The System is evaluating the accounting implications of these changes on the 2009 combined financial statements.

In addition, the FRBNY has been authorized to make loans of up to $8.5 billion to SPVs that may be established by the domestic life insurance subsidiaries of AIG. The SPVs would repay the loans from the net cash flows they receive from designated blocks of existing life insurance policies held by the parent insurance companies. The proceeds of the FRBNY's loans would pay down an equivalent amount of outstanding debt under the line of credit. The amounts lent, the size of the haircuts taken by the FRBNY, and other terms of the loans would be determined based on valuations acceptable to the FRBNY. In addition, the interest rate on the line of credit would be modified, removing the existing floor on the LIBOR rate, and the total amount available under the line of credit would be reduced from $60 billion to no less than $25 billion. The line would continue to be collateralized by a lien on a substantial portion of AIG's assets, including the equity interest in businesses AIG plans to retain. The other material terms of the line of credit would remain unchanged. As of April 2, 2009, the agreements necessary to effect this restructuring had not been executed.

The Board of Governors, the U.S. Treasury, and the FDIC jointly announced on November 23, 2008, that the U.S. government would provide financial support to Citigroup, Inc. ("Citigroup"). The agreement provides funding support for possible future principal losses on up to $301 billion of Citigroup's assets. It extends for ten years for residential assets and five years for non-residential assets. Under the agreement, a loss on a portfolio asset includes a charge-off or realized loss upon collection, through a permitted disposition or exchange, or upon a foreclosure or short-sale loss, but not through a change in Citigroup's mark-to-market accounting for the asset or the creation or increase of a related loss reserve. The FRBNY's commitment to lend under the agreement is triggered at the time that qualifying losses of $56.2 billion have been recognized in the covered assets pool. At that point, if Citigroup makes a proper election, the FRBNY would make a single non-recourse loan to Citigroup in an amount equal to the aggregate adjusted baseline value of the remaining covered assets, as defined in the relevant agreements. The loan would be collateralized by the remaining covered asset pool. The interest rate on the loan would be equal to the rate on the three-month overnight index swap rate ("OIS rate") plus 300 basis points. Citigroup would be required to make mandatory principal prepayments of the loan in an amount equal to 10 percent of any further covered losses on the remaining covered assets, and that obligation plus the interest on the loan is with recourse to Citigroup. The loan matures in 2018 (or 2019 if extended by the FRBNY).

The Board of Governors, the U.S. Treasury, and the FDIC jointly announced on January 15, 2009, that the U.S. government would provide financial support to Bank of America Corporation ("Bank of America"). Under this arrangement, the Federal Reserve Bank of Richmond (FRBR) will provide funding support for possible future principal losses relating to a designated pool of up to $118 billion of financial instruments. The FRBR's commitment under the arrangement is to provide a non-recourse loan to Bank of America if and when qualifying losses of $18 billion have been recorded in the pool. Interest and fees would be with recourse to Bank of America. This arrangement extends for a maximum of ten years for residential assets and five years for non-residential assets. Because the details of the arrangement have not been finalized, the FRBR has not determined the accounting treatment for this transaction.

(4) Significant Accounting Policies

Accounting principles for entities with the unique powers and responsibilities of a 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* ("Financial Accounting Manual" or "FAM"), which is issued by the Board of Governors. All of the Reserve Banks are required to adopt and apply accounting policies and practices that are consistent with the FAM and the combined financial statements have been prepared in accordance with the FAM.

Differences exist between the accounting principles and practices in the FAM and generally accepted accounting principles in the United States ("GAAP"), primarily due to the unique nature of the Reserve Banks' powers and responsibilities as part of the nation's central bank. The primary difference is the presentation of all SOMA securities holdings at amortized cost, rather than using the fair value presentation as required by GAAP. U.S. government, federal agency, and GSE securities and investments denominated in foreign currencies comprising the SOMA are recorded at cost, on a settlement-date basis, and are adjusted for amortization of premiums or accretion of discounts on a straight-line basis. Amortized cost more appropriately reflects the Reserve Banks' securities holdings, given the System's unique responsibility to conduct monetary policy. Although application of fair value measurements to the securities holdings may result in values substantially above or below their carrying values, these unrealized changes in value would have no direct effect on the quantity of reserves available to the banking system or on the prospects for future Reserve Bank earnings or capital. Both the domestic and foreign components of the SOMA portfolio may involve transactions that result in gains or losses when holdings are sold prior to 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 any gains or losses resulting from the sale of such securities and currencies are incidental to the open market operations and do not motivate decisions related to policy or open market activities.

In addition, the Board of Governors and the Reserve Banks have elected not to present a Statement of Cash Flows because the liquidity and cash positions of the Reserve Banks are not a primary concern given their unique powers and responsibilities. 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. There are no other significant differences between the policies outlined in the FAM and GAAP.

Preparing the consolidated 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 consolidated financial statements, and the reported amounts of income and expenses during the reporting period. Actual results could differ from those estimates. Certain amounts relating to the prior year have been reclassified to conform to the current-year presentation. Unique accounts and significant 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 ML, ML II, ML III, and CPFF. The consolidation of the VIEs was assessed in accordance with FASB Interpretation No. 46 (revised), Consolidation of Variable Interest Entities ("FIN 46R"), which requires a variable interest entity to be consolidated by its primary beneficiary.

A Reserve Bank consolidates a VIE if it is the primary beneficiary because it will absorb a majority of the entity's expected losses, receive a majority of the entity's expected residual returns, or both. To determine whether it is the primary beneficiary of a VIE, the Reserve Bank evaluates the VIEs' design, capital structure, and the relationships among the variable interest holders. The Reserve Bank reconsiders whether it is the primary beneficiary of a VIE when certain events occur as required by FIN 46R. Intercompany balances and transactions are eliminated in consolidation.

(b) Gold and Special Drawing Rights Certificates

The Secretary of the U.S. Treasury is authorized to issue gold and special drawing rights ("SDR") certificates to the Reserve Banks.

Payment for the gold certificates by the Reserve Banks is made by crediting equivalent amounts in dollars into the account established for the U.S. Treasury. The gold certificates held by the Reserve Banks are required to be backed by the gold of the U.S. Treasury. The U.S. Treasury may reacquire the gold certificates at any time and the Reserve Banks must deliver them to the U.S. Treasury. At such time, the U.S. 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 a fine troy ounce. The Board of Governors allocates the gold certificates among the Reserve Banks once a year based on the average Federal Reserve notes outstanding in each Reserve Bank.

SDR certificates are issued by the International Monetary Fund (the "Fund") to its members in proportion to each member's quota in the Fund at the time of issuance. SDR certificates 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 U.S. Treasury is authorized to issue SDR certificates somewhat like gold certificates to the Reserve Banks. When SDR certificates are issued to the Reserve Banks, equivalent amounts in dollars are credited to the account established for the U.S. Treasury, and the Reserve Banks' SDR certificate accounts are increased. The Reserve Banks are required to purchase SDR certificates, at the direction of the U.S. Treasury, for the purpose of financing SDR acquisitions or for financing exchange stabilization operations. At the time SDR transactions occur, the Board of Governors allocates SDR certificate transactions among the Reserve Banks based upon each Reserve Bank's Federal Reserve notes outstanding at the end of the preceding year. There were no SDR transactions in 2008 or 2007.

(c) Loans to Depository Institutions and Other Loans

Loans are reported at their outstanding principal balances net of unamortized commitment fees. Interest income is recognized on an accrual basis. Loan commitment fees are generally deferred and amortized on a straight-line basis over the commitment period, which is not materially different from the interest method.

Outstanding loans are evaluated to determine whether an allowance for loan losses is required. The Reserve Banks have developed procedures for assessing the adequacy of the allowance for loan losses that reflect the assessment of credit risk considering all available information. This assessment includes monitoring information obtained from banking supervisors, borrowers, and other sources to assess the credit condition of the borrowers.

Loans are considered to be impaired when it is probable that the Reserve Banks will not receive principal and interest due in accordance with the contractual terms of the loan agreement. The amount of the impairment is the difference between the recorded amount of the loan and the amount expected to be collected after consideration of the fair value of the collateral. Recognition of interest income is discontinued for any loans that are considered to be impaired. Cash payments made by borrowers on impaired loans are applied to principal until the balance is reduced to zero; subsequent payments are recorded as recoveries of amounts previously charged off and then to interest income.

(d) Securities Purchased Under Agreements to Resell, Securities Sold Under Agreements to Repurchase, and Securities Lending

The FRBNY may engage in tri-party purchases of securities under agreements to resell ("tri-party agreements"). Tri-party agreements are conducted with two commercial custodial banks that manage the clearing and settlement of collateral. Collateral is held in excess of the contract amount. Acceptable collateral under tri-party agreements primarily includes U.S. government securities; pass-through mortgage securities of Fannie Mae, Freddie Mac, and Ginnie Mae; STRIP securities of the U.S. government; and "stripped" securities of other government agencies. The tri-party agreements are accounted for as financing transactions and the associated interest income is accrued over the life of the agreement.

Securities sold under agreements to repurchase 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 in the Combined Statements of Condition, and the related accrued interest payable is reported as a component of "Other liabilities."

U.S. government securities held in the SOMA are lent to primary dealers to facilitate the effective functioning of the domestic securities market. Overnight securities-lending transactions are fully collateralized by other U.S. government securities. TSLF transactions are fully collateralized with investment-grade debt securities, collateral eligible for tri-party repurchase agreements arranged by the Open Market Trading Desk, or both. The collateral taken in both overnight and TSLF transactions is in excess of the fair value of the securities loaned. The FRBNY charges the primary dealer a fee for borrowing securities, and these fees are reported as a component of "Non-interest income (loss): Other income" 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 are allocated to each of the Reserve Banks on a percentage basis derived from an annual settlement of the interdistrict settlement account.

(e) U.S. Government, Federal Agency, and Government-Sponsored Enterprises Securities; Investments Denominated in Foreign Currencies and Warehousing Agreements

Interest income on U.S. government, federal agency, and GSE securities and investments denominated in foreign currencies comprising the SOMA is accrued on a straight-line basis. Gains and losses resulting from sales of securities are determined by specific issue based on average cost. Foreign-currency-denominated assets are revalued daily at current foreign currency market exchange rates in order to report these assets in U.S. dollars. Realized and unrealized gains and losses on investments denominated in foreign currencies are reported as "Foreign currency gains, net" in the Combined Statements of Income and Comprehensive Income.

Activity related to U.S. government, federal agency, and GSE securities, 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 April of each year. The settlement also equalizes Reserve Bank gold certificate holdings to Federal Reserve notes outstanding in each District. Activity related to investments denominated in foreign currencies, 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 aggregate capital and surplus at the preceding December 31.

Warehousing is an arrangement under which the FOMC agrees to exchange, at the request of the U.S. Treasury, U.S. dollars for foreign currencies held by the U.S. Treasury or ESF over a limited period of time. The purpose of the warehousing facility is to supplement the U.S. dollar resources of the U.S. Treasury and ESF for financing purchases of foreign currencies and related international operations.

Warehousing agreements are designated as held for trading purposes and are valued daily at current market exchange rates. Activity related to these agreements is allocated to each Reserve Bank based on the ratio of each Reserve Bank's capital and surplus to aggregate capital and surplus at the preceding December 31.

(f) Central Bank Liquidity Swaps

At the initiation of each central bank liquidity swap transaction, the foreign central bank transfers a specified amount of its currency to the FRBNY in exchange for U.S. dollars at the prevailing market exchange rate. Concurrent with this transaction, the FRBNY and the foreign central bank agree to a second transaction that obligates the foreign central bank to return the U.S. dollars and the FRBNY to return the foreign currency on a specified future date at the same exchange rate. The foreign currency amounts that the FRBNY acquires are reported as "Central bank liquidity swaps" on the Combined Statements of Condition. Because the swap transaction will be unwound at the same exchange rate 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 pays interest to the FRBNY based on the foreign currency amounts held by the FRBNY. The FRBNY recognizes interest income during the term of the swap agreement and reports the interest income as a component of "Interest income: Central bank liquidity swaps" in the Combined Statements of Income and Comprehensive Income.

Activity related to these swap transactions, including the related interest income, 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. Similar to other investments denominated in foreign currencies, the foreign currency holdings associated with these central bank liquidity swaps are revalued at current market exchange rates. Because the swap arrangement will be unwound at the same exchange rate that was used in the initial transaction, the obligation to return the foreign currency is also revalued at current foreign currency market exchange rates and is recorded in a currency exchange valuation account by the FRBNY. This reevaluation method eliminates the effects of the changes in market exchange rates. As of December 31, 2008, the FRBNY began allocating this currency exchange valuation account to the other Reserve Banks. The balance in the currency exchange valuation account at December 31, 2007 was $353 million and was reclassified from "Other liabilities" to "Central bank liquidity swaps" in the Combined Statements of Condition.

(g) Investments Held by Consolidated Variable Interest Entities

Investments held by the consolidated VIEs include commercial paper, agency and non-agency collateralized mortgage obligations ("CMOs"), commercial and residential real mortgage loans, MBS, CDOs, other investment securities, and derivatives and associated hedging activities. These investments are accounted for and classified as follows:

- Commercial paper held by the CPFF is designated as held-to-maturity under Statement of Financial Accounting Standards No. 115, "Accounting for Certain Instruments in Debt and Equity Securities" ("SFAS 115") according to the terms of the program. The CPFF has the positive intent and the ability to hold the securities to maturity, and therefore the commercial paper is recorded at amortized cost. The amortized cost is adjusted for amortization of premiums and accretion of discounts on a straight-line basis that the CPFF believes is not materially different from the interest method. Interest income on the commercial paper is reported as "Interest income: Investments held by consolidated variable interest entities" in the Combined Statements of Income and Comprehensive Income. All other investments held by the CPFF are classified as trading securities under SFAS 115 and are recorded at fair value. Gains and losses on these trading securities are recorded as "Non-interest income (loss): Investments held by consolidated variable interest entities (losses), net" in the Combined Statements of Income and Comprehensive Income.

  The FRBNY conducts quarterly reviews to identify and evaluate CPFF investments held at amortized cost that have indications of possible impairment. An investment is impaired if its fair value falls below its recorded value and the decline is considered other than temporary. Impairment of investments is evaluated using numerous factors, the relative significance of which varies on a case by case basis. Factors considered include collectability, collateral, the length of time and extent to which the fair value has been less than cost, the financial condition and near-term prospects of the issuer of a security, and the CPFF's intent and ability to retain the security in order to allow for an anticipated recovery in fair value. If, after analyzing each of the above factors, the FRBNY determines that the impairment is other than temporary, the cost basis of the individual security is written down to fair value, and the amount of the write-down is reported in "Non-interest income (loss): Investments held by consolidated variable interest entities (losses), net" in the Combined Statements of Income and Comprehensive Income.
- ML follows the guidance in SFAS 115 when accounting for investments in debt securities. ML classifies its debt securities as available for sale and has elected the fair value option for all eligible assets in accordance with Statement of Financial Accounting Standards No. 159, "The Fair Value Option for Financial Assets and Liabilities" (SFAS 159) and Statement of Financial Accounting Standards No. 157, "Fair Value Measurements" (SFAS 157). Other financial instruments, including derivatives contracts in ML, are recorded at fair value in accordance with Statement of Financial Accounting Standards No. 133 "Accounting for Derivative Instruments and Hedging Activities," as amended (SFAS 133). ML II and ML III qualify as non-registered investment companies under the provisions of the American Institute of Certified Public Accountants' *Audit and Accounting Guide for Investment Companies* and, therefore, all investments are recorded at fair value in accordance with SFAS 157.
- Interest income, accretion of discounts, amortization of premiums on investments, and paydown gains and losses on RMBS, ABS CDOs, and CMOSs held by consolidated variable interest entities are reported in "Interest income: Investments held by consolidated variable interest entities" in the Combined Statements of Income and Comprehensive Income. Realized and unrealized gains (losses) on investments in consolidated variable interest entities that are recorded at fair value are reported as "Non-interest income (loss): Investments held by consolidated variable interest entities (losses), net" in the Combined Statements of Income and Comprehensive Income.

(h) Bank Premises, Equipment, and Software

Bank premises and equipment are stated at cost less accumulated depreciation. Depreciation is calculated on a straight-line basis over the estimated useful lives of the assets, which range from two to fifty years. Major alterations, renovations, and improvements are capitalized at cost as additions to the asset accounts and are depreciated over the remaining useful life of the asset or, if appropriate, over the unique useful life of the alteration, renovation, or improvement. Maintenance, repairs, and minor replacements are charged to operating expense in the year incurred.

Costs incurred for software during the application development stage, whether developed internally or acquired for internal use, are capitalized based on the 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 range from two to five years. Maintenance costs related to software are charged to expense in the year incurred.

Capitalized assets, including software, buildings, leasehold improvements, furniture, and equipment, are evaluated for impairment, 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.

(i) Federal Reserve Notes

Federal Reserve notes are the circulating currency of the United States. These notes are issued through the various Federal Reserve agents (the chairman of the board of directors of each Reserve Bank and their designees) to the Reserve Banks upon deposit with such agents of specified classes of collateral security, typically U.S. government securities. These notes are identified as issued to a specific Reserve Bank. The Federal Reserve Act provides that the collateral security tendered by the Reserve Bank to the Federal Reserve agent must be at least equal to the sum of the notes applied for by such Reserve Bank.

Assets eligible to be pledged as collateral security include all of the Reserve Banks' assets. 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 pledged for securities sold under agreements to repurchase is deducted.

The Board of Governors may, at any time, call upon a Reserve Bank for additional security to adequately collateralize the 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. At December 31, 2008 and 2007, all Federal Reserve notes issued to the Reserve Banks were fully collateralized.

"Federal Reserve notes outstanding, net" in the Combined Statements of Condition represents the Federal Reserve notes outstanding, reduced by the Reserve Banks' currency holdings of $169,681 million and $218,571 million at December 31, 2008 and 2007, respectively.

At December 31, 2008, all Federal Reserve notes were fully collateralized. All gold certificates, all special drawing right certificates, $496,733 million of domestic securities and securities purchased under agreements to resell, and $343,198 million of loans were pledged as collateral. At December 31, 2008, no investments denominated in foreign currencies were pledged as collateral.

(j) Beneficial Interest In Consolidated Variable Interest Entities

ML, ML II, and ML III have issued senior and subordinated debt, inclusive of a fixed deferred purchase price in ML II and an equity contribution in ML III. Upon issuance of the senior and subordinated debt, ML, ML II, and ML III each elected to measure these obligations at fair value in accordance with SFAS 159. Principal, interest and changes in fair value on the senior debt, which were extended by the FRBNY, are eliminated in consolidation. The subordinated debt is recorded at fair value as "Beneficial interest in consolidated variable interest entities" in the Combined Statements of Condition. Interest expense and changes in fair value of the subordinated debt are recorded in "Interest expense: Other interest expense related to consolidated variable interest entities" and "Non-interest income (loss): Investments held by consolidated variable interest entities (losses), net," respectively, in the Combined Statements of Income and Comprehensive Income.

(k) U.S. Treasury Supplemental Financing Account and Other Deposits

The U.S. Treasury initiated a temporary supplementary program that consists of a series of Treasury bill auctions in addition to the Treasury's standard borrowing program. The proceeds of this debt are held in an account at the Federal Reserve that is separate from the Treasury's general account. The effect of placing funds in this account is to drain reserves from the banking system and partially offset the reserve impact of the System's lending and liquidity initiatives. The new account is defined as the "U.S. Treasury, supplementary financing account" in the Combined Statements of Condition.

Other deposits represent amounts held in accounts at the Reserve Banks by GSEs and foreign central banks and governments.

(l) Items in Process of Collection and Deferred Credit Items

"Items in process of collection" in the Combined Statements of Condition 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 are the counterpart liability to items in process of collection, and the amounts in this account arise from deferring credit for deposited items until the amounts are collected. The balances in both accounts can vary significantly.

(m) 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 6 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 6 percent on the paid-in capital stock. This cumulative dividend is paid semiannually. To reflect the Federal Reserve Act requirement that annual dividends be deducted from net earnings, dividends are presented as a distribution of comprehensive income in the Combined Statements of Income and Comprehensive Income.

(n) Surplus

The Board of Governors requires the Reserve Banks to maintain a surplus equal to the amount of capital paid-in as of December 31 of each year. This amount is intended to provide additional capital and reduce the possibility that the Reserve Banks will be required to call on member banks for additional capital.

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. The balance of accumulated other comprehensive income is comprised of expenses, gains, and losses related to the System retirement plan and other postretirement benefit plans that, under accounting standards, are included in other comprehensive income, but excluded from net income. Additional information regarding the classifications of accumulated other comprehensive income is provided in Notes 12, 13, and 14.

(o) Interest on Federal Reserve Notes

The Board of Governors requires the Reserve Banks to transfer excess earnings to the U.S. Treasury as interest on Federal Reserve notes, after providing for the costs of operations, payment of dividends, and reservation of an amount necessary to equate surplus with capital paid-in. This amount is reported as "Payments to U.S. Treasury as interest on Federal Reserve notes" in the Combined Statements of Income and Comprehensive Income and is reported as a liability, or as an asset if overpaid during the year, in the Combined Statements of Condition. Weekly payments to the U.S. Treasury may vary significantly.

In the event of losses or an increase in capital paid-in at a Reserve Bank, payments to the U.S. Treasury are suspended and earnings are retained until the surplus is equal to the capital paid-in.

In the event of a decrease in capital paid-in, the excess surplus, after equating capital paid-in and surplus at December 31, is distributed to the U.S. Treasury in the following year.

(p) Interest on Depository Institutions Deposits

Beginning October 9, 2008, the Reserve Banks pay interest to depository institutions on qualifying balances held at the Banks. Authorization for payment of interest on these balances was granted by Title II of the Financial Services Regulatory Relief Act of 2006, which had an effective date of 2011. Section 128 of the Emergency Economic Stabilization Act of 2008, enacted on October 3, 2008, made that authority immediately effective. The interest rates paid on required reserve balances and excess balances are based on an FOMC established target range for the effective federal funds rate.

(q) Income and Costs Related to U.S. Treasury Services

The Reserve Banks are required by the Federal Reserve Act to serve as fiscal agent and depositories of the United States government. By statute, the Department of the Treasury has appropriations to pay for these services. During the years ended December 31, 2008 and 2007, the Reserve Banks were reimbursed for substantially all services provided to the Department of the Treasury as its fiscal agent.

(r) Assessments by the Board of Governors

The Board of Governors assesses the Reserve Banks to fund its operations based on each Reserve Bank's capital and surplus balances as of December 31 of the prior year. The Board of Governors also assesses each Reserve Bank for the expenses incurred for the U.S. Treasury to prepare and retire 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.

(s) Taxes

The Reserve Banks are exempt from federal, state, and local taxes, except for taxes on real property and, in some states, sales taxes on construction-related materials. Real property taxes were $38 million and $33 million for the years ended December 31, 2008 and 2007, respectively, and are reported as a component of "Occupancy expense" in the Combined Statements of Income and Comprehensive Income.

(t) 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, or a fundamental reorganization that affects the nature of operations. Restructuring charges may include costs associated with employee separations, contract terminations, and asset impairments. Expenses are recognized in the period in which the Reserve Banks commit to a formalized restructuring plan or execute the specific actions contemplated in the plan and all criteria for financial statement recognition have been met.

Note 15 describes the Reserve Banks' restructuring initiatives and provides information about the costs and liabilities associated with employee separations and contract terminations. The costs associated with the impairment of certain of the Reserve Banks' assets are discussed in Note 10. 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 13.

(u) Recently Issued Accounting Standards

In December 2008, FASB issued FASB Staff Position (FSP) FAS 140-4 and FIN 46(R)-8, "Disclosures by Public Entities (Enterprises) about Transfers of Financial Assets and Interests in Variable Interest Entities." FSP FAS 140-4 and FIN 46(R)-8 amends FASB Statement No. 140 to require public entities to provide additional disclosures about transfers of financial assets. It also amends FASB Interpretation No. 46(R) to require public entities, including sponsors that have a variable interest in a VIE, to provide additional disclosures about their involvement with VIEs. FSP FAS 140-4 and FIN 46(R)-8 was effective for the combined financial statements for the year ended December 31, 2008. The adoption of the additional disclosure requirements of FSP FAS 140-4 and FIN 46(R)-8 did not materially impact the Reserve Banks' combined financial statements.

In December 2008, FASB issued FSP 132(R)-1, "Employers' Disclosures about Postretirement Benefit

Plan Assets." FSP 132(R)-1 provides rules for the disclosure of information about assets held in a defined benefit plan in the financial statements of the employer sponsoring that plan. This FSP applies SFAS 157 to defined benefit plans and provides rules for additional disclosures about asset categories and concentrations of risk. It is effective for financial statements with fiscal years ending after December 15, 2009. The provisions of FSP 132(R)-1 will be applied prospectively effective January 1, 2009, and are not expected to materially affect the Reserve Banks' combined financial statements.

In October 2008, FASB issued FSP 157-3, "Determining the Fair Value of a Financial Asset When the Market for That Asset Is Not Active" with an effective date of October 10, 2008. FSP 157-3 clarifies how SFAS 157 should be applied when valuing securities in markets that are not active. For additional information on the effects of the adoption of this accounting pronouncement, see Note 9.

In September 2008, FASB issued FSP 133-1 and FIN 45-4, "Disclosures about Credit Derivatives and Certain Guarantees: An Amendment of FASB Statement No. 133 and FASB Interpretation No. 45; and Clarification of the Effective Date of FASB Statement No. 161." This FSP requires expanded disclosures about credit derivatives and guarantees. The expanded disclosure requirements of the FSP, which are effective for the Reserve Banks' combined financial statements for the year ending December 31, 2008, are incorporated in the accompanying notes.

In March 2008, FASB issued SFAS No. 161, "Disclosures about Derivative Instruments and Hedging Activities" ("SFAS 161"), which requires expanded qualitative, quantitative, and credit-risk disclosures about derivatives and hedging activities and their effects on a company's financial position, financial performance, and cash flows. SFAS 161 is effective for the Reserve Banks' combined financial statements for the year beginning on January 1, 2009, and is not expected to materially affect the Reserve Banks' combined financial statements.

In February 2008, FASB issued FSP FAS 140-3, "Accounting for Transfers of Financial Assets and Repurchase Financing Transactions." FSP FAS 140-3 requires that an initial transfer of a financial asset and a repurchase financing that was entered into contemporaneously with, or in contemplation of, the initial transfer be evaluated together as a linked transaction under SFAS 140, unless certain criteria are met. FSP FAS 140-3 is effective for the Reserve Banks' combined financial statements for the year beginning on January 1, 2009, and earlier adoption is not permitted. The provisions of this standard will be applied prospectively and are not expected to materially affect the Reserve Banks' combined financial statements.

In February 2007, FASB issued SFAS No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities, including an amendment of FASB Statement No. 115" ("SFAS 159"), which provides companies with an irrevocable option to elect fair value as the measurement for selected financial assets, financial liabilities, unrecognized firm commitments, and written loan commitments that are not subject to fair value under other accounting standards. There was a one-time election available to apply this standard to existing financial instruments as of January 1, 2008; otherwise, the fair value option will be available for financial instruments on their initial transaction date. The Reserve Banks adopted SFAS 159 on January 1, 2008, and the effect of the Reserve Banks' election for certain assets and liabilities is reflected in Note 9.

In September 2006, FASB issued SFAS No. 157, "Fair Value Measurements" ("SFAS 157"), which establishes a single authoritative definition of fair value and a framework for measuring fair value, and expands the required disclosures for assets and liabilities measured at fair value. SFAS 157 was effective for fiscal years beginning after November 15, 2007, with early adoption permitted. The Reserve Banks adopted SFAS 157 on January 1, 2008, and the effect of the Reserve Banks' adoption of this standard is reflected in Note 9.

(5) Loans

The loan amounts outstanding to depository institutions and others at December 31 were as follows (in millions):

	2008	2007
Primary, secondary, and seasonal credit	$ 93,790	$ 8,636
TAF	450,220	40,000
Total loans to depository institutions	544,010	48,636
AMLF	23,765	0
PDCF	37,403	0
Other (AIG)	38,914	0
Total other loans	$100,082	$ 0

Loans to Depository Institutions

The Reserve Banks offer primary, secondary, and seasonal credit to eligible borrowers. Each program has its own interest rate. Interest is accrued using the applicable interest rate established at least every fourteen days by the boards of directors of each Reserve Bank, subject to review and determination by the Board of Governors. Primary and secondary credits are extended on a short-term basis, typically overnight, whereas seasonal credit may be extended for a period up to nine months.

Primary, secondary, and seasonal credit lending is collateralized to the satisfaction of the Reserve Banks to reduce credit risk. Assets eligible to collateralize these loans include consumer, business, and real estate loans; U.S. Treasury securities; federal agency securities; GSE obligations; foreign sovereign debt obligations; municipal or corporate obligations; state and local government obligations; asset-backed securities; corporate bonds; commercial paper; and bank-issued assets, such as certificates of deposit, bank notes, and deposit notes. Collateral is assigned a lending value deemed appropriate by each Reserve Bank, which is typically fair value or face value reduced by a margin.

Depository institutions that are eligible to borrow under the Reserve Banks' primary credit program are also eligible to participate in the temporary TAF program. Under the TAF program, the Reserve Banks conduct auctions for a fixed amount of funds, with the interest rate determined by the auction process, subject to a minimum bid rate. TAF loans are extended on a short-term basis, with terms of either 28 or 84 days. All advances under the TAF must be fully collateralized. Assets eligible to collateralize TAF loans include the complete list noted above for loans to depository institutions. Similar to the process used for primary, secondary, and seasonal credit, a lending value is assigned to each asset accepted as collateral for TAF loans.

Loans to depository institutions are monitored on a daily basis to ensure that borrowers continue to meet eligibility requirements for these programs. The financial condition of borrowers is monitored by the Reserve Banks and, if a borrower no longer qualifies for these programs, the Reserve Banks will generally request full repayment of the outstanding loan or may convert a primary credit 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.

Other Loans

The FRBB administers the AMLF and is authorized to extend loans to eligible borrowers on behalf of the other Reserve Banks. All loans extended under the AMLF are recorded as assets by the FRBB and, if the borrowing institution settles to a depository account in another Reserve Bank District, the funds are credited to the institution's depository account by the appropriate Reserve Bank and settled between the Reserve Banks through the interdistrict settlement account. The loans extended under the AMLF are nonrecourse, so that the FRBB has recourse only to the collateral pledged by the borrowers. The credit risk related to the AMLF is assumed by the FRBB, and any losses are not recorded by the other Reserve Banks. No losses were incurred on loans extended in 2008. Eligible collateral under the program is limited to U.S. dollar-denominated ABCP that is rated not lower than A-1/P-1/F1 and must be purchased from an eligible money market mutual fund. The terms of loans under the AMLF are limited to 120 days if the borrower is a bank or 270 days for non-bank borrowers. The interest rate for advances made under the AMLF is equal to the FRBB's primary credit rate offered to depository institutions at the time the advance is made. The loans extended under the AMLF are reported as "Other loans" in the Combined Statements of Condition.

The PDCF provides secured overnight financing to primary dealers in exchange for a specified range of collateral, including U.S. Treasury securities, federal agency securities, agency MBS, investment-grade corporate securities, municipal securities, mortgage-backed securities, and other asset-backed securities for which a price is available. Interest on PDCF secured financing is accrued using the primary credit rate offered to depository institutions. The secured financing is reported as "Other loans" in the Combined Statements of Condition. The frequency-based fees are reported as "Other income" in the Combined Statements of Income and Comprehensive Income.

The $38.9 billion extended to AIG under the revolving line of credit is net of unamortized deferred commitment fees and includes unpaid commitment fees and accrued interest. Unamortized deferred commitment fees were $1.5 billion, and unpaid commitment fees and accrued interest were $1.7 billion and $1.9 billion, respectively, at December 31, 2008. The AIG loan is reported as "Other loans" in the Combined Statements of Condition.

The remaining maturity distribution of loans outstanding at December 31, 2008, was as follows (in millions):

	Primary, Secondary, and Seasonal Credit	TAF
Within 15 days	$85,846	$235,424
16 days to 90 days	7,944	214,796
Over 1 year to 5 years	0	0
Total loans	$93,790	$450,220

	Other loans
Within 15 days	$ 47,086
16 days to 90 days	14,083
Over 1 year to 5 years	38,913
Total loans	$100,082

Allowances for Loan Losses

At December 31, 2008 and 2007, no loans were considered to be impaired, and the Reserve Banks determined that no allowance for loan losses was required.

(6) U.S. Government, Federal Agency, and Government-Sponsored Enterprise Securities; Securities Purchased Under Agreements To Resell; Securities Sold Under Agreements To Repurchase; and Securities Lending

The FRBNY, on behalf of the Reserve Banks, holds securities bought outright in the SOMA.

The securities held in the SOMA at December 31 were as follows (in millions):

	2008	2007
U.S. government securities:		
Bills	$ 18,423	$227,840
Notes	334,779	401,776
Bonds	122,719	110,995
Federal agency and GSE securities	19,708	0
Total par value	495,629	740,611
Unamortized premiums	8,049	7,988
Unaccreted discounts	(1,489)	(2,970)
Total	$502,189	$745,629

At December 31, 2008 and 2007, the fair value of the U.S. government, federal agency, and GSE securities held in the SOMA, excluding accrued interest, was $566,427 million and $777,141 million, respectively, as determined by reference to quoted prices for identical securities.

Although the fair value of 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 central bank, to meet their financial obligations and responsibilities and do not represent a risk to the Reserve Banks, their shareholders, or the public. The fair value is presented solely for informational purposes.

Financial information related to securities purchased under agreements to resell and securities sold under agreements to repurchase for the years ended December 31, 2008 and 2007, were as follows (in millions):

	Securities purchased under agreements to resell	
	2008	2007
Contract amount outstanding, end of year	$ 80,000	$46,500
Weighted average amount outstanding, during the year	97,037	35,073
Maximum month-end balance outstanding, during the year	119,000	51,500
Securities pledged, end of year	0	0

	Securities sold under agreements to repurchase	
	2008	2007
Contract amount outstanding, end of year	$88,352	$43,985
Weighted average amount outstanding, during the year	65,461	34,846
Maximum month-end balance outstanding, during the year	98,559	43,985
Securities pledged, end of year	78,896	44,048

The contract amounts for securities purchased under agreements to resell and securities sold under agreements to repurchase approximate fair value.

The remaining maturity distribution of U.S. government, federal agency, and GSE securities bought outright, securities purchased under agreements to resell, and securities sold under agreements to repurchase that were held in the SOMA at December 31, 2008, was as follows (in millions):

	U.S. government securities (Par value)	Federal agency and GSE securities (Par value)
Within 15 days	$ 19,138	$ 450
16 days to 90 days	20,965	3,281
91 days to 1 year	63,330	976
Over 1 year to 5 years	173,328	11,361
Over 5 years to 10 years	97,325	3,640
Over 10 years	101,835	0
Total	$475,921	$19,708

	Total: U.S. government, Federal agency, and GSE securities (Par value)
Within 15 days	$ 19,588
16 days to 90 days	24,246
91 days to 1 year	64,306
Over 1 year to 5 years	184,689
Over 5 years to 10 years	100,965
Over 10 years	101,835
Total	$495,629

	Securities purchased under agreements to resell (Contract amount)	Securities sold under agreements to repurchase (Contract amount)
Within 15 days	$40,000	$88,352
16 days to 90 days	40,000	0
91 days to 1 year	0	0
Over 1 year to 5 years	0	0
Over 5 years to 10 years	0	0
Over 10 years	0	0
Total	$80,000	$88,352

At December 31, 2008 and 2007, U.S. government securities with par values of $180,765 million and $16,649 million, respectively, were loaned from the SOMA.

(7) Investments Denominated in Foreign Currencies

The FRBNY, on behalf of the Reserve Banks, holds foreign currency deposits with foreign central banks and with the Bank for International Settlements and invests in foreign government debt instruments. These investments are guaranteed as to principal and interest by the issuing foreign governments.

Total investments denominated in foreign currencies, including accrued interest, valued at amortized cost and foreign currency market exchange rates at December 31, were as follows (in millions):

	2008	2007
European Union euro:		
Foreign currency deposits	$ 5,563	$ 7,181
Securities purchased under agreements to resell	4,076	2,548
Government debt instruments	4,609	4,666
Japanese yen:		
Foreign currency deposits	3,483	2,811
Government debt instruments	7,073	5,708
Total	$24,804	$22,914

At December 31, 2008 and 2007, the fair value of total System investments denominated in foreign currencies, including accrued interest, was $25,021 million and $22,892 million, respectively. The fair value of government debt instruments was determined by reference to quoted prices for identical securities. The cost basis of foreign currency deposits and securities purchased under agreements to resell, adjusted for accrued interest, approximates fair value. Similar to the U.S. government, federal agency, and GSE securities discussed in Note 6, unrealized gains or losses have no effect on the ability of a Reserve Bank, as central bank, to meet its financial obligations and responsibilities.

The remaining maturity distribution of investments denominated in foreign currencies at December 31, 2008, was as follows (in millions):

	European Euro	Japanese Yen
Within 15 days	$ 7,594	$ 3,484
16 days to 90 days	1,169	630
91 days to 1 year	1,749	1,986
Over 1 year to 5 years	3,736	4,456
Total	$14,248	$10,556

	Total
Within 15 days	$11,078
16 days to 90 days	1,799
91 days to 1 year	3,735
Over 1 year to 5 years	8,192
Total	$24,804

At December 31, 2008 and 2007, the authorized warehousing facility was $5 billion, with no balance outstanding.

In connection with its foreign currency activities, the FRBNY may enter into transactions that contain varying degrees of off-balance-sheet market risk that result from their future settlement and counter-party credit risk. The FRBNY controls credit risk by obtaining credit approvals, establishing transaction limits, in some cases receiving collateral, and performing daily monitoring procedures.

(8) Central Bank Liquidity Swaps

Central bank liquidity swap arrangements are contractual agreements between two parties, the FRBNY and an authorized foreign central bank, whereby the parties agree to exchange their currencies up to a prearranged maximum amount and for an agreed-upon period of time. At the end of that period of time, the currencies are returned at the original contractual exchange rate, and the foreign central bank pays interest to the Federal Reserve at an agreed-upon rate. These arrangements give the authorized foreign central bank temporary access to U.S. dollars. Drawings under the swap arrangements are initiated by the foreign central bank and must be agreed to by the Federal Reserve.

The remaining maturity distribution of central bank liquidity swaps at December 31 was as follows (in millions):

	2008		
	Within 15 days	16 days to 90 days	Total
Australian dollar	$ 10,000	$ 12,830	$ 22,830
Danish krone	0	15,000	15,000
Euro	150,969	140,383	291,352
Japanese yen	47,893	74,823	122,716
Korean won	0	10,350	10,350
Norwegian krone	2,200	6,025	8,225
Swedish krona	10,000	15,000	25,000
Swiss franc	19,221	5,954	25,175
U.K. pound	120	32,960	33,080
Total	$240,403	$313,325	$553,728

	2007
	Total
Australian dollar	$ 0
Danish krone	0
Euro	20,000
Japanese yen	0
Korean won	0
Norwegian krone	0
Swedish krona	0
Swiss franc	4,000
U.K. pound	0
Total	$24,000

(9) Investments Held By Consolidated Variable Interest Entities

(a) Summary Information for Consolidated Variable Interest Entities

The total assets of consolidated VIEs, including cash, cash equivalents, and accrued interest, at December 31, 2008, were as follows (in millions):

	Total Assets
CPFF	$334,910
ML	30,635
ML II	19,195
ML III	27,256
Total	$411,996

The FRBNY's maximum exposure to loss on these assets was $405.4 billion and incorporates potential losses associated with assets recorded on the Combined Statements of Condition, net of the fair value of subordinated interests.

The net income (loss) attributable to consolidated VIEs for the period ended December 31, 2008, was as follows (in millions):

	ML	ML II	ML III
Interest income:			
Portfolio interest income	$ 1,561	$ 302	$ 517
Less: Interest expense	332	103	28
Net interest income	1,229	199	489
Non-interest income:			
Portfolio holdings gain (loss)	(5,497)	(1,499)	(2,633)
Unrealized gains on beneficial interest in consolidated VIEs	1,188	1,003	2,198
Non-interest income	(4,309)	(496)	(435)
Total interest income and non-interest income	(3,080)	(297)	54
Less: Professional fees	54	5	9
Net (loss) income attributable to consolidated VIEs	$(3,134)	$ (302)	$ 45

	CPFF	Total
Interest income:		
Portfolio interest income	$1,707	$ 4,087
Less: Interest expense	0	463
Net interest income	1,707	3,624
Non-interest income:		
Portfolio holdings gain (loss)	3	(9,626)

	CPFF	Total
Unrealized gains on beneficial interest in consolidated VIEs	0	4,389
Non-interest income	3	(5,237)
Total interest income and non-interest income ..	1,710	(1,613)
Less: Professional fees	12	80
Net (loss) income attributable to consolidated VIEs	$1,698	$(1,693)

The classification of significant assets and liabilities of the consolidated VIEs at December 31, 2008, was as follows (in millions):

	Assets Recorded At		
	Amortized Cost	Fair Value	Total
Assets:			
Commercial paper	$333,631	$ 0	$333,631
CDOs	0	26,957	26,957
RMBS	0	18,839	18,839
Agency CMOs	0	13,565	13,565
Non-agency CMOs	0	1,836	1,836
Commercial and residential mortgage loans ...	0	6,490	6,490
SWAP contracts	0	2,454	2,454
TBA commitments	0	2,089	2,089
Other investments	0	2,340	2,340
Subtotal	$333,631	$74,570	$408,201
Cash, cash equivalents, and accrued interest receivable			$ 3,795
Total investments held by consolidated variable interest entities:			$411,996
Liabilities:			
Beneficial interest in consolidated variable interest entities		$ (2,824)	
Other liabilities	$ (5,813)		

The amount reported as "Consolidated variable interest entities: Other liabilities" in the Combined Statements of Condition comprises $2.6 billion related to cash collateral received on swap contracts, $2.4 billion payable for investments purchased by VIEs, accrued interest, unearned registration fees, and accrued professional fees.

Total realized gains (losses) and unrealized gains (losses) associated with the investments held by consolidated VIEs at December 31, 2008, were as follows (in millions):

	Total Realized Gains (Losses)	Fair Value Changes Unrealized Gains (Losses)
CDOs	$ 0	$(3,281)
RMBS	0	(1,499)
Agency CMOs	(109)	60
Non-agency CMOs	(4)	(1,502)
Commercial and residential mortgage loans	39	(2,693)
Swap contracts	(70)	155
TBA commitments	(57)	(10)
Other investments	237	(892)
Total	$ 36	$(9,662)

	Total Realized/ Unrealized Gains (Losses)
CDOs	$(3,281)
RMBS	(1,499)
Agency CMOs	(49)
Non-agency CMOs	(1,506)
Commercial and residential mortgage loans	(2,654)
Swap contracts	85
TBA commitments	(67)
Other investments	(655)
Total	$(9,626)

(b) Commercial Paper Funding Facility LLC

The interest rate for unsecured commercial paper held by the CPFF is the three-month OIS rate plus 100 basis points, along with an additional surcharge ("credit enhancement fee") of 100 basis points. The interest rate for asset-backed commercial paper is the three-month OIS rate plus 300 basis points.

The non-refundable facility fee ("registration fee") is equal to 10 basis points times the maximum amount of the participant's commercial paper that the CPFF may purchase, which equals the greatest amount of U.S. dollar-denominated commercial paper that the issuer had outstanding on the days between January 1 and August 31, 2008. The registration fee is recognized on a straight-line basis over the life of the program.

The credit enhancement fee is equal to 100 basis points per annum of the face value of the unsecured commercial paper purchased. Unsecured commercial paper issuers covered by the FDIC's Temporary Liquidity Guarantee Program are viewed as having a satisfactory guarantee, and the credit enhancement fee for those participants is waived. The credit enhancement fee is recognized on a straight-line basis over the term of the commercial paper, which is not materially different from the interest method.

The FRBNY conducts a periodic review of the CPFF's commercial paper to determine if impairment is other than temporary such that a loss should be recognized. At December 31, 2008, there were no commercial paper securities for which management considered impairment to be other than temporary.

The remaining maturity distribution of the commercial paper and trading securities held by the CPFF, excluding interest receivable, at December 31, 2008, was as follows (in millions):

	Commercial Paper	
	Asset Backed	Non-Asset Backed
0 – 15 Days	$ 0	$ 0
16 – 60 Days	95,306	201,660
61 – 92 Days	25,625	11,040
Total	$120,931	$212,700

	Trading Securities	Total
0 – 15 Days	$ 233	$ 233
16 – 60 Days	473	297,439
61 – 92 Days	565	37,230
Total	$1,271	$334,902

Top-tier commercial paper has received investment grade ratings from all rating agencies (A-1, P-1, F1). Split-rated commercial paper has received a top-tier rating from two rating agencies and a second-tier rating (A-2, P-2, F2) from a third rating agency. Second-tier commercial paper has received non-investment grade ratings from two or more rating agencies (A-2, P-2, F2). Commercial paper that is rated second tier resulted from rating changes after acquisition of the commercial paper. The credit ratings profile of commercial paper held by the CPFF, excluding cash, cash equivalents, and accrued interest, by assets and by issuer type and industry sector at December 31, 2008, was as follows (in millions):

	Top Tier	Split-Rated
Asset Backed		
Multi-seller	$ 58,879	$ 0
Hybrid	24,625	0
Single-seller	23,129	0
Other	14,298	0
	120,931	0
Non-Asset Backed		
Diversified financial	179,651	1,685
Insurance	17,647	1,805
Other	8,051	3,657
	205,349	7,147
Total	$326,280	$7,147

	Second Tier	Total
Asset Backed		
Multi-seller	$ 0	$ 58,879
Hybrid	0	24,625
Single-seller	0	23,129
Other	0	14,298
	0	120,931
Non-Asset Backed		
Diversified financial	0	181,336
Insurance	204	19,656
Other	0	11,708
	204	212,700
Total	$204	$333,631

The top ten issuers of commercial paper held by the CPFF accounted for 43.5% of the total commercial paper portfolio holdings at December 31, 2008. The largest issuer, a diversified financial company, represents 10.8% of the total commercial paper at December 31, 2008.

(c) Maiden Lane LLC

ML's investment portfolio consists primarily of agency and non-agency CMOs, commercial and residential mortgage loans, and derivatives and associated hedging activities. A synopsis of the significant holdings at December 31, 2008, and the associated credit risk for each holding follows.

i. Agency CMOs and Non-agency CMOs

CMOs represent fractional ownership interests in residential mortgage-backed securities issued by either U.S. government agencies or private entities. The rate of delinquencies and defaults on the underlying residential mortgage loans and the aggregate amount of the resulting losses will be affected by a number of factors, including general economic conditions, particularly those in the area where the related mortgaged property is located; the level of the borrower's equity in the mortgaged property; and the individual financial circumstances of the borrower. Changes in economic conditions, including delinquencies or defaults on assets underlying these securities, can affect the value, income, or liquidity of such positions.

At December 31, 2008, the ratings breakdown of the $16.8 billion of securities recorded at fair value in the ML portfolio, as a percentage of aggregate fair value of all securities in the portfolio, was as follows:

	Ratings [1]		
	AAA	AA+ to AA–	A+ to A–
Security Type: [2]			
Agency CMOs	0.0%	0.0%	0.0%
Non-Agency CMOs	6.7%	0.7%	0.7%
Other [3]	3.2%	1.3%	1.0%
Total	9.9%	2.0%	1.7%

	Ratings [1]	
	BBB+ to BBB–	BB+ and lower
Security Type: [2]		
Agency CMOs	0.0%	0.0%
Non-Agency CMOs	0.7%	2.2%
Other [3]	1.5%	1.1%
Total	2.2%	3.3%

	Ratings [1]	
	Government/ Agency	Total
Security Type: [2]		
Agency CMOs	80.9%	80.9%
Non-Agency CMOs	0.0%	11.0%
Other [3]	0.0%	8.1%
Total	80.9%	100.0%

[1]Lowest of all ratings is used for the purposes of this table.

[2]This table does not include ML swaps and other derivative contracts, commercial and residential mortgage loans, and TBA investments.

[3]Includes all asset sectors that individually represent less than 5 percent of aggregate portfolio fair value.

At December 31, 2008, non-agency CMOs held by ML were collateralized by properties at the locations identified below:

Geographic Location	Percentage [1]
California	39.1%
Florida	11.7%
Other [2]	49.2%
Total	100.0%

[1]Based on a percentage of the total unpaid principal balance of the underlying loans.

[2]No other individual state comprises more than 5 percent of the total.

ii. Commercial and Residential Mortgage Loans

Commercial and residential mortgage loans are subject to a high degree of credit risk because of exposure to loss from loan defaults. Default rates are subject to a wide variety of factors, including, but not limited to, property performance, property management, supply and demand factors, construction trends, consumer behavior, regional economic conditions, interest rates, and other factors beyond the control of the FRBNY.

The performance profile for the commercial and residential mortgage loans at December 31, 2008, was as follows (in millions):

	Remaining Principal Amount Outstanding	Fair Value
Performing loans:		
Commercial	$ 8,406	$5,529
Residential	1,288	817
Subtotal	9,694	6,346
Non-performing loans (past due greater than 60 days)		
Commercial	79	24
Residential	380	120
Subtotal	459	144
Total		
Commercial	8,485	5,553
Residential	1,668	937
Total loans	$10,153	$6,490

	Fair Value as Percentage of Remaining Principal
Performing loans:	
Commercial	65.8%
Residential	63.4%
Subtotal	65.5%
Non-performing loans (past due greater than 60 days)	
Commercial	30.3%
Residential	31.7%
Subtotal	31.4%
Total	
Commercial	65.4%
Residential	56.2%
Total loans	63.9%

The following table summarizes the state in which residential mortgage loans are collateralized and the property types of the commercial mortgage loans held in the ML at December 31, 2008:

	Concentration of Unpaid Principal Balances	
	Residential	Commercial [2]
By State:		
California	35.8%	
Florida	9.1%	
Other [1]	55.1%	
Total	100.0%	
By Property:		
Hospitality		80.3%
Office		10.2%
Other [1]		9.5%
Total		100.0%

[1]No other individual state or property comprises more than 5 percent of the total.

[2]At December 31, 2008, one issuer represented approximately 48 percent of the total unpaid principal balance of the commercial mortgage loan portfolio.

iii. Derivative Instruments

The ML portfolio includes various derivative financial instruments, primarily consisting of such as a total return swap agreement ("TRS") with JPMC. ML may enter into additional derivative contracts during the normal course of business to economically hedge its exposure to interest rates. Losses may arise if the value of the derivative contracts acquired decrease because of an unfavorable change in the market price of the underlying security or if the counterparty does not perform under the contract.

Total return swaps are agreements in which one party commits to pay a fee in exchange for a return linked to the market performance of an underlying security or group of securities, index, or other asset ("reference obligation"). Risks may arise if the value of the swap acquired decreases because of an unfavorable change in the price of the reference obligation or because of the inability of the counterparty to meet the terms of its contracts.

During the term of a swap contract, unrealized gains or losses are recorded as a result of marking the swap to fair value. When a swap is settled or terminated, a realized gain or loss is recorded equal to the difference, if any, between the contractual amount and the actual proceeds on settlement of the contract.

At closing, ML and JPMC entered into a TRS with reference obligations representing to a basket of CDS and interest rate swaps ("IRS"). The TRS is structured such that ML's economic position for each CDS and IRS replicates Bear Stearns' economic position. JPMC is the calculation agent for the TRS, and the underlying values are also monitored by the investment manager on behalf of ML. ML made an initial payment to JPMC of $3.3 billion, which was included in the purchase price of the assets.

At December 31, 2008, the cash collateral liability associated with the TRS is invested in cash, cash equivalents, and investments in the amounts of $2.1 billion and $0.5 billion, respectively. In addition, the ML has pledged $3.0 billion of agency CMOs to JPMC.

CDS are agreements that provide protection against a credit event on one or more referenced credits. 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 notational amount of the contract. Such future payments could be reduced or offset by amounts recovered under recourse or collateral provisions outlined in the contract, including seizure and liquidation of collateral pledged by the buyer.

The following table summarizes the maximum credit exposure (notational amount, as described above) and fair value as of December 31, 2008, related to those CDS for which ML was the protection seller or guarantor (in millions):

	Notional Amount	Maturity Range (Date) [1]
Single-name CDS [2]		
ABS	$2,530	04/20/10–11/07/47
CMBS	621	01/25/36–10/12/52
CMO	83	07/25/34–10/25/44
Corporate debt	358	12/20/10–03/20/18
	$3,592	
Index CDS:		
CMBS	17	2/17/51
Totals	$3,609	

	Fair Value
Single-name CDS [2]	
ABS	$(2,158)
CMBS	(371)
CMO	(61)
Corporate debt	(150)
	$(2,740)
Index CDS:	
CMBS	(12)
Totals	$(2,752)

[1]The maturity range date represents a range of legal final maturity dates of single-name CDS within the corresponding CDS sector. Due to the fact that most of the reference obligations may be prepaid prior to the respective legal final maturity dates, the terms of the LLC's obligation under a given CDS contract may terminate sooner than the legal final maturity date.

[2]Included in the reference obligations of the TRS with JPMC.

Interest rate swaps obligate two parties to exchange one or more payments typically calculated with reference to fixed or periodically reset rates of interest applied to a specified notional principal amount. Notional principal is the amount to which interest rates are applied to determine the payment streams under interest rate swaps. Such notional principal amounts often are used to express the volume of these transactions but are not actually exchanged between the counterparties. ML entered into interest rate swaps as part of its interest rate risk management strategy. Additionally, there is exposure to credit risk in the event of nonperformance by the counterparty to the swap. The notional value of the interest rate swaps in ML, including those embedded in the TRS, totals $11.2 billion at December 31, 2008.

Futures contracts are agreements to buy and sell financial instruments for a set price on a future date. Initial margin deposits in the form of cash or securities are made upon entering into futures contracts. During the period that a futures contract is open, changes in the fair value of the contract are recorded as unrealized gains or losses on a daily basis. Variation margin payments are paid or received, depending upon whether unrealized gains or losses result. When the contract is closed, ML will record a realized gain or loss equal to the difference between the proceeds from (or cost of) the closing transaction and ML's cost basis in the contract. The use of futures transactions involves the risk of imperfect correlation in movements in the price of futures contracts, interest rates, and the underlying hedged assets. ML is also at risk of not being able to enter into a closing transaction for the futures contract because of an illiquid secondary market. At December 31, 2008, ML had pledged collateral related to future contracts of $69.0 million.

(d) Maiden Lane II LLC

ML II's RMBS investment portfolio has risks related to credit, interest rate, general market, and concentration risk. Credit-related risk on RMBS arises from losses due to delinquencies and defaults by borrowers on the underlying mortgage loans and breaches by originators and servicers of their obligations under the underlying documentation pursuant to which the RMBS are issued. The rate of delinquencies and defaults on residential mortgage loans and the aggregate amount of the resulting losses will be affected by a number of factors, including general economic conditions, particularly those in the area where the related mortgaged property is located, the level of the borrower's equity in the mortgaged property, and the individual financial circumstances of the borrower.

The rate of interest payable on certain RMBS may be set or effectively capped at the weighted average net coupon of the underlying mortgage loans themselves, often referred to as an "available funds cap." As a result of this cap, the return to the holder of such RMBS is dependent on the relative timing and rate of delinquencies and prepayments of mortgage loans bearing a higher rate of interest.

The fair value of any particular RMBS asset may be subject to substantial variation. The entire market or particular instruments traded on a market may decline even if projected cash flow or other factors improve because the prices of such instruments are subject to numerous other factors that have little or no correlation to the performance of a particular instrument.

Since ML II concentrates its investments in RMBS, the overall impact on ML II of adverse developments in the RMBS market could be considerably greater than if ML II did not concentrate its investments in RMBS.

At December 31, 2008, the sector/rating composition of ML II's $18.8 billion RMBS portfolio, recorded at fair value, as a percentage of aggregate fair value, was as follows (in millions):

	Rating[1]		
	AAA	AA+ to AA–	A+ to A–
Asset type:			
Alt-A (adjustable rate)	10.6%	5.4%	4.1%
Subprime	22.5%	8.5%	6.7%
Other[2]	7.1%	1.1%	0.8%
Total[3]	40.1%	15.0%	11.6%

	Rating[1]		
	BBB+ to BBB–	BB+ and lower	Total
Asset type:			
Alt-A (adjustable rate)	3.1%	4.7%	27.7%
Subprime	6.8%	12.7%	57.3%
Other[2]	4.4%	1.5%	15.0%
Total[3]	14.3%	18.9%	100.0%

[1]Lowest of all ratings is used for the purposes of this table.

[2]Includes all asset sectors that, individually, represent less than 5 percent of the aggregate outstanding fair value of the portfolio.

[3]Rows and columns may not total due to rounding.

At December 31, 2008, the RMBS held by ML II were collateralized by properties at the locations identified below, as a percentage of the total unpaid principal balance of the underlying loans:

Geographic Location	Percentage[1]
California	32.5%
Florida	12.6%
Other[2]	54.9%
Total	100.0%

[1]Based on geographic location information that was available for approximately 88 percent of underlying mortgage loans by outstanding unpaid principal balance.

[2]Includes all geographic locations that, individually, represent less than 5 percent of the total aggregate outstanding unpaid principal balance of the underlying loans.

(e) Maiden Lane III LLC

The primary holdings within ML III are ABS CDOs. An ABS CDO is a security issued by a bankruptcy-remote entity that is backed by a diversified pool of debt securities, which in the case of ML III are primarily RMBS and CMBS. The cash flows of ABS CDOs can be split into multiple segments, called "tranches," which will vary in risk profile and yield. The junior tranches will bear the initial risk of loss followed by the more senior tranches. The ABS CDOs in the ML III portfolio represent senior tranches. Because they are shielded from defaults by the subordinated tranches, senior tranches will typically have higher credit ratings and lower yields than their underlying securities and will often receive investment grade ratings from one or more of the nationally recognized rating agencies. Despite the protection afforded by the subordinated tranches, senior tranches can experience substantial losses from actual defaults on the underlying RMBS or CMBS.

Over the past several years, default rates, delinquencies, and rating downgrades on RMBS and CMBS have increased significantly. This trend has reduced the amount of credit support available for the ABS CDOs. Such diminished credit support increases the likelihood that payments may not be made to holders of ABS CDOs.

ABS CDO issuers can issue short-term eligible investments under Rule 2a-7 of the Investment Company Act of 1940 if the ABS CDO contains arrangements to remarket the securities at defined periods. The investments must contain put options ("2a-7 puts"), which allow the purchasers to sell the ABS CDO at par to a third party ("put provider") if a scheduled remarketing is unsuccessful due to reasons other than a credit or bankruptcy event. As of December 31, 2008, the total notional value of ABS CDOs held by ML III with embedded 2a-7 puts for which AIGFP was, directly or indirectly, the put provider was $2.7 billion. ML III has agreed, in return for the put premiums, to either convert the ABS CDOs to long-term notes or extinguish the 2a-7 puts, to not exercise the 2a-7 puts, or only to exercise the 2a-7 puts if it simultaneously re-purchases the ABS CDOs at par. These agreements will mature on or before December 31, 2009.

At December 31, 2008, the ABS CDO type/vintage and rating composition of ML III's $26.7 billion CDO portfolio, recorded at fair value, as a percentage of aggregate fair value of all securities in the portfolio, was as follows:

	Ratings[1]		
Asset Type/Vintage	AAA	AA+ to AA–	A+ to A–
High-Grade Multi-Sector CDO	**0.2%**	**24.2%**	**7.4%**
2003–2004	0.2%	9.4%	5.1%
2005	0.0%	3.8%	2.3%
2006	0.0%	11.1%	0.0%
Mezzanine Multi-Sector CDO	**0.3%**	**2.4%**	**1.6%**
2003–2004	0.3%	1.2%	0.9%
2005	0.0%	1.2%	0.7%
2006	0.0%	0.0%	0.0%
Commercial Real-Estate CDO	**17.6%**	**0.4%**	**0.0%**
2002–2005	2.8%	0.4%	0.0%
2006	2.3%	0.0%	0.0%
2007	12.5%	0.0%	0.0%
Total[2]	18.1%	27.0%	9.0%

	Ratings[1]		
Asset Type/Vintage	BBB to BBB–	BB+ and lower	Total
High-Grade Multi-Sector CDO	**12.5%**	**26.1%**	**70.4%**
2003–2004	3.9%	7.8%	26.3%
2005	8.6%	15.9%	30.6%
2006	0.0%	2.4%	13.5%
Mezzanine Multi-Sector CDO	**0.2%**	**7.1%**	**11.6%**
2003–2004	0.0%	1.3%	3.7%
2005	0.2%	5.8%	7.9%

Asset Type/Vintage	Ratings[1] BBB to BBB–	BB+ and lower	Total
2006	0.0%	0.1%	0.1%
Commercial Real-Estate CDO	**0.0%**	**0.0%**	**18.0%**
2002–2005	0.0%	0.0%	3.2%
2006	0.0%	0.0%	2.3%
2007	0.0%	0.0%	12.5%
Total[2]	12.6%	33.2%	100.0%

[1]Lowest of all ratings is used for the purposes of this table.
[2]Rows and columns may not foot due to rounding.

(f) Fair Value Measurement

The consolidated VIEs have adopted SFAS 159 and SFAS 157, and ML has elected the fair value option for all of its holdings of securities and commercial and residential mortgages. ML II and ML III qualify as nonregistered investment companies under the provisions of the American Institute of Certified Public Accountants *Audit and Accounting Guide for Investment Companies* and, therefore, all investments are recorded at fair value in accordance with SFAS 157. In addition, ML, ML II, and ML III have elected to record their respective beneficial interests 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. Fair Value Hierarchy

SFAS 157 establishes a three-level fair value hierarchy that distinguishes between market participant assumptions developed using market data obtained from independent sources (observable inputs) and the consolidated VIEs' own assumptions about market participant assumptions developed using the best information available in the circumstances (unobservable inputs).

The three levels established by SFAS 157 are described below:

- 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 inputs from model-based techniques that use significant assumptions not observable in the market. These unobservable assumptions reflect the consolidated VIEs' own estimates of assumptions that market participants would use in pricing the asset and liability. Valuation techniques include the use of option pricing models, discounted cash flow models, and similar techniques.

The inputs or methodology used for valuing securities are not necessarily an indication of the risk associated with investing in those securities.

ii. Determination of Fair Value

The consolidated VIEs value their investments on the basis of the last available bid prices or current market quotations provided by dealers, or pricing services selected by their designated investment managers. To determine the value of a particular investment, pricing services may use certain information with respect to transactions in such investments, quotations from dealers, pricing matrices, market transactions in comparable investments, various relationships observed in the market between investments, and calculated yield measures based on valuation technology commonly employed in the market for such investments.

Market quotations may not represent fair value in certain circumstances where an investment manager believes that facts and circumstances applicable to an issuer, a seller, a purchaser, or the market for a particular security cause current market quotations not to reflect the fair value of the security. The investment manager applies proprietary valuation models that use collateral performance scenarios and pricing metrics derived from reported performance of the universe of bonds as well as observable market data to determine fair value.

Due to the inherent uncertainty of 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 used had a readily available fair value existed for these investments and may differ materially from the values that may ultimately be realized.

The fair value of the liability for the beneficial interests of consolidated VIEs is estimated based upon the fair value of the underlying assets held by the VIEs. The holders of these beneficial interests do not have recourse to the general credit of the FRBNY.

iii. Valuation Methodologies for Level 3 Assets and Liabilities

In certain cases where there is limited activity or less transparency around inputs to the valuation, securities are classified within level 3 of the valuation hierarchy. For instance, in valuing collateralized debt obligations, certain collateralized mortgage obligations, and commercial and residential mortgage loans, the determination of fair value is based on collateral performance scenarios. These valuations also incorporate pricing matrices derived from the reported performance of the universe of bonds as well as observations and estimates of market data. Because external price information is not available, market-based models are used to value these securities. Key inputs to the model are market spreads data for each credit rating, collateral type, and other relevant contractual features. Because there is a lack of observable pricing, loans carried at fair value are classified within level 3.

The following table presents the financial instruments recorded in VIEs at fair value as of December 31, 2008, by SFAS 157 hierarchy (in millions):

	Level 1	Level 2	Level 3
Assets:			
CDOs	$0	$ 155	$26,802
RMBS	0	7,406	11,433
Agency CMOs	0	12,670	895
Non-agency CMOs	0	759	1,077

	Level 1	Level 2	Level 3
Commercial and residential mortgage loans	0	0	6,490
Swap contracts	0	0	2,454
TBA commitments	0	2,089	0
Other investments	0	1,992	348
Total assets	$0	$25,071	$49,499
Liabilities:			
Beneficial interest in consolidated variable interest entities			$ (2,824)

	Total Fair Value
Assets:	
CDOs	$26,957
RMBS	18,839
Agency CMOs	13,565
Non-agency CMOs	1,836
Commercial and residential mortgage loans	6,490
Swap contracts	2,454
TBA commitments	2,089
Other investments	2,340
Total assets	$74,570
Liabilities:	
Beneficial interest in consolidated variable interest entities	$ (2,824)

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) during the year ended December 31, 2008, including realized and unrealized gains (losses) (in millions):

	Net Purchases, Sales, and Settlements	Total Realized & Unrealized Gains/ (Loss)
Assets:		
CDOs	$29,740	$(2,938)
RMBS	12,606	(1,173)
Agency CMOs	891	4
Non-agency CMOs	2,062	(985)
Commercial and residential mortgage loans	9,183	(2,693)
Swap contracts	2,369	85
Other Investments	625	(277)
Total assets	$57,746	$(7,977)
Liabilities:		
Beneficial interest in consolidated variable interest entities [1]	$ (7,213)	$ 4,389

	Transfers In or Out	Fair Value December 31, 2008
Assets:		
CDOs	$0	$26,802
RMBS	0	11,433
Agency CMOs	0	895
Non-agency CMOs	0	1,077
Commercial and residential mortgage loans	0	6,490
Swap contracts	0	2,454
Other Investments	0	348
Total assets	$ 0	$49,499
Liabilities:		
Beneficial interest in consolidated variable interest entities [1]	$(0)	$ (2,824)

[1]Includes $63 million in capitalized interest.

(g) Professional Fees

The consolidated VIEs have contracted with several nationally recognized institutions to serve as investment managers, administrators, and custodians for the VIEs' assets. Service providers to the VIEs operate under multiyear contracts that include provisions governing termination.

The fees charged by the investment managers, custodians, administrators, auditors, and other service providers and organization costs are recorded as a component of "Operating expenses: Professional fees related to consolidated variable interest entities" in the Combined Statements of Income and Comprehensive Income.

(10) Bank Premises, Equipment, and Software

Reserve Bank premises and equipment at December 31, 2008, were as follows (in millions):

	2008	2007
Reserve Bank premises and equipment:		
Land	$ 334	$ 323
Buildings	2,161	1,878
Building machinery and equipment	463	416
Construction in progress	160	380
Furniture and equipment	1,037	1,118
Subtotal	4,155	4,115
Accumulated depreciation	(1,583)	(1,576)
Bank premises and equipment, net	$ 2,572	$ 2,539
Depreciation expense, for the year ended December 31	$ 199	$ 185

The Federal Reserve Bank of Kansas City completed the construction of a new headquarters building in Kansas City in 2008.

Reserve Bank premises and equipment at December 31 included the following amounts for capitalized leases (in millions):

	2008	2007
Leased premises and equipment under capital leases	$ 21	$ 21
Accumulated depreciation	(13)	(11)
Leased premises and equipment under capital leases, net	$ 8	$ 10

Depreciation expense related to leased premises and equipment under capital leases was $4 million for each of the years ended December 31, 2008 and December 31, 2007.

Certain of the Reserve Banks lease space to outside tenants with remaining lease terms ranging from one to fifteen years. Rental income from such leases was $30 million and $27 million for the years ended December 31, 2008 and 2007, respectively, and is reported as a component of "Non-interest income (loss): Other income" 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, 2008, are as follows (in millions):

2009	$ 28
2010	27
2011	22
2012	20
2013	19
Thereafter	57
Total	$173

The Reserve Banks have capitalized software assets, net of amortization, of $129 million and $158 million at December 31, 2008 and 2007, respectively. Amortization expense was $67 million and $62 million for the years ended December 31, 2008 and 2007, respectively. Capitalized software assets are reported as a component of "Other assets" in the Combined Statements of Conditions, and the related amortization is reported as a component of "Other expenses" in the Combined Statements of Income and Comprehensive Income.

Assets impaired as a result of the Reserve Banks' restructuring plans, as discussed in Note 15, include check equipment, leasehold improvements, and furniture assets. Asset impairment losses of $2 million and $32 million for the years ended December 31, 2008 and 2007, respectively, were determined using fair values based on quoted fair values or other valuation techniques and are reported as a component of "Operating expenses: Other expenses" in the Combined Statements of Income and Comprehensive Income. The Reserve Banks recorded write-offs of $9 million during the year ended December 31, 2008 related to discontinued software development projects.

(11) Commitments and Contingencies

In the normal course of operations, the Reserve Banks enter into contractual commitments, normally with fixed expiration dates or termination provisions, at specific rates and for specific purposes.

Operating Leases

At December 31, 2008, the Reserve Banks were obligated under noncancelable leases for premises and equipment with remaining terms ranging from one to approximately 15 years. These leases provide for increased rental payments based upon increases in real estate taxes, operating costs, or selected price indices.

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 (reported as a component of "Other income"), was $27 million and $29 million for the years ended December 31, 2008 and 2007, respectively. Certain of the Reserve Banks' leases have options to renew.

Future minimum rental payments under noncancelable operating leases, net of sublease rentals, with remaining terms of one year or more, at December 31, 2008, are as follows (in millions):

	Operating Leases
2009	$ 11
2010	10
2011	9
2012	9
2013	9
Thereafter	91
Future minimum rental payments	$139

Future minimum rental payments under noncancelable capital leases, net of sublease rentals, with remaining terms of one year or more at December 31, 2008, were not material.

At December 31, 2008, the Reserve Banks had unrecorded unconditional purchase commitments and long-term obligations extending through the year 2017 with a remaining fixed commitment of $294 million. Purchases of $33 million and $59 million were made against these commitments during 2008 and 2007, respectively. These commitments represent goods and services for maintenance of currency-processing machines and for licenses and maintenance of check software and hardware, and have variable and/or fixed components. The variable portion of the commitments is for additional services above fixed contractual service limits. The fixed payments for the next five years under these commitments are as follows (in millions):

	Fixed Commitment
2009	$ 8
2010	59
2011	30
2012	30
2013	31

The Federal Reserve Bank of Richmond had commitments of approximately $7 million and $51 million at December 31, 2008 and 2007, respectively, for the construction of an employee parking deck at its head office and for security enhancements throughout the District. Expected payments related to these commitments are $7 million for the year ending December 31, 2009.

Under the Insurance Agreement of the Federal Reserve Banks, each Reserve Bank has agreed to bear, on a per incident basis, a pro rata share of losses in excess of one percent of the capital paid-in of the claiming Reserve Bank, up to 50 percent of the total capital paid-in of all Reserve Banks. Losses are borne in the ratio of a Reserve Bank's capital paid-in to the total capital paid-in of all Reserve Banks at the beginning of the calendar year in which the loss is shared. No claims were outstanding under the agreement at December 31, 2008 or 2007.

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 aforementioned litigation and claims will be resolved without material adverse effect on the financial position or results of operations of the Reserve Banks.

Other Commitments

In support of financial market stability activities, the FRBNY entered into commitments to provide financial assistance and backstop support to financial institutions. The contractual amount represents the FRBNY's maximum exposure to loss in the event of default by the borrower or total loss in value of pledged collateral. Total commitments at December 31, 2008, were as follows (in millions):

	Contractual Amount	Unfunded Amount
Loan commitment (Citigroup)	$244,800	$244,800
Secured line of credit (AIG)	60,000	23,200
Commercial loan commitments (ML)	266	266
Total	$305,066	$268,266

The agreement with Citigroup, while legally a loan commitment, is accounted for in accordance with FIN 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others." As of December 31, 2008, both the probable loss and the fair value of the FRBNY's loan commitment was deemed to be zero, because under a range of scenarios it is unlikely that the FRBNY will be required to make the loan.

The secured line of credit relates to the undrawn portion of the line of credit provided to AIG to assist it with meeting obligations as they come due. Collateral to secure the line of credit includes the equity in AIG's subsidiaries. The FRBNY does not expect to incur any losses related to the unfunded commitment as of December 31, 2008.

The commercial loan commitments relate to commercial mortgage loans acquired by ML that have underlying unfunded commitments due to the borrower.

(12) 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 Reserve Banks', Board of Governors, and the Office of Employee Benefits of the Federal Reserve Systems' employees participate in the Retirement Plan for Employees of the Federal Reserve System ("System Plan"). Employees at certain compensation levels participate in the Benefit Equalization Retirement Plan ("BEP"), and certain Reserve Bank officers participate in the Supplemental Employee Retirement Plan ("SERP").

The System Plan provides retirement benefits to employees of the Federal Reserve Banks, the Board of Governors, and the Office of Employee Benefits of the Federal Reserve Employee Benefits System. 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. Costs associated with the System Plan are not reimbursed by other participating employers.

Following is a reconciliation of the beginning and ending balances of the System Plan benefit obligation (in millions):

	2008	2007
Estimated actuarial present value of projected benefit obligation at January 1	$5,325	$5,147
Service cost-benefits earned during the period	150	146
Interest cost on projected benefit obligation	357	317
Actuarial loss (gain)	599	(46)
Contributions by plan participants	3	3
Special termination benefits	9	22
Benefits paid	(280)	(264)
Plan amendments	868	0
Estimated actuarial present value of projected benefit obligation at December 31	$7,031	$5,325

Following is a reconciliation of the beginning and ending balances of the System Plan assets, the funded status, and the prepaid pension benefit costs (in millions):

	2008	2007
Estimated fair value of plan assets at January 1	$ 6,604	$ 6,330
Actual return on plan assets	(1,274)	535
Contributions by plan participants	3	3
Benefits paid	(280)	(264)
Estimated fair value of plan assets at December 31	$ 5,053	$ 6,604
Funded status and (accrued) prepaid pension benefit costs	$(1,978)	$ 1,279
Amounts included in accumulated other comprehensive loss are shown below:		
Prior service cost	$ (989)	$ (163)
Net actuarial loss	(3,429)	(1,135)
Total accumulated other comprehensive loss	$(4,418)	$(1,298)

Accrued and prepaid pension benefit costs are reported as "Accrued benefit costs" and "Other assets," respectively, in the Combined Statements of Condition.

The accumulated benefit obligation for the System Plan, which differs from the estimated actuarial present value of the projected benefit obligation because it is based on current rather than future compensation levels, was $6,143 million and $4,621 million at December 31, 2008 and 2007, respectively.

The weighted-average assumptions used in developing the accumulated pension benefit obligation for the System Plan as of December 31 are as follows:

	2008	2007
Discount rate	6.00%	6.25%
Rate of compensation increase	5.00%	5.00%

In 2008, the System approved several plan amendments. As a result, the actuarially determined net periodic benefit expense for the year ended December 31, 2008, was remeasured, using a 7.75 percent discount rate as of November 1. The approved plan amendments, the most significant of which was to incorporate annual, rather than ad hoc, cost-of-living adjustments to the plan benefit, resulted in a $60 million increase in net periodic benefit expenses for the year ended December 31, 2008.

Net periodic benefit expenses for the years ended December 31 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:

	2008	2007
Discount rate	6.50%	6.00%
Expected asset return	8.00%	8.00%
Rate of compensation increase	5.00%	4.50%

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 expected long-term rate of return on assets was based on a combination of methodologies including the System Plan's historical returns; surveys of expected rates of return for other entities' plans; building 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):

	2008	2007
Service cost-benefits earned during the period	$ 150	$ 146
Interest cost on accumulated benefit obligation	357	317
Amortization of prior service cost	41	29
Amortization of net loss	78	79
Expected return on plan assets	(497)	(496)
Net periodic pension benefit expense	129	75
Special termination benefits	9	22
Curtailment (gain) loss	0	0
Total periodic pension benefit expense	$ 138	$ 97

Estimated amounts that will be amortized from accumulated other comprehensive loss into net periodic pension benefit expense in 2009 are shown below:

Prior service cost	$ 116
Actuarial loss	284
Total	$ 400

The recognition of special termination losses is the result of enhanced retirement benefits provided to employees during the restructuring described in Note 15.

Following is a summary of expected benefit payments excluding enhanced retirement benefits (in millions):

	Expected benefit payments
2009	$ 315
2010	330
2011	346
2012	368
2013	391
2014–2018	2,278
Total	$4,028

The System's Committee on Investment Performance ("CIP") is responsible for establishing investment policies, selecting investment managers, and monitoring the investment managers' compliance with the policies. In 2008, the CIP reassessed the System Plan investment strategies, and the resulting target allocations evolved considerably. The System Plan's assets were held in five investment vehicles: actively-managed balanced accounts, a constant mix asset allocation account, a liability-linked account, indexed commingled trusts, and a money market fund. The actively-managed balanced accounts have equity, fixed income, and temporary investment segments, with a performance benchmark for these assets based upon 60 percent of the return of the Standard & Poor's 500 Stock Index and 40 percent of the return of the Barclays Aggregate Bond Index, with required equity segment exposures in the range of 40 percent to 80 percent of each account. The constant mix account is comprised of two index funds, one tracking the Standard & Poor's 500 Stock Index and the other tracking the Barclays Aggregate Bond Index, and is automatically rebalanced. The liability-linked account, funded in April 2008, seeks to defease a portion of the System Plan's liability related to retired lives using a Treasury securities portfolio. The policy governing this account calls for cash-matching over the next two years of a portion of retiree benefits payments and immunizing the remaining obligation. The three indexed commingled trust investments, initially funded in October 2008, are intended to provide the System Plan with low-cost, broadly-diversified exposures to U.S. equities, U.S. investment-grade bonds, and international equities. The money market fund is the repository for cash balances and adheres to a constant-dollar accounting methodology.

The System Plan's weighted-average asset allocations at December 31, by asset category, are as follows:

	2008	2007
Equities	55.40%	65.70%
Fixed income	42.80%	33.20%
Cash	1.80%	1.10%
Total	100.00%	100.00%

Contributions to the System Plan may be determined using different assumptions than those required for financial reporting. The System Plan's actuarial funding method is expected to produce a recommended annual funding range between $150 and $200 million. Beginning in January 2009, the System will make monthly contributions of $20 million and will reevaluate funding upon completion of the 2009 actuarial valuation. The Reserve Banks' projected benefit obligation, funded status, and net pension expenses for the BEP and the SERP at December 31, 2008 and 2007, and for the years then ended, were not material.

Thrift Plan

Employees of the Reserve Banks may also participate in the defined contribution Thrift Plan for Employees of the Federal Reserve System ("Thrift Plan"). The Reserve Banks match employee contributions based on a specified formula. For the years ended December 31, 2008 and 2007, the Reserve Banks matched 80 percent on the first 6 percent of employee contributions for employees with less than five years of service and 100 percent on the first 6 percent of employee contributions for employees with five or more years of service. The Reserve Banks' Thrift Plan contributions totaled $72 million and $69 million for the years ended December 31, 2008 and 2007, respectively, and are reported as a component of "Salaries and other benefits" in the Combined Statements of Income and Comprehensive Income. Beginning in 2009, the Reserve Banks will match 100 percent of the first 6 percent of employee contributions from the date of hire and provide an automatic employer contribution of 1 percent of eligible pay.

(13) Postretirement Benefits Other Than Pensions and Postemployment Benefits

Postretirement Benefits Other Than Pensions

In addition to the Reserve Banks' retirement plans, employees who have met certain age and length-of-service requirements are eligible for both medical benefits and life insurance coverage during retirement.

The Reserve Banks fund benefits payable under the medical and life insurance plans as due and, accordingly, have no plan assets.

Following is a reconciliation of the beginning and ending balances of the benefit obligation (in millions):

	2008	2007
Accumulated postretirement benefit obligation at January 1	$1,121	$1,164
Service cost-benefits earned during the period	38	41
Interest cost on accumulated benefit obligation	71	69
Net actuarial loss (gain)	54	(93)
Curtailment gain	(10)	(10)
Special termination benefits loss	0	3
Contributions by plan participants	15	13
Benefits paid	(72)	(69)
Medicare Part D subsidies	4	4
Plan amendments	0	(1)
Accumulated postretirement benefit obligation at December 31	$1,221	$1,121

At December 31, 2008 and 2007, the weighted-average discount rate assumptions used in developing the postretirement benefit obligation were 6.00 percent and 6.25 percent, respectively.

Discount rates reflect yields available on high-quality corporate bonds that would generate the cash flows necessary to pay the plan's benefits when due.

Following is a reconciliation of the beginning and ending balance of the plan assets, the unfunded postretirement benefit obligation, and the accrued postretirement benefit costs (in millions):

	2008	2007
Fair value of plan assets at January 1	$ 0	$ 0
Contributions by the employer	53	52
Contributions by plan participants	15	13
Benefits paid	(72)	(69)
Medicare Part D subsidies	4	4
Fair value of plan assets at December 31	0	0
Unfunded obligation and accrued postretirement benefit cost	$1,221	$1,121
Amounts included in accumulated other comprehensive loss are shown below:		
Prior service cost	44	60
Net actuarial loss	(313)	(292)
Deferred curtailment gain	4	6
Total accumulated other comprehensive loss	$ (265)	$ (226)

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:

	2008	2007
Health care cost trend rate assumed for next year	7.50%	8.00%
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	5.00%	5.00%
Year that the rate reaches the ultimate trend rate	2014	2013

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, 2008 (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	$ 14	$ (12)
Effect on accumulated postretirement benefit obligation	125	(107)

The following is a summary of the components of net periodic postretirement benefit expense for the years ended December 31 (in millions):

	2008	2007
Service cost-benefits earned during the period	$ 38	$ 41
Interest cost on accumulated benefit obligation	71	69
Amortization of prior service cost	(20)	(22)
Amortization of actuarial loss	27	48
Total periodic expense	116	136
Curtailment gain	(1)	0
Special termination benefits loss	0	3
Net periodic postretirement benefit expense	$115	$139

Estimated amounts that will be amortized from accumulated other comprehensive loss into net periodic postretirement benefit expense in 2009 are shown below:

Prior service cost	$ (20)
Net actuarial loss	24
Total	$ 4

Net postretirement benefit costs are actuarially determined using a January 1 measurement date. At January 1, 2008 and 2007, the weighted-average discount rate assumptions used to determine net periodic postretirement benefit costs were 6.25 percent and 5.75 percent, respectively.

Net periodic postretirement benefit expense is reported as a component of "Salaries and other benefits" in the Combined Statements of Income and Comprehensive Income.

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' plans 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 $3.3 million and $6.2 million for the years ended December 31, 2008 and 2007, respectively. Expected receipts in 2009, which relate to benefits paid in the year ended December 31, 2008 and 2007, are $2.2 million.

Following is a summary of expected postretirement benefit payments (in millions):

	Without subsidy	With subsidy
2009	$ 72	$ 66
2010	77	72
2011	83	77
2012	87	80
2013	92	84
2014–2018	511	462
Total	$922	$841

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 medical and dental insurance, survivor income, and disability benefits. The accrued postemployment benefit costs recognized by the Reserve Banks at December 31, 2008 and 2007 were $117 million and $124 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 2008 and 2007 operating expenses were $10 million and $15 million, respectively, and are recorded as a component of "Salaries and other benefits" in the Combined Statements of Income and Comprehensive Income.

(14) Accumulated Other Comprehensive Income and Other Comprehensive Income

Following is a reconciliation of beginning and ending balances of accumulated other comprehensive income (loss) (in millions):

	Amount related to defined benefit retirement plan	Amount related to postretirement benefits other than pensions
Balance at January 1, 2007	$(1,492)	$(357)
Change in funded status of benefit plans:		
Prior service costs arising during the year	0	(3)
Net actuarial gain arising during the year	86	103
Deferred curtailment gain	0	5
Amortization of prior service cost	29	(22)
Amortization of net actuarial loss	79	48
Change in funded status of benefit plans - other comprehensive income	194	131
Balance at December 31, 2007	$(1,298)	$(226)
Change in funded status of benefit plans:		
Prior service costs arising during the year	$ (868)	$ 4
Net actuarial loss arising during the year	(2,371)	(48)
Deferred curtailment gain	0	1
Amortization of prior service cost	41	(20)
Amortization of net actuarial loss	78	27
Amortization of deferred curtailment gain	0	(3)
Change in funded status of benefit plans - other comprehensive loss	(3,120)	(39)
Balance at December 31, 2008	$(4,418)	$(265)

	Total accumulated other comprehensive income (loss)
Balance at January 1, 2007	$(1,849)
Change in funded status of benefit plans:	
Prior service costs arising during the year	(3)
Net actuarial gain arising during the year	189
Deferred curtailment gain	5
Amortization of prior service cost	7
Amortization of net actuarial loss	127
Change in funded status of benefit plans - other comprehensive income	325
Balance at December 31, 2007	$(1,524)
Change in funded status of benefit plans:	
Prior service costs arising during the year	(864)
Net actuarial loss arising during the year	(2,419)
Deferred curtailment gain	1
Amortization of prior service cost	21
Amortization of net actuarial loss	105
Amortization of deferred curtailment gain	(3)
Change in funded status of benefit plans - other comprehensive loss	(3,159)
Balance at December 31, 2008	$(4,683)

Additional detail regarding the classification of accumulated other comprehensive loss is included in Notes 12 and 13.

(15) Business Restructuring Charges

2008 Restructuring Plans

In 2008, the Reserve Banks announced the acceleration of their check restructuring initiatives to align the check processing infrastructure and operations with declining check processing volumes. The new infrastructure will involve consolidation of operations into two regional Reserve Bank processing sites in Cleveland and Atlanta. Additional announcements in 2008 included restructuring plans associated with the closure of a check processing contingency center and the consolidation of check adjustments sites.

2007 and Prior Restructuring Plans

In 2007, the Reserve Banks announced restructuring plans related to aligning the check-processing infrastructure and operations with declining processing volumes. The new infrastructure would involve consolidation of operations into four regional Reserve Bank processing sites in Philadelphia, Cleveland, Atlanta, and Dallas. Additional announcements in 2007 included restructuring plans associated with the U.S. Treasury's Collections and Cash Modernization initiative. The Reserve Banks incurred various restructuring charges prior to 2007 related to the initial phases of restructuring of the System's check-processing and cash-handling infrastructure.

Following is a summary of financial information related to the restructuring plans (in millions):

	2006 and Prior Restructuring Plans	2007 Restructuring Plans
Information related to restructuring plans as of December 31, 2008:		
Total expected costs related to restructuring activity	$ 36	$ 41
Estimated future costs related to restructuring activity	$ 0	$ 0
Expected completion date	2008	2008
Reconciliation of liability balances:		
Balance at January 1, 2007	$ 12	$ 0
Employee separation costs	2	38
Adjustments	(5)	3
Payments	(6)	(1)
Balance at December 31, 2007	$ 3	$ 40
Employee separation costs	1	4
Adjustments	0	(4)
Payments	(4)	(17)
Balance at December 31, 2008	$ 0	$ 23

	2008 Restructuring Plans	Total
Information related to restructuring plans as of December 31, 2008:		
Total expected costs related to restructuring activity	$ 17	$94
Estimated future costs related to restructuring activity	$ 1	$ 1
Expected completion date	2012	
Reconciliation of liability balances:		
Balance at January 1, 2007	$ 0	$12
Employee separation costs	0	40
Adjustments	0	(2)
Payments	0	(7)

	2008 Restructuring Plans	Total
Balance at December 31, 2007	$ 0	$ 43
Employee separation costs	17	22
Adjustments	0	(4)
Payments	0	(21)
Balance at December 31, 2008	$17	$ 40

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 "Salaries and other benefits" in the Combined Statements of Income and Comprehensive Income.

(16) Subsequent Events

Where applicable, all subsequent events are disclosed in Note 3.

The effects of subsequent events do not require adjustment to the combined financial statements as of December 31, 2008.

Office of Inspector General Activities

The Board of Governors' Office of Inspector General (OIG) operates in accordance with the Inspector General Act of 1978, as amended. The OIG plans and conducts audits, attestations, inspections, evaluations, investigations, and law and regulation reviews relating to the Board's programs and operations, and to those functions that the Board has delegated to the Federal Reserve Banks. In addition, it retains an independent auditor each year to audit the Board's financial statements. The OIG makes recommendations and conducts activities to promote economy and efficiency, enhance policies and procedures, and prevent and detect waste, fraud, and abuse in Board and Board-delegated programs and operations. The OIG also keeps the Congress and the Chairman of the Board of Governors fully informed about serious abuses and deficiencies.

During 2008, the OIG completed 15 audits, attestations, inspections, evaluations, and other assessments, and conducted a number of follow-up reviews to evaluate action taken on prior recommendations. It also issued a *Compendium of Open Recommendations,* the *Strategic Plan 2008-2011,* and two semiannual reports to Congress. In addition, the OIG closed nine investigations and performed numerous legislative and regulatory reviews.

Visit the OIG website at www.federalreserve.gov/oig/ for more information.

OIG Audits, Attestations, Inspections, and Evaluations Completed during 2008

Report title	Month issued
Security Control Review of the Federal Reserve Integrated Records Management Architecture (Internal Report)	January
Security Control Review of the EGov Systems (Internal Report)	January
Audit of the Federal Financial Institutions Examination Council's Financial Statements for the Year Ended December 31, 2007	February
Audit of the Board's Financial Statements for the Year Ended December 31, 2007	March
Inspection of Controls for Safeguarding Confidential and Personally Identifiable Information Collected during Bank Examinations (Internal Report)	March
Review of Selected Common Information Security Controls (Internal Report)	March
Control Review of the Reserve Bank Operating Assessment Process	March
Security Control Review of the Currency Ordering System (Internal Report)	June
Reducing the Risk of Loss or Theft of Confidential Information: Comparison of Agencies' Requirements (Internal Report)	June
Security Control Review of the FISMA Assets Maintained by the Federal Reserve Bank of Boston (Internal Report)	September
Evaluation of Data Flows for Board Employee Data Received by OEB and its Contractors (Internal Report)	September
Audit of the Board's Information Security Program	September
Control Review of the Board's Currency Expenditures and Assessments	September
Evaluation of Certification and Accreditation (C&A) Reviews of the National Examination Database (Internal Report)	September
Report on the External Quality Control Review of the Smithsonian Institution Inspector General Audit Organization	December

Government Accountability Office Reviews

Under the Federal Banking Agency Audit Act (Public Law 95–320), most Federal Reserve System operations are under the purview of the Government Accountability Office (GAO). In 2008, the GAO completed seven reports on selected aspects of Federal Reserve operations (table). In addition, eight projects concerning the Federal Reserve were in various stages of completion at year-end (table). The Federal Reserve also provided information to the GAO during the year on numerous other GAO investigations, including eight other completed reviews and ten other ongoing reviews.

The reports are available directly from the GAO.

Reports Completed during 2008

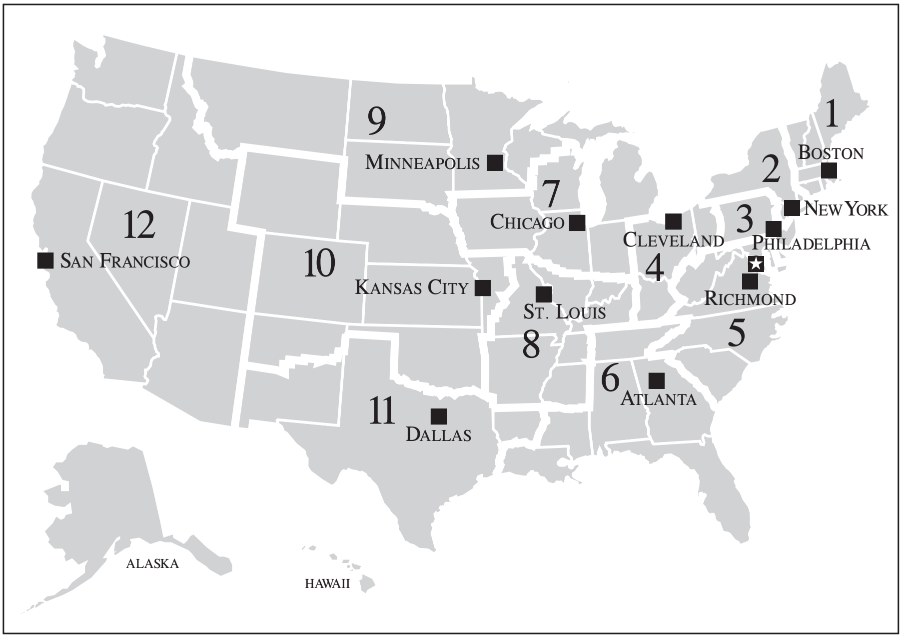
Report title	Report number	Month issued (2008)
Hedge Funds: Regulators and Market Participants Are Taking Steps to Strengthen Market Discipline, but Continued Attention Is Needed	GAO-08-200	January
U.S. Coins: The Federal Reserve Banks Are Fulfilling Coin Demand, but Optimal Inventory Ranges Are Undefined	GAO-08-401	March
Fair Lending: Race and Gender Data Are Limited for Nonmortgage Lending	GAO-08-698	June
Information Security Controls at FRBs	GAO-08-836R	June
U.S. Patriot Act: Better Interagency Coordination and Implementing Guidance for Section 311 Could Improve U.S. Anti–Money Laundering Efforts	GAO-08-1058	September
Risk-Based Capital: New Basel II Rules Reduced Certain Competitive Concerns, but Bank Regulators Should Address Remaining Uncertainties	GAO-08-953	September
Check 21 Act: Most Consumers Have Accepted and Banks Are Progressing Toward Full Adoption of Check Truncation	GAO-09-8	October

Projects Active at Year-End 2008

Subject of project	Month initiated
Suspicious Activity Reports (SAR) process	September 2007
Inspector Generals' role in federal entities	September 2007
Bank Secrecy Act (BSA) compliance and enforcement	October 2007
Review of federal enforcement of fair lending laws	September 2008
Systemic risk determination	October 2008
Risks and challenges presented by credit default swaps	November 2008
Risk management oversight among federal financial regulators	December 2008
Cybersecurity strategy	December 2008

Maps of the Federal Reserve System

The Federal Reserve System



Legend

Both pages

■ Federal Reserve Bank city

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

Facing page

• Federal Reserve Branch city

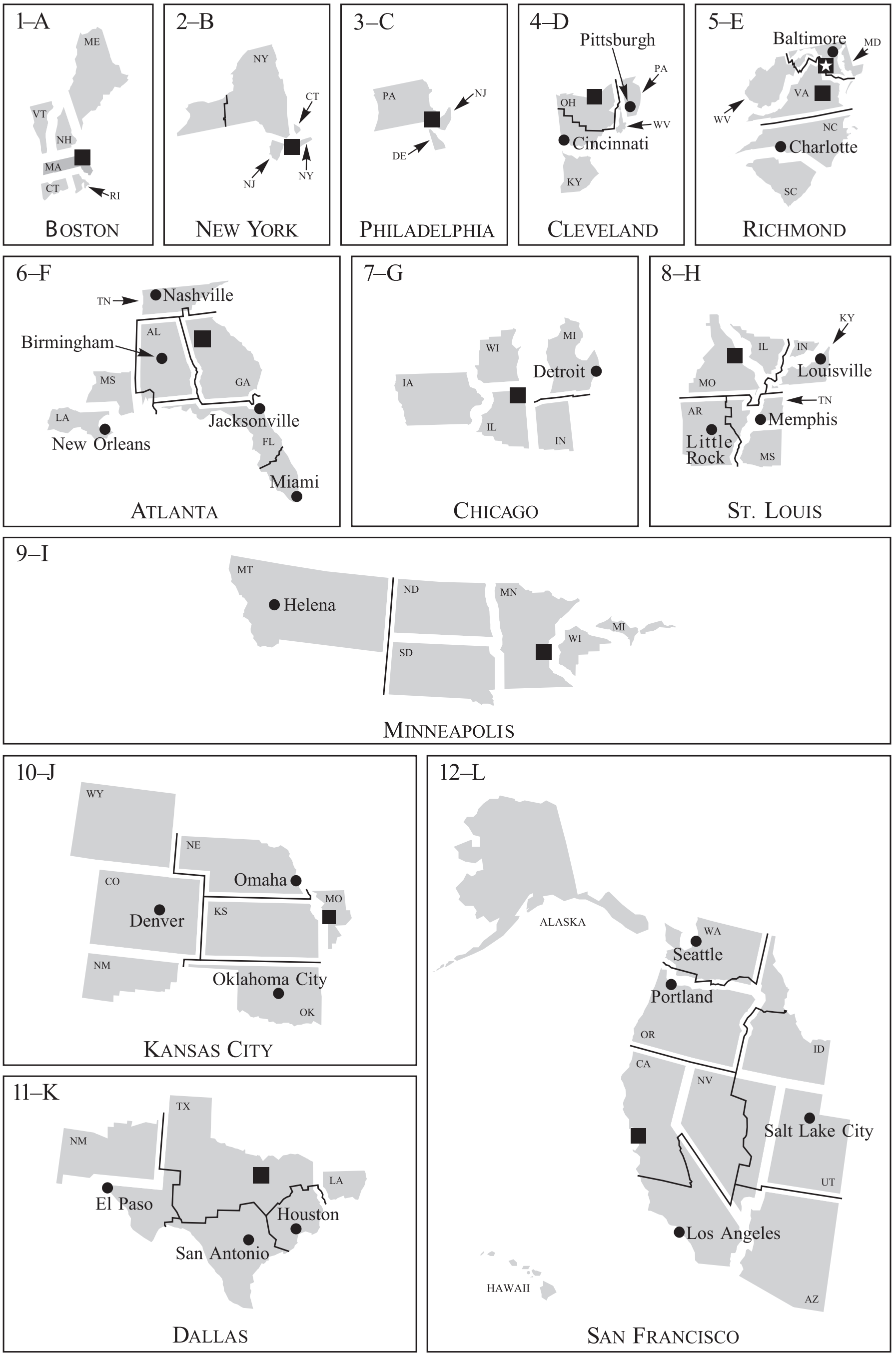
— Branch boundary

Note

The Federal Reserve officially identifies Districts by number and by Reserve Bank city (shown on both pages) and by letter (shown on the facing page).

In the 12th District, the Seattle Branch serves Alaska, and the San Francisco Bank serves Hawaii.

The System serves commonwealths and territories as follows: The New York Bank serves the Commonwealth of Puerto Rico and the U.S. Virgin Islands; the San Francisco Bank serves American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands. The maps show the boundaries within the System as of year-end 2008.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Omaha
CO
Denver
KS
MO
NM
Oklahoma City
OK
KANSAS CITY
11–K
TX
NM
LA
El Paso
Houston
San Antonio
DALLAS
12–L
ALASKA
WA
Seattle
Portland
OR
ID
CA
NV
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UT
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