

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.

April 2008

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-fourth annual report of the Board of Governors of the Federal Reserve System.

This report covers operations of the Board during calendar year 2007.

Sincerely,

1 AL

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 Governorsand twelve 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 1,860. 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

Part 1

Overview: Monetary Policy and the Economic Outlook

The U.S. economy has weakened considerably since last July, when the Federal Reserve Board submitted its previous Monetary Policy Report to the Congress. Substantial strains have emerged in financial markets here and abroad, and housing-related activity has continued to contract. Also, further increases in the prices of crude oil and some other commodities have eroded the real incomes of U.S. households and added to business costs. Overall economic activity held up reasonably well into the autumn despite these adverse developments, but it decelerated sharply in the fourth quarter. Moreover, the outlook for 2008 has become less favorable since last summer, and considerable downside risks to economic activity have emerged. Headline consumer price inflation picked up in 2007 as a result of sizable increases in energy and food prices, while core inflation (which excludes the direct effects of movements in energy and food prices) was, on balance, a little lower than in 2006. Nonetheless, 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, monetary policy makers generally have expected inflation to moderate somewhat in 2008 and 2009. Under these circumstances, the Federal Reserve has eased the stance of monetary policy substantially since July.

The turmoil in financial markets that emerged last summer was triggered by a sharp increase in delinquencies and defaults on subprime mortgages. That increase substantially impaired the functioning of the secondary markets for subprime and nontraditional residential mortgages, which in turn contributed to a reduction in the availability of such mortgages to households. Partly as a result of these developments as well as continuing concerns about prospects for house prices, the demand for housing dropped further. In response to weak demand and high inventories of unsold homes, homebuilders continued to cut the pace of new construction in the second half of 2007, pushing the level of single-family starts in the fourth quarter more than 50 percent below the high reached in the first quarter of 2006.

After midyear, as losses on subprime mortgages and related structured investment products continued to mount, investors became increasingly skeptical about the likely credit performance of even highly rated securities backed by such mortgages. The loss of confidence reduced investors' overall willingness to bear risk and caused them to reassess the soundness of the structures of other

NOTE: The discussion here and in the next three parts consists of the text, tables, and selected charts from the Monetary Policy Report submitted to the Congress on February 27, 2008, pursuant to section 2B of the Federal Reserve Act. The complete set of charts 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 2007 meetings of the Federal Open Market Committee (see the "Records" section) and statistical tables 1–4 (at the back of this report).

financial products. That reassessment was accompanied by high volatility and diminished liquidity in a number of financial markets here and abroad. The pressures in financial markets were reinforced by banks' concerns about actual and potential credit losses. In addition, banks recognized that they might need to take a large volume of assets onto their balance sheets-including leveraged loans, some types of mortgages, and assets relating to asset-backed commercial paper programs-given their existing commitments to customers and the increased resistance of investors to purchasing some securitized products. In response to those unexpected strains, banks became more conservative in deploying their liquidity and balance sheet capacity, leading to tighter credit conditions for some businesses and households. The combination of a more negative economic outlook and a reassessment of risk by investors precipitated a steep fall in Treasury yields, a substantial widening of spreads on both investment-grade and speculative-grade corporate bonds, and a sizable net decline in equity prices.

Initially, the spillover from the problems in the housing and financial markets to other sectors of the economy was limited. Indeed, in the third quarter, real gross domestic product (GDP) rose at an annual rate of nearly 5 percent, in part because of solid gains in consumer spending, business investment, and exports. In the fourth quarter, however, real GDP increased only slightly, and the economy seems to have entered 2008 with little momentum. In the labor market, growth in private-sector payrolls slowed markedly in late 2007 and January 2008. The sluggish pace of hiring, along with higher energy prices, lower equity prices, and softening home values, has weighed on consumer sentiment and spending of late. In addition,

indicators of business investment have become less favorable recently. However, continued expansion of foreign economic activity and a lower dollar kept U.S. exports on a marked uptrend through the second half of last year, providing some offset to the slowing in domestic demand.

Overall consumer price inflation, as measured by the price index for personal consumption expenditures (PCE), stepped up to 3½ percent over the four quarters of 2007 because of the sharp increase in energy prices and the largest rise in food prices in nearly two decades. Core PCE price inflation picked up somewhat in the second half of last year, but the increase came on the heels of some unusually low readings in the first half; core PCE price inflation over 2007 as a whole averaged slightly more than 2 percent, a little less than in 2006.

The Federal Reserve has taken a number of steps since midsummer to address strains in short-term funding markets and to foster its macroeconomic objectives of maximum employment and price stability. With regard to short-term funding markets, the Federal Reserve's initial actions when market turbulence emerged in August included unusually large open market operations as well as adjustments to the discount rate and to procedures for discount window borrowing and securities lending. As pressures intensified near the end of the year. the Federal Reserve established a Term Auction Facility to supply short-term credit to sound banks against a wide variety of collateral; in addition, it entered into currency swap arrangements with two other central banks to increase the availability of term dollar funds in their jurisdictions. With regard to monetary policy, the Federal Open Market Committee (FOMC) cut the target for the federal funds rate 50 basis points at its September meeting to address the potential downside risks to the broader economy from the ongoing disruptions in financial markets. The Committee reduced the target 25 basis points at its October meeting and did so again at the December meeting. In the weeks following that meeting, the economic outlook deteriorated further, and downside risks to growth intensified; the FOMC cut an additional 125 basis points from the target in January—75 basis points on January 22 and 50 basis points at its regularly scheduled meeting on January 29–30.

Since the previous Monetary Policy Report, the FOMC has announced new communications procedures, which include publishing enhanced economic projections on a timelier basis. The most recent projections were released with the

minutes of the January FOMC meeting and are reproduced in part 4 of this report. Economic activity was expected to remain soft in the near term but to pick up later this year-supported by monetary and fiscal stimulus-and to be expanding at a pace around or a bit above its long-run trend by 2010. Total inflation was expected to be lower in 2008 than in 2007 and to edge down further in 2009. However, FOMC participants (Board members and Reserve Bank presidents) indicated that considerable uncertainty surrounded the outlook for economic growth and that they saw the risks around that outlook as skewed to the downside. In contrast, most participants saw the risks surrounding the forecasts for inflation as roughly balanced.

Part 2 Recent Economic and Financial Developments

Although the U.S. economy had generally performed well in the first half of 2007, the economic landscape was subsequently reshaped by the emergence of substantial strains in financial markets in the United States and abroad, the intensifying downturn in the housing market, and higher prices for crude oil and some other commodities. Rising delinquencies on subprime mortgages led to large losses on related structured credit products, sparking concerns about the structures of other financial products and reducing investors' appetite for risk. The resulting dislocations generated unanticipated pressures on bank balance sheets, and those pressures combined with uncertainty about the size and distribution of credit losses to impair shortterm funding markets. Consequently, the Federal Reserve and other central banks intervened to support liquidity and functioning in those markets. Amid a deteriorating economic outlook, and with downside risks increasing, Treasury yields declined markedly, and the Federal Open Market Committee cut the federal funds rate substantially. Meanwhile, risk spreads in a wide variety of credit markets increased considerably, and equity prices tumbled.

The financial turmoil did not appear to leave much of a mark on overall economic activity in the third quarter. Real GDP rose at an annual rate of nearly 5 percent, as solid gains in consumer spending, business investment, and exports more than offset the continuing drag from residential investment. In the fourth quarter, however, economic activity decelerated significantly, and the Change in Real GDP, 2001-07



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.

economy seems to have entered 2008 with little forward momentum. In part because of tighter credit conditions for households and businesses, the housing correction has deepened, and capital spending has softened. In addition, a number of factors, including steep increases in energy prices, lower equity prices, and softening home values, have started to weigh on consumer outlays. In the labor market, private hiring slowed sharply in late 2007 and January 2008. The increase in the price index for total consumption expenditures personal (PCE) picked up to $3\frac{1}{2}$ percent in 2007 as a result of sizable increases in food and energy prices. Core PCE inflation, though uneven over the course of the year, averaged a bit more than 2 percent during 2007 as a whole, a little less than the increase posted in 2006.

Change in the Chain-Type Price Index for Personal Consumption Expenditures, 2001–07



SOURCE: Department of Commerce, Bureau of Economic Analysis.

The Household Sector

Residential Investment and Finance

Economic activity in the past two years has been restrained by the ongoing contraction in the housing sector, and that restraint intensified in the second half of 2007. Home sales and prices softened significantly further, and homebuilders curtailed new construction in response to weak demand and elevated inventories. In all, the decline in residential investment reduced the annual growth rate of real GDP in the second half of 2007 by more than 1 percentage point, and the further drop in housing starts around the turn of the year suggests that the drag on the growth of real GDP remains substantial in early 2008.

The downturn in housing activity followed a multi-year period of soaring home sales and construction and rapidly escalating home prices. The earlier strength in housing reflected a number of factors. One was a low level of global real interest rates. Another was that Private Housing Starts, 1994-2007



NOTE: The data are quarterly and extend through 2007:Q4.

many homebuyers apparently expected that home prices would continue to rise briskly into the indefinite future, thereby adding a speculative element to the market. In addition, toward the end of the boom, housing demand was supported by an upsurge in nonprime mortgage lending-in many cases fed by lax lending standards.1 By the middle of the decade, house prices had reached very high levels in many parts of the United States, and housing was becoming progressively less affordable. Declining affordability and waning optimism about future house price appreciation apparently started to weigh on the demand for housing, thereby causing sales to fall and the supply of unsold homes to ratchet up relative to the pace of sales.

SOURCE: Department of Commerce, Bureau of the Census.

Nonprime mortgages comprise subprime and near-prime loans and accounted for about onefourth of all home-purchase mortgages in 2006. Near-prime mortgages are generally less risky than subprime mortgages but riskier than prime mortgages; they may require limited or no borrower documentation, have nontraditional amortization structures or high loan-to-value ratios, or be made on investment properties.

NOTE: The data are quarterly and extend through 2007:Q4; changes are from one year earlier. For the years preceding 1991, the repeat-transactions index includes appraisals associated with mortgage refinancings; beginning in 1991, it includes purchase transactions only. The S&P/Case-Shiller index reflects all arm's-length sales transactions in the metropolitan areas of Boston, Chicago, Denver, Las Vegas, Los Angeles, Miami, New York, San Diego, San Francisco, and Washington, D.C.

SOURCE: For repeat transactions, Office of Federal Housing Enterprise Oversight; for S&P/Case-Shiller, Chicago Mercantile Exchange.

Against this backdrop, prices began to decelerate, further damping expectations of future price increases and exacerbating the downward pressure on demand.

House prices decelerated dramatically in 2006 and softened further in 2007. In many areas of the nation, existing home prices fell noticeably last year. For the nation as a whole, the OFHEO price index declined in the second half of the year after rising modestly in the first half; that measure had risen 4 percent in 2006 and about $9\frac{1}{2}$ percent in each of the two years before that.² In the market for new homes, the constant-quality index of new home prices fell 2¹/₄ percent over the four quarters of 2007. Moreover, many large homebuilders reportedly have been using not only price discounts but also nonprice incentives (for example, paying closing costs and including optional upgrades at no cost) in an effort to bolster sales of new homes and reduce inventories.

In all, the pace of sales of existing homes fell 30 percent between mid-2005 and the fourth quarter of 2007, and sales of new homes dropped by half. Builders cut production in response to the downshift in demand; by the fourth quarter of 2007, starts of single-family homes had fallen to an annual rate of just 826,000 units—less than half the quarterly high reached in early 2006. Nonetheless, the ongoing declines in sales prevented builders from making much progress in paring their bloated inventories of homes. In fact, although the number of unsold new homes has decreased, on net, since the middle of 2006, inventories have climbed sharply relative to sales. Measured relative to the average pace of sales over the three months ending in December, the months' supply of unsold new homes at the end of December stood at nine months, more than twice the upper end of the narrow range that had prevailed from 1997 to mid-2005.

The contraction in housing demand and construction was exacerbated in the second half of 2007 by the near elimination of nonprime mortgage originations and a tightening of lending standards on all types of mortgages. Indeed, large fractions of banks that responded to the Federal Reserve's Senior Loan Officer Opinion Survey on Bank Lending Practices reported that they had tightened lending standards over this period. Nonetheless, interest rates on prime conforming mortgages have declined on

Change in Prices of Existing Single-Family Houses, 1988–2007

^{2.} The index is the seasonally adjusted purchase-only version of the repeat-transactions price index for existing single-family homes published by the Office of Federal Housing Enterprise Oversight.

net: Rates on conforming thirty-year fixed-rate loans dropped from about 6³/₄ percent last summer to just above 6 percent at year-end. This year they dipped as low as 51/2 percent but have recently moved back up to about 6 percent, within the range that prevailed for much of the 2003-05 period.3 Rates on conforming adjustable-rate loans have also fallen significantly over the past several months and now stand at their lowest level since the end of 2005. Offered rates on fixed-rate jumbo loans, which ran up in the second half of 2007, have recently declined somewhat, on net.4 Even so, spreads between rates offered on these loans and conforming loans remain unusually wide.

The softness in home prices has played an important role in the ongoing deterioration in the credit quality of subprime mortgages. The deterioration was rooted in poor underwriting standards—and, in some cases, fraudulent and abusive lending practices which were based in part on the assumption that house prices would continue to rise rapidly for some time to come. Many borrowers with weak credit histories took out adjustable-rate mortgages (subprime ARMs) with low initial rates; of those loans originated in 2005 and 2006, a historically large fraction had high loan-to-value ratios, which were often boosted by the addition of an associated junior lien or "piggyback" mortgage. When house prices decelerated, borrowers with high loan-to-value ratios on their loans were unable to build equity in their homes, making refinancing more difficult, and also faced the prospect of significantly higher mortgage payments after the initial rates on the loans reset.

Subprime ARMs account for about 7 percent of all first-lien mortgages outstanding. Delinquency rates on subprime ARMs began to increase in 2006, and by December 2007, more than one-fifth of these loans were seriously delinquent (that is, ninety days or more delinquent or in foreclosure). Moreover, an increasing fraction of subprime ARMs in the past few years have become seriously delinquent soon after they were originated and often well before the initial rate was due to reset.5 For subprime ARMs originated in 2006, about 10 percent had defaulted in the first twelve months, more than double the fraction for mortgages originated in earlier years. Furthermore, the path of the default rate for subprime ARMs originated in 2007 has run even higher. For subprime mortgages with fixed interest rates, delinquency rates have moved up significantly in recent months, to the upper end of their historical range.

For mortgages made to higher-quality borrowers (prime and near-prime mortgages), performance weakened somewhat in 2007, but it generally remains

^{3.} 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 Economic Stimulus Act of 2008, signed into law on February 13, retroactively raised the conforming loan limit for a first mortgage on a single-family home in the contiguous United States from \$417,000 to 125 percent of the median house price in an area, with an overall cap of \$729,750. The new conforming limit will be in effect through the end of 2008.

^{4.} Jumbo mortgages are those that exceed the maximum size of a conforming loan; they are typically extended to borrowers with relatively strong credit histories.

^{5.} The initial low-rate period for most subprime ARMs originated in the period from 2005 to 2007 was twenty-four months. Roughly 1½ million subprime ARMs are scheduled to undergo their first rate reset in 2008. Even with the recent declines in market interest rates, a notable fraction of those subprime ARMs are scheduled to reset to a higher interest rate.



Mortgage Delinquency Rates, 2001–07

Note: The data are monthly. For subprime, prime, and near-prime mortgages, the data extend through December 2007; for mortgages in alt-A pools, which are a mix of prime, near-prime, and subprime mortgages, the data extend through November 2007. For further details on the loans included in alt-A pools, refer to text. Delinquency rate is the percent of loans ninety days or more past due or in foreclosure.

SOURCE: First American LoanPerformance.

fairly solid. Although the rate of serious delinquency on ARMs has moved up, that on fixed-rate loans has stayed low. Serious delinquencies on jumbo mortgages—which often carry adjustable rates—have crept up slightly from very low levels.

The credit quality of loans that were securitized in pools marketed as "alt-A"

has declined considerably. Such loans are typically made to higher-quality borrowers but have nontraditional amortization structures or other nonstandard features. Some of the loans are categorized as prime or near prime and others as subprime. The rate of serious delinquency on loans with adjustable rates in alt-A pools currently stands at almost 6 percent, far above the rates of less than 1 percent seen as recently as early 2006. The rate of serious delinquency on fixed-rate alt-A loans has also increased in recent months.

The continued erosion in the quality of mortgage credit has led to a rising number of initial foreclosure filings; indeed, such filings were made at a record pace in the third quarter of 2007. Foreclosures averaged about 360,000 per quarter over the first three quarters of 2007, compared with a rate of about 235,000 in the corresponding quarters of 2006. As was the case in 2006, more than half of the foreclosure filings in 2007 were subprime mortgages despite the relatively smaller share of such loans in total mortgages outstanding. In some cases, falling prices may have tempted more-speculative buyers with little or no equity to walk away from their properties. Foreclosures have risen most in areas where home prices have been falling after a period of rapid increase; foreclosures also have mounted in some regions where economic growth has been below the national average.

Avoiding foreclosure—even if it involves granting concessions to the borrower—can be an important lossmitigation strategy for financial institutions. To limit the number of delinquencies and foreclosures, financial institutions can use a variety of approaches, including renegotiating the timing and size of rate resets. A complication in implementing such approaches is that the loans have often been packaged and sold in securitized pools that are owned by a dispersed group of investors, which makes the task of coordinating renegotiation among all affected parties difficult. In part to address the challenges in modifying securitized loans, counselors, servicers, investors, and other mortgage market participants joined in a collaborative effort, called the Hope Now Alliance, to facilitate cross-industry solutions to the problem.⁶ Separately, the Federal Reserve has directly responded in a number of ways to the problems with mortgage credit quality (described in the box entitled "The Federal Reserve's Responses to the Subprime Mortgage Crisis").

Most commercial banks responding to the Federal Reserve's January 2008 Senior Loan Officer Opinion Survey indicated that loan-by-loan modifications based on individual borrowers' circumstances were an important part of their loss-mitigation strategies. Almost twothirds of respondents indicated that they would consider refinancing the loans of their troubled borrowers into other mortgage products at their banks. About onethird of respondents said that streamlined modifications of the sort proposed by the Hope Now Alliance were important to their strategies for limiting losses.

All of the factors discussed above the drop in home sales, softer house prices, and tighter lending standards (especially for subprime and alternative mortgage products)—combined to reduce the growth of household mortgage debt to an annual rate of about $7\frac{1}{2}$ percent over the first three quarters of 2007, down from $11\frac{1}{4}$ percent in 2006. Growth likely slowed further in the fourth quarter.

Consumer Spending and Household Finance

Consumer spending held up reasonably well in the second half of 2007, though it moderated some in the fourth quarter. Spending continued to be buoyed by solid gains in aggregate wages and salaries as well as by the lagged effects of the increases in household wealth in 2005 and 2006. However, other influences on spending have become less favorable. Job gains have slowed lately, household wealth has been damped by the softening in home prices as well as by recent declines in equity values, and consumers' purchasing power has been sapped by sharply higher energy prices. Moreover, consumer sentiment has fallen appreciably, and although consumer credit has remained available to

Change in Real Income and Consumption, 2001–07



SOURCE: Department of Commerce, Bureau of Economic Analysis.

^{6.} The Hope Now Alliance (www.hopenow. com) aims to increase outreach efforts to contact at-risk borrowers and to play an important role in streamlining the process for refinancing and modifying subprime ARMs. The alliance will work to expand the capacity of an existing national network to counsel borrowers and refer them to participating servicers, who have agreed to work toward cross-industry solutions to better serve the homeowner.

most borrowers, credit standards for many types of loans have been tightened.

Real personal consumption expenditures (PCE) increased at an annual rate of $2^{3/4}$ percent in the third quarter, a little above the average pace during the first half of the year; in the fourth quarter, PCE growth slowed to 2 percent. With the notable exception of outlays for new light motor vehicles (cars, sport-utility vehicles, and pickup trucks)-which were well maintained through yearend-the deceleration in spending in the fourth quarter was widespread. PCE appears to have entered 2008 on a weak trajectory, as sales of light vehicles sagged in January and spending on other goods was soft.

Growth in real disposable personal income-that is, after-tax income adjusted for inflation-was sluggish in the second half of 2007. Although aggregate wages and salaries rose fairly briskly in nominal terms over that period, the purchasing power of the nominal gain was eroded by the energydriven upturn in consumer price inflation in the fall. Indeed, for many workers, increases in real wages over 2007 as a whole were modest, once again falling short of the rise in aggregate labor productivity. For example, average hourly earnings, a measure of wages for production or nonsupervisory workers, increased only 1/2 percent over the four quarters of 2007 after accounting for the rise in the overall PCE price index. Moreover, for some workers, real wages actually declined: Real average hourly earnings in manufacturing edged down about 3/4 percent last year, while for retail trade-an industry that typically pays relatively low wages-this measure of real wages fell about 2 percent.

On the whole, household balance sheets remained in good shape in 2007,

although they weakened late in the year. The aggregate net worth of households rose modestly through the third quarter, as increases in equity values more than offset the effect of softening home prices. However, preliminary data suggest that the value of household wealth fell in the fourth quarter, and as a result the ratio of household wealth to disposable income-a key influence on consumer spending-ended the year well below its level at the end of 2006. Nonetheless, because changes in net worth tend to influence consumption with a lag, the increases in wealth during 2005 and 2006 likely helped sustain spending in 2007. In the fourth quarter, the personal saving rate was just a shade above zero, about in line with its average value since 2005.

Overall household debt increased at an annual rate of about 7¹/₄ percent through the third quarter of 2007, a notable deceleration from the 10¹/₄ percent pace in 2006; household debt likely slowed further in the fourth quarter. Because the growth of household debt about matched the growth in nominal disposable personal income through the third quarter, and net changes in interest rates on mortgage debt to that point were small, the ratio of financial obligations to disposable personal income was about flat.

Consumer (nonmortgage) borrowing picked up a bit in 2007 to $5\frac{1}{2}$ percent, perhaps reflecting some substitution of consumer credit for mortgage debt. The pickup in consumer debt was mostly attributable to faster growth in revolving credit, a pattern consistent with the results of the Federal Reserve's Senior Loan Officer Opinion Survey. Banks, on net, reported easing lending standards on credit cards over the first half of 2007 and reported little change in those standards on net over the second half of the year. In contrast, significant fractions of

The Federal Reserve's Responses to the Subprime Mortgage Crisis

The sharp increases in subprime mortgage loan delinquencies and foreclosures over the past year have created personal, economic, and social distress for many homeowners and communities. The Federal Reserve has taken a number of actions that directly respond to these problems. Some of the efforts are intended to help distressed subprime borrowers and limit preventable foreclosures, and others are aimed at reducing the likelihood of such problems in the future.

Home losses through foreclosure can be reduced if financial institutions work with borrowers who are having difficulty meeting their mortgage payment obligations. Foreclosure cannot always be avoided, but in many cases prudent loss-mitigation techniques that preserve homeownership are less costly to lenders than foreclosure. In 2007, the Federal Reserve and other banking agencies encouraged mortgage lenders and mortgage servicers to pursue prudent loan workouts through such measures as modification of loans, deferral of payments, extension of loan maturities, capitalization of delinquent amounts, and conversion of adjustable-rate mortgages (ARMs) into fixed-rate mortgages or fully indexed, fully amortizing ARMs.1

The Federal Reserve has also collaborated with community groups to help homeowners avoid foreclosure. Staff members throughout the Federal Reserve System are working to identify localities that are likely to experience the highest rates of foreclosure; the resulting information is helping local groups to better focus their borrower outreach efforts. In addition, the Federal Reserve actively supports NeighborWorks America, a national nonprofit organization that has been helping thousands of mortgage borrowers facing current or potential distress. Federal Reserve staff members have worked closely with this organization and its local affiliates on an array of foreclosure prevention efforts, and a member of the Federal Reserve Board serves on its board of directors. Other contributions include efforts by Reserve Banks to convene workshops for stakeholders to develop community-based solutions to mortgage delinquencies in their areas.

The Federal Reserve has taken important steps aimed at avoiding future problems in subprime mortgage markets while still preserving responsible subprime lending and sustainable homeownership. In coordination with other federal supervisory agencies and the Conference of State Bank Supervisors, the Federal Reserve issued principles-based guidance on subprime mortgages last summer.² The guidance is designed to help ensure that

respondents in the second half of 2007 reported that they had tightened standards and terms on other consumer loans, a change that may have contributed to a slowing in the growth of nonrevolving loans over the final months of 2007. Average interest rates on credit cards generally moved down in the second half of the year, but by less than the short-term market interest rates on which they are often based. Interest rates on new auto loans at banks and at auto finance companies have also declined some in recent months.

^{1.} Board of Governors of the Federal Reserve System (2007), "Working with Mortgage Borrowers," Division of Banking Supervision and Regulation, Supervision and Regulation Letter SR 07-6 (April 17); and "Statement on Loss Mitigation Strategies for Servicers of Residential Mortgages," Supervision and Regulation Letter SR 07-16 (September 5).

Board of Governors of the Federal Reserve System (2007), "Statement on Subprime Mortgage Lending," Division of Banking Supervision and Regulation, Supervision and Regulation Letter SR 07-12 (July 24).

borrowers obtain adjustable-rate mortgages 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 2006.³

The Federal Reserve is working to help safeguard borrowers in their interactions with mortgage lenders. In support of this effort, in December 2007 the Federal Reserve used its authority under the Home Ownership and Equity Protection Act of 1994 to propose new rules that address unfair or deceptive mortgage lending practices. This proposal addresses abuses related to prepayment penalties, failure to escrow for taxes and insurance, problems related to stated-income and lowdocumentation lending, and failure to give adequate consideration to a borrower's ability to repay. The proposal includes other protections as well, such as rules designed to curtail deceptive mortgage advertising and to ensure that consumers receive mortgage disclosures at a time when the information is likely to be the most useful to them.

The Federal Reserve is also currently undertaking a broad and rigorous review of the Truth in Lending Act, including extensive consumer testing of loan disclosure documents. After a similar comprehensive analysis of disclosures related to credit card and other revolving credit arrangements, the Board issued a proposal in May 2007 to require such disclosures to be clearer and easier to understand. Like the credit card review, the review of mortgage disclosures will be lengthy given the critical need for field testing, but the process should ultimately help more consumers make appropriate choices when financing their homes.

Finally, strong uniform oversight of all mortgage lenders is critical to avoiding future problems in mortgage markets. Regulatory oversight of the mortgage industry has become more challenging as the breadth and depth of the market has grown over the past decade and as the role of nonbank mortgage lenders, particularly in the subprime market, has increased. In response, the Federal Reserve, together with other federal and state agencies, launched a pilot program last summer focused on selected nondepository lenders with significant subprime mortgage operations.⁴ The program will review compliance with consumer protection regulations and impose corrective or enforcement actions as warranted.

Indicators of the credit quality of consumer loans suggest that it has weakened but generally remains sound. Over the second half of the year, delinquency rates on consumer loans at commercial banks increased, but from relatively moderate recent levels. Meanwhile, delinquency rates at captive auto finance companies increased somewhat but are well below previous highs. 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

^{3.} Board of Governors of the Federal Reserve System (2006), "Interagency Guidance on Nontraditional Mortgage Product Risks," Division of Banking Supervision and Regulation, Supervision and Regulation Letter SR 06-15 (October 10).

^{4.} The other agencies collaborating on the effort are the Office of Thrift Supervision, the Federal Trade Commission, the Conference of State Bank Supervisors, and the American Association of Residential Mortgage Regulators.

modestly over the first nine months of 2007.

The issuance of asset-backed securities (ABS) tied to credit card loans and auto loans (consumer loan ABS) has remained robust. Spreads of yields on consumer loan ABS over comparablematurity swap rates have moved up considerably since July; the rise pushed spreads on two-year BBB-rated consumer loan ABS to almost double their previous peaks in late 2002. Spreads on two-year AAA-rated consumer loan ABS jumped to between 60 basis points and 100 basis points after having been near zero for most of the decade, perhaps in part as a result of investors' general reassessment of the risk in structured credit products.

The Business Sector

Fixed Investment

Real business fixed investment (BFI) rose at an annual rate of 81/2 percent in the second half of 2007, largely because of a double-digit rise in expenditures on nonresidential construction. Investment in equipment and software (E&S), which had accounted for virtually all of the growth in real BFI from 2003 to 2005, has been erratic since early 2006 but, on balance, has decelerated noticeably. On the whole, the economic and financial conditions that influence capital spending were fairly favorable in mid-2007, but they subsequently worsened as the outlook for sales and profits soured and as credit conditions for some borrowers tightened. A bright spot, however, is that many firms still have ample cash on hand to fund potential projects.

On average, real outlays on E&S rose at an annual rate of 5 percent in the second half of 2007; in the first half, these outlays had risen just $2\frac{1}{2}$ percent, in part because of a sharp downswing in Change in Real Business Fixed Investment, 2001–07



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

SOURCE: Department of Commerce, Bureau of Economic Analysis.

outlays on motor vehicles.⁷ Real investment in high-technology performed well in the second half, with further increases in all major components (computers, communications equipment, and software). Real outlays on equipment other than high-tech and transportation (a broad category that accounts for nearly half of investment in E&S when measured in nominal terms) posted a solid gain in the third quarter. However, those

^{7.} The plunge in business outlays on motor vehicles in the first half was related to new Environmental Protection Agency emissions standards for large trucks, which went into effect at the start of 2007. Many firms had accelerated their purchases of such trucks into 2005 and 2006 so that they could take delivery before the new standards went into effect and thus avoid the higher costs associated with those standards. Outlays on motor vehicles rose modestly, on net, in the second half of the year.

outlays edged down in the fourth quarter, and the relatively slow pace of orders, along with the downbeat tone in recent surveys of business conditions, suggests that the softness in spending has extended into early 2008.

Meanwhile, real outlays on nonresidential construction remained on a strong uptrend. Some of the recent strength likely represents a catch-up from the prolonged weakness in this sector in the first half of the decade. With the notable exception of the non-office commercial sector-where spending has been about flat since mid-2007-all major types of building continued to exhibit considerable vigor in the second half. In general, the nonfinancial fundamentals affecting nonresidential construction remain favorable: Vacancy rates for office and industrial buildings have fallen appreciably over the past few years despite the addition of a good deal of available space; and, although the vacancy rate for retail buildings has moved up somewhat of late, it remains well below its cyclical highs in 1991 and 2003. However, funding has reportedly become more difficult to obtain in recent months, especially for speculative projects, and the slowing in aggregate output and employment is likely to limit the demand for nonresidential space in coming quarters. Meanwhile, real outlays for drilling and mining structures have continued to rise in response to high prices for petroleum and natural gas.

Inventory Investment

Although inventory imbalances had cropped up in a number of industries in late 2006, overhangs were largely eliminated in the first half of 2007, and firms generally continued to keep a tight rein on stocks in the second half. In the motor vehicle sector, manufacturers pursued an aggressive strategy of production adjustments to keep dealer stocks reasonably well aligned with sales. In December 2007, days' supply of light vehicles stood at a comfortable sixtyfour days-though it ticked up in January because of the drop in sales noted earlier. Apart from motor vehicles, real nonfarm inventory investment was a modest \$10 billion (annual rate) in the first half of 2007; it stayed around that rate in the third quarter and appears to have remained modest in the fourth quarter as manufacturing firms adjusted production promptly in response to signs of softening demand. With only a few exceptions-mostly related to the ongoing weakness in construction and motor vehicle production-book-value inventory-sales ratios in December seemed in line with historical trends. Moreover, businesses surveyed in January by the Institute for Supply Management reported that their customers were generally satisfied with their current level of stocks.

Corporate Profits and Business Finance

Four-quarter growth in economic profits for all U.S. corporations came in at about 2 percent in the third quarter of 2007, with the entire gain attributable to a large increase in receipts from foreign subsidiaries. The share of profits in the GDP of the nonfinancial sector peaked in the third quarter of 2006, near its previous high reached in 1997, and has since receded. For S&P 500 firms, operating earnings per share in the third quarter came in about 6 percent below year-earlier levels.⁸ Data from about

^{8.} The difference between economic profits and S&P operating earnings in the third quarter is attributable primarily to numerous asset writedowns and capital losses, which are generally ex-

80 percent of those firms and analysts' estimates for the rest indicate that operating earnings per share in the fourth quarter fell more than 20 percent from the fourth quarter of 2006. Earnings per share among the group's financial firms are estimated to have been negative, primarily because of asset write-downs; in contrast, earnings per share of the nonfinancial firms appear to have increased about 13 percent.

Nonfinancial business debt is estimated to have grown about 11 percent in 2007, buoyed by robust merger and acquisition activity. Net corporate bond issuance was strong throughout the year, although high-yield issuance declined after midyear, as yields on such bonds increased and spreads over yields on Treasury securities of comparable maturity widened to levels not seen since late 2002. The amount of outstanding nonfinancial commercial paper was about flat, on net, over 2007, held down mostly by runoffs of lower-tier paper in the second half of the year as the market for such paper came under pressure. After an unprecedented amount of issuance of leveraged syndicated loans over the first half of 2007, issuance declined considerably in the second half of the year, when demand by nonbank investors for those loans fell off. Commercial and industrial (C&I) loans at banks expanded briskly in 2007 as underlying demand for bank-intermediated business credit seemed to remain solid and banks took onto their balance sheets loans that had been intended for syndication. In the Senior Loan Officer Opinion Surveys taken in October 2007 and January 2008, considerable net fractions of banks reported charging wider spreads on C&I loans-the loan rate less the

cluded in the calculation of economic profits but are included as an expense in operating earnings per share of financial firms. Selected Components of Net Financing for Nonfinancial Corporate Businesses, 2003–07





bank's cost of funds—the first such tightening in several years. Large fractions of banks also indicated that they had tightened lending standards. Most of the banks that tightened terms and standards indicated that they had done so in response to a less favorable or more uncertain economic outlook and a reduced tolerance for risk. A lesser fraction—about one-fourth—cited concerns about the liquidity or capital position of their own banks as reasons for tightening.

Gross equity issuance picked up in 2007 on an increase in the pace of seasoned offerings. Nonetheless, record volumes of share repurchases and cash-financed mergers and acquisitions pushed net equity retirements even higher in 2007 than in 2006.

The credit quality of nonfinancial corporations remained strong. The sixmonth trailing bond default rate stayed near zero through January 2008. The delinquency rate on C&I loans at commercial banks at the end of 2007 remained near the bottom of its historical range, but it trended higher over the year. Charge-offs on C&I loans at banks also increased in 2007, particularly in the fourth quarter. Rating downgrades of corporate bonds were modest through the fourth quarter, and over the year the fraction of debt that was downgraded roughly equaled the fraction that was upgraded. For public firms, balance sheet liquidity remained at a high level through the third quarter of 2007, and leverage stayed very low despite robust borrowing and surging retirements of equity.

Commercial real estate debt continued to expand briskly in 2007, reflecting in part strong investment in nonresidential structures, but the overall pace tapered off some in the second half of the year. As noted above, readings on some market fundamentals for existing structures-for example, vacancy rates and rents-remained solid. Similarly, the latest data for commercial mortgages held by life insurance companies or by issuers of commercial mortgage-backed securities (CMBS)—mortgages that mostly finance existing structuresshow little change in delinquency rates in recent quarters.

In contrast, the delinquency rate on commercial mortgages held by banks about doubled over the course of 2007, reaching almost 23/4 percent. The loan performance problems were the most striking for construction and land development loans-especially for those that finance residential development-but some increase in delinquency rates was also apparent for loans backed by nonfarm, nonresidential properties and multifamily properties. In the most recent Senior Loan Officer Opinion Survey, large fractions of banks reported having tightened standards and terms on commercial real estate loans. Among the most common reasons cited by those that tightened credit conditions were a less favorable or more uncertain economic outlook, a worsening of commercial real estate market conditions in the

areas where the banks operate, and a reduced tolerance for risk.

Moreover, despite the generally solid performance of commercial mortgages in securitized pools, spreads of yields on BBB-rated CMBS over comparablematurity swap rates soared, and spreads on AAA-rated tranches of those securities rose to unprecedented levels. The widening of spreads reportedly reflected heightened concerns regarding the underwriting standards for commercial mortgages over the past few years and likely also investors' general wariness of structured finance products.

Issuance of CMBS in 2007 topped the pace of 2006. It was fueled by leveraged buyouts of real estate investment trusts in the first half of the year, but issuance slowed to a trickle over the final four months of the year on tighter underwriting standards and the higher required yields. Nonetheless, the still-steady growth of commercial real estate debt indicates that, thus far, borrowers have found alternative funding sources for projects.

The Government Sector

Federal Government

The deficit in the federal unified budget stood at \$162 billion in fiscal year 2007, roughly \$250 billion below the recent high reached in fiscal 2004 and equal to just 1¼ percent of nominal GDP. However, growth in revenues has slowed since last summer, and growth in outlays has quickened. Given those developments, the deficit during the first four months of fiscal 2008 (October 2007 to January 2008) was larger than it had been during the comparable period of fiscal 2007. Over the remainder of fiscal 2008, a slow pace of economic activity and the revenue loss associated with the Economic Stimulus Act of 2008 are expected to boost the deficit.

Nominal federal receipts have decelerated sharply since posting double-digit advances in fiscal years 2005 and 2006: They rose less than 7 percent in fiscal 2007 and have slowed substantially further thus far in fiscal 2008. The deceleration has been most pronounced in corporate receipts, which barely increased in fiscal 2007 after three years of exceptional growth and have fallen well below year-earlier levels so far in fiscal 2008; the downturn has reflected the recent softness in corporate profits. In addition, growth in individual income tax receipts has moderated from the rapid rates seen around the middle of the decade. Nonetheless, total receipts grew faster than nominal GDP for the third year in a row in fiscal 2007 and reached 18³/₄ percent of GDP, slightly above the average of the past forty years.

Nominal federal outlays rose less than 3 percent in fiscal 2007 after having

Federal Receipts and Expenditures, 1987–2007



NOTE: The receipts and expenditures data are on a unified-budget basis and are for fiscal years (October through September); GDP is for the four quarters ending in Q3.

SOURCE: Office of Management and Budget.

risen about 7¹/₂ percent in each of the two preceding years. In large part, the slowing in 2007 reflected a number of transitory factors—most notably, the tapering off of expenditures for flood insurance and disaster relief related to the 2005 Gulf Coast hurricanes, which had produced a noticeable bulge in spending in fiscal 2006. So far in fiscal 2008, sharp increases in outlays for defense and net interest have helped push spending 8 percent above its year-earlier level.

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—rose at an annual rate of $3\frac{1}{2}$ percent, on average, in the second half of calendar 2007 after having been unchanged in the first half. The step-up was concentrated in real defense spending, which tends to be erratic from quarter to quarter and rose at an annual rate of $4\frac{1}{2}$ percent in the second half, somewhat above its average pace over the past three years.

Federal debt rose at an annual rate of almost 5 percent over the four quarters

Federal Government Debt Held by the Public, 1960–2007



NOTE: The data for debt are as of year-end; the observation for 2007 is an estimate. The corresponding values for GDP are for Q4 at an annual rate. Excludes securities held as investments of federal government accounts.

SOURCE: Federal Reserve Board, flow of funds data.

of calendar year 2007, a bit faster than the roughly 4 percent increase in 2006. The ratio of federal debt held by the public to nominal GDP remained in the narrow range around 361/2 percent seen in recent years. The Treasury's decision in May to discontinue auctions of threeyear nominal notes elicited little reaction in financial markets. The Treasury also trimmed some auction sizes for a few other coupon securities over the first three quarters of the year as the narrower deficit reduced borrowing needs. Data suggest that the proportion of nominal coupon securities purchased at Treasury auctions by foreign official institutions edged down over the second half of 2007, but the proportion has changed little, on net, since mid-2005.

State and Local Government

The fiscal condition of state and local governments appears to have lost some luster in 2007 after improving significantly between the early part of the decade and 2006. Indeed, for the state and local sector as a whole, net saving as measured in the NIPA, which is broadly similar to the surplus in an operating budget, fell from a recent high of \$25 billion in 2006 to roughly zero, on average, during the first three quarters of 2007. The downshift occurred as revenue increases tailed off after a period of hefty gains and as nominal expenditures-especially on energy and health care-rose sharply. Recent information from individual states points to a good deal of unevenness in current budget conditions. Some states—especially those in agricultural and energyproducing regions-continue to enjoy strong fiscal positions. Others, however, are reporting sizable shortfalls in revenues, in part because sales tax collections are being hit hard by the weakness in purchases of housing-related items. In

these circumstances, some states may have to cut spending or raise taxes to satisfy their balanced-budget requirements. At the local level, property tax receipts apparently were bolstered in 2007 by the earlier run-up in real estate values, but the deceleration in house prices will likely slow the rise in local revenues down the road. Moreover, many state and local governments expect to face significant structural imbalances in their budgets in coming years as a result of the ongoing pressures from Medicaid and the need to provide pensions and health care to their retired employees.

According to the NIPA, real expenditures on consumption and gross investment by state and local governments continued to expand briskly in the second half of 2007. Much of the strength was in construction spending, which picked up speed early last year after having been essentially flat between 2002 and 2006. Meanwhile, real outlays for current operations remained on the moderate uptrend that has been evident since 2006.

Boosted by spending on education and industrial aid, borrowing for new capital expenditures by state and local governments was very strong in 2007. Refundings in advance of retirements were brisk in the early part of the year as issuers locked in low interest rates, but refundings subsided in the second half as a result of higher volatility and reduced liquidity in the municipal bond market. By contrast, short-term borrowing picked up a bit during the second half of the year, possibly because of some deterioration in state and local budgets.

Municipal issuers are benefiting from lower interest rates, as bond yields have declined some since midyear. However, investors reportedly have become increasingly concerned about the weaker fiscal outlooks for many state and local governments and the condition of municipal bond insurers. Partly as a result of those developments, the ratio of an index of municipal bond yields to the yield on comparable-maturity Treasuries has climbed to the top end of its historical range.

Some indicators of credit quality in the municipal bond sector have begun pointing to greater weakness in recent months. Rating upgrades have slowed while downgrades have risen. A substantial number of revenue bonds for projects insured by a subsidiary of a major investment bank were downgraded in October. In January another group of bonds was downgraded because of the downgrade of their insurer.

National Saving

Total net national saving—that is, the saving of households, businesses, and governments excluding depreciation charges—was equal to about 1½ percent of nominal GDP, on average, during the first three quarters of 2007. The drain on national saving from the federal budget deficit was smaller than it had been a few years earlier. However, net business saving receded somewhat from the relatively high levels of the preceding few years, and personal saving was very low for the third consecutive year.

Net national saving fell appreciably as a percentage of GDP between the late 1990s and the early part of this decade; that ratio has changed little since 2002 (apart from the third quarter of 2005, which was marked by sizable hurricanerelated property losses). If not boosted over the longer run, persistent low levels of national 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 an aging population.

The External Sector

International Trade

The external sector provided significant support to economic activity in the second half of last year. Net exports added almost 1 percentage point to U.S. GDP growth during that period, according to the latest GDP release from the Bureau of Economic Analysis, but data received since then suggest a somewhat larger positive contribution. The contribution of net exports was supported by a robust expansion-about 11 percent at an annual rate-of real exports of goods and services that was helped by still-solid growth of foreign economies and the effects of the past depreciation of the dollar. The broad-based rise in real exports of goods included sizable increases for automobiles, agricultural goods, and capital goods, especially aircraft. Exports of services rose in 2007 but at a

Change in Real Imports and Exports of Goods and Services, 1999–2007



SOURCE: Department of Commerce.

slower pace than in the previous year. The value of exports to China, India, Russia, South America, and the members of OPEC rose quite substantially, and gains for exports to Canada and western Europe were also sizable. Exports to Mexico and Japan increased at a somewhat slower pace.

A slowdown in real imports was also a factor in the positive contribution of net exports to the growth of real GDP last year. The growth of real imports of goods and services decreased to about $1\frac{1}{2}$ percent in 2007, down from a $3^{3}/_{4}$ percent rise in 2006, in part because of a slowdown in U.S. domestic demand and the depreciation of the dollar. Although real imports of capital goods were strong, the growth of most other major categories declined. Despite the moderation in the growth of imports overall, the value of goods (excluding oil) imported from western Europe, China, and Mexico still rose at solid rates.

Given those movements in exports and imports, along with somewhat higher net investment income, the U.S. current account deficit appears likely to have shrunk in 2007 on an annual basis for the first time since 2001. The current account deficit narrowed from \$811 billion in 2006 to an average of \$753 billion at an annual rate, or around 5½ percent of nominal GDP, in the first three quarters of 2007 (the latest available data). However, its largest component, the trade deficit, widened in the fourth quarter because of a steep increase in the price of imported oil.

The price of crude oil soared on world markets in 2007. The spot price of West Texas intermediate increased from around \$60 per barrel at the end of 2006 to about \$100 at present. The strong demand for oil was powered by the continued expansion of the world economy through 2007, especially in the developPrices of Oil and of Nonfuel Commodities, 2003–08



Note: The data are monthly. The last observation for the oil price is the average for February 1 through February 21, 2008. The price of nonfuel commodities extends through January 2008. The oil price is the spot price of West Texas intermediate crude oil. The price of nonfuel commodities is an index of forty-five primary-commodity prices.

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

ing countries. In addition, a number of actual and potential disruptions to supply have contributed to the surge in oil prices. OPEC members announced cuts to oil production in late 2006. Despite recent agreements that have reversed some of these cuts, OPEC production remains restrained. The growth of production has also been hampered by some governments' moves to take control of oil resources or raise their share of revenues. Geopolitical tensions in the Middle East and instability in Nigeria have contributed to concerns about oil supply as well. The price of the fardated NYMEX oil futures contract (currently for delivery in 2016) now has risen to nearly \$95 per barrel and likely reflects a belief by oil market participants that the balance of supply and demand will remain tight for some time to come.

Broad indexes of non-oil commodities prices remain elevated. Although they fell back slightly over the second half of last year, prices have again risen since the start of 2008. Prices of a number of metals, which surged in the spring on strong global demand, retreated somewhat during the latter half of 2007 as production increased and as users substituted into other materials. However, more recently the prices of copper and aluminum have moved back up. Prices for food commodities continue to rise steeply. Poor harvests in Australia as well as in parts of Europe and Asia led to higher wheat prices. The price of soybeans also has risen sharply because acreage has been shifted to corn production, in part to produce biofuel; in addition, the soybean harvest in China was down sharply from last year.

Import price inflation increased in 2007, with the depreciation of the dollar providing an important impetus; higher oil and food prices also contributed. Prices of imported goods rose about 8½ percent in 2007, but excluding food, oil, and natural gas, such prices rose 2¼ percent; both rates were somewhat higher than in the previous year.

The Financial Account

Although the current account deficit appears to have narrowed during 2007, it remains sizable and continues to require a significant inflow of financing from abroad. As in the past, the deficit was largely financed by foreign net acquisitions of U.S. securities.

The global financial turmoil that began in the summer left an imprint on the components of the U.S. financial account. After acquiring record amounts of U.S. securities in the first half of 2007, foreign private investors sold a sizable net amount of non-Treasury U.S. securities in the third quarter—the first quarterly net sale of such securities in more than fifteen years. In contrast, foreign private demand for U.S. Treasury securities picked up sharply in the third quarter as global investors shifted into less-risky positions. On balance, flows out of non-Treasuries and into U.S. Treasuries nearly offset one another, and total foreign private acquisitions of U.S. securities recorded an unusually small net inflow for the third quarter. Preliminary data for the fourth quarter indicate renewed foreign acquisitions of U.S. corporate securities, although at a notably weaker pace than in the first half of the year. Foreign private demand for U.S. Treasury securities has remained strong.

As issuers of asset-backed commercial paper around the globe began to encounter difficulties over the summer, nonbank entities that had issued commercial paper in the United States and lent the proceeds to foreign parents sharply curtailed those activities. As a result, those entities reduced their claims on foreign parents, and net financial inflows from nonbank entities thus were sizable in the third quarter. Foreign inflows through direct investment into the United States surged in the third quarter, as foreign parents injected additional equity capital into their U.S. affiliates.

Foreign official inflows slowed in the third quarter, as Asian central banks acquired debt securities issued by government-sponsored enterprises (GSEs) but on net sold U.S. Treasury securities. Official inflows appear to have strengthened again in the fourth quarter, with a return to moderate purchases of U.S. Treasury securities, continued strong purchases of GSE-issued debt securities, and a notable pickup in acquisitions of both corporate equities and corporate debt securities.

Net purchases of foreign securities by U.S. residents, which represent a financial outflow, were maintained at a brisk pace for 2007 as a whole. Outflows associated with U.S. direct investment abroad remained strong.

The Labor Market

Employment and Unemployment

The demand for labor decelerated early last year and has slowed further of late. The average monthly gain in private nonfarm payroll employment, which slid from about 160,000 in 2006 to 80,000 over the first ten months of 2007, was only 50,000 in November and December, and private employment was nearly flat in January 2008. The civilian unemployment rate, which had hovered around 41/2 percent in the early part of 2007, drifted up about 1/4 percentage point from May to November; it rose another 1/4 percentage point, on net, over the following two months and stood at 4.9 percent in January.

Employment in residential construction has been falling for about two years and now stands 375,000 below the high reached in early 2006. Jobs in related financial industries have also decreased lately. Payrolls in the manufacturing sector, which have been on a downtrend for

Net Change in Private Payroll Employment, 2001–08



Note: Nonfarm business sector. The data are monthly and extend through January 2008.

more than a quarter-century, have continued to shrink. Meanwhile, some service-producing industries have maintained solid gains. In particular, hiring by health and education institutions and by food services and drinking establishments has remained strong, and job gains at businesses providing professional and technical services have been sizable as well.

The increase in joblessness since the spring of 2007 has been widespread across major demographic groups. In January 2008, unemployment rates for men and women aged 25 years and older were both about 1/4 percentage point above the levels of last spring, and—as typically occurs-rates for teenagers and young adults showed larger increases. Among the major racial and ethnic groups, unemployment rates for blacks and Hispanics rose somewhat more than did unemployment rates for whites, a differential also typical of periods when labor market conditions soften. An increase in the number of unemployed who had lost their last jobs (as opposed to those who had voluntarily left their jobs or were new entrants to the labor force) accounted for about half of the rise in the overall jobless rate between the spring of 2007 and January 2008. The labor force participation rate stood slightly above 66 percent in January; it has changed little, on net, over the past couple of years after falling appreciably over the first half of the decade.

Most other recent indicators also point to some softening of labor market conditions. Initial claims for unemployment insurance, which had remained relatively low through the fall, moved up somewhat in the closing months of 2007; though erratic from week to week, they appear to have risen further in early 2008. Meanwhile, private surveys suggest that firms have cut back on plans for hiring in the near term. Households

SOURCE: Department of Labor, Bureau of Labor Statistics.
have also become less upbeat about the prospects for the labor market in the year ahead.

Productivity and Labor Compensation

Output per hour in the nonfarm business sector rose 21/2 percent in 2007 after averaging just 11/2 percent per year over the preceding three years. Although estimates of the underlying pace of productivity growth are quite uncertain, the pickup in measured productivity growth in 2007 suggests that the fundamental forces supporting a solid underlying trend remain in place. Those forces include the rapid pace of technological change as well as the ongoing efforts by firms to use information technology to improve the efficiency of their operations. Increases in the amount of capital per worker also appear to be providing an impetus to productivity growth.

Change in Output per Hour, 1948-2007



NOTE: Nonfarm business sector. Change for each multiyear period is measured to the fourth quarter of the final year of the period from the fourth quarter of the year immediately preceding the period.

SOURCE: Department of Labor, Bureau of Labor Statistics.

Hourly compensation rose at a relatively moderate rate in 2007 despite a pickup in overall consumer price inflation, a continued advance in labor productivity, and generally tight labor markets. The employment cost index (ECI) for private industry workers, which measures both wages and the cost of benefits, increased 3 percent in nominal terms over the twelve months of 2007. about in line with its pace in 2005 and 2006. Within the ECI, wages and salaries increased 3¹/₄ percent in 2007, the same as in 2006 but ³/₄ percentage point above the increases in 2004 and 2005. Meanwhile, increases in the cost of providing benefits have slowed markedly in recent years, in part because employer contributions for health insurance have decelerated. The increase in benefits costs in 2007, which amounted to just 2¹/₂ percent, was also held down by a drop in employer contributions to defined-benefit retirement plans in the first quarter. The lower contributions appear to have been facilitated by several factors, including a high level of employer contributions over the preceding few years and the strong performance of the stock market in 2006.

According to preliminary data, nominal compensation per hour in the nonfarm business sector—an alternative measure of hourly compensation derived from the compensation data in the NIPA—rose 3³/₄ percent in 2007, somewhat faster than the ECI. In 2006, the nonfarm business measure had risen 5 percent, with an apparent boost from a high level of bonuses and stock option exercises, which do not seem to have been repeated in 2007.⁹ The moderation in this measure last year, along with the

^{9.} Income received from the exercise of stock options is included in the measure of hourly compensation in the nonfarm business sector but not in the ECI. Income received from most types

step-up in measured productivity growth, held the increase in unit labor costs in 2007 to 1 percent. Unit labor costs rose about $2\frac{1}{2}$ percent per year, on average, from 2004 to 2006 after having been nearly flat over the preceding three years.

Prices

consumer price inflation Headline slowed dramatically in the third quarter of 2007, when energy prices hit a lull after their first-half surge, but it moved back up in the fourth quarter as energy prices climbed again. Over the year as a whole, the overall PCE chain-type price index rose $3\frac{1}{2}$ percent, $1\frac{1}{2}$ percentage points more than in 2006. Core price inflation excludes the direct effects of increases in food and energy prices; these increases were sharp last year. Like headline inflation, core PCE inflation was uneven from quarter to quarter in 2007; over the four quarters of the year, it averaged a bit more than 2 percent. In 2006, the core index rose $2^{1/4}$ percent. Although data for PCE prices in January 2008 are not yet available, information from the consumer price index (CPI) and other sources suggests that both total and core inflation remained on the high side early this year after having firmed in the fourth quarter of 2007.

The PCE price index for energy rose nearly 20 percent over the four quarters of 2007 after having fallen modestly in 2006. The retail price of gasoline was up about 30 percent over the year as a whole, driven higher by the upsurge in the cost of crude oil. In 2008, gasoline prices through mid-February were around the high levels seen late last year. Prices of natural gas rose sharply in early 2007, but they receded over the second half of the year as inventories reached their highest levels since the early 1990s. So far in 2008, natural gas prices have risen notably as inventories have fallen back into line with seasonal norms. Consumer prices for electricity rose sharply last fall, likely because of last year's higher prices of fossil fuel inputs to electricity generation.

Last year's increase in the PCE price index for food and beverages, at 41/2 percent, was the largest in nearly two decades. Food prices accelerated in response to strong world demand and high demand for corn for the production of ethanol. Taken together, prices for meats, poultry, fish, and eggs rose $5\frac{1}{2}$ percent, and prices of dairy products were up at double-digit rates. Prices for purchased meals and beverages, which typically are influenced more by labor and other business costs than by farm prices, also recorded a sizable increase last year. In commodity markets, grain prices soared to near-record levels in late 2007 as strong global demand outstripped available supply, and they have moved somewhat higher since the turn of the year. Meanwhile, spot prices of livestock have declined of late; the decrease should provide some offset to the upward pressure from grain prices and thus help limit increases in consumer food prices in coming months.

The pattern of core PCE inflation was uneven during 2007. In the first half of the year, core inflation was damped significantly by unusually soft prices for apparel, prescription drugs, and nonmarket items (especially financial services provided by banks without explicit charge); all of these developments proved transitory and were reversed later in the year with little net effect on core inflation over the year as a whole. Meanwhile, the rate of increase in the core CPI dropped from 2³/₄ percent in

of bonuses is included in both measures of compensation.

2006 to 2¹/₄ percent in 2007; the main reason for the sharper deceleration in the core CPI than in the core PCE price index is that housing costs, which rose less rapidly in 2007 than they had in 2006, carry much greater weight in the core CPI.

More fundamentally, the behavior of core inflation in 2007 was shaped by many of the same forces that were at work in 2006. The December jump in unemployment notwithstanding, resource utilization in labor and product markets remained fairly high last year, and increases in prices for energy and other industrial commodities continued to add to the cost of producing a wide variety of goods and services. Higher prices for non-oil imports also likely put some upward pressure on core inflation. Meanwhile, the news on inflation expectations has been mixed. Probably reflecting the higher rate of actual headline inflation, the median expectation for year-ahead inflation in the Reuters/ University of Michigan Surveys of Consumers moved up from 3 percent in early 2007 to between 31/4 percent and $3\frac{1}{2}$ percent last spring; apart from a downward blip in the autumn, it remained there through January 2008 and spurted to $3\frac{3}{4}$ percent in the preliminary estimate for February. In contrast, most indicators suggest that expectations for longer-run inflation have remained reasonably well contained. The preliminary February result for median five- to tenyear inflation expectations in the Reuters/ University of Michigan survey, at 3.0 percent, was around the middle of the narrow range that has prevailed for the past few years. And according to the Survey of Professional Forecasters, conducted by the Federal Reserve Bank of Philadelphia, expectations of CPI inflation over the next ten years have remained around $2\frac{1}{2}$ percent, a level that has been essentially unchanged since

Alternative Measures of Price Change, 2005–07

Percent

Price measure	2005	2006	2007
Chain-type			
Gross domestic product (GDP) Excluding food and energy	3.4 3.3	2.7 2.9	2.6 2.3
Personal consumption expenditures (PCE) Excluding food and energy	3.2 2.2	1.9 2.3	3.4 2.1
Market-based PCE excluding food and energy	1.7	2.0	1.9
Fixed-weight Consumer price index Excluding food and energy	3.8 2.1	1.9 2.7	4.0 2.3

Note: Changes are based on quarterly averages of seasonally adjusted data.

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

1998. Meanwhile, ten-year inflation compensation, as measured by the spreads of yields on nominal Treasury securities over those on their inflationprotected counterparts, has changed little, on balance, since mid-2007.

Last year's sharp rise in energy prices also left an imprint on the price index for GDP, which rose a little more than 2¹/₂ percent for the second year in a row.¹⁰ Excluding food and energy prices, the increase in GDP prices slowed from 3 percent in 2006 to 2¹/₄ percent in 2007; significantly smaller increases in construction prices accounted for much of the deceleration.

Financial Markets

Domestic and international financial markets experienced substantial strains and volatility in 2007 that were sparked by the ongoing deterioration of the

^{10.} The effect of energy prices on GDP prices was much smaller than that on PCE prices. The reason is that much of the energy-price increase was attributable to the higher price of imported oil, which is excluded from GDP because it is not part of domestic production.

subprime mortgage sector and emerging worries about the near-term outlook for U.S. economic growth. Substantial losses on structured products related to subprime mortgages caused market participants to reassess the risks associated with a wide range of other structured financial instruments. The result was a drying up of markets for subprime and nontraditional mortgage products as well as a significant impairment of the markets for asset-backed commercial paper and leveraged syndicated loans. Those dislocations generated unexpected balance sheet pressures at some major financial institutions, and the pressures in turn contributed to severe strains in short-term bank funding markets. The Federal Reserve responded to the financial turmoil and the risks to the broader economy along two tracks: It took a series of actions to support market liquidity and functioning (partly in coordination with foreign central banks), and it eased monetary policy in pursuit of its macroeconomic objectives. As a result of the downward revision to the economic outlook and strained financial conditions, yields on Treasury securities fell, risk spreads widened significantly, equity prices dropped, and volatility in many financial markets increased.

Market Functioning and Financial Stability

The ongoing erosion in the credit quality of subprime residential mortgages, particularly adjustable-rate mortgages, has exposed weaknesses in other financial markets and posed challenges to financial institutions. Over the first half of 2007, problems were mostly isolated within the subprime mortgage markets. However, around midyear, as credit quality in that sector continued to worsen and losses mounted, investors began to retreat from structured credit products and from risky assets more generally. Strains began to emerge in the leveraged syndicated loan market in late June and then surfaced in the assetbacked commercial paper and term bank funding markets in August. After a respite in late September and October, revelations of larger-than-expected losses at several financial firms and a weaker economic outlook contributed to yearend pressures in short-term funding markets that exacerbated financial strains and heightened market volatility. Financial markets remained volatile through mid-February, in part owing to a further downgrading of the economic outlook and problems at some financial guarantors.

Signs of investor nervousness about the mortgage situation first appeared in December 2006 and then intensified in late February 2007, at a time when softer-than-expected U.S. economic data were adding to market uncertainty. Over this period, mortgage companies specializing in subprime products began to experience considerable funding pressures, and many failed, because rising delinquencies on recently originated subprime mortgages required those firms to repurchase the bad loans from securitized pools. Financial markets calmed in April, however, and liquidity in major markets remained ample. In June, rating agencies downgraded or put under review for possible downgrade the credit ratings of a large number of securities backed by subprime mortgages. Shortly thereafter, a few hedge funds experienced serious difficulties as a result of subprime-related investments.

Prices of indexes of credit default swaps on residential mortgage-backed securities backed by subprime mortgages—which had already weakened over the first half of 2007 for the lowerrated tranches—dropped steeply in July for both lower-rated and higher-rated Gross Issuance of Securities Backed by Alt-A and Subprime Mortgage Pools, 2002–08



NOTE: Mortgages in alt-A pools are a mix of prime, near-prime, and subprime mortgages; for further details on alt-A pools, refer to text.

SOURCE: Inside MBS & ABS.

tranches. Subsequently, investor demand for securities backed by subprime and alt-A mortgage pools dwindled, and the securitization market for those products virtually shut down. Those developments amplified credit and funding pressures on mortgage companies specializing in subprime mortgages; with no buyers for the mortgages they originated, more of those firms were forced to close or drastically reduce their operations, and subprime originations slowed to a crawl. Originations of alt-A mortgages-which had held up over the first half of the year-also dropped sharply beginning in July. Interest rates on jumbo loans increased, but institutions that had the capacity to hold such loans on their balance sheets continued to make them available to prime borrowers. In contrast, the market for conforming mortgages for prime borrowers was affected relatively little. Indeed, the issuance of securities carrying guarantees from Fannie Mae or Freddie Mac rose somewhat in the second half of the year.

The unprecedented decline in the value of highly rated tranches of mortgage-related securities led investors to doubt their own ability, and that of the rating agencies, to evaluate many other types of structured instruments. The loss of confidence was reflected in significantly higher spreads on the debt collateralized loan of obligations (CLOs), and the issuance of such debt weakened noticeably over the summer. Because CLOs had been the largest purchasers of leveraged syndicated loans, the drop in issuance contributed to the decline in leveraged lending. In the secondary market for such loans, trading volumes were reportedly large, but bidasked spreads widened sharply and prices, which had been high in the first half of 2007, declined markedly. Implied spreads on an index of loan-only credit default swaps (LCDX) spiked in July and remained elevated in August. Unable to distribute many leveraged syndicated loans that they had reportedly underwritten-a problem apparently affecting about \$250 billion of such loans in the United States alonebanks faced the prospect of bringing those loans onto their balance sheets as the underlying deals closed.

At the end of July, European assetbacked commercial paper (ABCP) and short-term funding markets were roiled by warnings of heavy losses associated with commercial paper programs backed by U.S. subprime mortgages. On August 9, a major European bank announced that it had frozen redemptions for three of its investment funds, citing its inability to value some of the mortgage-related securities held by the funds. After that announcement, liquidity problems and short-term funding pressures intensified in Europe and emerged in U.S. money markets. Partly in response to those developments, the Federal Reserve and other central banks took steps to foster smoother functioning of short-term credit markets (refer to the box entitled "The Federal

Reserve's Responses to Financial Strains").

Spreads on U.S. ABCP widened considerably in mid-August, and the volume of ABCP outstanding began a precipitous decline as investors balked at rolling over paper for more than a few days. Outstanding European ABCP also declined substantially, and the market for Canadian ABCP not sponsored by banks virtually collapsed.¹¹ Structured investment vehicles (SIVs) and singleseller ABCP conduits that were heavily exposed to securities backed by subprime mortgages experienced the greatest difficulties. Unlike traditional ABCP programs, SIVs had very little explicit liquidity support from their sponsors. As a result, investors became particularly concerned about the ability of SIVseven those with little or no exposure to residential mortgages-to make timely payments, and demand for ABCP issued by SIVs fell sharply. Over the next few weeks, some U.S. issuers invoked their right to extend the maturity of their paper. Others temporarily drew on their bank-provided backup credit lines, and a few issuers defaulted. The general uncertainty and lack of liquidity also led to some decrease in demand for lower-tier unsecured nonfinancial commercial paper-especially at longer maturitiesand spreads in that segment of the market widened markedly in August as well. Issuers of high-grade unsecured commercial paper were largely unaffected by the turmoil and experienced little disruption.

At the same time, term interbank funding markets in the United States and Europe came under pressure. Banks recognized that the difficulties in the markets for mortgages, syndicated loans, and commercial paper could lead to substantially larger-than-anticipated calls on their funding capacity. Moreover, creditors found they could not reliably determine the size of their counterparties' potential exposures to those markets, and concerns about valuation practices added to the overall uncertainty. As a result, banks became much less willing to provide funding to others, including other banks, especially for terms of more than a few days. Spreads of term federal funds rates and term Libor over rates on comparable-maturity overnight index swaps widened appreciably, and the liquidity in these markets diminished (for the definition of overnight index swaps, refer to the accompanying figure). European banks also sought to secure term funding in their domestic currencies, and similar spreads were seen in term euro and sterling Libor markets. Liquidity in the foreign exchange swap market was poor over this period, and European firms found it more difficult and costly to use the foreign exchange swap market to swap term funds denominated in euros or other currencies for funds denominated in dollars. Term funding markets in the Japanese yen and Australian dollar also came under pressure as foreign institutions attempted to borrow in those currencies and swap the funds into dollars or euros.

Against that backdrop, investors fled to the relative safety of Treasury securities, particularly Treasury bills, during mid-August. For example, inflows into money market mutual funds investing only in Treasury and agency securities jumped in August. Surges of safe-haven demand caused Treasury bill rates to plunge at times, and the considerable volatility in that market was likely exacerbated in September by a seasonal reduction in bill supply. Bid-asked spreads in the Treasury bill market widened substantially in this period.

^{11.} In December, a group of investor representatives agreed in principle to restructure Canadian nonbank ABCP into longer-term notes.

The Federal Reserve's Responses to Financial Strains

In response to the serious financial strains that emerged last August, the Federal Reserve has undertaken a number of measures to foster the normal functioning of financial markets and thereby promote its dual objectives of maximum employment and price stability.

In mid-August, the Federal Reserve, as well as several foreign central banks, took actions designed to provide liquidity and help stabilize markets. On August 9, the European Central Bank (ECB) conducted an unscheduled tender operation in response to sharply elevated demands for liquidity by European banks, an action it repeated several more times in subsequent weeks. On August 10, similar stresses emerged in U.S. money markets, and the Federal Reserve added substantial reserves to meet heightened demand for funds from banks.

Short-term markets remained under considerable pressure over subsequent days despite the provision of ample liquidity in overnight funding markets by the Federal Reserve, the ECB, and the central banks of other major industrialized countries. On August 17, the Federal Reserve Board announced a narrowing of the spread between the federal funds rate and the discount rate from 100 basis points to 50 basis points and changed discount window lending practices to allow the provision of term financing for as long as thirty days, renewable by the borrower. To ease pressures in the Treasury market, the Federal Reserve Bank of New York announced on August 21 some temporary changes to the terms and conditions of the System Open Market Account (SOMA) securities lending program.

The Federal Reserve's efforts achieved some of the desired results. The provision of increased liquidity generally succeeded in keeping the federal funds rate from rising above its intended level. (Indeed, despite heightened demand for liquidity, the effective federal funds rate was somewhat below the target for a time in August and early September, as efforts to keep the rate near the target were hampered by technical factors and financial market volatility.) After the September meeting of the Federal Open Market Committee, conditions in overnight funding markets improved further. The volume of loans to depository institutions made through the discount window increased at times because of term loans to a relatively small number of institutions, but it remained generally moderate. Institutions may have been reluctant to use the discount window, perhaps fearing that their borrowing would become known and would be seen by creditors and counterparties as a sign of financial weakness-the so-called stigma problem. Nonetheless, collateral placed by banks at the discount window in anticipation of possible borrowing rose sharply during August and September, which suggested that some banks viewed the discount window as a potentially valuable option.

Pressures in financial markets ebbed for a time in the fall but rose again later in the year. On November 26, the Federal Reserve Bank of New York announced some additional modest, temporary changes to the SOMA securities lending program that were designed to further relax the limitations on borrowing particular Treasury securities and to improve the functioning of the Treasury market. In addition, the New York Reserve Bank stated that the Open Market Trading Desk planned to conduct a series of term repurchase agreements that would extend over year-end and that it would provide sufficient reserves to resist upward pressures on the federal funds rate around yearend. Then on December 12, the Federal Reserve and several foreign central banks announced a coordinated effort to facilitate a return to more-normal pricing and functioning in term funding markets. As part of that effort, the Federal Reserve announced the creation of a temporary Term Auction Facility (TAF) to provide secured term funding to eligible depository institutions through an auction mechanism beginning in mid-December. The Federal Reserve also established swap lines with the ECB and the Swiss National Bank (SNB), which provided dollar funds that those central banks could lend in their jurisdictions. At the same time, the Bank of England and the Bank of Canada announced plans to conduct similar term funding operations in their own currencies.

The Federal Reserve has conducted six TAF auctions thus far, two of \$20 billion in December, two of \$30 billion in January, and two of \$30 billion in February. The auctions attracted a large number of bidders. The ratio of the dollar value of bids to the amount offered (the bid-to-cover ratio) at the two auctions in December was about 3. The auctions in January and February were somewhat less oversubscribed, with bid-to-cover ratios of roughly 2 on January 14, February 11, and February 25 and of 1¹/₄ on January 28. The lower bid-to-cover ratios in those auctions may have reflected improved liquidity in term funding markets, the larger auction size, and, for the January 28 auction, some uncertainty about the monetary policy action that would be taken at the January 29-30 FOMC meeting.

The spread of the interest rate for the auctioned funds over the minimum bid rate (the overnight-index-swap rate correspond-

ing to the maturity of the credit being auctioned) was about 50 basis points in December but was lower in the January and February auctions. The lower spread apparently reflected some improvement in banks' access to term funding after the turn of the year. Although isolating the impact of the TAF on financial markets is not easy, a decline in spreads in term funding markets since early December provides some evidence that the TAF may have had beneficial effects on financial markets. The initial experience with the TAF suggests that it may well be a useful complement to the discount window in some circumstances, and the Federal Reserve Board will consider making it a permanent addition to the Federal Reserve's available instruments for providing liquidity to the banking system.

The swap arrangements with foreign central banks allowed for up to \$20 billion in currency swaps with the ECB and up to \$4 billion with the SNB. Drawing upon these lines, the ECB auctioned \$10 billion in dollar funds on December 17 and another \$10 billion on December 20 in coordination with the Federal Reserve's TAF auctions. The SNB auctioned \$4 billion in funds on December 17. The bid-to-cover ratios at the ECB and SNB auctions in December ranged between $1\frac{1}{4}$ and $4\frac{1}{4}$; the actions were considered successful in helping to give foreign financial institutions access to additional dollar funding. The December loans were renewed by the ECB and SNB at auctions in January, with bid-to-cover ratios ranging from $1\frac{1}{4}$ to $2\frac{3}{4}$. The ECB and SNB have not conducted auctions in February; ECB officials have indicated that consideration would be given to reactivating dollar auctions if conditions appear to warrant such actions.

Financial conditions appeared to improve somewhat in late September and October after the larger-than-expected reduction of 50 basis points in the federal funds rate at the September FOMC meeting and a few encouraging reports on economic activity. Spreads in many short-term funding markets partially reversed their August run-ups. Bid-asked spreads in the interdealer market for Treasury bills were a bit less elevated than they had been in August. But the Treasury bill market remained thin, and yields were volatile at times. In the syndicated loan market, implied LCDX spreads partly reversed their summer surge, and some multibillion-dollar deals were successfully placed in the market. However, underwriting banks were forced to take sizable discounts from par value to induce investors to purchase the loans, and they retained significantly larger-than-intended portions of deals on their own balance sheets. The improvements in market functioning proved to be short lived, in part because of a further worsening in the outlook for the housing sector and associated concerns about possible effects on financial institutions and the economy.

The strains in financial markets intensified during November and December. The syndicated loan market again ground to a halt, and spreads on the LCDX indexes moved up. The heightened uncertainties and ongoing financial turmoil, along with the desire of financial institutions to show safe and liquid assets on their year-end statements, generated significant year-end pressures in short-term funding markets for the first time in several years. Spreads on onemonth Libor and term federal funds shot up in late November when their maturities crossed year-end. Similarly, spreads on ABCP and lower-tier unsecured commercial paper widened further over the

period. Strong demand for safe assets over year-end drove yields on shortdated Treasury bills maturing in early 2008 to low levels, and liquidity in that market was impaired at times.

In mid-December, the Federal Reserve announced coordinated action with a number of other central banks to help facilitate a return to more-normal pricing and functioning in term funding markets. The efforts of the central banks, combined with the passage of year-end, appeared to help steady short-term financial markets in early 2008. So far this year, commercial paper spreadsboth for ABCP and for lower-tier unsecured paper-and term bank funding spreads have dropped, although they remain above the levels that prevailed before last August. In contrast, liquidity in the Treasury bill market has been inconsistent. The subprime and alt-A mortgage markets remain essentially shuttered. Conditions in the market for leveraged syndicated loans have worsened, and the forward calendar of committed deals remains substantial. Risk spreads on corporate bonds widened significantly in January, and equity prices dropped. Most recently, demand has evaporated for auction-rate securitieslong-term debt (much of which is municipal bonds) with floating interest rates that are reset at frequent, regular auctions-and thereby imposed higher rates on issuers and reduced liquidity for current holders.

In January and February, problems at several financial guarantors intensified as rating agencies and investors became more concerned that guarantors' exposures to collateralized debt obligations that hold asset-backed securities (especially those backed by subprime residential mortgages) had imperiled the guarantors' AAA ratings. Indeed, the rating agencies downgraded a few financial guarantors and put some firms on watch for possible downgrades; financial guarantors' equity prices declined, and credit default swap spreads increased. A number of guarantors are undertaking efforts to bolster their financial strength.

Financial guarantors have played an important role in the markets for municipal bonds and for some structured finance products by providing insurance against default. Those markets have already felt some effects from the stress at the financial guarantors and could be more substantially affected by any future downgrades. The direct exposures of U.S. banks to losses from downgrades of guarantors' ratings-through banks' holdings of municipal bonds and credit protection on structured productsappear to be moderate relative to the banks' capital. But some large banks and broker-dealers could experience significant funding pressures from structured products tied to municipal bonds that might return to their balance sheets if guarantors are downgraded below specified thresholds or if investors choose to unwind their investments in advance of potential downgrades.

Although U.S. financial markets and institutions have encountered considerable difficulties over the past several months, the financial system entered that period with some distinct strengths. In particular, most large financial institutions had strong capital positions, and the financial infrastructure was robust. Although some large financial institutions have experienced sizable losses, the sector generally remains healthy. A number of the firms that have reported sizable write-downs of assets have been able to raise additional capital. Market infrastructure for clearing and settlement performed well over the year, even when volatility spiked and trading volumes were very large.

Moreover, not all markets experienced significant impairment. For instance, the investment-grade corporate bond market reportedly functioned well over most of the period, and the unsecured high-grade commercial paper market appeared little affected by the difficulties encountered in other shortterm funding markets. The securitization of consumer loans and conforming residential mortgages was robust. Despite a few notable failures, hedge funds overall seemed to hold up fairly well, and counterparties of failing hedge funds did not sustain material losses.

Policy Expectations and Interest Rates

The current target for the federal funds rate, 3 percent, is substantially below the level that investors expected at the end of June 2007. Judging from futures quotes at that time, market participants expected the FOMC to shave at most 25 basis points from the federal funds rate by February 2008 rather than the 225 basis points that has been realized. Investors currently expect about 100 basis points of additional easing by the end of 2008. Uncertainty about the path of policy had been very low during the first half of the year, but it increased appreciably over the summer and generally has remained around its long-run historical average since then.

Although nominal Treasury yields rose somewhat over the first half of last year, rates subsequently fell sharply as the outlook for the economy dimmed and as market participants revised their expectations for monetary policy accordingly. Treasury bill yields declined to particularly low levels at times because of increased demand for safe and liquid assets. On net, two-year yields fell roughly 180 basis points in the second half of the year, and ten-year yields shed about 100 basis points. Treasury yields fell significantly more in early Interest Rates on Selected Treasury Securities, 2003–08



NOTE: The data are daily and extend through February 21, 2008.

SOURCE: Department of the Treasury.

2008, especially for shorter-term securities, as policy expectations shifted down in response to signs of further weakness in the economic outlook. As of February 21, the two-year yield was about 2 percent, and the ten-year yield was about 3³/₄ percent.

Yields on inflation-indexed Treasury securities also declined considerably in the second half of 2007 and into 2008. The difference between the five-year nominal Treasury yield and the fiveyear inflation-indexed Treasury yieldfive-year inflation compensationedged down over that period. Meanwhile, the ten-year inflation compensation measure changed little. As noted earlier, survey-based measures of short-term inflation expectations rose somewhat in 2007 and early 2008, presumably because of the increase in headline inflation. Survey measures of longer-term inflation expectations changed only slightly.

Yields on corporate bonds firmed a bit over the first half of 2007, and spreads of those yields over yields on comparable-maturity Treasury securities changed little, on net. Since June, yields on AA-rated corporate bonds have decreased somewhat, on net, while those Spreads of Corporate Bond Yields over Comparable Off-the-Run Treasury Yields, by Securities Rating, 1998–2008



NOTE: The data are daily and extend through February 21, 2008. The spreads shown are the yields on ten-year bonds less the ten-year Treasury yield.

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

on BBB-rated bonds increased slightly; spreads on AA-rated and BBB-rated bonds have risen about 90 and 130 basis points respectively. Moreover, yields on speculative-grade securities have increased substantially over the same period, and their spreads have shot up almost 300 basis points.

Equity Markets

Broad equity indexes logged increases of around 10 percent over the first half of 2007 but then lost ground over the second half; they ended the year with

Stock Price Indexes, 2005-08



NOTE: The data are daily and extend through February 21, 2008.

SOURCE: Dow Jones Indexes.

gains of 3 percent to 6 percent. The increase reflected continued strong profitability in many nonfinancial sectors, particularly energy, basic materials, and technology. By contrast, stock indexes for the financial sector fell about 20 percent in 2007 as investors reacted to the fallout from the problems in the subprime mortgage sector. So far in 2008, growing concerns about the economic outlook, along with announcements of additional substantial losses at some large financial firms, have precipitated a widespread drop in equity prices that has pushed broad indexes down about 8 percent.

The continued uncertainty surrounding the ultimate size and distribution of losses from subprime-related and other investment products, as well as the potential effects of the financial turmoil on the broader economy, contributed to higher volatility in equity markets and a wider equity premium. The implied volatility of the S&P 500, as calculated from options prices, rose significantly in the second half of 2007 and remains elevated. The ratio of twelve-monthforward expected earnings to equity prices for S&P 500 firms increased over the second half of 2007 and into 2008, while the long-term real Treasury yield decreased. The difference between these two values-a measure of the premium that investors require for holding equity shares-has reached the high end of its range over the past twenty years.

Flows into equity mutual funds were heavy early in 2007 but slowed substantially after the first quarter. Indeed, equity funds that focused on domestic holdings experienced consistent net outflows beginning in the spring. By contrast, inflows into foreign equity funds held up through the end of 2007 despite the weakness in many foreign stock markets in the fourth quarter. Both domestic and foreign equity funds experienced large outflows in January as equity prices tumbled worldwide, but flows appear to have stabilized in February.

Debt and

Financial Intermediation

The total debt of the domestic nonfinancial sectors appears to have expanded about 8 percent in 2007, a slightly slower rate of growth than in 2006. The slowing reflected a deceleration of household debt that was only partially offset by a considerable step-up in borrowing by businesses and governments.

Commercial bank credit rose 10¹/₄ percent last year, a pickup from the 9³/₄ percent gain in 2006.¹² The acceleration of bank credit, as well as the differences in growth rates across bank asset classes, reflect in part the effects of the financial market distress. As already noted, commercial and industrial loans surged in 2007 because of extremely rapid growth in the second half of the year that in part resulted from the inability of banks to syndicate leveraged loans. At various times over the second half of the year, banks' balance sheets were boosted by extensions of credit to nonbank financial institutions, a category that includes loans to ABCP programs that were no longer able to issue commercial paper. Through the third quarter of 2007, the growth of residential mortgages (excluding revolving home equity loans) was fairly robust, but the value of such loans on banks' books contracted in the fourth quarter. The reversal likely stemmed from a

^{12.} The data for commercial bank balance sheets are adjusted for some shifts of assets and liabilities between commercial banks and non-banks, including those resulting from mergers, acquisitions, changes in charter, and asset purchases and sales.

stepped-up pace of securitization of conforming mortgages and a slowing of new originations in response to the weaker demand and the tightening of lending standards reported in the Senior Loan Officer Opinion Surveys covering the second half of 2007. The growth of revolving home equity loans picked up in 2007, particularly late in the year; because rates on such loans are generally tied to short-term market rates, which declined over the second half of 2007, that form of financing may have become relatively more attractive. Bank consumer loans grew somewhat faster in 2007 than in 2006, which is consistent with some substitution of nonmortgage credit for mortgage credit. To fund the rapid expansion of their balance sheets, commercial banks mainly turned to a variety of managed liabilities, including large time deposits and advances from Federal Home Loan Banks. Branches and agencies of foreign banks also tapped their parent institutions for funds. The growth of bank credit slowed in January 2008, as declines in holdings of securities and residential mortgages partly offset continued growth in most other loan categories.

Bank profits declined significantly in 2007 as fallout from the subprime mortgage crisis and related financial disruptions caused trading income to plunge and loss provisions to more than double from the previous year. Over the second half of 2007, the return on assets and the return on equity both dropped to levels not seen since the early 1990s. Weak profits or outright losses, along with significant balance sheet growth, also put pressure on capital ratios at some of the largest commercial banks. In response, a number of banking organizations raised significant amounts of new capital in the second half of 2007 and early 2008.

Loan delinquency rates rose noticeably for many loan categories, but especially for residential mortgages, construction and land development loans financing residential projects, and other construction and land development loans.

Other types of financial institutions also faced substantial challenges in 2007. As a result of exposures to subprime loans, some thrift institutions had significant losses. Several of the major investment banks and their affiliates booked losses on mortgage-related products and other exposures that were large enough to lead some of them to raise additional equity capital.

In the third quarter, Fannie Mae and Freddie Mac each experienced sizable losses on their mortgage portfolios and on credit guarantees. In response, both firms raised additional equity. The firms also tightened underwriting standards slightly and increased the fees that they charge to purchase some types of loans. All else equal, these changes would be expected to increase borrower costs for conforming loans.

The M2 Monetary Aggregate

M2 grew at a solid rate, on balance, in 2007 and the early part of 2008. Growth was supported by declines in the opportunity cost of holding money relative to other financial assets. The considerable growth of money market mutual funds also boosted M2 as investors sought the relative safety of these liquid assets amid the volatility in various financial markets. The currency component of M2 decelerated further in 2007 from its already tepid pace in 2006; it actually contracted from November through January 2008, probably because of reduced demand from foreign sources.

International Developments

International Financial Markets

Global financial markets were calm over the first half of 2007 except for a brief period in late February when equity markets were roiled in part by worries about U.S. subprime mortgage lenders. After midyear, as the global financial turmoil began in earnest and the possibility of slowing growth weighed on investor sentiment, market volatility rose substantially, and on net most major foreign stock markets fell. Despite the rocky end to the year, most major equity indexes in the advanced foreign economies, with the exception of Japan, finished higher on net in local-currency terms compared with the beginning of 2007. However, indexes of the stock prices of financial firms in those countries declined 10 percent to 30 percent. The financial turbulence had less effect on equity prices in emerging markets, and most major emerging-market stock indexes outperformed their counterparts in the advanced economies. So far in 2008, stock markets in both advanced and emerging-market economies are down further as concerns about global growth have increased.

Long-term bond yields in the advanced foreign economies rose over the first half of 2007 but then reversed course as investors reacted to signs in many countries of deteriorating financial conditions, a softening economic outlook, and expectations for a lower future path of monetary policy rates. All told, the net changes were not large; long-term rates in Canada, the United Kingdom, and Japan ended the year 20 to 30 basis points lower, on net, while they were about 10 basis points higher in the euro area than at the start of the year. Yields on inflation-protected longterm securities followed a similar pattern; inflation compensation (the difference between yields on nominal securities and those on inflationprotected securities) fell modestly in Canada and rose slightly in the euro area. Since the beginning of 2008, yields on nominal securities in most economies have declined; yields on indexed securities have fallen in the euro area but have risen in Canada, the United Kingdom, and Japan.

The Federal Reserve's broadest measure of the nominal trade-weighted foreign exchange value of the dollar has declined about 8 percent on net since the beginning of 2007. Over the same period, the major currencies index of the dollar has moved down a bit more than 10 percent. The dollar has depreciated about 9¹/₂ percent against the yen and slightly more than 10 percent versus the euro. The dollar has depreciated roughly

U.S. Dollar Nominal Exchange Rate, Broad Index, 2004–08



Note: The data, which are in foreign currency units per dollar, are weekly. The last observation for each series is the average for February 18 through February 21, 2008. 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.

13¹/₂ percent against the Canadian dollar and in November briefly touched its lowest level in decades against that currency. The dollar has declined 8¹/₂ percent against the Chinese renminbi since the beginning of 2007, and the pace of depreciation accelerated late last year.

Advanced Foreign Economies

Economic activity in the major advanced foreign economies posted relatively strong growth over the first three quarters of 2007, and labor markets tightened. However, evidence of a slowdown has accumulated since the summer. Financial market strains appear to be weighing on growth in the major economies. Surveys of banks have revealed a tightening of credit standards for both households and businesses. Both consumer and business confidence have slid since August, and readings from surveys of economic activity have declined. Retail sales have slowed, and housing markets in a number of countries that until recently had been robust-including Ireland, Spain, and the United Kingdom-have softened. According to initial releases, real GDP growth for the fourth quarter slowed in a number of countries. Although growth in Japan rebounded in the fourth quarter-pushed up by strong exports and capital spending-household spending has been relatively weak, and the construction sector has been depressed by changes to regulations that have resulted in bottlenecks in reviewing building plans.

Headline rates of inflation have continued to rise in some economies, mainly because of increasing food and energy prices. The twelve-month change in consumer prices in the euro area exceeded 3 percent in January, up from less than 2 percent just a few months earlier; core inflation (which excludes the changes in the prices of energy and unprocessed food) has moved up as well. Canadian inflation climbed from less than 1 percent late in 2006 to about 2½ percent in the second half of 2007; however, core inflation has slowed in recent months, partly because of the continued strength of the Canadian dollar. Although inflation in Japan was close to zero for most of 2007, the rate picked up to roughly ³/₄ percent at the end of the year, again mainly a result of the rise in energy prices.

Faced with a weaker outlook for growth but somewhat higher inflation, major foreign central banks either have cut official policy rates or have remained on hold since late 2007-a change from earlier market expectations of further rate increases. The Bank of Canada and the Bank of England lowered their targets for their respective overnight rates. The European Central Bank and the Bank of Japan have kept their policy rates at 4 percent and 0.5 percent respectively. (Further discussion of actions by foreign central banks is in the box entitled "The Federal Reserve's Responses to Financial Strains.")

Emerging-Market Economies

The growth of output in the emergingmarket economies also slowed in the second half of 2007 but was still strong. In China, government policy measures helped moderate the growth rate of real GDP in the second half. To damp loan growth, the government in 2007 repeatedly raised the reserve requirement ratio and the benchmark rate at which banks can lend to their customers. In addition, the government directed banks to freeze their level of lending over the final two months of 2007 at the October level. Chinese authorities also allowed the renminbi's rate of appreciation to step up in late 2007, and the People's Bank of China noted in its monetary policy report in November that it would be using the exchange rate as a tool to fight inflation.

Elsewhere in emerging Asia, growth appears to have stepped down to a more tempered pace in several countries in the second half of the year, though generally from very strong levels in the first half. One factor suppressing growth in these export-dependent economies appears to be a softening of the rate of activity in the rest of the world.

In Mexico, output growth was moderate in 2007 and followed roughly the same pattern as in the United States. The growth of economic activity exceeded 5 percent during the third quarter but slowed to 3 percent in the fourth quarter. In Brazil and other Latin American countries, growth was robust.

Increases in the prices of food and fuel contributed to a rise in consumer price inflation in many emerging-market economies. Prices of edible oils and grains were boosted by increased demand, higher energy prices, and unfavorable weather in several producing regions. Meat and dairy prices have also increased as consumption of these products in developing countries has grown rapidly and as the price of animal feedmostly grain-has risen. Inflation rose during 2007 in many emerging Asian economies, including China, where the inflation rate for the twelve months ending in January reached just over 7 percent. Also, the pace of consumer price inflation rose in the second half of the year in Argentina, Chile, Mexico, and Venezuela. The rise in inflation in Venezuela was compounded by stimulative monetary and fiscal policies.

Part 3 Monetary Policy in 2007 and Early 2008

Throughout the first half of 2007, the available information pointed to a generally favorable economic outlook despite the ongoing correction in the housing market. Indicators of consumer and business spending were somewhat uneven, but their generally positive trajectories suggested that the housing market developments were, as yet, having little effect on the broader economy. Net exports, spurred in part by a falling dollar, were providing support to economic growth. Outside of the subprime mortgage sector, financial conditions in general were fairly accommodative. The Federal Open Market Committee expected core inflation to moderate from the somewhat elevated level that had prevailed at the start of the year, but

high resource utilization had the potential to sustain upward pressure on inflation. As a result, during the first half of the year, the Committee consistently noted in its statement that its predominant policy concern was that inflation would fail to moderate as expected. However, in part owing to indications of increasing weakness in the housing sector, the Committee emphasized in the statements issued at the conclusion of its March, May, and June meetings that its future policy actions would depend on the evolution of the outlook for both inflation and economic growth.

When the Committee met on August 7, financial markets had been unusually volatile for a few weeks, and credit conditions had become somewhat



Selected Interest Rates, 2005–08

NOTE: The data are daily and extend through February 21, 2008. The ten-year Treasury rate is the constantmaturity yield based on the most actively traded securities. The dates on the horizontal axis are those of regularly scheduled FOMC meetings.

SOURCE: Department of the Treasury and the Federal Reserve.

tighter for some households and businesses. Participants in FOMC meetings (Board members and Reserve Bank presidents) noted that adjustments in the housing sector had the potential to prove deeper and more prolonged than had seemed likely earlier in the year, and a further underperformance in the housing area represented a significant downside risk to the economic outlook. Nonetheless, incoming data indicated that economic growth had strengthened in the second quarter, as a quicker pace of business spending offset a slowdown in consumer outlays. Participants believed that the economy remained likely to expand at a moderate pace in coming quarters, supported in part by continued growth in business investment and a robust global economy. Although core inflation had moved lower since the start of the year, participants were still concerned about several factors-including a continued high level of resource utilization-that could augment inflation pressures. They believed that a sustained moderation in those pressures had yet to be convincingly demonstrated. As a result, the FOMC decided to leave the target for the federal funds rate unchanged at 51/4 percent and, despite somewhat greater downside risks to growth, reiterated that the predominant policy concern remained the risk that inflation would fail to moderate as expected.

In the days following the August 7 FOMC meeting, financial conditions deteriorated rapidly as market participants became concerned about counterparty credit risk and their access to liquidity. After an FOMC conference call on August 10 to review worsening strains in money and credit markets, the Committee issued a statement indicating that the Federal Reserve would provide reserves as necessary through open market operations to promote trading in the federal funds market at rates close to the FOMC's target rate of 5¹/₄ percent. As conditions deteriorated further, the Committee met again on August 16 by conference call to discuss the potential usefulness of various policy responses. The following day, the Federal Reserve announced changes in discount window policies to facilitate the orderly functioning of short-term credit markets. Furthermore, the FOMC released a statement indicating that the downside risks to growth had increased appreciably and that the Committee was prepared to act as needed to mitigate adverse effects on the economy. (The box entitled "The Federal Reserve's Responses to Financial Strains" provides additional detail on the outcomes of these conference calls and other measures taken by the Federal Reserve to facilitate the orderly functioning of financial markets over the second half of the year, including coordinated actions with other central banks.)

At the time of the September FOMC meeting, financial markets remained volatile. Liquidity in short-term funding markets was significantly impaired amid heightened investor unease about exposures to subprime mortgages and to structured credit products more broadly. Credit generally remained available for most businesses and households, but the Committee noted that the tighter credit conditions for other borrowers had the potential to restrain economic growth. Incoming economic data were mixed: Consumer spending appeared to have strengthened from its subdued secondquarter pace, but a further intensification of the housing contraction and slowing employment growth suggested a weaker economic outlook. Participants noted that incoming data on core inflation continued to be favorable and that the downwardly revised economic outlook implied some lessening of pressures on resources, but they remained

concerned about possible upside risks to inflation. To forestall some of the adverse macroeconomic effects that might otherwise arise from the disruptions in financial markets and to promote moderate growth over time, the FOMC lowered the target for the federal funds rate 50 basis points, to 43/4 percent. The Committee also noted that recent developments had increased the uncertainty surrounding the economic outlook and stated that it would act as needed to foster price stability and sustainable economic growth.

At the time of the October FOMC meeting, the data indicated that economic growth had been solid in the third quarter. A pickup in consumer spending and continued expansion of business investment suggested that spillovers from the turmoil in the housing and financial markets had been limited to that point. Although strains in financial markets had eased somewhat on balance, tighter credit conditions were thought likely to slow the pace of economic expansion over coming quarters. Furthermore, the downturn in residential construction had deepened, and available indicators pointed to a further slowing in housing activity in the near term. FOMC meeting participants noted that readings on core inflation had improved somewhat over the year and anticipated that some of the moderation likely would be sustained. Nonetheless, participants expressed concern about the upside risks to the outlook for inflation, stemming in part from the effects of recent increases in commodity prices and the significant decline in the foreign exchange value of the dollar. Against that backdrop, the Committee decided to lower the target for the federal funds rate 25 basis points, to $4\frac{1}{2}$ percent, and judged that the upside risks to inflation roughly balanced the downside risks to growth.

Also at the October meeting, the Committee continued its discussions regarding communication with the public. Participants reached a consensus on increasing the frequency and expanding the content of their periodic economic projections. Under the new procedure, which was announced on November 14, the FOMC compiles and releases the projections made by the Federal Reserve Governors and Reserve Bank presidents four times each year, at approximately quarterly intervals, rather than twice each year, as had been the practice since 1979. In addition, the projection horizon has been extended from two years to three years. FOMC meeting participants provide projections for the increase in the price index for total personal consumption expenditures (PCE) as well as projections for real GDP growth, the unemployment rate, and core PCE price inflation. Summaries of the projections and an accompanying narrative are published along with the minutes of the FOMC meeting at which they were discussed. Beginning with the present report, the projections made in January are included in the February Monetary Policy Report to the Congress, and the projections made in June are included in the July report.

In a conference call on December 6, Board members and Reserve Bank presidents reviewed conditions in domestic and foreign financial markets and discussed two proposals aimed at improving market functioning. The first proposal was for the establishment of a temporary Term Auction Facility (TAF), which would provide term funding through an auction mechanism to eligible depository institutions against a broader range of collateral than that used for open market operations. The second proposal was to set up a foreign exchange swap arrangement with the European Central Bank to address elevated

pressures in short-term dollar funding markets. At the conclusion of the discussion, the Committee voted to direct the Federal Reserve Bank of New York to establish and maintain a reciprocal currency (swap) arrangement for the System Open Market Account with the European Central Bank.¹ The Board of Governors approved the TAF via notation vote on December 10.

At the Committee's meeting on December 11, participants noted that incoming information suggested economic activity had decelerated significantly in the fourth quarter. The housing contraction had steepened further, and participants agreed that the sector was weaker than had been expected at the time of the Committee's previous meeting. Moreover, spillovers from housing to other parts of the economy had begun to emerge: Consumption spending appeared to be softening more than had been anticipated, and employment gains appeared to be slowing. Participants noted that evidence of further deterioration in the credit quality of mortgages and other loans to households appeared to be spurring lenders to further tighten the terms on new extensions of credit for a widening range of credit products. Financial market conditions had worsened significantly. The financial strains were exacerbated by concerns related to year-end pressures in short-term funding markets, and similar stresses were evident in the financial markets of major foreign economies. Although a surge in energy prices pushed up headline consumer price inflation during September and October. Committee members agreed that the inflation situation had changed little from the time of the previous meeting. In these circumstances, the

FOMC lowered the target for the federal funds rate a further 25 basis points, to 4¹/₄ percent, and, given the heightened uncertainty, the Committee decided to refrain from providing an explicit assessment of the balance of risks. The Committee also indicated that it would continue to assess the effects of financial and other developments on economic prospects and act as needed to foster price stability and sustainable economic growth. In addition to that policy move, the Federal Reserve and several other central banks announced on December 12 the measures they were taking to address elevated pressures in short-term funding markets. The Federal Reserve announced the creation of the TAF and the establishment of foreign exchange swap lines with the European Central Bank and the Swiss National Bank.

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. Moreover, participants cited concerns that the slowing of economic growth could lead to a further tightening of financial conditions, which in turn could reinforce the economic slowdown. However, participants noted that core inflation had edged up in recent months and believed that considerable uncertainty surrounded the inflation outlook. 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.

^{1.} A swap arrangement with the Swiss National Bank was approved by the Committee on December 11.

On January 21, the Committee held another conference call. Participants in the call noted that strains in some financial markets had intensified and that incoming evidence had reinforced their view that the outlook for economic activity was weak. Participants observed that investors apparently were becoming increasingly concerned about the economic outlook and that these developments could lead to an excessive pullback in credit availability. Against that background, 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 $3\frac{1}{2}$ percent, and stated that appreciable downside risks to growth remained. Although inflation was expected to edge lower over the course of 2008, participants underscored 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 continued tightening of financial conditions. With the contraction in the housing sector in-

tensifying and a range of financial markets remaining under pressure, participants generally expected economic growth to remain weak in the first half of 2008 before picking up strength in the second half. However, the continuing weakness 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, many participants cited risks regarding the potential for adverse feedback between the financial markets and the economy. 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 the 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.

Part 4

Summary of Economic Projections

The following material appeared as an addendum to the minutes of the January 29–30, 2008, meeting of the Federal Open Market Committee.

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 fur-

ther ahead was projected to pick up to a pace around or 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

	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

 Economic Projections of Federal Reserve Governors and Reserve Bank Presidents (Percent)

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 expendtures and the price index for personal consumption expendditures 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.

monetary policy to date and appropriate adjustments to policy going 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

Chart 1: Central Tendencies and Ranges of Economic Projections

Real GDP growth



Unemployment rate



PCE inflation



Core PCE inflation



Note: See notes to table 1 for variable definitions.

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

2.	Average Historical Projection Error
	Ranges (Percentage Points)

	2008	2009	2010
Real GDP ¹ Unemployment rate ² Total consumer prices ³	$^{\pm 1.2}_{\pm 0.5}_{\pm 1.0}$	$_{\pm 0.8}^{\pm 1.4}$ $_{\pm 1.0}$	$^{\pm 1.4}_{\pm 1.0}_{\pm 0.9}$

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 first years is likely the result of using a limited sample period for computing these statistics.

an estimate of average ranges of forecast uncertainty for GDP growth, unemployment, and inflation over the past twenty years.¹) 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.

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 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 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.

^{1.} 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.

Chart 2(a): Distribution of Participants' Projections (Percent)

Real GDP













Unemployment rate

Chart 2(b): Distribution of Participants' Projections (Percent)

PCE inflation



Core PCE inflation











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.

Monetary Policy Report of July 2007

Monetary Policy and the Economic Outlook

The U.S. economy generally performed well in the first half of 2007. Activity continued to increase moderately, on average, over the period; businesses added jobs at a steady pace; and the unemployment rate remained at 41/2 percent. Overall inflation, however, picked up as a result of sizable increases in energy and food prices. At the same time, core inflation (which excludes the direct effects of movements in energy and food prices) held at about the same rate as in 2006; this measure smoothes through some of the volatility in the highfrequency data and thus is generally a better gauge of underlying inflation trends.

Although real gross domestic product appears to have expanded at about the same average rate thus far this year as it did in the second half of 2006, the pace of expansion has been uneven. In the first quarter, consumer expenditures and business fixed investment, taken together, posted a solid gain. However, homebuilding continued to contract, and manufacturing firms adjusted production to address stock imbalances in that sector that had emerged over the course of 2006. In the second quarter, housing activity declined further in response to the continued softness in home sales and still-elevated inventories of unsold new

NOTE: The discussion in this chapter consists of the text and tables from the Monetary Policy Report submitted to the Congress on July 18, 2007; the charts from that report (as well as earlier reports) are available on the Board's web site, at www.federalreserve.gov/boarddocs/hh. homes; personal consumption expenditures (PCE) also slowed. Even so, the available data point to solid gains overall in other components of final sales, and with manufacturing inventory imbalances significantly reduced, growth in real GDP apparently sped up.

Job growth in the first half of 2007 was driven by sizable increases in service-producing industries. In the goods-producing sector, manufacturing employment contracted, especially at firms closely tied to the construction industry and at producers of motor vehicles and parts. Employment in residential construction, which had turned down in mid-2006, decreased only modestly further over the first half of 2007 despite the substantial decline in homebuilding.

Real hourly compensation increased over the year ending in the first quarter, the most recent period for which complete data are available. In the second quarter, however, gains in real compensation were probably curtailed by a steep, energy-driven rise in consumer prices. Employment continued to rise apace in the first half of 2007 in the face of moderate growth in output. As a consequence, growth in labor productivity-which had slowed in 2006 from the rapid rate observed earlier in the decade-appears to have remained modest. The cooling of productivity growth in recent quarters likely reflects cyclical or other temporary factors, but the underlying pace of productivity gains may also have slowed somewhat.

Financial market conditions have continued to be generally supportive of economic expansion thus far in 2007, though there was a notable repricing in the subprime-mortgage sector. In recent weeks, the deterioration in that sector has been particularly marked, and markets for lower-quality corporate credits have also experienced some strains. Nonetheless, spreads on such corporate credits have remained narrow on the whole, and business borrowing has continued to be fairly brisk. On balance, equity markets posted sizable gains through mid-July, in part because of continued robust corporate profits and an upward revision to investors' outlook for the economy. The improved outlook led market participants to mark up their anticipated path for the federal funds rate, and intermediate- and long-term interest rates rose significantly. The foreign exchange value of the dollar has declined moderately this year as the pace of economic activity abroad has strengthened.

Overall consumer price inflation, as measured by the PCE price index, picked up noticeably in the first half of 2007, largely because of a sharp increase in energy prices. After moving down over the second half of 2006, the prices households pay for energy subsequently turned up and by May were 14 percent (not at an annual rate) above their level at the end of last year. Food prices also contributed to the step-up in overall inflation this year. The faster rate of increase in overall prices has had only a modest effect on inflation expectations: Surveys suggest that near-term inflation expectations have risen somewhat in recent months, but measures of long-term inflation expectations have remained within the range of recent years.

The rate of increase in the core PCE price index ticked down from 2.1 percent over the twelve months of 2006 to an annual rate of 2.0 percent over the first five months of 2007, primarily accounted for by more-favorable readings between March and May. Although higher energy prices this year added to the cost of producing a wide variety of goods and services that are included in the core index, these effects were offset by other factors—most notably, a slowdown in the rate of increase in shelter costs from the very high rates seen in 2006.

The U.S. economy seems likely to continue to expand at a moderate pace in the second half of 2007 and in 2008. The current contraction in residential construction will likely restrain overall activity for a while longer, but as stocks of unsold new homes are brought down to more comfortable levels, that restraint should begin to abate. In addition, the inventory correction that damped activity in the manufacturing sector around the turn of the year appears largely to have run its course. Thus, stock adjustment is unlikely to be a drag on production in coming quarters. Consumer spending should also keep moving up. Employment and real wages are on track to rise further, and, although the difficulties in the subprime-mortgage market have created severe financial problems for some individuals and families, the household sector is in good financial shape overall. Businesses are also continuing to enjoy favorable financial conditions, which, along with a further expansion in business output, should support moderate increases in business investment. The positive outlook for economic activity abroad bodes well for U.S. exports.

Core inflation is expected to moderate a bit further over the next year and a half. Longer-run inflation expectations are contained, pressures on resource utilization should ease slightly in an environment of economic expansion at or just below the rate of increase in the nation's potential to produce, and some of the other factors that boosted inflation in recent years have already receded or seem likely to do so. As noted, increases in shelter costs, which helped push up core inflation in 2006, have slowed appreciably this year. In addition, the paths for the prices of energy and other commodities embedded in futures markets suggest that the impetus to core inflation from these influences should diminish. And although unit labor costs in the nonfarm business sector have been rising, the average markup of prices over unit labor costs is still high by historical standards, an indication that firms could potentially absorb higher costs, at least for a time, through a narrowing of profit margins.

Nonetheless, the possibility that the expected moderation in inflation will fail to materialize remains the predominant risk to the economic outlook. The more-favorable readings on core inflation in recent months partly reflect some factors that seem likely to prove transitory. Moreover, the economy appears to be operating at a high level of resource utilization, which has the potential to sustain inflation pressures. In addition, an upward impetus to costs could emanate from other sources, including higher prices for energy and other commodities or a slower rate of increase in structural productivity. Another concern is that high rates of headline inflation, if prolonged, could cause longer-run inflation expectations to rise and could thus become another factor sustaining inflation pressures.

Significant risks also attend the outlook for real economic activity. On the downside, the fall in housing construction could intensify or last longer than expected. In addition, persistent weakness in the housing sector could spill over to other sectors, especially consumption. But upside risks also exist. For example, consumer spending appears to be rising less rapidly of late after a period of large increases that pushed the personal saving rate into negative territory; increases in consumption could return to their earlier pace. Exports could also boost aggregate demand more than anticipated, especially if economic conditions abroad continue to exceed expectations.

The Conduct of Monetary Policy over the First Half of 2007

The Federal Open Market Committee (FOMC) left the stance of monetary policy unchanged over the first half of 2007. At the time of the January meeting, available economic information pointed to a relatively favorable outlook for both economic growth and inflation. While manufacturing activity had softened, the housing sector had shown tentative signs of stabilizing, and consumer spending remained strong. Readings on core inflation had improved some from the elevated levels reached in 2006, and inflation expectations continued to be stable. Nevertheless, the prevailing level of inflation was uncomfortably high, and elevated resource utilization had the potential to sustain inflation pressures. Against this backdrop, the Committee decided to leave its target for the federal funds rate unchanged at $5\frac{1}{4}$ percent and reiterated in its policy statement that some inflation risks remained. The Committee also explained that the extent and timing of any additional firming would depend on the evolution of the outlook for both inflation and economic growth as implied by incoming information.

When the Committee met in March, data suggested that the ongoing weakness in the housing market had not spilled over to consumption spending, and the strains in the subprime-mortgage market did not appear to be affecting the availability of other types of household or business credit. Although investment spending had been soft, it was expected to pick up, primarily because of strong corporate balance sheets, continued high profitability, and generally favorable financial conditions. Nevertheless, sluggish business spending and the deterioration in the subprime-mortgage market suggested that downside risks to growth had increased. At the same time, readings on core inflation had stayed somewhat elevated, and increases in the prices of energy and non-energy commodities had boosted the risk that the expected deceleration in inflation would fail to occur. The FOMC decided to leave its target for the federal funds rate unchanged at 51/4 percent and noted in the accompanying statement that its predominant policy concern remained the risk that inflation would fail to moderate as expected. In light of the increased uncertainty about the outlook for both inflation and growth, the statement indicated that future policy adjustments would depend on the evolution of the outlook for both inflation and economic growth as implied by incoming information-a characterization that has been repeated in the two postmeeting FOMC statements since then.

In May, the data in hand indicated that the adjustment in the housing sector was continuing and appeared likely to persist for longer than previously anticipated. Moreover, growth in consumer spending seemed to have slowed in the early spring. Nonetheless, because the problems in the subprime-mortgage market apparently were contained and business spending indicators suggested improving prospects for investment, the economy seemed likely to expand at a moderate pace over coming quarters. Despite more-favorable readings for March, core inflation remained somewhat elevated from a longer perspective. Inflation pressures were expected to moderate over time, but the high level

of resource utilization had the potential to sustain those pressures. As a result, the FOMC decided to leave its target for the federal funds rate unchanged at 5¹/₄ percent and repeated in the statement that its predominant policy concern remained the risk that inflation would fail to moderate as expected.

At the June meeting, data appeared to confirm that economic growth had strengthened in the second quarter of 2007 despite the ongoing adjustment in the housing sector. Business spending on capital equipment, which had faltered around the turn of the year, firmed somewhat in the spring, and nonresidential construction advanced briskly. In addition, the inventory correction that had held down economic activity late last year and early this year seemed to have mostly run its course. Moreover, defense spending and net exports appeared poised to rebound after sagging in the first quarter. These factors more than offset a slowdown in the growth of consumer spending. Readings on core inflation remained favorable in April and May. Nonetheless, a sustained moderation of inflation pressures had yet to be convincingly demonstrated, and the high level of resource utilization had the potential to sustain those pressures. Under these circumstances, the Committee decided to leave its target for the federal funds rate unchanged at $5\frac{1}{4}$ percent. In its policy statement, the Committee repeated that its predominant policy concern remained the risk that inflation would fail to moderate as expected.

At their meetings over the first half of 2007, FOMC meeting participants continued the discussions they had formally initiated last year regarding their communications with the public. The discussions included a review of the role of the economic projections that are made twice a year by the members of the Board of Governors and the Reserve Bank presidents and which are included in the Board's Monetary Policy Report to the Congress. In addition, participants exchanged views on the possible advantages and disadvantages of specifying a numerical price objective for monetary policy. They also discussed the appropriate role of meeting minutes and policy statements. These discussions remain ongoing, as participants continue to evaluate the best available means for improving communication with the public in furtherance of the Committee's dual mandate for both maximum employment and stable prices.

Economic Projections for 2007 and 2008

In conjunction with the FOMC meeting at the end of June, the members of the Board of Governors and the Reserve Bank presidents, all of whom participate in the deliberations of the FOMC, provided economic projections for 2007 and 2008 for this report. The central tendency of the FOMC participants' forecasts for the increase in real GDP is $2^{1/4}$ percent to $2^{1/2}$ percent over the four quarters of 2007 and 21/2 percent to 2³/₄ percent in 2008. The civilian unemployment rate is expected to lie between $4\frac{1}{2}$ percent and $4\frac{3}{4}$ percent in the fourth quarter of 2007 and to be at about the top of that range in 2008. As for inflation, FOMC participants expect that the increase in the price index for personal consumption expenditures excluding food and energy (core PCE inflation) will total 2 percent to 21/4 percent over the four quarters of 2007 and will drift down to 1³/₄ percent to 2 percent in 2008.

Economic activity appears poised to expand at a moderate rate in the second half of 2007, and it should strengthen gradually into 2008. The ongoing correction in the housing market seems

Economic Projections for 2007 and 2008 Percent

Indicator	Federal Reserve Governors and Reserve Bank presidents		
	Range	Central tendency	
	2007		
Change, fourth quarter to fourth quarter ¹ Nominal GDP PCE price index excluding food and energy Average level, fourth quarter Civilian unemployment rate	41/2-51/2 2-23/4 2-21/4 41/2-43/4	41/2-5 21/4-21/2 2-21/4 41/2-43/4	
Change, fourth quarter to fourth quarter ¹ Nominal GDP Real GDP PCE price index excluding food and energy	4 ¹ / ₂ -5 ¹ / ₂ 2 ¹ / ₂ -3 1 ³ / ₄ -2	4 ³ / ₄ -5 2 ¹ / ₂ -2 ³ / ₄ 1 ³ / ₄ -2	
Average level, fourth quarter Civilian unemployment rate	4½-5	About 4 ³ / ₄	

1. Change from average for fourth quarter of previous year to average for fourth quarter of year indicated.

likely to continue to weigh on the rate of economic expansion over the near term. But as that process runs its course, the rate of growth of economic activity should move up somewhat. The pace of consumer spending may be restrained in the near term as households continue to adjust to the latest run-up in energy prices and to softer house prices; still, household balance sheets are generally in good shape, and increases in employment and real wages over the next year and a half should be sufficient to sustain further gains in spending. Regarding business investment, solid gains in real outlays on equipment and software seem likely in light of the anticipated expansion in business output, continuing
strong profits, and generally favorable financial conditions. Opportunities to realize significant gains in efficiency by investing in high-tech equipment should provide ongoing support to equipment spending as well. Investment in nonresidential buildings also seems to be expanding briskly. In addition, prospects are favorable for continued increases in demand for exports of U.S. goods and services.

FOMC participants generally expect core inflation to edge down a bit further over the next year and a half. In assessing the apparent slowing of core inflation this spring, participants recognized that the monthly price data are volatile and that some of the recent improvement may prove to have been transitory. Nonetheless, they believe that the current environment will be conducive to some further moderation in underlying price pressures. The participants' forecasts for real activity imply a slight easing over the next several quarters of the tightness in labor and product markets. And although core inflation is expected to remain under some upward pressure in the near term from the pass-through of the increases to date in the prices of energy and other commodities, those cost pressures should subsequently wane. Accordingly, with long-run inflation expectations contained, diminished cost pressures should result in some moderation in core inflation.

Economic and Financial Developments in 2007

Real GDP increased at an annual rate of 2¹/₄ percent in the second half of 2006, and it appears to have risen at roughly that pace, on average, over the first half of 2007. Although consumer spending and business fixed investment posted moderate gains, on balance, during the first half, the contraction in residential

construction exerted significant restraint on economic activity. The rise in real GDP in the first quarter was also damped by a downswing in inventory investment, a dip in defense spending, and an unusually sharp drop in net exports. The available information suggests that GDP growth rebounded in the second quarter as the drag from inventory investment waned and as defense expenditures and net exports snapped back after their first-quarter declines. In the labor market, hiring continued at a steady pace throughout the first half, although job gains fell short of those recorded in 2006, and the unemployment rate remained at 41/2 percent. Headline consumer price inflation was boosted by a reversal of the downturn in energy prices in late 2006 and a step-up in retail food prices, while core inflation was little changed. Real hourly labor compensation increased over the year ending in the first quarter, although gains in the second quarter were probably eroded by the energy-driven pickup in overall inflation. Conditions in financial markets have remained generally supportive of economic expansion thus far this year despite deteriorating conditions in the subprime-mortgage sector. Investors seemed to become more optimistic about the outlook for the economy: Interest rates rose, credit spreads on corporate bonds stayed narrow on the whole, and equity markets recorded sizable gains.

The Household Sector

Consumer Spending

After exhibiting considerable vigor in late 2006, consumer spending slowed somewhat over the first half of 2007. Spending continued to be bolstered by the strong labor market and the lagged effects of earlier increases in household wealth. However, these positive influences were partly offset by the rise in energy prices this year, which drained consumers' purchasing power, and by reduced home-price appreciation, which limited recent gains in wealth for many households. Surveys of consumer sentiment have remained in a favorable range this year.

Real PCE rose at an annual rate of 4¹/₄ percent in the first quarter. Spending on light motor vehicles (cars, sportutility vehicles, and pickup trucks) got off to a fast start this year, expenditures on energy services were boosted by unusually cold weather in February, and outlays for other goods and services posted sizable gains after a steep run-up in the fourth quarter. The available data imply a much slower pace of spending growth in the second quarter, as sales of light motor vehicles softened and real spending on goods other than motor vehicles turned lackluster.

Real disposable personal income (DPI)—that is, after-tax income adjusted for inflation—also started the year on a strong note after a large increase in the fourth quarter.¹ Wages and salaries and some other major categories of personal income continued to rise appreciably in nominal terms throughout the first half. However, these gains were eroded in real terms by the energy-related jump in inflation in the spring, and, as a result, real DPI rose at an annual rate of just 1½ percent between the fourth quarter

of 2006 and May 2007, compared with an increase of more than 3 percent over the four quarters of 2006.

Even given the sharp deceleration in residential real estate values, household wealth has remained supportive of spending growth. One reason is that the surge in equity values in recent quarters has allowed overall household wealth to keep pace with nominal income despite the softness in home prices. In addition, because changes in net worth tend to influence consumption with a lag of several quarters, the increases in wealth during 2005 and 2006 are likely still providing a good deal of impetus to spending. These increases in wealth, which have provided many households with the resources and inclination to raise their spending at a rate that exceeds income growth, have been a factor pushing down the personal saving rate over the past couple of years even as interest rates have moved up. After fluctuating in the vicinity of 2 percent from 1999 to 2004, the saving rate subsequently dropped sharply, and it stood at negative 11/4 percent, on average, in April and May of 2007.

Residential Investment

Residential construction activity remained soft in the first half of 2007, as builders continued to confront weak demand and an elevated inventory of unsold new homes. In the single-family sector, new units were started at an average annual rate of 1.18 million between January and May-more than 30 percent below the quarterly high reached in the first quarter of 2006. Starts in the multifamily sector averaged a little less than 300,000 units during the first five months of 2007, an amount at the lower end of the range of the past nine years. All told, the contraction in housing activity subtracted nearly 1 percentage

^{1.} According to the published data, real DPI rose at an annual rate of 4³/₄ percent in the first quarter. However, a substantial part of the increase occurred because the Bureau of Economic Analysis (BEA) added \$50 billion (annual rate) to its estimate of first-quarter wages and salaries in response to information that bonus payments and stock option exercises around the turn of the year were unusually large. Because the BEA did not assume that these payments carried forward into April, real DPI fell sharply in that month.

point from the change in real GDP in the first quarter of 2007—almost as much as in the second half of 2006—and the drag likely remained substantial in the second quarter.

The monthly data on home sales have been erratic this year. But after smoothing through the ups and downs, the data suggest that demand has softened further after falling at a double-digit rate between mid-2005 and mid-2006 and then holding reasonably steady in the second half of last year. On average, sales of existing homes over the three months ending in May 2007 were 41/2 percent below their average level in the second half of last year, while sales of new homes were down 10 percent over that period. The further weakening of housing demand this year likely reflects, in part, tighter lending standards for mortgages, and it occurred despite mortgage rates that were relatively low by longer-run standards. The ongoing slippage in sales has made it more difficult for homebuilders to make much of a dent in their inventories of new homes for sale. When evaluated relative to the three-month average pace of sales, the months' supply of unsold new homes in May was more than 60 percent above the high end of the relatively narrow range it occupied from 1997 to 2005. Moreover, these published figures probably understate the true inventory overhang in this sector to the extent that they do not account for the surge in canceled sales in the past year; such cancellations return homes to unsold inventory but are not incorporated in the official statistics.

The rate of house-price appreciation slowed dramatically in 2006 after nearly a decade of rapid increases, and prices appear to have moved roughly sideways in the first half of 2007. The purchaseonly version of the repeat-transactions price index for existing single-family homes published by the Office of Federal Housing Enterprise Oversight, which tracks sales prices of the same houses over time, rose at an annual rate of just 2 percent in the first quarter of 2007 (the latest available data) and was up just 3 percent over the year ending in the first quarter, compared with an increase of 10 percent over the preceding year. For April and May combined, the average 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 1 percent below that of a year earlier.

Household Finance

Household debt expanded at an annual rate of 6 percent in the first quarter of 2007, somewhat below the pace of 8³/₄ percent posted in 2006. The deceleration was primarily the result of a significant step-down in the rise of mortgage debt, which reflected the sharp slowing of house-price appreciation and the slower pace of home sales. Consumer (nonmortgage) debt has remained on a moderate uptrend this year.

Debt rose a little more slowly than personal income in the first quarter, so the financial obligations ratio for the household sector inched down, though it remained only a bit below its historical high. Most households were able to meet their debt service obligations, and measures of household credit quality were generally little changed. For example, delinquency rates on consumer loans and prime mortgages-the two main components of total household debt-stayed low through the spring of 2007, as did those on subprime fixedrate mortgages. In addition, household bankruptcy filings continued to be subdued in the first half of the year: They ran near the average pace seen since early 2006, after the bulge that accompanied the implementation of the new bankruptcy law in October 2005.

Some households, however, have experienced growing financial strains. Delinquency rates on subprime mortgages with variable interest rates, which account for about 9 percent of all first-lien mortgages outstanding, continued to climb in the first five months of 2007 and reached a level more than double the recent low for this series, which was recorded in mid-2005. The rise in delinquencies has begun to show through to new foreclosures. In the first quarter of 2007. an estimated 325,000 foreclosure proceedings were initiated, up from an average quarterly rate of 230,000 over the preceding two years; about half of the foreclosures this year were on subprime mortgages. The decline in credit quality in the subprime sector has likely stemmed from a combination of several factors, including the moderation in overall economic growth and some regional economic weakness. In addition, a substantial number of subprime borrowers with variable-rate mortgages have faced an upward adjustment of the rates from their initial levels. When house prices were rising rapidly and rates on new loans were lower, many of these borrowers qualified to refinance into another loan with morefavorable terms. With house prices having decelerated and rates having moved higher, however, the scope for refinancing has been reduced. Moreover, investor owners may have been tempted to walk away from properties with little or no equity. Subprime mortgages originated in late 2005 and 2006 have shown unusually high rates of early delinquency, suggesting that some lenders unduly loosened underwriting standards during that period.

In recent months, credit has become less easily available in the subprimemortgage market, as investors in sub-

prime-mortgage-backed securities reportedly have scrutinized the underlying subprime loans more carefully and lenders have tightened underwriting standards. For example, more than half of the respondents to the questions on subprime residential mortgages in the Federal Reserve's April 2007 Senior Loan Officer Opinion Survey on Bank Lending Practices indicated that they had tightened credit standards on such loans over the previous three months. In June, the federal financial regulatory agencies issued a final Statement on Subprime Mortgage Lending to address issues relating to certain adjustable-rate mortgage products. Credit spreads on the lower-rated tranches of new subprime securitizations have increased sharply, on balance, this year, and issuance of subprime-mortgage-backed securities has moderated from its vigorous pace of the past couple of years. However, despite the ongoing problems, the subprime market has continued to function, and new loans are being made.

The Business Sector

Fixed Investment

After having risen sharply over much of 2006, real business fixed investment (BFI) lost some steam in the fourth quarter and posted a relatively meager gain in the first quarter of 2007. The slower rise in business output in recent quarters has likely been a moderating influence on business investment expenditures. But on the whole, economic and financial conditions still appear to be favorable for capital spending: Corporate profits remain robust, businesses have ample liquid assets at their disposal, and conditions in financial markets remain supportive.

Much of the recent softness in BFI was in spending on equipment and soft-

ware (E&S), which rose at an annual rate of less than 2 percent in real terms in the first quarter after having fallen nearly 5 percent in the fourth quarter of 2006. Within the major components of E&S, real spending on high-tech equipment expanded at an annual rate of more than 20 percent in the first quarter of 2007 because of both a surge in outlays on computers after the release of a major new operating system and a spurt in investment in communications gear. Aircraft purchases also posted a sizable increase. However, spending on motor vehicles tumbled, as many firms had accelerated their purchases of medium and heavy trucks into 2005 and 2006 so that they could take delivery before the Environmental Protection Agency's new emissions standards for engines went into effect this year. Elsewhere, real investment in equipment other than hightech and transportation goods dropped at an annual rate of 10 percent in the first quarter after a fall of nearly 5 percent in the previous quarter. The weakness in this category, which accounts for roughly 40 percent of investment in E&S when measured in nominal terms, appears to have reflected, in part, appreciable declines in spending on equipment disproportionately used by the construction and motor vehicle industries and was most pronounced around the turn of the year.

Although the weakness in truck sales apparently extended through midyear, real E&S outlays apart from transportation equipment appear to have posted a solid increase in the second quarter. Incoming information suggests that hightech spending continued to move up in real terms—albeit not as fast as it did in the first quarter. Moreover, shipments and orders for equipment other than high-tech and transportation items regained some lost ground.

Nonresidential construction activity turned up steeply in 2006 after having been stagnant for several years, and it continued to exhibit considerable strength in early 2007. Outlays for office, retail, and industrial buildings are all running well above year-earlier levels, and—given that vacancy rates have moved down over the past couple of years-prospects for further gains in coming quarters are good. One exception to the recent strength in this sector is the drilling and mining category, in which real outlays fell in the first quarter after three years of sizable gains. The recent softening in this category of investment may reflect, in part, reported shortages of specialty equipment and skilled labor.

Inventory Investment

Inventory investment slowed markedly in the fourth quarter of 2006 as firms acted to stem rising inventory imbalances, and it turned negative in the first quarter of 2007. The downswing in inventory investment shaved about 1 percentage point from the change in real GDP in both the fourth and first quarters, and it appears to have brought stocks into better alignment with sales. Some of the inventory correction was in the motor vehicle sector, in which high gasoline prices have been causing demand to shift to more-fuel-efficient models-a trend that, by the middle of 2006, had left dealers with bloated inventories of light trucks and sport-utility vehicles. Facing little prospect of significantly stronger sales of those vehicles in the near term, the manufacturers instituted sharp cuts in production starting in the second half of last year. The production cuts, which in the first quarter of 2007 brought assemblies of light vehicles to their lowest level in more than a decade, helped clear out dealers' lots and thus set the stage for a step-up in assemblies in the second quarter. The automakers have scheduled a further rise in assemblies in the third quarter, in part to get a good start on producing the new, more-fuel-efficient models that will be introduced to the public in coming months.

Excluding motor vehicles, inventories appeared to be well aligned with sales through much of 2006, but they too started to look excessive as the growth of aggregate demand slowed in the latter part of the year. The emerging imbalances, some-though not all-of which appear to have been at firms that supply the construction and motor vehicle industries, prompted production adjustments that reduced non-auto inventory investment to a very modest rate in the first quarter. According to the limited available information, the pace of real stockbuilding appears to have remained low in April and May, and, for the most part, inventories seem to have moved back into rough alignment with sales. In fact, businesses surveyed in June by the Institute for Supply Management reported that their customers were mostly comfortable with their current stock levels, whereas earlier in the year an elevated number of respondents had characterized these inventory positions as too high.

Corporate Profits and Business Finance

In the first quarter of 2007, growth in corporate profitability slowed from last year's pace, but the level of profitability remained high. Earnings per share for S&P 500 firms decelerated but still came in nearly 10 percent above their year-earlier level. In the national income accounts, profits of nonfinancial corporations in the first quarter were little changed from year-earlier levels after

double-digit gains in 2006; nonetheless, before-tax profits measured as a share of sector GDP were nearly 13 percent, close to the high levels posted last year.

Fueled in part by continued heavy merger and acquisition activity, nonfinancial business debt expanded at an annual rate of 9 percent in the first quarter of this year, only a bit slower than in 2006, and data in hand suggest a robust pace of expansion again in the second quarter. Net bond issuance has been solid so far in 2007, and commercial and industrial lending by banks has remained strong. Although lower-quality corporate credit markets experienced some strains, generally narrow credit spreads have encouraged corporate bond issuance, and the growth of business loans has been spurred by banks' accommodative lending posture. Considerable net fractions of respondents to the April 2007 Senior Loan Officer Opinion Survey indicated that they had eased some terms-especially spreads of loan rates over their costs of funds, costs of credit lines, and loan covenants-on commercial and industrial loans over the previous three months. Banks pointed to more-aggressive competition from other banks or nonbank lenders and to increased liquidity in the secondary market for these loans as the most important reasons for having eased business lending terms. Commercial paper outstanding was flat in the first quarter but increased somewhat in the second quarter.

Gross public issuance of equity by nonfinancial corporations has continued to be moderate so far this year, but private equity issuance has apparently remained strong, as leveraged buyout activity has continued to climb. However, given the elevated levels of share repurchases and equity retirements from cashfinanced mergers and acquisitions in the first quarter, net equity issuance continued to be deeply negative.

Despite some deceleration in profits, the credit quality of nonfinancial firms has generally continued to be robust. The six-month trailing bond default rate has stayed near zero this year, and the delinquency rate on commercial and industrial loans at banks remained extremely low in the first quarter. For public firms, balance sheet liquidity was still high in the first quarter, whereas corporate leverage stayed near historical lows despite the large net retirement of equity. In addition, net interest payments relative to cash flow continued to be near the low end of the range seen over the past two decades.

Commercial real estate debt expanded briskly in the first quarter of 2007, albeit not quite so rapidly as in 2006, a pattern consistent with the net tightening of credit standards on commercial real estate loans reported in the Senior Loan Officer Opinion Survey. Spreads on BBB-rated commercial-mortgagebacked securities (CMBS) soared in late February and have varied within an elevated range since then. The increase reportedly came in response to a reduction in investor interest in collateralized debt obligations, sponsors of which traditionally have purchased many of these securities, and to plans by the rating agencies to increase the level of credit support required for such securities. However, because rents on commercial properties have been increasing and vacancy rates have remained moderate, credit quality has generally continued to be good. Delinquency rates on commercial mortgages held by life insurance companies and on those backing CMBS have stayed near the bottom of their recent ranges this year. The delinquency rate on commercial mortgages held by banks edged up further in the first quarter in response to a deterioration in the performance of loans for multifamily properties and for construction and land

development; nevertheless, this delinquency rate remained low by historical standards.

The Government Sector

Federal Government

The deficit in the federal unified budget narrowed further during the past year: Receipts continued to rise at a fairly rapid rate, while growth in outlays was relatively subdued. Over the twelve months ending in June, the unified budget recorded a deficit of \$163 billion, \$113 billion less than during the comparable period ending in June 2006. When measured relative to nominal GDP, the deficit has decreased steadily from a recent fiscal year high of 3.6 percent in 2004 to a little more than 1 percent during the past twelve months.

Nominal federal receipts during the twelve months ending in June were 8 percent higher than during the same period a year earlier. This increase was considerably smaller than the doubledigit advances recorded in fiscal 2005 and fiscal 2006. Nonetheless, it was faster than the increase in income and pushed up the ratio of receipts to GDP to nearly 19 percent. Individual income tax receipts continued to outpace the rise in taxable personal income as measured in the national income and product accounts (NIPA), likely a result, at least in part, of larger capital gains realizations (which are excluded from NIPA income), the effect of some taxpayers moving into higher tax brackets as their real incomes increased, and perhaps a further shift in the distribution of income toward high-income households, which typically face higher tax rates. Corporate receipts, after rising at an annual rate of nearly 40 percent, on average, over the three years ending in fiscal 2006, rose 15 percent during the year

ending in June, a rate more in line with the increase in corporate profits.

Nominal federal outlays increased less than 3 percent during the twelve months ending in June and edged down to 20 percent of nominal GDP, around the lower end of the narrow range that has prevailed since 2003. In large part, the deceleration in outlays reflected the tapering off of the temporary bulge in expenditures for flood insurance and disaster relief associated with the 2005 hurricanes. Meanwhile, spending on health programs continued to rise briskly, only in part because of the net increment to spending from the Medicare Part D prescription drug program, which started in January 2006. Defense spending was up 5 percent over the period, an increase somewhat below those recorded in fiscal years 2005 and 2006. Total federal outlays were also boosted by a sizable rise in net interest payments as interest rates moved higher, although the increase in debt service costs was significantly smaller than that of a year earlier.

As measured in the NIPA, real federal expenditures on consumption and gross investment-the part of federal spending that is a direct component of GDPfell at an annual rate of nearly 4 percent in the first quarter, as a drop in defense spending more than offset a moderate increase in nondefense purchases. Defense expenditures tend to be erratic from quarter to quarter, and the firstquarter dip followed a large increase in the fourth quarter. Defense spending appears to have turned back up in the second quarter, and, given currently enacted appropriations, it is likely to increase further in coming quarters.

All else being equal, the significant narrowing of the unified budget deficit over the past few years raises national saving. However, the positive effect on national saving of the smaller federal deficit has been largely offset by a downward drift in nonfederal saving. Although business saving has increased substantially over this period, personal saving has dropped sharply. Accordingly, total national saving (that is, federal plus nonfederal) has recovered only a little from the exceptionally low levels reached between 2003 and 2005; measured net of estimated depreciation, it has fluctuated between $1\frac{1}{2}$ percent and 2¹/₂ percent of GDP since the start of 2006. If not boosted 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 an aging population.

Federal Borrowing

Federal debt rose at an annual rate of $6\frac{3}{4}$ percent in the first quarter of 2007, a bit slower than in the corresponding quarter of last year. As of the end of the first quarter, the ratio of federal debt held by the public to nominal GDP was about 36 percent, a level little changed from that in recent quarters.

The improvement in the budget position of the federal government has led the Treasury to scale back issuance of marketable coupon securities. As part of its reduction in issuance, the Treasury announced in May that it was discontinuing auctions of three-year nominal notes. This move had been widely anticipated and elicited little reaction in financial markets.

Overall, foreign purchases of Treasury securities appear to have increased further this year, thereby bringing the share of these securities held by foreign investors to a new high of almost 45 percent at the end of the first quarter. The proportion of nominal coupon securities purchased at auctions by foreign investors moved up in late 2006 and has stayed elevated thus far this year, albeit well off the peak reached in 2004. Balance of payments data point to sizable net purchases by foreign private investors between January and March, whereas such investors sold Treasury securities, on net, in 2006. In contrast, net purchases by foreign official investors have declined somewhat this year. Custody holdings at the Federal Reserve Bank of New York on behalf of foreign official and international accounts have only edged up since the end of 2006.

State and Local Government

On the whole, state and local governments continue to enjoy strong fiscal positions as a consequence of several years of robust revenue inflows and a period of appreciable restraint on spending after these governments' fiscal difficulties earlier in the decade. Accordingly, over the past year or so, states and localities in the aggregate have been able both to raise expenditures and to maintain healthy balances in their reserve funds. However, revenue flows in many states appear to have slowed a bit of late, a pattern similar to the one that has emerged at the federal level. For local governments, property tax receipts are still being bolstered by the earlier run-up in real estate values, but the deceleration in house prices over the past year will likely slow the rise in local revenues down the road. Moreover, many state and local governments expect to face significant structural imbalances in their budgets in coming years as a result of the ongoing pressures from Medicaid and the need to provide pensions and health care to an increasing number of retired state and local government employees.

According to the NIPA, real expenditures on consumption and gross investment by state and local governments rose at an annual rate of nearly 4 percent in the first quarter, and they apparently posted a further increase in the second quarter. Much of the strength in the first half of 2007 was in construction spending, which has been climbing since the start of 2006, in part because of very rapid increases in outlays on highways. Hiring by states and localities also exhibited considerable vigor during the first half of 2007, both in the education sector and elsewhere; on average, state and local government employment rose 30,000 per month over the six months ending in June, compared with an average monthly increase of 22,000 over the preceding ten years.

State and Local Government Borrowing

Borrowing by state and local governments has been strong thus far in 2007, largely because refundings in advance of retirements have been elevated as interest rates have remained relatively low. In contrast, issuance of short-term debt has been moderate-a development consistent with the strong budgets of state and local governments. The credit quality of municipal bonds has remained solid on the whole, as the number of bond-rating upgrades has outpaced the number of downgrades thus far this year. The ratio of yields on municipal bonds to those on comparable-maturity Treasury securities has stayed at the low end of its range of the past decade.

The External Sector

In 2006, U.S. real net exports made a positive contribution to the full year's economic growth for the first time since 1995. The contribution of net exports moved into negative territory again,

however, in the first quarter of this year, as imports rebounded and exports slowed from their exceptional pace late last year. Data for April and May point to a resurgence of exports and a moderation of imports in the second quarter.

The U.S. nominal current account deficit widened a bit in the first quarter of 2007 to \$770 billion at an annual rate, or about 5³/₄ percent of nominal GDP, from \$752 billion in the fourth quarter of 2006. The larger deficit was due to an increase in net unilateral transfers abroad. Although the first-quarter trade balance deteriorated in real terms, increases in export prices outpaced those in import prices, thereby leaving the nominal trade balance unchanged. Despite the large negative U.S. net international investment position, the U.S. balance on investment income remained positive and also was about unchanged in the first quarter.

International Trade

Despite continued solid foreign economic expansion and persisting stimulus from earlier declines in the dollar, the growth of real exports of goods and services slowed to an annual rate of less than 1 percent in the first quarter from its exceptionally strong pace of more than 10 percent in the fourth quarter. The slowdown was particularly evident in sales of capital goods-especially aircraft and computers-and industrial supplies, which fell in the first quarter after rising robustly in late 2006. Also contributing to the slowdown, real exports of services rose only 2 percent in the first quarter after increasing more than 16 percent in the fourth quarter. Available data for nominal exports in April and May suggest that real export growth moved up in the second quarter, as increases in exports of services, automobiles, industrial supplies, and consumer goods more than offset a further contraction in exports of capital goods.

Prices of exported goods rose at an annual rate of 4 percent in the first quarter of 2007, up from the pace of about $2\frac{1}{2}$ percent seen in the second half of 2006. Prices of non-agricultural industrial supplies, which had been reduced in the fourth quarter by lower oil prices, were pushed up in the first quarter by higher prices for metals and renewed increases in oil prices. In addition, agricultural prices-especially those of corn, soybeans, and wheat-have risen briskly over the past several quarters, in part because of the direct and indirect effects of the increased demand for ethanol. Monthly data on trade prices in the second quarter point to further increases in export prices on the strength of additional run-ups in the prices of nonagricultural industrial supplies, most notably metals.

After falling at an annual rate of $2\frac{1}{2}$ percent in the fourth quarter, real imports of goods and services rose at a 51/2 percent rate in the first quarter. A sharp increase in oil imports, after a fourth-quarter decline, was the most important contributor to the swing, but imports of computers, semiconductors, and natural gas also accelerated. Imports of other goods continued to be weak, likely a result, in part, of slower U.S. growth; imports of autos and industrial supplies, in particular, contracted sharply. The growth of real imports of services dropped from $6\frac{1}{4}$ percent in the fourth quarter to $2^{3/4}$ percent in the first quarter. Data for April and May imply some slowing of overall real imports in the second quarter. In particular, imports of oil and computers displayed noteworthy decelerations.

Prices of imported goods excluding oil and natural gas rose at an annual rate of about $1\frac{1}{2}$ percent in the first quarter of 2007, as prices of both finished and material-intensive goods recorded higher rates of increase. Monthly trade price data suggest that import prices accelerated in the second quarter, partly because of higher metals prices, which have fluctuated widely in recent months but are up substantially, on balance, so far in 2007. More generally, prices of industrial supplies have been rising briskly, a movement that may reflect, in part, a response to the depreciation of the dollar in recent months. No such effect of the dollar's decline is readily apparent in the prices of finished goods.

Oil prices fell at the beginning of 2007, as unusually mild temperatures reduced oil demand and OPEC members appeared less likely to implement fully production cuts agreed to at the end of 2006. The spot price of West Texas intermediate (WTI) crude oil, the U.S. benchmark, fell from an average of \$62 per barrel in December to \$54 per barrel in January. Oil prices then rose gradually as it became apparent that OPEC, led by Saudi Arabia, indeed would restrain oil production further. Oil prices also have been supported by solid growth in demand, particularly in developing countries, and by long-running concerns about supply disruptions. Ongoing violence has depressed oil production in Iraq and Nigeria; the Nigerian outage recently worsened to about onefourth of the country's estimated capacity. Since the start of the year, concerns have also intensified about a possible future disruption of oil exports from Iran. The spot price of WTI averaged \$72 per barrel in the first half of July.

Despite its elevated level by historical standards, the spot price of WTI has not increased as much in recent months as have the prices of other grades of crude oil because of high inventories of WTI in the central United States arising from interruptions for maintenance and unplanned outages at refineries. Since early March, the spot price of Brent crude oil, the European benchmark, has risen about \$5 per barrel more than has the spot price of WTI; the price of Brent averaged \$76 per barrel in the first half of July.

The Financial Account

The U.S. nominal current account deficit continued to be financed primarily by foreign purchases of U.S. debt securities. Driven by purchases of U.S. government securities by Asian central banks, foreign official inflows moved up noticeably in the first quarter. Although demand for U.S. Treasury securities by foreign official investors eased, it was more than offset by increased official purchases of bonds and mortgagebacked securities issued by governmentsponsored enterprises (GSEs). Preliminary data indicate that official inflows remained strong through April.

Foreign private purchases of U.S. securities maintained the extraordinary pace set in 2006. Demand for U.S. Treasury bonds extended its fourth-quarter strength, while demand for equities picked up from an already robust level; purchases of corporate bonds moderated slightly, and, on net, private foreigners sold debt issued by GSEs. Foreign direct investment flows into the United States weakened significantly; the rate of inflows in the first quarter was roughly half that in 2006.

Net purchases of foreign securities by U.S. residents, which represent a financial outflow, remained strong in the first quarter of this year. Net acquisitions of bonds continued at the brisk pace recorded in the second half of 2006, while purchases of foreign stocks, although slowing slightly, remained elevated. Outflows associated with U.S. direct investment abroad strengthened to a nearrecord rate.

The Labor Market

Employment and Unemployment

The demand for labor has been increasing at a moderate rate this year, somewhat less quickly than in 2006. After having averaged 190,000 per month in 2006, gains in payroll employment averaged 145,000 per month in the first half of 2007. The civilian unemployment rate has changed little since last fall and stood at 4.5 percent in June.

As was the case in 2006, job growth in the first half of 2007 was driven by solid gains in service-producing industries. In particular, hiring at health, education, and eating and drinking establishments remained on strong uptrends, and job gains at businesses providing professional and technical services were sizable. However, employment in the financial activities and administrative support sectors softened after two years of strong advances. In the goodsproducing sector, manufacturing employment, which has been on a secular downtrend for more than a quartercentury, declined again over the first half of 2007. The decline this year reflected cutbacks at firms closely tied to the construction industry and at producers of motor vehicles and parts, as well as the ongoing downtrend in payrolls at manufacturers of apparel and textiles. Employment in residential construction, which had fallen in 2006 after two years of substantial increases, declined just modestly, on net, over the first half of 2007 despite the substantial contraction in housing activity.

Other labor market indicators have mostly remained positive. Initial claims for unemployment insurance have stayed relatively low in recent months. In addition, readings from private surveys of hiring plans have remained in a favorable range despite recent declines, and the job openings rate has held at a high level. According to the Conference Board, households' assessments of job availability cooled a bit in the spring after having improved somewhat earlier in the year; even so, the June value for this indicator was still relatively positive.

After hovering around 4³/₄ percent during the first three quarters of 2006, the unemployment rate fell to $4\frac{1}{2}$ percent in the fourth quarter, and it remained in that neighborhood through June. The labor force participation rate has continued to be buoyed by the favorable job market, and it stood at 66.1 percent in June, within the narrow range that has prevailed since 2005. Despite the recent flatness, the participation rate has fallen appreciably since the start of the decade; the downtrend has largely reflected longer-run demographic forces that include a leveling off in the participation rate of women and an increase in the proportion of the workforce in older age groups, which have lower average participation rates than do younger age groups.

Productivity and Labor Compensation

Gains in labor productivity have slowed lately. According to currently published data, output per hour in the nonfarm business sector rose just 1 percent over the year ending in the first quarter of 2007, down from the pace of 2 percent per year recorded over the preceding two years (and down from much larger increases in the first half of the decade). The slowing in productivity was associated with the deceleration in output and thus was probably, at least in part, a temporary cyclical phenomenon. Indeed, the fundamental forces that in recent years have supported a solid uptrend in underlying productivity-the driver of real wage gains over timeremain in place. They include the rapid pace of technological change and firms' ongoing efforts 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 compensation have been bounced around in recent years by the lumpiness of bonus payments, stock option exercises, and sharp swings in employer benefit costs. However, on balance, the evidence points to some pickup recently in the underlying pace of compensation gains, a development consistent with the tight labor market. The employment cost index (ECI) for private industry workers, which measures both wages and the cost of benefits, increased 31/4 percent in nominal terms between March 2006 and March 2007, compared with an increase of 21/2 percent over the preceding twelve months. Adjusted for inflation, as measured by the increase in the overall PCE price index, the ECI rose nearly 1 percent over the year ending in March after having fallen nearly 1/2 percent over the preceding year. Data on hourly compensation in the second quarter are not yet available, but a sharp rise in overall consumer prices during that period probably offset much-if not all-of the nominal gains that were realized.

The step-up in the rate of increase in the ECI over the past year was concentrated in its wage and salary component, which rose 3¹/₂ percent over the year ending in March, 1¹/₄ percentage points more than the increase over the yearearlier period. Meanwhile, increases in the cost of providing benefits have slowed dramatically of late, in part because premiums for health insurance have stopped rising at double-digit rates. The increase in benefit costs over the year ending in March, which amounted to just 2¹/₄ percent, was also held down by a sharp drop in employer contributions to retirement plans. The lower contributions appear to have reflected several factors, including the strong performance of the stock market in 2006 and a high level of employer contributions over the past several years; taken together, these factors significantly boosted the funding levels of definedbenefit plans.

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 $3\frac{1}{4}$ percent over the year ending in the first quarter of 2007, the same rise as in the ECI. Over the year ending in the first quarter of 2006, NFB hourly compensation had risen 5³/₄ percent, in part because of an apparent surge in the value of stock option exercises (which are excluded from the ECI) early last year. Largely reflecting the slower growth in NFB hourly compensation, unit labor costs rose 21/4 percent over the year ending in the first quarter of 2007 after increasing $3\frac{1}{2}$ percent over the preceding four quarters.

Prices

Headline inflation picked up again in the first half of 2007, as energy prices surged after having eased late last year and increases in food prices quickened. The PCE chain-type price index increased at an annual rate of 4.4 percent between December 2006 and May 2007 after rising 2.2 percent over the twelve months of 2006. Core PCE prices which exclude the direct effects of movements in food and energy prices rose at an annual rate of 2.0 percent over the first five months of the year, 0.1 perAlternative Measures of Price Change, 2006–07

Percent

Price measure	2006	2007
Chain-type (Q1 to Q1) Gross domestic product (GDP) Excluding food and energy Gross domestic purchases	3.1 2.9 3.5	2.8 2.7 2.5
Personal consumption expenditures (PCE) Excluding food and energy Market-based PCE excluding	3.0 2.0	2.2 2.3
food and energy	1.6	2.1
Fixed-weight (Q2 to Q2) Consumer price index Excluding food and energy	4.0 2.4	2.6 2.3

NOTE: Changes are based on quarterly averages of seasonally adjusted data. For the consumer price index, the 2007:Q2 value is calculated as the average for April and May compared with the average for the second quarter of 2006 and is expressed at an annual rate.

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

centage point less than the increase over the twelve months of 2006.

Energy prices, which had fallen substantially in the fourth quarter of 2006, decreased further in January in response to declines in the price of crude oil, unseasonably mild temperatures in North America and Europe, and historically high inventories of petroleum products and natural gas. However, energy prices shot up from February to May, and the rise brought the net increase in the PCE price index for energy over the first five months of the year to 14 percent (not at an annual rate). The increase was especially large for gasoline, the price of which was boosted not only by higher prices for crude oil beginning in late winter but also by numerous refinery shutdowns, reflecting both planned maintenance and unplanned disruptions. Retail gasoline prices have fallen some since May as refiners have made some progress in bringing output closer to seasonal norms, but they are still about \$0.70 per gallon above the levels of late December.

Food prices have also picked up this year, in part because of the jump in the price of corn, which is now in demand not only as a feedstuff and food but also as an input to the production of ethanol. Between December 2006 and May 2007, the PCE price index for food and beverages increased at an annual rate of nearly 6 percent. The higher cost of corn was partly responsible for a $10^{1/2}$ percent rise over the period in prices for meats, poultry, fish, and eggs. The index for fruits and vegetables also posted a double-digit increase, mainly because a severe freeze in California in January destroyed a substantial portion of the citrus crop and set back the harvest of many other fruits and vegetables. Prices for food consumed away from home, which typically are influenced more by labor and other business costs than by farm prices, rose at an annual rate of 4 percent over the first five months of the year.

The edging down of core PCE inflation this year largely reflected some waning of the sizable increases in shelter costs that were recorded in 2006. Core PCE inflation in the most recent few months was also held down significantly by transitory factors-most notably, a sharp drop in the price of apparel. In addition, the retail price of tobacco, which, like apparel, tends to be volatile from month to month, flattened out after a steep increase earlier in the year. Meanwhile, the rate of increase in the core consumer price index (CPI) has dropped from 2.6 percent in 2006 to an annual rate of 2.1 percent so far this year; the main reason for the sharper deceleration in the core CPI than in core PCE prices is that housing costs receive a much greater weight in this index than they do in the core PCE measure.

More fundamentally, the behavior of core inflation so far this year has been shaped by many of the same forces that were at work in 2006. Resource utilization in labor and product markets remains fairly high. And although last autumn's drop in energy prices may have offered some temporary relief, the resurgence in prices for energy and other commodities is likely putting some upward pressure on core inflation. Regarding inflation expectations, the Reuters/ University of Michigan Surveys of Consumers (Reuters/Michigan) suggest that the median expectation for yearahead inflation has moved up in response to the energy-driven pickup in headline inflation: It rose from 3.0 percent in the first three months of the year to 3.3 percent in April and remained at about this level through early July. However, longer-run inflation expectations appear to have remained contained. In fact, according to the Reuters/Michigan surveys, the median five- to ten-year expectation, at 3.1 percent in early July, has stayed within the narrow range that has prevailed for the past two years. According to the Survey of Professional Forecasters, conducted by the Federal Reserve Bank of Philadelphia, expectations of inflation over the next ten years remained around 21/2 percent in the first half of 2007, a level that has been essentially unchanged since 1998. Inflation compensation as measured by the spreads of yields on nominal Treasury securities over those on their inflationprotected counterparts has also stayed within its range of recent years.

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 rise in the price index for GDP less food and energy of 2³/₄ percent over the year ending in the first quarter, down ¹/₄ percentage point from the year-earlier figure. Although core PCE inflation picked up slightly during the past four quarters, prices for some other components of final demand, especially construction, decelerated.

U.S. Financial Markets

U.S. financial markets have functioned well thus far in 2007 despite episodes of heightened volatility. As the year opened, financial market quotes put considerable weight on the expectation of an easing of monetary policy sometime soon. By the spring, however, investors apparently had become more optimistic about the economic outlook and, as a result, had concluded that less Federal Reserve easing would be forthcoming than they had anticipated earlier. In line with the upward shift in policy expectations, two-year Treasury yields rose about 10 basis points, on balance, through mid-July; ten-year yields increased 40 basis points. Supported by solid corporate profits and the more upbeat economic outlook, equity prices advanced roughly 10 percent on net. Despite some widening in recent weeks, risk spreads on corporate credits generally remained narrow, reflecting strong and liquid corporate balance sheets. Measures of investors' uncertainty about prospects for a number of financial asset prices widened somewhat, on balance, from low levels.

Market Functioning and Financial Stability

In late February and early March, financial market volatility increased sharply amid a pullback from riskier assets that was reportedly spurred by a variety of factors, including a sharp dip in the Chinese equity market, mounting concerns about conditions in the subprimemortgage sector, and some softer-thanexpected U.S. economic data. During the period, spreads on indexes of subprimemortgage credit default swaps (CDS) spiked; equity markets in the United States and abroad declined; Treasury dropped maturities; vields across spreads of riskier fixed-income instruments over comparable Treasuries widened somewhat; and measures of market uncertainty, including implied volatilities derived from options prices, moved up sharply. Despite some capacityrelated technical difficulties in equity markets on February 27, financial markets generally handled the volatility well. Liquidity in the Treasury market continued to be good, as record-high trading volumes were accompanied by bid-ask spreads within ranges of the past few years. Market sentiment subsequently improved—apparently a result, in part, of reduced anxiety about spillovers to broader markets of the problems in the subprime-mortgage sectorand financial markets gradually stabilized. Many asset prices reversed their earlier declines, and measures of uncertainty moved lower.

Strains in financial markets increased again late in the spring, prompted largely by renewed concerns about the subprime-mortgage sector. A considerable widening in spreads on indexes of subprime-mortgage CDS contributed to, and was likely reinforced by, troubles at a few small and medium-sized hedge funds that had taken positions designed to profit from an improvement in subprime credit quality. These pressures intensified as a result of actual and anticipated downgrades of some securities backed by subprime mortgages. Investors' uncertainty about a range of asset prices increased, and lower-quality corporate credit spreads widened, reportedly reflecting, in part, heightened unabout the valuation certainty of structured credit products, which are an important source of funding in the subprime-mortgage market and in other financing markets. These pressures have

been contained, though: In spite of the recent rise, spreads on lower-quality corporate credits remain near the low end of their historical ranges, and, although investors recently have balked at some aggressively structured deals, financing activity in bond and other credit markets continues at a fairly brisk pace. Market participants do not appear to have pulled back from risk-taking more generally, in that equity prices have moved higher in recent weeks, and Treasury bid-ask spreads have stayed within normal ranges despite elevated trading volumes.

The effects on financial institutions of this year's difficulties in the subprimemortgage sector have depended on the institutions' exposure to the sector. Several mortgage lenders—particularly monoline subprime lenders-experienced substantial losses, as they had to repurchase larger-than-expected volumes of previously securitized loans because of so-called early payment defaults. Consequently, a number of these lenders have gone out of business since the beginning of the year. Large investment banks active in the securitization of subprime mortgages suffered modest hits to their earnings, and their CDS spreads are considerably higher than at the beginning of the year. To date, most large depository institutions appear to have been less affected by the subprime difficulties, in part because of their greater diversification and generally limited subprime lending activity. CDS spreads for these institutions have moved up only a little, on the whole, thus far in 2007.

Interest Rates

Since the beginning of the year, investors appear to have become more optimistic, on balance, about the outlook for economic activity and consequently have raised their expected path for the federal funds rate. Judging from futures markets, market participants currently anticipate that the rate will decline about 25 basis points through the end of 2008; at the end of last year, market participants had expected about 75 basis points of easing over the same period. Investors also have apparently become more certain about the path for the federal funds rate: Implied volatilities derived from options on Eurodollar futures over the next year have moved down, on net, this year and remain near historical lows. Estimated probability distributions for the target federal funds rate between six and twelve months ahead were somewhat skewed toward lower rates through mid-July.

Reflecting the reduced odds placed on policy easing, yields on two-year nominal Treasury securities increased about 10 basis points over the year through mid-July. Ten-year Treasury yields rose 40 basis points over the same period. A portion of the increase in longer-term yields appears to be attributable to a widening of term premiums, although estimated term premiums remain relatively low by historical standards. Yields on inflation-indexed Treasury securities moved nearly in line with those on their nominal counterparts, thereby leaving inflation compensation only a little higher.

In the corporate bond market, yields on investment- and speculative-grade securities rose about as much, on balance, as those on comparable-maturity Treasury securities through mid-July, and so risk spreads on such instruments are little changed on the year. The narrow spreads on corporate bonds appear to reflect investors' positive outlook for business credit quality over the medium term. The term structure of forward risk spreads for corporate bonds supports this view, as forward spreads for the next few years are low while spreads further out the curve are more in line with historical norms.

Equity Markets

Broad equity indexes increased between 81/2 percent and 12 percent, on net, through mid-July. Stock prices were boosted by solid first-quarter earnings that generally met or exceeded investors' expectations and by the more upbeat economic outlook. Share prices rose for a wide range of industries, although basic materials and energy firms outperformed the broader market because of strong global demand for commodities. The spread between the twelve-month forward earnings-price ratio for the S&P 500 and a real longrun Treasury yield-a rough gauge of the equity risk premium-narrowed a bit and now stands close to the middle of its range of the past few years. After a spike in connection with the period of unsettled conditions in financial markets in late February and early March, the implied volatility of the S&P 500 calculated from options prices fell back, but it picked up again recently in response to renewed concerns about the subprimemortgage market.

Debt and Financial Intermediation by Banks

The total debt of the domestic nonfinancial sectors expanded at an annual rate of 7¹/₄ percent in the first quarter of 2007, a somewhat slower pace than in 2006. The deceleration in borrowing was mainly accounted for by a slowdown in household debt, particularly mortgage debt. In contrast, borrowing by nonfinancial businesses remained robust in the first quarter. Preliminary data for the second quarter suggest slightly slower growth in total domestic nonfinancial sector debt. The step-down in growth is particularly noticeable in the federal government sector, in which strong receipts this tax season held down borrowing. However, the recent data suggest somewhat faster growth in nonfinancial business debt in the second quarter, a pickup fueled by heavy merger and acquisition activity.

Commercial bank credit increased at an annual rate of about $6\frac{1}{2}$ percent in the first half of 2007. However, adjusted to remove the effects of a conversion of a bank to a thrift institution, bank credit expanded at an annual rate of about $8\frac{1}{4}$ percent over the same period, somewhat slower than in 2006.

Excluding this bank-to-thrift conversion, total loans grew briskly in the first half of the year, with most bank loan types expanding vigorously. Rapid growth in commercial and industrial loans was supported by the continued robust merger and acquisition activity. Growth in commercial real estate loans was also strong even though construction and land development loans, a portion of which is used to fund residential development, decelerated sharply. Despite the ongoing adjustment in the housing market, residential real estate loans on banks' books (adjusted for the bank-to-thrift conversion noted earlier) expanded at a strong pace. But home equity loans grew only modestly. Because rates on these loans are generally tied to short-term market interest rates, the flattening of the yield curve last year made them a relatively more expensive source of credit. Consumer loans held by banks picked up in the first quarter, but they slowed in the second quarter.

Commercial bank profitability declined somewhat in the first quarter of 2007 but remained solid. The net interest margin of the industry continued to narrow, a likely result of ongoing competitive pressures and the flat yield curve. Bank profitability was also restrained by growth in non-interest expenses and a modest increase in provisions for loan losses. Credit quality stayed strong overall: Delinquency and charge-off rates remained generally low, although delinquency rates on residential and commercial real estate loans moved up further from last year's levels.

The M2 Monetary Aggregate

M2 expanded at an annual rate of about $7\frac{1}{2}$ percent over the first half of 2007. The increase evidently outstripped growth in nominal GDP by a substantial margin and exceeded the rate that would have been expected on the basis of the aggregate's previous relationship with income and interest rates. M2 rose at an annual rate of 8 percent in the first quarter before slowing to a pace of 63/4 percent in the second quarter. Liquid deposits, by far the largest component of M2, have followed a similar pattern this year. Small time deposits and retail money market funds both grew rapidly last year, as the rates paid on them moved up with short-term market interest rates. However, these components have decelerated this year because market rates have changed relatively little. Currency growth has remained modest in 2007, apparently a result of weak demand for U.S. dollars overseas.

International Developments

Foreign economic growth remained strong in the first quarter of 2007, supported by increased domestic demand in many key countries. Most recent indicators point to continued strength in foreign economies in the second quarter as well. Canada, the euro area, Japan, and the United Kingdom all posted abovetrend growth rates in the first quarter. Although the expansion of the Japanese economy moderated somewhat in the first quarter, growth remained brisk relative to the average pace seen in recent years. Output accelerated in emerging Asia, led by China, and growth in Mexico appears to be picking up again after a lull in the first quarter.

Rising energy prices boosted consumer prices in many regions of the world last year, and, in some cases, substantial increases in food prices also contributed to inflation pressures. Broad measures of price inflation have continued to rise in many foreign economies this year, as economic growth has remained strong, and core inflation has moved up noticeably in a number of these economies. In response, monetary policy has been tightened in many major industrial countries as well as in some emerging-market economies. Longerterm foreign interest rates have also risen.

Global financial markets were calm at the beginning of 2007, and volatilities for many asset prices were at, or close to, record lows. Toward the end of February, conditions changed, as international investors scaled back their exposure to risky positions—particularly those funded in yen—in response to a sharp drop in Chinese stock prices and concerns about the U.S. economy. As a result, equity prices in most industrial and emerging economies fell over the course of several days, while the yen appreciated sharply against most other currencies.

More-placid conditions returned in early March, and by early June share prices around the world had posted solid gains, reaching multiyear highs or even record highs in many countries. In particular, Chinese stock prices resumed their steep climb, although the rise was interrupted by occasional additional periods of heightened volatility. These episodes had no apparent disruptive effects on other global financial markets.

Most major global equity indexes experienced another increase in volatility during June and July amid concerns about the U.S. subprime-mortgage market, but they were little changed, on net, over this period. On balance, equity indexes in the major foreign industrial countries have increased between 5 percent and 12 percent in local-currency terms since the beginning of 2007. The Shanghai composite index is up more than 45 percent this year after a remarkable increase of about 130 percent last year. Leading equity indexes in other emerging Asian economies and in Latin America have also posted sizable gains in the range of 10 percent to 35 percent so far this year.

As in the United States, long-term bond yields in Canada, the euro area, and Japan rose significantly, on balance, in the first half of 2007; increases on ten-year nominal sovereign debt ranged from 25 to 70 basis points. Starting in early February, yields declined in global markets for several weeks amid growing concerns about the outlook for the U.S. economy. Since then, market participants seem to have become more optimistic about prospects for both U.S. and foreign economic growth, and yields have more than reversed the declines. Yields on inflation-protected long-term securities also rose during the first half of 2007 in the major industrial countries, but, with the exception of those in the euro area, they did not rise quite as much as nominal yields did, implying some modest increases in inflation compensation.

Our broadest measure of the nominal trade-weighted foreign exchange value of the dollar has declined about $3\frac{1}{2}$ percent, on net, since the beginning of 2007. Over the same period, the major currencies index of the dollar has moved down more, about $4\frac{1}{2}$ percent. On a bilateral basis, the dollar has depreciated

10 percent against the Canadian dollar and roughly 3¹/₂ percent against the euro and sterling; in contrast, it has appreciated about 2¹/₂ percent against the yen. The bulk of the change against the Canadian dollar occurred in the second quarter after better-than-expected news about economic activity and expectations of monetary policy tightening in Canada. The U.S. dollar has depreciated 3 percent, on net, against the Chinese renminbi since the beginning of 2007; the pace of change in the renminbi– dollar rate has accelerated somewhat over the past two and a half months.

Industrial Economies

The major foreign industrial economies experienced above-trend growth in the first quarter of this year. In Canada, real GDP grew at an annual rate of 3³/₄ percent after rising nearly 2 percent during 2006; inventory accumulation figured prominently in the faster growth. In the United Kingdom, real GDP increased at an annual rate of 23/4 percent in the first quarter. Robust expansions in both countries have been accompanied by increases in inflation rates, which in recent months have hovered at or above those countries' inflation targets of 2 percent. Although the pickup in headline inflation partly reflected higher energy prices, core inflation has also trended up in recent months in both Canada and the United Kingdom. In the midst of elevated inflation and increasing rates of resource utilization, monetary policy was tightened three times this year in the United Kingdom (by 25 basis points each time) after two increases in the policy rate last year. The Bank of Canada also recently raised its policy rate 25 basis points. Market participants expect that both countries' central banks will raise their policy rates further.

Growth of real GDP in the euro area moved down to 2³/₄ percent in the first quarter after posting growth of 31/4 percent over the four quarters of 2006. Although export growth moderated from its strong performance of 2006, recovery of domestic demand appears to have taken firmer hold, as investment accelerated in the first quarter. Private consumption in Germany had been muted earlier this year, partly because of a hike in the value-added tax at the start of the year, but lately retail sales in Germany and the euro area more broadly have picked up, on balance, from their January lows. Survey indicators of consumer and business sentiment also point to relatively strong growth in the euro area during the second quarter. Overall consumer price inflation has remained just below the European Central Bank's 2 percent ceiling since the fall of last year, while core inflation has risen to about 2 percent from around 11/2 percent last year. To combat potential inflation pressures, the Bank continued to tighten monetary policy during the first half of this year, implementing two more increases of 25 basis points in its policy rates.

Japanese economic growth moderated in the first quarter of this year to a stillbrisk annual rate of 31/4 percent. Household consumption rose at a robust rate of about 3 percent, and real exports increased almost 14 percent. Investment growth slowed, although recent surveys report that businesses are optimistic about the outlook. The labor market in Japan improved further in the first five months of the year: The unemployment rate fell below 4 percent, and the ratio of job offers to applicants remained elevated. Despite the strong growth of output and improved labor markets, consumer prices were about unchanged on a twelve-month basis in May; the GDP deflator has continued to fall, though,

during the period. Core consumer prices have shown small twelve-month declines over the past several months, and wages have declined relative to their year-earlier levels.

Emerging-Market Economies

Economic activity in China accelerated in the first quarter of 2007 and appears to have remained robust in the second quarter. Growth was supported by a surge in exports and a pickup in fixed investment, which had slowed somewhat in the second half of 2006. The strength of exports has resulted in a ballooning of the Chinese trade surplus. Since late 2006, inflation in China has increased-reaching a rate of 31/2 percent over the twelve months ending in May-largely because of higher food prices. Continuing rapid growth of aggregate demand and liquidity pressures from the accumulation of foreign exchange reserves have raised concerns about broader, more-sustained upward pressures on inflation. Chinese authorities have tightened monetary policy through several increases in banks' reserve requirements and two increases in interest rates so far this year; they have also continued to use sterilization operations to partially offset the effect of the reserve accumulation on the money supply.

Elsewhere in emerging Asia, real GDP surged in India and the Philippines in the first quarter and remained strong in Malaysia and Singapore. Growth was generally supported by domestic demand in all four economies. Growth held steady in South Korea, as stronger domestic demand was partially offset by a drag from net exports. Incoming data point to strength in the region in the second quarter. Outside of China, infla-

tionary pressures in several emerging Asian economies have eased somewhat this year because of the unwinding of previous increases in food prices and, in some cases, the effect of currency appreciations. During the past year, political tensions in Thailand and uncertainty about the government's policy on capital controls have periodically disrupted markets and economic activity.

In a continuation of the deceleration that started about the middle of last year, Mexican output rose a scant 1/2 percent in the first quarter; manufacturing (particularly in the automobile sector) was restrained by the moderation in the U.S. economic expansion, and construction slowed sharply. Recent data on industrial production, however, suggest that growth may have rebounded in the second quarter. Mexican headline consumer price inflation continues to hover at the upper limit of the Bank of Mexico's target range of 2 percent to 4 percent. Monetary policy was tightened in Mexico in April for the first time since March 2005.

In Brazil, the growth of real GDP moderated to about 3 percent in the first quarter, as the appreciation of the Brazilian *real* weighed on the external sector. The strong *real* has also helped keep inflation in check despite fairly strong economic growth and a lowering of the policy interest rate. Economic growth in Argentina moved down in the first quarter, in part because of a contraction in exports, and reported data suggest that inflation has continued to decline. Growth in Venezuela appears to have slowed sharply so far in 2007 after three years of double-digit performances, driven by expansionary fiscal policy funded by high petroleum revenues. Venezuelan twelve-month inflation picked up to nearly 20 percent in June.

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.

Two thousand seven was a challenging year for bank holding companies (BHCs) and state member banks. BHC asset quality and earnings deteriorated over the second half of the year, mainly because of the effects of developments in the residential housing market. Nonperforming assets increased notably as the quality of mortgages, home equity lines of credit, and loans to real estate developers weakened. Nevertheless. BHCs reported net income exceeding \$90 billion for the full year. A sharp increase in subprime mortgage delinquencies adversely affected the securitization market. Liquidity and capital were strained as some BHCs brought certain off-balance-sheet exposures onto their books. Several institutions also recognized significant valuation writedowns on assets affected by market conditions. Despite these pressures, BHCs continued to maintain regulatory capital ratios in excess of minimum regulatory requirements.

Most state member banks entered 2007 after a sustained period of strong earnings performance, partly mitigating developments in the market. Although net income and return on assets fell late in the year, reflecting asset write-downs and higher loan-loss provisions, these measures of profitability have been at historically high levels since the mid-1990s, helping to provide banks with a substantial base of capital. Risk-based capital ratios declined modestly over the year, but at year-end more than 99 percent of all commercial banks continued to report capital ratios consistent with a "well capitalized" designation under prompt corrective action standards. Although credit quality indicators also worsened during the year, overall loan quality measures remained relatively sound by historical standards.

In 2007 the banking industry saw bank failures for the first time in three years as three insured institutions—two state nonmember banks and one thrift institution with assets totaling approximately \$2.6 billion—were closed.

Banking supervisors focused in 2007 on credit risk issues related to subprime lending activities. During the course of the year the federal financial regulatory agencies-the Federal Reserve, Federal Deposit Insurance Corporation (FDIC), National Credit Union Administration (NCUA), Office of the Comptroller of the Currency (OCC), and Office of Thrift Supervision (OTS)-issued guidance encouraging supervised institutions to work constructively with homeowners unable to continue meeting their mortgage payments. The agencies also released a statement emphasizing the need to maintain prudent underwriting standards and to provide clear and balanced information to consumers so that institutions and consumers can assess the risks arising from certain adjustablerate mortgage (ARM) products that offer discounted or low introductory rates. The Federal Reserve also joined with

the FDIC, NCUA, OCC, OTS, and the Conference of State Bank Supervisors to issue a statement encouraging federally regulated financial institutions and state-supervised entities that service securitized residential mortgages to review their authority under pooling and servicing agreements so as to identify borrowers at risk of default and pursue appropriate loss-mitigation strategies designed to preserve sustainable home ownership.

Federal Reserve staff continued to work with the other federal banking agencies in 2007 to prepare for U.S. implementation of the Basel II capital accord.¹ In November the Board of Governors approved final rules implementing new risk-based capital requirements for large, internationally active banking organizations (the Basel II advanced approaches framework) and joined the OCC, FDIC, and OTS in publishing those rules in December.

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 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, 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,

^{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 thirteen 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).

Entity/Item	2007	2006	2005	2004	2003
State member banks					
Total number	878	901	907	919	935
Total assets (billions of dollars)	1.519	1,405	1.318	1.275	1.912
Number of examinations	694	761	783	809	822
By Federal Reserve System	479	500	563	581	581
By state banking agency	215	261	220	228	241
Top-tier bank holding companies					
Large (assets of more than \$1 billion)					
Total number	459	448	394	355	365
Total assets (billions of dollars)	13.281	12.179	10.261	8,429	8,295
Number of inspections	492	566	501	500	454
By Federal Reserve System ¹	476	557	496	491	446
On site	438	500	457	440	399
Off site	38	57	39	51	47
By state banking agency	16	9	5	9	8
Small (assets of \$1 billion or less)					
Total number	4.611	4.654	4,760	4,796	4,787
Total assets (billions of dollars)	974	947	890	852	847
Number of inspections	3.186	3,449	3,420	3,703	3,453
By Federal Reserve System	3.007	3.257	3.233	3,526	3,324
On site	120	112	170	186	183
Off site	2.887	3,145	3.063	3.340	3.141
By state banking agency	179	192	187	177	129
Financial holding companies					
Domestic	597	599	591	600	612
Foreign	43	44	38	36	32

State Member Banks and Bank Holding Companies, 2003-2007

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

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 assessment of the quality of the processes in place to identify, measure, monitor, and control risks; (2) an assessment of the quality of the organization's assets; (3) an evaluation of management, including an assessment of internal policies, procedures, controls, and operations; (4) an assessment of the key financial factors of capital, asset quality, earnings, and liquidity; and (5) 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 recent shift in supervisory practices for these organizations 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 regulator's rating of the subsidiary depository institution.

In managing the supervisory process, the Federal Reserve takes a risk-focused approach that directs resources to (1) those business activities posing the greatest risk to banking organizations and (2) the organizations' management processes for identifying, measuring, monitoring, and controlling risks. The key features of the supervision program for large complex banking organizations (LCBOs) are (1) identifying those LCBOs that are judged, on the basis of their shared risk characteristics, to present the highest level of supervisory risk to the Federal Reserve; (2) maintaining continual supervision of these organizations so that the Federal Reserve's assessment of each organization's condition is current; (3) 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 (4) promoting Systemwide and interagency information-sharing through automated systems.

For other banking organizations, the risk-focused supervision program provides that examination procedures are tailored to each banking organization's size, complexity, and risk profile. As with the LCBOs, examinations 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 2007, 878 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 14 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 fullscope, on-site examination of these banks is required at least once a year, although certain well-capitalized, wellmanaged organizations having total assets of less than \$500 million may be examined once every eighteen months.3 The Federal Reserve conducted 479 exams of state member banks in 2007.

^{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.

^{3.} The total assets threshold for this group of well-capitalized, well-managed organizations was increased during the year. 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.

Bank Holding Companies

At year-end 2007, a total of 5,793 U.S. bank holding companies were in operation, of which 5,070 were top-tier bank holding companies. These organizations controlled 6,038 insured commercial banks and held approximately 96 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 2007, the Federal Reserve conducted 476 inspections of large bank holding companies and 3,007 inspections of small, noncomplex bank holding companies.

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 (that is, regulators for insurance, securities, and commodities firms).

As of year-end 2007, 597 domestic bank holding companies and 43 foreign banking organizations had financial holding company status. Of the domestic financial holding companies, 33 had consolidated assets of \$15 billion or more; 136, between \$1 billion and \$15 billion; 93, between \$500 million and \$1 billion; and 335, 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.

^{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/).

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 2007, 55 member banks were operating 619 branches in foreign countries and overseas areas of the United States; 33 national banks were operating 567 of these branches, and 22 state member banks were operating the remaining 52. In addition, 17 nonmember banks were operating 23 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 2007, 67 banking organizations, operating 12 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 2007, 172 foreign banks from 53 countries were operating 211 state-licensed branches and agencies, of which 8 were insured by the FDIC, and 47 OCC-licensed branches and agencies, of which 4 were insured by the FDIC. These foreign banks also owned 9 Edge Act and agreement corporations and 2 commercial lending companies; in addition, they held a controlling interest in 62 U.S. commercial banks. Altogether, the U.S. offices of these foreign banks at the end of 2007 controlled approximately 18 percent of U.S. commercial banking assets. These 172 foreign banks also operated 91 representative offices; an additional 49 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 eighteen 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 twelve months, but the period may be extended to eighteen 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 357 examinations in 2007.

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 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

With regard to anti-money-laundering requirements, U.S. Department of the Treasury regulations (31 CFR 103) 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 programs on BSA/anti-money-laundering compliance and that the programs be formally approved by bank boards of directors. An institution's compliance program must (1) establish a system of internal controls to ensure compliance with the BSA, (2) provide for independent compliance testing, (3) identify individuals responsible for coordinating and monitoring day-to-day compliance, and (4) provide training for personnel as appropriate.

The Federal Reserve is responsible for examining its supervised institutions for compliance with various antimoney-laundering laws and regulations. During examinations of state member banks and U.S. branches and agencies of foreign banks and, when appropriate, inspections of bank holding companies, examiners review the institution's compliance with the BSA and determine whether adequate procedures and controls to guard against money laundering and terrorism financing are in place.

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 2007, the Federal Reserve was the lead agency in 2 cooperative, interagency examinations of large, multiregional data processing servicers.

Fiduciary Activities

The Federal Reserve has supervisory responsibility for state member commercial banks and depository trust companies that together reported, at the end of 2007, \$39 trillion of assets in various fiduciary or custodial capacities. Additionally, state member nondepository trust companies supervised by the Federal Reserve reported \$40 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 2007, Federal Reserve examiners conducted 98 on-site fiduciary examinations.

Transfer Agents and Securities Clearing Agencies

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 2007, the Federal Reserve conducted on-site examinations at 18 of the 68 state member banks and bank holding companies that were registered as transfer agents and examined 1 state member limited-purpose trust company acting as a national securities depository.

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. Thirty state member banks and 6 state branches of foreign banks have notified the Board that they are government securities dealers or brokers not exempt from Treasury's regulations. During 2007, the Federal Reserve conducted 7 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 22 entities that dealt in municipal securities during 2007, 7 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), the NCUA, or the OTS.

At the end of 2007, 621 lenders other than banks, brokers, or dealers were registered with the Federal Reserve. Other federal regulators supervised 200 of these lenders, and the remaining 421 were subject to limited Federal Reserve supervision. On the basis of regulatory requirements and annual reports, the Federal Reserve exempted 246 lenders from its on-site inspection program. Nonexempt lenders are subject to either biennial or triennial inspection. Sixtyeight inspections were conducted during the year.

Business Continuity

In 2007, 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, the OCC, and the Securities and Exchange Commission (SEC) continued joint supervisory assessments of the activities of core clearing and settlement firms and significant market participants in implementing and maintaining sound business resiliency and continuity practices as outlined in "Interagency Paper on Sound Practices to Strengthen the Resilience of the U.S. Financial System." The Federal Reserve and the other Federal Financial Institutions Examination Council (FFIEC) agencies continued to coordinate their efforts to ensure a consistent supervisory approach for business continuity practices.5

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 ceaseand-desist orders, written agreements, removal and prohibition orders, and civil money penalties. In 2007, the Federal Reserve completed 34 formal enforcement actions. Civil money penalties totaling \$20,255,290 were assessed.

^{5.} The FFIEC member agencies are the Federal Reserve Board, the FDIC, the NCUA, the OCC, and the OTS.

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 67 informal enforcement actions in 2007. 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 primarily 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 2007, three 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 commercial real estate guidance data, and provided a way to access structure information for all institutions in NIC.

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 2007, 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 2007 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 Financial Regulators' Training Initiative, which is part of the U.S. government's Middle East Partnership Initiative.

During the year the Federal Reserve offered 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 Inter-American 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.

Supervisory Policy

The Federal Reserve's supervisory policy function is responsible for developing guidance for examiners and banking organizations as well as regulations for banking organizations under the Federal Reserve's supervision. Staff members participate in supervisory and regulatory forums, provide support for the work of the FFIEC, and participate in international forums such as the Basel Committee, the Joint Forum, and the International Accounting Standards Board.

Capital Adequacy Standards

Risk-Based Capital Standards for Certain Internationally Active Banking Organizations

On December 7, 2007, the Federal Reserve, OCC, FDIC, and OTS published final rules implementing new risk-based capital requirements for large, internationally active banking organizations (the Basel II advanced approaches framework). The advanced approaches framework is broadly consistent with international approaches to implementation of Basel II and includes a number of prudential safeguards, such as the requirement that banking organizations satisfactorily complete a four-quarter parallel run period before operating under the Basel II framework, and the use of transitional capital floors. It retains the long-standing minimum risk-based capital requirement of 4 percent tier 1 capital and 8 percent total qualifying capital and the tier 1 leverage ratio.

New Capital Adequacy Framework for U.S. Banking Organizations

Aligning regulatory capital requirements with risk and fostering good risk measurement and management practices for our largest and most complex banking organizations will, I believe, contribute to safer and sounder banks and a more resilient financial system.

> Randall S. Kroszner, *Member*, Board of Governors November 2007

On December 7, 2007, the U.S. banking agencies published a new risk-based capital adequacy framework.1 The new framework-known as the advanced approaches framework-is designed to align more closely the amount of capital U.S. banking organizations are required to hold as a cushion against potential losses with the risks to which they are exposed. Effective April 2008, large, internationally active U.S. banking organizations will be required to transition to the advanced approaches framework to calculate the amount of capital they must hold relative to their risk profile; other banking organizations may choose to use the new framework.² The advanced approaches framework for U.S. banking organizations is based on the revised international capital accord known as Basel II, which was

adopted in 2006 by international banking authorities working through the Basel Committee on Banking Supervision.

The need for a new capital adequacy framework arose from continuing rapid and extensive evolution and innovation in the financial marketplace, which has substantially reduced the effectiveness of the existing risk-based capital rules (the Basel I-based rules) for large, internationally active banking organizations. The Basel II-based rules are more sensitive to risk and are tailored to the different kinds of risk to which banking organizations are exposed. Basel II regulatory capital requirements will vary from organization to organization in line with the organization's actual risk profile, so that a banking organization exposed to greater risk will have higher requirements than one exposed to less risk.

Both the international and the U.S. frameworks encompass three elements, or pillars: minimum risk-based capital requirements (pillar 1); supervisory review of capital adequacy (pillar 2); and market discipline through enhanced public disclosure (pillar 3).

Pillar 1 addresses calculation of regulatory capital requirements in relation to certain risk exposures. To calculate their minimum requirements in relation to the credit risk arising from wholesale and retail

Banking organizations subject to the framework are expected to meet certain public disclosure requirements designed to foster transparency and market discipline. In addition, the prompt corrective action rules for banks that are not adequately capitalized remain in effect. (For more information, see the box "New Capital Adequacy Framework for U.S. Banking Organizations.")

^{1.} The U.S. banking agencies are the Federal Reserve, the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, and the Office of Thrift Supervision.

^{2.} Banking organizations with at least \$250 billion of consolidated total assets or at least \$10 billion of foreign exposure are required to use the advanced approaches and to meet the rule's rigorous qualification requirements; other banking organizations may opt into the advanced approaches framework, provided they also meet its requirements.

exposures, U.S. banking organizations will use an internal ratings-based approach, inserting their own internal estimates of key credit risk parameters into formulas provided by supervisors. They will calculate their minimum requirements in relation to operational risk using advanced measurement approaches, which rely on the institutions' internal risk-measurement and capital calculation processes. The advanced approaches framework also specifies separate methodologies for calculating capital requirements in relation to securitization and equity exposures.

Compared with the Basel I-based rules, banking organizations under Basel II-based rules will be required to take greater account of their off-balance-sheet activities in calculating their capital requirements. The new framework also provides a more-risksensitive regulatory capital approach to capital markets activities and transactions, such as repurchase agreements, securities borrowing and lending, margin loans, and over-the-counter derivatives. The enhanced risk sensitivity of the advanced approaches framework should provide incentives for lending to creditworthy counterparties and using effective credit-risk mitigation techniques, such as requiring collateral.

The advanced approaches build on the risk-measurement and risk-management approaches already being used by sophisticated banking organizations and are designed to evolve over time as these organizations refine and enhance their internal practices. As a result, these approaches are better able than the Basel I-based rules to be adapted to innovations in banking and financial markets and to capture the risks arising from new products and activities. This increased adaptability and flexibility suggests that the relationship between the risk-based regulatory measure of capital adequacy and a banking organization's actual risk exposures and its day-to-day risk management will be stronger and more consistent.

Pillars 2 and 3 are also essential elements of the advanced approaches framework. Under pillar 2, banking organizations are required to have an internal process for ensuring that they are holding enough capital to support their overall risk profile (including those risks not captured or not fully addressed under pillar 1), particularly during economic downturns and periods of financial stress. These internal processes will be subject to rigorous supervisory review.

Pillar 3 addresses banking organizations' communication with market participants about their risks, the associated levels of capital, and the manner in which they are meeting the requirements of the advanced approaches framework. The public disclosures called for under pillar 3 are expected to increase the transparency of banking organizations' activities and exposures, giving market participants useful information about banking organizations' risk profiles and their ability to manage risk.

Adoption of the advanced approaches framework is an important milestone for the U.S. banking agencies, but effective implementation in the coming years will be just as important. Implementation of the Basel II-based rules, and the associated improvements in risk management, will not be a one-time event, but rather an ongoing process. The agencies will observe carefully how the advanced approaches work in practice, assessing their advantages and limitations, to ensure that they are operating as intended.

Revisions to the Market Risk Capital Rule

During 2007, the Federal Reserve, OCC, FDIC, and OTS considered public com-

ments on a September 2006 notice of proposed rulemaking that presented revisions to the market risk capital rule used by the Federal Reserve, OCC, and
FDIC since 1997 for banking organizations having significant exposure to market risk. Under the existing market risk capital rule, certain banking organizations are required to calculate a capital requirement for the general market risk of their covered positions and the specific risk of their covered debt and equity positions. The proposed revisions would enhance the rule's risk sensitivity, require banking organizations that model specific risk to reflect any incremental default risk of traded positions, and require public disclosure of certain qualitative and quantitative market risk information. The agencies expect to finalize this rule in the first half of 2008.

In July 2007, the Federal Reserve issued a letter reminding supervised banking organizations that the application of the fair value option to securities may subject the organization to the market risk capital rule. The letter directed those organizations to contact their Reserve Bank to discuss their plans to address the rule's requirements.

Risk-Based Capital Standards for Banking Organizations Not Subject to Basel II

During 2007, the Federal Reserve, OCC, FDIC, and OTS considered public comments on a notice of proposed rulemaking (NPR) issued in December 2006 proposing modifications to the current Basel I-based capital rules. The proposed rules would provide an option to those banking organizations that are not required to adopt Basel II and do not wish to voluntarily follow the advanced approaches. This option is known as the Basel I-A proposal.

In response to comments calling for an option to adopt the standardized approach under Basel II, the agencies revised the Basel I-A proposal and intend to issue a new NPR setting forth a proposed standardized Basel II capital rule in the first half of 2008.

Other Capital Issues

Board staff conduct supervisory analyses of innovative capital instruments and novel transactions to determine whether such instruments qualify for inclusion in tier 1 capital.⁶ Much of this work in 2007 involved evaluating enhanced forms of trust preferred securities and mandatory convertible securities.

Staff members also identify and address supervisory concerns related to supervised banking organizations' capital issuances and work with the Reserve Banks to evaluate the overall composition of banking organizations' capital. In this work, the staff often must review the funding strategies proposed in applications for acquisitions and other transactions submitted to the Federal Reserve by banking organizations.

Accounting Policy

The supervisory policy function is also 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 regulators, standardsetters, accounting firms, accounting and banking industry trade groups, and the banking industry, and issue supervisory guidance as appropriate.

^{6.} Tier 1 capital comprises common stockholders' equity and qualifying forms of preferred stock, less required deductions such as goodwill and certain intangible assets.

Domestic Accounting

The Federal Reserve continues to closely monitor domestic and international accounting standard-setting related to the use of fair value accounting. In previous comment letters to the Financial Accounting Standards Board (FASB), the Federal Reserve has raised concerns about the reliability of reported financial results based on fair value measurements, especially when financial instruments are illiquid. In May 2007, Federal Reserve staff issued a comment letter to the FASB regarding its "Invitation to Comment on Valuation Guidance for Financial Reporting" that strongly supported efforts to consider the need for additional valuation guidance.

The FASB's Statement of Financial Accounting Standards No. 159, The Fair Value Option for Financial Assets and Financial Liabilities, issued in February 2007, allows most financial assets and financial liabilities to be reported at fair value. As part of its continued focus on the use of fair value accounting at banking organizations, and in light of the potential increased use of fair value accounting for loans, the Federal Reserve staff conducted a study of fair value measurements of commercial loan values. The study was intended to provide additional insight into valuation methodologies used and related control frameworks for loans at a number of large, internationally active banking organizations. The study report, issued in June 2007, summarizes commercial loan fair value measurement practices at these organizations.

Federal Reserve staff participated in a number of SEC and FASB efforts to address current accounting issues. A senior Federal Reserve representative is 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. Federal Reserve staff also participated in FASB efforts to improve financial reporting, including roundtable discussions on modifications of securitized subprime mortgage loans and the joint FASB-Accounting International Standards Board (IASB) project on Financial Statement Presentation.

Bank Secrecy Act and Anti–Money Laundering

In 2007, the FFIEC again updated the Bank Secrecy Act/Anti-Money Laundering Examination Manual (originally issued in 2005) to further clarify supervisory expectations, incorporate new regulatory issuances, and respond to industry requests for additional guidance. Significant revisions included updates to the chapters on customer due diligence, suspicious activity reporting, foreign correspondent accounts, electronic banking, and trade finance. The manual provides current and consistent riskbased guidance to help banking organizations comply with the BSA and safeguard operations from money laundering and terrorism financing.

Also during the year, the FFIEC agencies issued "Interagency Statement on Enforcement of Bank Secrecy Act/Anti– Money Laundering Requirements" setting forth their interpretation of the requirement in the Federal Deposit Insurance Act relating to supervisory actions to address certain BSA compliance issues. The statement provides greater consistency among the agencies on certain BSA enforcement decisions and describes considerations that affect those decisions. The Federal Reserve and other federal banking agencies continued during 2007 to share information 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.

The Federal Reserve continues to participate in efforts to promote transparency and address risks faced by financial institutions that act as intermediaries in international funds transfers. The Federal Reserve, other U.S. banking agencies, and the Treasury have supported private-sector efforts to address the anti-money-laundering and sanctions concerns of banks that have international operations. In addition, the Federal Reserve participates in the Anti-Money Laundering and Countering the Financing of Terrorism Expert Group, a subcommittee of the Basel Committee's International Liaison Group.

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 2007, the Federal Reserve participated in ongoing cooperative work on implementation of Basel II and on development of international supervisory guidance, particularly in the area of funding liquidity risk management.

The Federal Reserve also continued to participate in Basel Committee working groups addressing issues not fully resolved in the Basel II framework. One effort is a look at eligible capital instruments across jurisdictions with the goal of developing a definition of *capital*. The Federal Reserve also participated in a workshop addressing supervisory and industry expectations with regard to implementation of pillar 2 of Basel II (supervisory review).

Risk Management

The Federal Reserve contributed to supervisory policy papers, reports, and recommendations issued by the Basel Committee during 2007 that were generally aimed at improving the supervision of banking organizations' risk-management practices.⁷ Two of these were

- "Principles for Home-Host Supervisory Cooperation and Allocation Mechanisms in the Context of Advanced Measurement Approaches," consultative document published in February and final document published in November
- "Guidelines for Computing Capital for Incremental Default Risk in the Trading Book," consultative document published in October

The Federal Reserve contributed to efforts begun in January 2007 to look at liquidity regulation across jurisdictions and to review the 2000 Basel Committee paper "Sound Practices for Managing Liquidity in Banking Organisations" with a view toward updating the paper.

Joint Forum

In 2007, 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

^{7.} Papers issued by the Basel Committee can be accessed via the Bank for International Settlements website at www.bis.org.

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 2007, including work on risk concentrations, credit risk transfer, customer suitability, and implementation of principles for the supervision of financial conglomerates.8 The Federal Reserve also participated in Joint Forum-sponsored informationsharing on pandemic planning and other business continuity initiatives.

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 2007, Federal Reserve staff contributed to the development of numerous Basel Committee comment letters related to accounting and auditing matters that were submitted to the IASB and the International Auditing and Assurance Standards Board (IAASB).

The Basel Committee in May 2007 issued a comment letter to the IASB on its discussion paper "Fair Value Measurements." The paper was prepared by the IASB as part of its efforts to develop a standard for fair value measurements similar to the FASB Statement of Financial Accounting Standards No. 157, *Fair Value Measurements*, issued in September 2006. In its letter, the Basel Committee emphasized the importance of sound guidance on fair value measurement, particularly as part of the joint FASB-IASB program on convergence between International Financial Reporting Standards and U.S. generally accepted accounting principles (GAAP).

In 2007 the Basel Committee also issued a series of comment letters to the IAASB related to the international standards on auditing (ISAs) that are being revised as part of the IAASB's Clarity Project. The Clarity Project is part of an effort by the IAASB to increase consistency in the application of auditing standards around the world and to improve the clarity of the ISAs. The revised ISAs cover such audit areas as planning the audit, auditing different types of financial statements, audit evidence, related parties, going concern, fair value measurements, internal audit, and the auditor's report.

Credit Risk Management

The Federal Reserve works with the other federal banking agencies to develop guidance on the management of credit risk.

Working with Mortgage Borrowers

In April 2007 the Federal Reserve, FDIC, NCUA, OCC, and OTS issued staff guidance to encourage supervised institutions to work constructively with homeowners who are financially unable to continue meeting their mortgage payments. The agencies reminded institutions that prudent workout arrangements that are consistent with safe and sound lending practices are generally in the long-term best interest of both the financial institution and the borrower.

Subprime Mortgage Lending

In June the Federal Reserve, FDIC, NCUA, OCC, and OTS issued "State-

^{8.} Papers issued by the Joint Forum can be accessed via the Bank for International Settlements website at www.bis.org.

ment on Subprime Mortgage Lending" to address issues and questions related to certain adjustable-rate mortgage (ARM) products marketed to subprime borrowers. The statement emphasizes the need for prudent underwriting standards and clear and balanced consumer information, so that institutions and consumers can assess the risks arising from certain ARM products that have discounted or low introductory rates. It describes the prudent safety and soundness and consumer protection standards that institutions should follow to ensure that borrowers obtain loans they can afford to repay. These standards include qualifying borrowers on a fully indexed, fully amortized basis and guidelines on the use of risk-layering features, including an expectation that stated income and reduced documentation would be accepted only if there are documented factors that clearly minimize the need for verification of the borrower's repayment capacity. Consumer protection standards include clear and balanced product disclosures for customers and limits on prepayment penalties so that customers have a reasonable period to refinance without penalty, typically at least sixty days before expiration of the initial fixed interest rate period.

Statement on Loss-Mitigation Strategies

In September the Federal Reserve, FDIC, NCUA, OCC, OTS, and Conference of State Bank Supervisors issued a statement encouraging federally regulated financial institutions and statesupervised entities that service securitized residential mortgages to review their authority under pooling and servicing agreements to identify borrowers at risk of default and to pursue appropriate loss-mitigation strategies designed to preserve sustainable home ownership. The statement outlines the steps a servicer may take when there is an increased risk of default, including identifying borrowers at heightened risk of delinquency or default, contacting borrowers to assess their ability to repay, and determining whether default is reasonably foreseeable. The statement goes on to explain possible loss-mitigation techniques that a servicer may pursue with a borrower, recognizing that the servicer must consider the documents governing the securitization trust to determine its authority to restructure loans that are delinquent or are at risk of imminent default.

Pandemic Planning

In December, the FFIEC agencies published guidance on planning for the purpose of minimizing the potential adverse effects of an influenza pandemic. The guidance emphasizes the importance of (1) a preventive program to reduce the likelihood that the institution's operations will be significantly affected by a pandemic, (2) a documented strategy that scales the response to the particular stages of an outbreak, (3) a comprehensive framework of facilities, systems, or procedures needed to continue critical operations, (4) a testing program, and (5) an oversight program. In September and October, the Federal Reserve participated with the other FFIEC agencies in a Treasury-sponsored, industrywide business continuity exercise to test the financial sector's ability to respond to a pandemic crisis. The Federal Reserve helped develop the after-exercise report, which was published in January 2008.

Banks' Securities Activities

In September, the Federal Reserve and the SEC adopted joint final rules defining the scope of securities activities a bank may conduct without registering with the SEC as a securities broker. The Gramm-Leach-Bliley Act eliminated the blanket "broker" exception for banks that had been contained in section 3(a)(4) of the Securities Exchange Act of 1934, but it granted exceptions designed to allow banks to continue to engage in securities transactions for customers in connection with their normal trust, fiduciary, custodial, and other banking operations. The rules implement the most important "broker" exceptions for trust and fiduciary activities, custodial and deposit "sweep" functions, and third-party networking arrangements.

Economic Growth and Regulatory Paperwork Reduction Act of 1996

The Economic Growth and Regulatory Paperwork Reduction Act of 1996 (EGRPRA) requires that the federal banking agencies review their regulations every ten years to identify and eliminate any unnecessary requirements imposed on insured depository institutions. (In addition, the Board periodically reviews each of its regulations.) During 2007, the Federal Reserve, OCC, FDIC, and OTS completed the required review and issued a joint report to Congress, which is available on the EGRPRA website at www.egrpra.gov.

Regulatory Reports

The 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 appropriate 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-9SPprovide 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 the 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.

In March, several revisions to the FR Y-9C report were approved for implementation during 2007: (1) collection of certain data on the sources of fair value measurements from all institutions that choose, under GAAP, to apply a fair

value option to one or more financial instruments and one or more classes of servicing assets and liabilities, and from certain institutions that report trading assets and liabilities; (2) collection of information on the cumulative change in the fair value of liabilities accounted for under the fair value option that is attributable to changes in the bank holding company's own creditworthiness, for purposes of determining regulatory capital; (3) collection of certain data on oneto four-family residential mortgage loans that have terms allowing for negative amortization; and (4) revision of instructions for reporting time deposits and brokered deposits.

Effective March 2007, four new items were added to the quarterly FR Y-11 and FR 2314 reporting forms to facilitate monitoring of the extension of negatively amortizing residential mortgage loans. Also, a new section concerning notes to the financial statements was added to the FR 2314.

Effective June 2007, reporting forms used to collect information on changes in organizational structure and the status of а foreign branch (FR Y-10, FR Y-10F, FR Y-10S, and FR 2058) were combined into one event-generated form called the FR Y-10. Also, a supplemental form was created (FR Y-10E) to collect additional structure information that the Federal Reserve deems to be critical and is needed in an expedited manner in order to meet new legislative requirements, answer congressional inquiries, or respond to market events. Effective December 2007, a requirement that an institution verify its list of domestic branches was added to the FR Y-6.

In November, the Federal Reserve proposed a number of revisions to the FR Y-9 for the 2008 reporting period comparable to those proposed for the bank Consolidated Reports of Condition and Income (Call Report) as described in the next section. In addition, the Federal Reserve proposed to collect certain data on the FR Y-9LP, FR Y-9SP, FR Y-11, FR 2314, FR Y-7, and FR 2886b forms from all institutions that choose to apply a fair value option to financial instruments and servicing assets and liabilities, and also proposed to collect other information on sources of income for supervisory purposes.

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.

For the 2007 reporting period, the FFIEC implemented various revisions to the Call Report to address new safety and soundness considerations and to facilitate supervision. Among these revisions were changes related to the reporting of data for deposit insurance assessments; changes to provide for the reporting of data on nontraditional mortgage products; and changes to provide for the reporting of data related to certain financial instruments measured at fair value.

In September, the FFIEC proposed a number of revisions to the Call Report for the 2008 reporting period. The proposed revisions include collecting additional information related to one- to four-family residential mortgage loans; modifying the definition of trading ac*count* in response to the creation of a fair value option in generally accepted accounting principles; revising certain schedules to enhance the reporting of information available under the fair value option; revising the instructions for reporting daily average deposit data by newly insured institutions to conform with the FDIC's assessment regulations; and clarifying the instructions for reporting credit derivatives data in the riskbased capital schedule.

In 2007, Federal Reserve staff led a review of the Call Report by the federal banking agencies to determine which data requirements are no longer necessary or appropriate. The review, required by the Financial Regulatory Relief Act of 2006 to be conducted every five years, documented the safety and soundness and other public policy uses of each Call Report item and will serve as a reference for future changes to the Call Report.

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 2007, 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 more accessible to staff working in the field; (3) strengthening of compliance with data-privacy regulations; (4) identification of opportunities to converge and streamline IT applications, including key administrative systems, to provide consistent and seamless information: (5) evaluation and 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; (6) with the other federal regulatory agencies, modernization of the Shared National Credit system; and (7) enhancement of the information security framework for the supervisory function, improving both overall security and compliance with best-practices and regulatory requirements (security enhancements included the encryption of data on all laptop computers and distribution of encrypted portable drives). In addition, new, advanced security measures were pilot-tested prior to expected implementation in 2008.

National Information Center

The National Information Center (NIC) is the Federal Reserve's comprehensive repository for supervisory, financial, and banking structure data and supervisory documents. NIC includes data on banking structure throughout the United States; the National Examination Database (NED), which enables supervisory personnel as well as federal and state banking authorities to access NIC data; 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 the Central Document and Text Repository (CDTR), 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 2007 work continued on upgrading the entire NIC infrastructure in order to provide easier access to information, a consistent Federal Reserve enterprise information layer, a comprehensive metadata repository, and uniform security across the Federal Reserve. Implementation is expected to be phased in beginning midyear 2008, with a completion target of 2010. Also in 2007, the NED system was modified to enhance the collection and reporting of Bank Secrecy Act information. In addition, the BOND and CDTR systems were enhanced to provide the document storage facility for the new national Federal Reserve Consumer Help call center. Key summary documentation regarding consumer complaints and inquiries is posted into the CDTR and made available to System staff and staff at the other federal banking agencies via the BOND system. The BOND and CDTR systems were also enhanced to provide an automated, electronic means for passing examination and inspection reports to the records management system of the Board's Office of the Secretary. This new electronic process has allowed the Reserve Banks to discontinue the long-standing practice of sending hard-copy reports to the Board for records management purposes.

Finally, during 2007 the Federal Reserve continued to work closely with other federal and state banking agencies—including federal agency chief information officers, FFIEC task forces and subgroups, and the Conference of State Bank Supervisors—on a variety of technology-related initiatives and projects supporting the supervision business function.

Staff Development

The System Staff Development Program trains staff members at the Board, the Reserve Banks, and state banking departments. Training is offered at the basic, intermediate, and advanced levels in several disciplines within bank supervision: safety and soundness, information technology, foreign banking organizations, and consumer affairs. Classes are conducted in Washington, D.C., as well as at Reserve Banks and other locations. The Federal Reserve also participates in training offered by the FFIEC and by certain other regulatory agencies. The System's involvement includes developing and implementing basic and advanced training in relation to various emerging issues as well as in specialized areas such as international banking, information technology, anti-money laundering, capital markets, payment systems risk, and real estate appraisal (see table).

In 2007, the Federal Reserve trained 2,588 students in Federal Reserve System schools, 894 in schools sponsored by the FFIEC, and 26 in other schools, for a total of 3,508. The number of training days in 2007 totaled 16,791.

The System provides scholarship assistance to the states for training their examiners in Federal Reserve and FFIEC schools. Through this program, 659 state examiners were trained—347 in Federal Reserve courses, 309 in FFIEC programs, and 3 in other courses.

A staff member seeking an examiner's commission is required to take a first proficiency examination as well as a second proficiency examination in one of two specialty areas, safety and sound-

Program	Number of sessions conducted	
	Total	Regional
Schools or seminars conducted by the Federal Reserve		
Core schools		
Banking and supervision elements	9	8
Financial analysis and risk management	9	8
Bank management	3	1
Report writing	17	17
Team dynamics and negotiation	9	9
Conducting meetings with management	15	15
Other schools		
Credit risk analysis	7	7
Examination management	6	5
Real estate lending seminar	2	1
Senior forum for current banking and regulatory issues	1	1
Basel II corporate activities	1	1
Basel II operational risk	2	1
Basel II retail activities	2	2
Principles of fiduciary supervision	1	1
Commercial lending essentials for consumer affairs	1	1
Consumer compliance examinations I	2	0
Consumer compliance examinations II	2	2
CRA examination techniques	2	2
CA risk-focused examination techniques	2	2
Fair lending examination techniques	2	2
Foreign banking organizations seminar	1	1
Information systems continuing education	8	8
Asset liability management (ALM1)	2	2
Fundamentals of interest rate risk management	6	6
Technology risk integration	4	4
Trading risk management	2	2
Leadership and influence	4	4
Fundamentals of fraud	7	7
Information technology seminars ¹	21	21
elf-study or online learning ²		
Drientation (core and specialty)	0	0
elf-study programs 1, 2, and 3	3	0
elf-study modules	0	0
ther agencies conducting courses ³		
ederal Financial Institutions Examination Council	71	1
he Options Institute	1	1

Training Programs for Banking Supervision and Regulation, 2007

1. Held at the IT Lab at the Chicago Federal Reserve Bank.

ness or consumer affairs. In 2007, 161 examiners passed the first proficiency examination and 73 passed the second proficiency examination, 53 examiners in safety and soundness and 20 in consumer affairs. An information technology specialty is also offered; it requires passing a proficiency examination and an examination administered by an information technology industry association. Self-study programs do not involve group sessions.
Open to Federal Reserve employees.

Regulation of the U.S. Banking Structure

The Federal Reserve administers several 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 2007, the Federal Reserve acted on 1,365 proposals, which represented 2,661 individual applications filed under the five administered 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. The act also identifies the nonbanking activities permissible for bank holding companies. Depending on the circumstances, these activities may or may not require Federal Reserve approval in advance of their commencement.

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 2007, the Federal Reserve acted on 603 applications and notices filed by bank holding companies to acquire a bank or a nonbank firm, or to otherwise expand their activities.

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. 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.

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 2007, the Federal Reserve reviewed 11 stock repurchase proposals by bank holding companies.

The Federal Reserve also reviews elections from 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 2007, 37 domestic financial holding company declarations and 2 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 appropriate 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 2007, the Federal Reserve approved 68 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 appropriate 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 federal 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 2007, the Federal Reserve approved 106 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 2007, the Federal Reserve acted on new and merger-related branch proposals for 1,520 domestic branches and granted prior approval for the establishment of 20 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 and insurance agency-related activities. In 2007, no financial subsidiary applications were filed.

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 2007, the Federal Reserve approved 69 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 homecountry 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 2007, the Federal Reserve approved 18 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 contains 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 SEC. At the end of 2007, 12 state member banks were registered with the Board under the Securities Exchange Act of 1934.

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 FCA, the NCUA, and the OTS examine lenders under their respective jurisdictions; and the Federal Reserve examines other Regulation U lenders.

Federal Reserve Membership

At the end of 2007, 2,489 banks were members of the Federal Reserve System and were operating 55,603 branches. These banks accounted for 36 percent of all commercial banks in the United States and for 71 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, and the consumer and community affairs staff of the Federal Reserve Banks.

The Federal Reserve System's various consumer protection and community development roles were the subject of great interest in 2007. Consumer protection concerns moved to the forefront of public dialogue as lawmakers, regulators, the media, and consumers scrutinized various practices being used in the financial services marketplace, particularly in the markets for subprime mortgages and credit cards. Intense examination of the policies and practices at issue has revealed the complexity of the current financial services marketplace. Deregulation and technological and financial innovation over the last two decades fueled the growth of this market, increasing competition and consumer choice. However, the number and types of consumer financing products and providers now available means consumers have to become more vigilant and wellinformed as they shop for financial products and manage their personal finances. The Federal Reserve has strategically used its regulatory and supervisory authorities to address consumer protection issues in today's complex consumer financial services marketplace and to promote consumer education and community development.

Mortgage Credit

Homeownership has long been a highly valued goal of both policymakers and consumers. In response to the demand for home loans, the mortgage industry has introduced innovative and creative loan products into the consumer financial services market. As a result, consumers' access to home mortgage credit has expanded considerably over the last decade. Market opportunities and technological advancements have contributed to the growth of the mortgage industry. As the mortgage market grew, some lenders employed nontraditional underwriting and risk-layering strategies in order to capture new market segments, particularly consumers who may not have been able to qualify for credit under more-traditional mortgageunderwriting criteria. Although innovation in the mortgage market has made access to mortgage credit possible for increasing numbers of households, loan products have become increasingly complex—and underwriting standards

An Overview of the Subprime Mortgage Market

At \$11 trillion, the depth and breadth of the U.S. home mortgage market is unique. Its sheer capacity has enabled many families to become homeowners, facilitating a long-standing goal of consumers and policymakers. Over the past two decades, the mortgage industry has expanded as a result of financial innovation, technological advancements, and deregulation. Lenders have been able to provide more consumers with access to mortgage credit. In particular, advances in credit scoring technology and risk-based pricing strategies opened up the mortgage market to consumers considered to be higher-risk because of their limited or negative credit histories, income limitations, or other financial issues. Lenders charged these borrowers, known as subprime borrowers, higher rates to reflect the higher level of risk they presented. The subprime mortgage market began to expand markedly in the mid-1990s and peaked in 2006.

The growth of the subprime mortgage market was fueled by expansive developments across the financial industry that significantly changed every aspect of the mortgage industry, from how mortgages were marketed and underwritten to how they were funded. The use of credit scoring models to price for risk enabled lenders to more efficiently evaluate a consumer's creditworthiness, reducing transaction costs for lenders. In addition, changes to and the ongoing growth of the secondary mortgage market increased the

have loosened in recent years, particularly in the subprime market. (See related box "An Overview of the Subprime Mortgage Market.")

Aware of the changing conditions in the mortgage market, the Federal Reserve Board has responded to the consumer protection and supervisory concerns of nontraditional and subprime ability of lenders to sell many mortgages to "securitizers" that pooled large numbers of mortgages and sold the rights to the resulting cash flows to investors. Previously, lenders tended to hold mortgages on their books until the loans were repaid. The increasingly popular "originate-todistribute" lending model gave lenders (and mortgage borrowers) greater access to capital markets and allowed risk to be shared more widely. Increased access to mortgage credit was further fueled by the rise of both mortgage brokers who expanded the sales and distribution channels of mortgage lending and independent mortgage originators not directly affiliated with a federally supervised depository institution.

The expanding field of nonbank mortgage lenders was particularly notable in the subprime mortgage market. Data from 2006 reported under the Home Mortgage Disclosure Act indicate that 45 percent of high-cost first mortgages were originated by independent mortgage companies, institutions that are not regulated by the federal banking agencies and that typically sell nearly all of the mortgages they originate. These nondepository institutions fund mortgage lending through the capital markets rather than customer deposits, the traditional source of loan funding for banks.

All of these mortgage market developments increased the supply of mortgage credit, which in turn likely contributed to

mortgage loans.¹ In recent years and throughout 2007, Federal Reserve staff have undertaken various initiatives to (1) scrutinize potentially risky practices within the mortgage industry and (2) ad-

^{1.} See the testimony of Chairman Ben S. Bernanke, September 20, 2007 (www.federalreserve.gov/ newsevents/testimony/bernanke20070920a.htm).

the rise in the national homeownership rate from 64 percent in 1994 to about 68 percent in 2007. But the broadening of access to mortgage credit also had negative aspects. Given their weaker credit histories and financial conditions, subprime borrowers tend to default on their loans more frequently than prime borrowers. A higher incidence of weaker underwriting standards and risk-layering practices, such as failing to document income and lending nearly to the full value of the home, further increased a subprime borrower's vulnerability for default.

In 2007, the problems in the subprime market, deceleration of the housing market, decreased house-price appreciation, and the weakening of the overall economy contributed to a significant number of subprime mortgage defaults. As a result, the subprime mortgage market experienced significant setbacks: several independent mortgage lenders declared bankruptcy, and some large financial organizations experienced multimillion dollar losses in their portfolios. For consumers, the consequences of defaulting on a mortgage can be severe, such as the loss of accumulated home equity, reduced access to credit, and foreclosure. And the negative effects can spread beyond subprime customers. Clusters of foreclosures in one community can cause the value of nearby properties to decline and lead to an increase in vacant and abandoned properties, thereby inflicting economic harm on entire neighborhoods.

As the subprime mortgage crisis expanded throughout the last quarter of 2007, the Federal Reserve actively used its policy, supervisory, and regulatory tools to respond to the needs of markets, lenders, consumers, and communities. These activities were discussed in detail by Federal Reserve Board governors and other officials who testified before Congress throughout the year, offering lawmakers and the public an in-depth discussion about the issues and actions undertaken by the Federal Reserve in response to concerns about the subprime market.1 In addition, staff at Federal Reserve Banks across the country worked with regulators, government officials, lenders, servicers, consumer advocates, and community leaders to improve their understanding of the complex issues that contribute to, as well as the effects of, widespread mortgage delinquencies and foreclosures. (For a detailed discussion of the Federal Reserve's efforts, see the "Mortgage Credit" section of this chapter.) The Federal Reserve has a strong interest in supporting consumers and communities. Its activities during 2007 have laid the foundation for continued efforts to help stabilize the mortgage industry and assist consumers to make sound financial decisions

1. See www.federalreserve.gov/newsevents/ testimony/2007testimony.htm)

dress issues through regulatory, supervisory, or community engagement activities.

Regulatory Actions

In June, the Board held a public hearing under the Home Ownership and Equity Protection Act (HOEPA). The purpose of the hearing was to gather information on how the Board might use its rulemaking authority to curb abusive lending practices in the home mortgage market, particularly the subprime sector.² The

^{2.} In 1994, HOEPA was enacted in response to reports of predatory home equity lending practices in underserved markets. HOEPA amended the

meeting, moderated by Governor Randall Kroszner, was the last in a series of five hearings held under HOEPA; the other four hearings were held throughout the nation during the summer of 2006.³ Representatives from the financial services industry, consumer and community groups, and state agencies participated in the June hearing and shared their perspectives on certain lending practices, such as prepayment penalties, the underwriting of "stated income" loans, and the failure to provide escrow accounts for taxes and insurance.4 Representatives from the financial services industry acknowledged that some recent lending practices merited concern, but these participants urged the Board to address most of the concerns by issuing supervisory guidance rather than regulations under HOEPA. They suggested that recent supervisory guidance on nontraditional mortgages and subprime lending, as well as corrective measures initiated within the mortgage market, had reduced the need for new regulations. Industry participants said that if the Board issues regulations, they must be clear enough to eliminate uncertainty and avoid unduly restricting credit. To help consumers avoid abusive lending practices, industry representatives supported improving the disclosures provided to consumers during the mortgage process.

Conversely, consumer advocates and state and local officials urged the Board adopt robust regulations under to HOEPA. They acknowledged a useful role for supervisory guidance but contended that recent problems in the mortgage market indicated a need for stronger requirements that can be enforced through civil actions—actions that would only be possible under regulations, not supervisory guidance. Consumer advocates and others welcomed efforts to improve mortgage disclosures but insisted that disclosures alone would not prevent abusive loans. They argued that independent mortgage lenders are not subject to the federal regulators' guidance, and enforcement of the existing laws governing these entities is limited.

In addition to the series of hearings, the Board received information and advice from its Consumer Advisory Council (see "Advice from the Consumer Advisory Council") and from outreach meetings to gain insight into industry practices. These efforts informed the Board's release of proposed amendments to Regulation Z (Truth in Lending) at a public meeting in December.⁵ The goals of these proposed amendments are to

- protect consumers in the mortgage market from unfair, abusive, or deceptive lending and servicing practices, while preserving responsible lending and sustainable homeownership;
- ensure that advertisements for mortgage loans provide accurate and balanced information and do not contain misleading or deceptive representations; and

Truth in Lending Act by imposing additional disclosure requirements and other limits on certain high-cost, home-secured loans. Under HOEPA, the Board is authorized to issue rules that prohibit certain acts or practices in connection with home mortgage loans. HOEPA also directs the Board to periodically hold public hearings to examine the home equity lending market and the adequacy of existing regulatory and legislative provisions for protecting the interests of consumers, particularly low-income consumers.

^{3.} For Governor Kroszner's opening comments, see www.federalreserve.gov/newsevents/ speech/kroszner20070614a.htm.

^{4.} For a list of panelists and the agenda, see www.federalreserve.gov/newsevents/press/bcreg/ 20070612a.htm.

^{5.} See www.federalreserve.gov/newsevents/ press/bcreg/20071218a.htm.

• provide additional consumer protections on "higher-priced mortgages," mortgages whose annual percentage rate (APR) exceeds the yield on comparable Treasury securities by at least three percentage points for first-lien loans, or five percentage points for subordinate-lien loans.

The proposed rules are comprehensive both in their reach and aim: they would apply to all mortgage lenders, not just depository institutions, and they seek to improve transparency and enhance consumer protection in mortgage lending.

The proposal directly addresses those practices raising the most significant concerns. For higher-priced loans, the proposed rule would prohibit lenders from engaging in a pattern or practice of making mortgage loans on the basis of collateral alone, without considering a borrower's ability to repay the loan; require lenders to verify the income or assets they rely upon in making the loan; and require lenders to establish escrow accounts for taxes and insurance. Prepayment penalties would be permitted on higher-cost loans only under certain conditions. For higher-cost loans and most other mortgage loans secured by a principal dwelling, the proposed rules would prohibit lenders from paying vield-spread premiums to brokers, unless a written agreement between the consumer and broker disclosed the broker's total compensation and other important information; prohibit lenders and brokers from coercing appraisers to misstate a home's value; and require that servicers credit loan payments on the date of receipt and refrain from charging consumers multiple late fees.

With respect to the marketing of home loans, the proposed rules would require lenders to disclose applicable rates or payments in advertisements as prominently as advertised teaser rates. For closed-end loans, the proposed rules would prohibit seven misleading or deceptive advertising practices, for example, using the term "fixed" to describe a rate that is not fixed. The public comment period ends in early April 2008.

Supervisory Activities

Throughout 2007, concerns about the mortgage industry continued to grow. The Board undertook various supervisory activities in collaboration with other agencies to provide guidance to lenders and support to consumers. A comprehensive overview of the Federal Reserve Board's ongoing efforts to address supervisory concerns in the subprime mortgage market was outlined in congressional testimony delivered in March by the director of the Division of Consumer and Community Affairs.⁶ In April, the federal financial regulatory agencies jointly issued the "Statement on Working with Mortgage Borrowers" that encouraged institutions to work constructively with residential borrowers who are, or who are reasonably expected to be, unable to make payments on their home loans.7 The statement emphasizes that loan-workout arrangements are generally in the long-term best interest of both financial institutions and borrowers, provided the arrangement is consistent with safe and sound lending practices. The statement cites examples of constructive workout arrangements; for instance, an institution might modify a borrower's loan terms or move a borrower from a variable-rate to a fixed-

^{6.} See the testimony of Sandra F. Braunstein, March 27, 2007 (www.federalreserve.gov/ newsevents/testimony/braunstein20070327a.htm).

^{7.} See www.federalreserve.gov/newsevents/ press/bcreg/20070417a.htm (press release) and www.federalreserve.gov/boarddocs/srletters/2007/ sr0706.htm (Consumer Affairs letter).

rate loan. In addition, bank and thrift programs that transition low- or moderate-income homeowners from higher-cost loans to lower-cost loans in a safe and sound manner may receive favorable consideration under the Community Reinvestment Act.⁸

In May, the federal bank, thrift, and credit union regulatory agencies issued final illustrations of the information on nontraditional mortgage products that lenders should provide to consumers. The sample illustrations are intended to help institutions implement consumer protections in the "Interagency Guidance on Nontraditional Mortgage Product Risks" that the agencies adopted in October 2006.9 The consumer protections described in the guidance aim to ensure that consumers receive clear and balanced information about nontraditional mortgages-before they choose a mortgage product or select a payment option for an existing mortgage. Accordingly, the illustrations consist of a narrative explanation of nontraditional mortgage products, a chart comparing interest-only and payment-option adjustable-rate mortgages (ARMs) with a traditional fixed-rate loan, and a table showing the impact of various payment options on the loan balance of a payment-option ARM (such a table could be included in monthly loan statements). Institutions are not required to use the sample illustrations, but the guidance sets forth information that lenders should provide to consumers to allow them to evaluate a nontraditional mortgage loan.

The federal financial regulatory agencies jointly issued additional guidance titled the "Statement on Subprime Mortgage Lending" in June.¹⁰ This guidance describes prudent safety-and-soundness and consumer protection standards that institutions should follow when originating certain ARMs that are typically offered to subprime borrowers. These ARMs offer low initial payments that are based on a short-term fixed introductory rate that is significantly discounted from the fully indexed rate (the sum of the current index and the margin). The statement emphasizes the importance of evaluating a borrower's repayment capacity and ability to make payments under the fully indexed rate, assuming a fully amortizing repayment schedule. The guidance also stresses the need for institutions to consider a borrower's total monthly housing-related payments (that is, principal, interest, taxes, and insurance) when assessing the borrower's repayment capacity, using the borrower's debt-to-income ratio. Finally, the guidance instructs lenders to provide consumers with clear and balanced information on the benefits and risks of this type of ARM.

In September, the federal financial regulatory agencies and the Conference of State Banking Supervisors issued the "Statement on Loss Mitigation Strategies for Servicers of Residential Mortgages."¹¹ The guidance encourages servicers of residential mortgages to pursue strategies to mitigate their losses and seek to preserve homeownership among their borrowers. The statement outlines steps that servicers may pursue to determine if a borrower is at an increased risk

^{8.} For more information, see Q&A §_.22(a)-1 (Interagency Questions and Answers Regarding Community Reinvestment, July 11, 2001).

^{9.} See www.federalreserve.gov/newsevents/ press/bcreg/20070531b.htm.

^{10.} See www.federalreserve.gov/newsevents/ press/bcreg/20070629a.htm (press release) and www.federalreserve.gov/boarddocs/srletters/2007/ sr0712.htm (Consumer Affairs letter).

^{11.} See www.federalreserve.gov/newsevents/ press/bcreg/20070904a.htm (press release) and www.federalreserve.gov/boarddocs/srletters/2007/ sr0716.htm (Consumer Affairs letter).

of mortgage default. Steps include identifying borrowers who have a heightened risk of delinquency, contacting those borrowers to assess their ability to repay, and determining whether default is reasonably foreseeable. The guidance also presents many possible lossmitigation techniques that a servicer may initiate with a troubled borrower.

In addition to issuing industry guidance, the Board entered a multiagency partnership to conduct targeted consumer compliance reviews of selected nondepository lenders that have significant subprime mortgage operations.¹² The joint effort, announced in July, is the first time multiple agencies have collaborated to plan and conduct consumer compliance reviews of independent mortgage lenders and nondepository subsidiaries of bank and thrift holding companies, as well as mortgage brokers doing business with, or working for, these entities.

The agencies involved-the Federal Reserve, the Office of Thrift Supervision (OTS), the Federal Trade Commission (FTC), state agencies represented by the Conference of State Bank Supervisors, and the American Association of Residential Mortgage Regulators-have begun developing plans for the targeted consumer compliance reviews. Federal Reserve System examiners, assisted by representatives from the FTC and the states, will lead reviews of entities supervised by the Federal Reserve System. At the same time, state regulators will conduct a coordinated review of an independent state-licensed subprime lender and associated mortgage brokers, and the OTS will conduct a review of a selected mortgage subsidiary of a thrift holding company. These reviews will evaluate the companies' underwriting

standards, as well as senior management's oversight of the risk-management practices the companies used to ensure compliance with state and federal consumer protection regulations and laws, including the Home Mortgage Disclosure Act, the Equal Credit Opportunity Act, the Truth in Lending Act, the Real Estate Settlement Procedures Act, the Federal Trade Commission Act, and the Home Ownership and Equity Protection Act. The agencies will share information about the reviews and investigations; take supervisory action, as appropriate; collaborate on lessons learned; and seek ways to better cooperate in ensuring effective and consistent reviews of these institutions. By jointly developing and applying a coordinated review program, the regulatory agencies will be better positioned to evaluate and more consistently assess subprime mortgage practices across a broad range of mortgage lenders and other participants within the industry. On-site reviews are scheduled to begin in February 2008.

Community Outreach Efforts

To augment the Board's regulatory and supervisory activities, System community affairs staff engaged in numerous efforts to address the personal, economic, and social distress of homeowners and communities that have been negatively affected by the sharp increases in subprime mortgage loan delinguencies and foreclosures. Community affairs analysts and outreach specialists used their long-standing networks of industry and community relationships to convene local community and business leaders, investors, lenders, servicers, rating agency representatives, government officials, consumer and community groups, and others across the country. To complement these discussions, System research staff collected

^{12.} See www.federalreserve.gov/newsevents/ press/bcreg/20070717a.htm.

and analyzed data on real estate and subprime mortgage conditions and on the impact of homeowner counseling programs. The Federal Reserve Bank of Philadelphia began collecting data for a longitudinal study of the effectiveness of homeownership counseling. In a similar but smaller-scale study, the Dallas Reserve Bank began measuring the impact of a local mortgage assistance program. The New York Reserve Bank collected zip code-level data on the incidence of Alt-A and subprime mortgage products in its District. Several other researchers focused on loan workouts and modifications throughout the country. Other key initiatives for the research functions included providing regional foreclosure projections and indepth analyses of the incidence of defaults within a particular region.

The Board and the Reserve Banks hosted a number of events, conferences, and meetings on foreclosure-related matters in 2007. Many events focused on encouraging lenders and servicers to develop systematic loss-mitigation techniques and to promote coordinated outreach to distressed borrowers. In the twelfth District, the San Francisco Reserve Bank and its partners conducted a series of six forums to explore foreclosure issues and identify strategies for preserving homeownership among minorities and low-income borrowers.13 The Federal Reserve Bank of Chicago sponsored symposiums in Chicago, Indianapolis, and Detroit that featured discussions on the regional impact of foreclosures. The Cleveland Reserve Bank cosponsored a conference on vacant and abandoned properties, and the Federal Reserve Bank of Minneapolis hosted several events in the Twin Cities area focused on mortgage broker licensing,

the need to modernize the foreclosure system, and the differences in state foreclosure laws. The Reserve Banks also organized several public workshops and participated in outreach events to highlight innovative intervention programs. For example, the San Francisco and Dallas Reserve Banks cosponsored a series of mortgage-streamlining workshops to leverage participants' broader knowledge of community development subjects and apply this knowledge to homeownership initiatives for Native Americans.

During the past year, Board and System staff strengthened partnerships with two prominent national homeownership preservation organizations, Neighbor-Works America and the Hope Now Alliance. Both groups have mobilized their national networks of affiliates and partners in order to advance efforts to streamline the mortgage-refinancing process and modify subprime mortgages. In 2007, Governor Kroszner continued to serve on the NeighborWorks America board of directors. Members of the Board's staff remain involved with that organization's Center for Homeownership Education and Counseling, which establishes education standards for counseling intermediaries. System community affairs staff collaborated with NeighborWorks America by participating in several foreclosureprevention training workshops for homeownership counselors; staff also helped promote the 1-888-995-HOPE hotline that links borrowers in financial distress with mortgage counseling. The Atlanta Reserve Bank produced an educational DVD in partnership with Neighbor-Works America that addressed the growing foreclosure challenges in its region.

Several Reserve Banks also supported the Hope Now Alliance, a collaboration of counselors, servicers, investors, and other mortgage market participants. Sys-

^{13.} See www.sf.frb.org/community/issues/assets/ preservation/index.html.

tem community affairs staff worked with local Hope Now partners and community stakeholders to identify crossindustry technology solutions that would enable servicers and counselors to contact at-risk borrowers and better serve homeowners.

Substantial consumer protection and community development concerns continue to be raised about mortgage lending practices. The Federal Reserve will continue its regulatory, supervisory, and community development efforts to seek ways to protect and support consumers' interests in mortgage credit. The Federal Reserve will also work collaboratively with a broad spectrum of partners to develop strategies and programs that will help troubled homeowners address their mortgage credit difficulties.¹⁴

Credit Cards

The credit card market is another area of consumer finance that has grown rapidly, spurred by technological advances, new products, and other innovations. Increasingly, electronic payments are accepted for a wide range of transactions, and consumers now use credit cards to facilitate everyday purchases, such as groceries, gasoline, and even a cup of coffee. In 2007, the total level of revolving debt held by consumers increased by nearly 8 percent from 2006, to nearly \$944 billion.

Competition in the credit card market has intensified over the last decade. As a result, lenders have undertaken aggressive marketing and product development campaigns and also pursued strategies to rely more on fee-based income. (Previously, lenders had relied almost solely on interest from their customers' account balances for revenue.) These industry developments have significantly 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.¹⁵

Credit card disclosures are intended to provide consumers with the information they need to shop for the product that best meets their needs and to enable them to make well-informed decisions regarding usage of their cards. However, as credit products became more complex, the Board recognized the need to evaluate its existing regulations governing the content and presentation of information on credit card disclosures. This undertaking required an in-depth understanding of the credit card industry, consumers' information needs, and the way consumers shop for credit cards. Before engaging in rule-writing, the Board undertook extensive consumer testing. Working with a consultant, the Board developed a testing methodology that involved several stages. First, two sets of focus-group meetings were held with credit card customers. The focus groups offered insight on

- what credit terms consumers usually consider when shopping for a credit card,
- what information consumers find useful when they receive a new card in the mail, and
- what information consumers find useful on periodic statements.

^{14.} See the testimony of Governor Randall S. Kroszner, December 6, 2007 (www.federalreserve. gov/newsevents/testimony/kroszner20071206a.htm), and October 24, 2007 (www.federalreserve.gov/ newsevents/testimony/kroszner20071024a.htm).

^{15.} See the testimony of Governor Frederic S. Mishkin, June 7, 2007 (www.federalreserve.gov/newsevents/testimony/mishkin20070607a.htm).

The second stage of the consumer testing focused on current credit card disclosures. In one-on-one interviews, credit card customers were presented with mock disclosures. Participants were asked to evaluate the information presented, and an interviewer asked them follow-up questions in order to evaluate the usability of the disclosures and consumers' understanding of them.

Feedback from the second stage was used to develop revised sample disclosures for the third phase of testing. These sample disclosures were tested and refined during multiple interviews with consumers. This process allowed staff to learn more about what information consumers read on current credit card disclosures; to observe how easily consumers can find various pieces of information in these disclosures; and to test consumers' understanding of the terminology used in the disclosures.

The consumer testing process provided important insights into the way consumers shop for credit cards and the information they need to make informed decisions. In particular, staff found that consumers tend to notice numbers rather than narrative text. Consumers frequently reviewed the summary table of rates and terms that they receive with credit card solicitations but paid little attention to densely worded accountopening disclosures and change-interms notifications. Likewise, on periodic statements, consumers generally focused on numbers, such as fee and interest charge information. The Board took these findings into account as it began drafting proposed amendments to Regulation Z.

Proposed Amendments to Regulation Z

In May, the Board issued for public comment proposed Regulation Z amend-

ments. The proposal is intended to improve the effectiveness of the disclosures consumers receive in connection with credit card accounts and other revolving credit plans; specifically, the proposal seeks to ensure that such information is provided in a timely manner and in a form that is readily understandable. The proposed amendments would require changes to the format, timing, and content requirements of the five main types of open-end credit disclosures: (1) credit and charge card application and solicitation disclosures; (2) account-opening disclosures; (3) periodicstatement disclosures; (4) change-interms notices; and (5) advertising provisions. The proposed amendments largely reflect the results of the consumer testing described above.

The proposal generated a great deal of interest, yielding more than 2,500 comments during the comment period that ended in October. A large number of these comments were submitted by individual consumers. Additional insights were provided by consumer advocates and industry representatives serving on the Board's Consumer Advisory Council. (See "Advice from the Consumer Advisory Council.")

Applications and Solicitations

The proposal contains changes to make the disclosures provided with credit and charge card applications and solicitations more meaningful and easier for consumers to use. Proposed changes include adopting new format requirements for the summary table, including rules regarding type size and the use of boldface type for certain key terms; placement of information; and use of crossreferences. The proposed rules address a number of issues regarding the penalties credit and charge card companies may charge customers. For example, applications and solicitations would have to state how long penalty rates may be in effect, provide a modified disclosure about variable rates, describe the effect of creditors' payment-allocation practices, and reference consumer education materials on the Board's website.

Account-Opening Disclosures

The proposal contains revisions to make the cost disclosures provided to consumers at account opening more conspicuous and easier to read. The proposed changes would require that certain key terms be disclosed in a summary table at account opening; this table would summarize the key information consumers need to make informed decisions about how they use credit cards. The proposed changes would also adopt a different approach to disclosing fees, in order to make it easier for consumers to identify the costs associated with using the card.

Periodic-Statement Disclosures

The proposal contains revisions to make the disclosures on periodic statements more understandable, primarily by changing the format requirements for these disclosures-for example, by grouping fees, interest charges, and transactions together by type. Other format changes include itemizing the interest charges for different types of transactions, such as purchases and cash advances, and providing aggregate totals of fees and interest for the month and year-to-date. In addition, creditors would have to disclose to consumers the effect of making only the minimum required payments on their account balances.

Change in Consumer's Interest Rate and Other Account Terms

The proposal expands the circumstances under which consumers will receive written notice of changes in the terms (for example, an increase in the interest rate) applicable to their accounts, and it increases the amount of time these notices must be sent before the change becomes effective. Generally, the proposed rules would increase advance notice before a changed term can be imposed from 15 to 45 days, to better allow consumers to obtain alternative financing or change their account usage. The proposed rules would also require a creditor to provide 45 days' prior notice before increasing a rate as a result of a consumer's delinquency or default.

Advertising Provisions

The proposal revises the rules governing the advertising of open-end credit, to help consumers better understand the credit terms being offered. Under the proposed revisions, advertisements that state a minimum monthly payment on a plan offered to finance the purchase of goods or services would be required to disclose, in equal prominence to the minimum payment, the time period required to pay off the balance and the total of payments if only minimum payments were made. Furthermore, advertisements would be able to refer to a rate as "fixed" only if the advertisement specified the time period for which the rate was fixed and that the rate would not increase for any reason during that time. If a time period is not specified, the term "fixed" may be used only if the rate will not increase for any reason while the plan is open.

Other Regulatory Actions

In addition to proposed rules related to mortgages and credit cards, the Board issued regulatory amendments in 2007 related to the electronic delivery of consumer disclosures, electronic fund transfers, and the privacy of financial information.

Electronic Disclosures

In November, the Board published amendments to five consumer financial services and fair lending regulations (Regulations B, E, M, Z, and DD). The amendments clarify the requirements for providing consumer disclosures in electronic form under the Electronic Signatures in Global and National Commerce Act (the E-Sign Act). Enacted in 2000, the E-Sign Act provides that electronic documents and electronic signatures have the same validity as paper documents and handwritten signatures. The E-Sign Act also contains special rules for the use of electronic disclosures in consumer transactions. Under the act, consumer disclosures that are required by other laws or regulations to be provided in writing may be provided in electronic form if the consumer affirmatively consents after receiving the notice specified in the statute and if certain other conditions are met.

In March 2001, the Board published interim final rules under Regulations B, E, M, Z, and DD that established uniform standards for the timing and delivery of electronic disclosures, consistent with the requirements of the E-Sign Act. The Board later lifted the mandatory compliance date for these rules. As a result, institutions could provide disclosures electronically pursuant to the E-Sign Act but were not required to comply with the 2001 interim rules.

In November, the Board withdrew certain portions of the 2001 interim rules from the Code of Federal Regulations in order to reduce confusion about their status and simplify the regulations. The Board also withdrew other provisions of the 2001 interim rules that might have imposed undue burdens on electronic

banking and commerce and that were unnecessary for consumer protection. The November final rules also included guidance on the use of electronic disclosures, including provisions to clarify the circumstances under which consumers conducting transactions online may obtain electronic disclosures without regard to the consent requirements of the E-Sign Act. The mandatory compliance date for the final rules is October 1, 2008.¹⁶

Regulation E

The Electronic Fund Transfer Act (EFTA) provides a basic framework of rights, liabilities, and responsibilities for participants in electronic fund transfer systems. The EFTA is implemented by the Board's Regulation E (12 CFR 205). In July, the Board published a final rule that exempts transactions of \$15 or less from Regulation E's requirement that receipts be made available to consumers for transactions initiated at an electronic terminal. For this purpose, electronic terminals include automated teller machines and point-of-sale terminals. This exception is intended to facilitate the ability of consumers to use debit cards in retail settings where it may not be practical or cost-effective to provide receipts. The rule was effective August 6, 2007.17

Fair Credit Reporting Act

In November, the Board published two final rules under Regulation V to implement provisions of the Fair and Accurate Credit Transactions Act of 2003 (the FACT Act), which amended the

^{16.} See www.federalreserve.gov/newsevents/ press/bcreg/20071101a.htm.

^{17.} See www.federalreserve.gov/newsevents/ press/bcreg/20070628a.htm.

Fair Credit Reporting Act (FCRA). First, the Board published final rules to implement the affiliate-marketing-notice and opt-out requirements of section 214 of the FACT Act. The final rules give consumers the ability to limit the use of certain information for marketing purposes by affiliates of companies with which consumers have done business. The final rules also incorporate certain statutory exceptions to the notice and opt-out requirement, including exceptions for when an affiliate has a preexisting business relationship with a consumer or when the marketing is in response to a consumer-initiated communication. The mandatory compliance date for the final rule is October 1, 2008. The affiliate-marketing rules were developed on an interagency basis with the other federal banking agencies, the Federal Trade Commission (FTC), and the Securities and Exchange Commission.¹⁸

Second, the Board published final rules to implement the identity theft "red flag" provisions of section 114 of the FACT Act and the address-discrepancy provisions of section 315 of the act. The final rules require financial institutions and creditors to develop and implement an identity theft protection program that is designed to detect, prevent, and mitigate identity theft. The final rules also require users of consumer reports to (1) adopt reasonable policies and procedures for verifying the identity of a consumer upon receipt of a notice of address discrepancy from a consumer reporting agency and (2) reconcile the discrepancy when the user opens an account despite the discrepancy and regularly furnishes information to the consumer reporting agency. The mandatory compliance date for the final rule is November 1, 2008. The rules for identity

18. See www.federalreserve.gov/newsevents/ press/bcreg/20071025a.htm.

theft red flags and address discrepancies were developed on an interagency basis with the other federal banking agencies and the FTC.¹⁹

In December, the Board published proposed rules to implement the provisions of section 312 of the FACT Act, which apply to those who furnish information to consumer reporting agencies (furnishers). That section requires the Board to issue guidelines to ensure the accuracy and integrity of information being furnished to consumer reporting agencies. Section 312 also requires the Board to issue rules identifying the circumstances under which furnishers must investigate disputes about the accuracy of information contained in consumer reports based on a direct request from a consumer. The comment period for the proposal will close in February 2008. The furnisher accuracy-and-integrity guidelines and the direct-dispute rules were developed on an interagency basis with the other federal banking agencies and the FTC.20

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

The Division of Consumer and Community Affairs supports and oversees the supervisory efforts of the Reserve Banks to ensure that consumer protection laws and regulations are fully and fairly enforced. (See "Mortgage Credit" earlier in this chapter for a description of the division's supervisory activities related to mortgage lending.) Division staff members provide guidance and expertise to the Reserve Banks on consumer

^{19.} See www.federalreserve.gov/newsevents/ press/bcreg/20071031a.htm.

^{20.} See www.federalreserve.gov/newsevents/ press/bcreg/20071129a.htm.

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 System's primary means of enforcing compliance with consumer protection laws. During the 2007 reporting period,²¹ the Reserve Banks conducted 324 consumer compliance examinations—312 of state member banks and 12 of foreign banking organizations.²²

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. Fair lending reviews are conducted regularly within the supervisory cycle. Additionally, examiners may conduct fair lending reviews outside of the usual supervisory cycle, if warranted. 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 consistently and rigorously throughout the Federal Reserve System.²³

The Federal Reserve enforces the ECOA and the provisions of the Fair Housing Act that apply to lending institutions. The 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 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 the ECOA, if the Board has reason to believe that a creditor has engaged in a pattern or practice of discrimination in violation of the ECOA, the matter will be referred to the Department of Justice (DOJ) The DOJ reviews the referral and 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 corrects the problems and makes amends to the victims.

During 2007, the Board referred the following eight matters to the DOJ:

^{21.} The 2007 reporting period for examination data was July 1, 2006, through June 30, 2007.

^{22.} The foreign banking organizations examined by the Federal Reserve are organizations operating 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 that are covered by consumer protection laws.

^{23.} See the testimony of Sandra F. Braunstein, director, Division of Consumer and Community Affairs, July 25, 2007 (www.federalreserve.gov/ newsevents/testimony/braunstein20070725a.htm).

- Two referrals involved ethnic and racial discrimination in mortgage pricing by nationwide lenders. These referrals are discussed in more detail below. (See "Evaluating Pricing-Discrimination Risk by Analyzing HMDA Data and Other Information.")
- One referral involved racial discrimination in the pricing of automobile loans. The institution purchased loans in which auto dealers had charged higher interest rates, through the use of markups, that were based on the race of the borrowers. This pricing was permitted by the lender, who received a share of the markups.
- One referral involved an institution with two loan policies that were found to be discriminatory. One policy prohibited lending on Native American lands. The other policy restricted lending on row houses, which resulted in discrimination against African Americans.
- Four referrals involved discrimination against unmarried people. In one matter, an institution combined incomes for married applicants, but not for coapplicants who were unmarried, when underwriting consumer loans. In another matter, an institution only permitted spousal co-applicants for consumer loans. The institution also improperly required non-applicant spouses to sign mortgage notes. The remaining two referrals involved improper spousal guarantees.

If a fair lending violation does not constitute a pattern or practice that is referred to the DOJ, the Federal Reserve acts on its own to ensure that the bank remedies it. 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 by Analyzing HMDA Data and Other Information

The two previously mentioned referrals involving mortgage-pricing discrimination resulted from a process of targeted pricing reviews that the Federal Reserve initiated when Home Mortgage Disclosure Act (HMDA) pricing data first became available in 2005. (See "Reporting on Home Mortgage Disclosure Act Data.") Board staff developed, and continue to refine, HMDA screens that identify institutions that may warrant further review on the basis of 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 supervisory information to evaluate a lender's risk for engaging in discrimination.

For the 2006 HMDA pricing data the most recent year for which the data are publicly available—Federal Reserve examiners performed a pricingdiscrimination risk assessment for each institution that was identified through the HMDA screening process. These risk assessments incorporated 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 the institution is at risk for engaging in pricing discrimination and may 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 that are 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 riskbased pricing-have increased the complexity of fair lending reviews. It is not

uncommon for a lender to offer many different products, each with its own pricing based on the borrower's credit risk.

To effectively detect discrimination in the 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, pricing policies, and 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. Looking at specific markets is important, as relatively small unexplained pricing disparities at the national level can mask much larger disparities in individual markets.

On the basis of the results of pricing reviews conducted, Federal Reserve staff had reason to believe that two nationwide lenders had engaged in a pattern or practice of discrimination and referred these cases to the DOJ. After accounting for legitimate factors reflected in the lenders' specific pricing policies, staff found that minorities still paid more for their mortgages than non-Hispanic white borrowers in multiple MSAs. The first referral involved two of the fair lending risk factors that the agencies have identified and used for some time: (1) broad discretion in pricing by loan officers or brokers and (2) financial incentives for loan officers or brokers to charge borrowers higher prices. The lending institution gave its loan officers discretion to charge overages and underages, that is, to set loan prices higher or lower than its standard rates. The institution also paid loan officers more if they charged overages. The Federal Reserve found evidence that, in multiple MSAs, African American and Hispanic borrowers paid higher overages than comparable non-Hispanic whites.

The second referral involved loans originated through mortgage brokers at which the institution also permitted pricing discretion. In multiple MSAs, African Americans and Hispanics paid higher annual percentage rates than comparable non-Hispanic whites. Pricing discretion and financial incentives to charge borrowers more do not always result in fair lending violations; however, these referrals underscore that it is critical for lenders that permit these practices to have clear policies about their use and to monitor their use effectively.

Reporting on Home Mortgage Disclosure Act Data

The Home Mortgage Disclosure Act (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 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 segment of the homeloan 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 FFIEC released the 2006 HMDA data to the public in September 2007.

A December 2007 article published by Federal Reserve staff in the *Federal* Reserve Bulletin uses the 2006 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.24 The article also analyzed several of the items included in the HMDA data in order to determine their usefulness in predicting mortgageloan delinquency across metropolitanarea counties. The analysis resulted in several findings, including that the incidence of higher-priced lending and the share of non-owner-occupied loans in a county were both related to higher levels of default in the future.

As in 2004 and 2005, most reporting institutions reported extending few if any higher-priced loans in 2006; 61 percent of the lenders originated less than

^{24.} Robert B. Avery, Kenneth P. Brevoort, and Glenn B. Canner, "The 2006 HMDA Data," *Federal Reserve Bulletin*, December 2007 (www.federalreserve.gov/pubs/bulletin/2007/pdf/ hmda06final.pdf).

10 higher-priced loans that year. The data also indicate that relatively few lenders accounted for most of the higher-priced loan originations in 2006. Of the nearly 8,900 home lenders reporting HMDA data, 928 of them made 100 or more higher-priced loans. The 10 home lenders that had the largest volume of higher-priced loans accounted for about 38 percent of all such loans in 2006. Also as in 2004 and 2005, the majority of all loan originations were not higher priced in 2006; however, the incidence of higher-priced lending did increase from 26.2 percent in 2005 to 28.7 percent in 2006. Some of the increase in the incidence of higher-priced lending is attributed to changes in the interest rate environment from 2005 to 2006, as well as to changes in borrower profiles and lender practices.

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, and the pricing for these loans reflects their risk profiles: 25.3 percent of first-lien conventional home purchase loans were reported as higher-priced in 2006, compared with 45.7 percent of comparable junior-lien loans.

Second, higher-priced lending varies widely by geography. As in 2004 and 2005, many of the metropolitan areas that reported the greatest incidence of higher-priced lending were in the southern region of the country. Several metropolitan areas on the West Coast also had an elevated incidence of higher-priced lending in 2006. In many metropolitan areas in the South, Southwest, and West, 30 percent to 40 percent of the homebuyers who obtained conventional loans in 2006 received higher-priced loans.

Third, the incidence of higher-priced lending varies greatly among borrowers of different races and ethnicities. In 2006, as in 2004 and 2005, African Americans and Hispanics were much more likely than non-Hispanic whites and Asians to receive higher-priced loans. For example, in 2006, 54 percent of African American borrowers, and 47 percent of Hispanic borrowers, received higher-priced conventional home purchase loans, compared with 18 percent of non-Hispanic white and 17 percent of Asian borrowers. 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 "Fair Lending.")

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 the CRA,²⁵
- analyzes applications for mergers and acquisitions by state member banks and bank holding companies in relation to CRA performance, and²⁶
- 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 the CRA in the course of examinations conducted by staff at the twelve Reserve Banks. During the 2007 reporting period, the Reserve Banks conducted 271 CRA examinations of banks: 33 were rated Outstanding, 237 were rated Satisfactory, none was rated Needs to Improve, and one was rated Substantial Noncompliance.²⁷

Consumer Alert on Solicitations for CRA Programs

In February, the Board, the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, and the Office of Thrift Supervision jointly released a consumer alert about CRA-related solicitations from lenders.²⁸ This alert cautioned the public about loan solicitations or other offers from lenders or mortgage brokers that offer consumers cash as part of a "Community Reinvestment Act (CRA) Program." The agen-

cies had received numerous consumer complaints and inquiries about this type of solicitation, and the alert warned that the solicitation appears to be a deceptive effort to encourage consumers to apply for a mortgage loan secured by their home. A statement that the agencies do not sponsor or endorse such programs and that the CRA does not require such programs was also included in the alert, along with a warning for consumers to be suspicious about conducting business with lenders who make deceptive claims.

Proposed Interagency Questions and Answers on the CRA

In July, the federal bank and thrift regulatory agencies released for comment a series of new and revised interagency questions and answers on CRA. The agencies are proposing new questions and answers, as well as making substantive and technical revisions to the existing material. Some of the proposed revisions are intended to encourage institutions to work with homeowners who are unable to make their mortgage payments; the questions and answers emphasize that institutions can receive CRA consideration for foreclosureprevention programs for low- and moderate-income homeowners, consistent with the April 2007 interagency "Statement on Working with Mortgage Borrowers."29 In addition, several technical changes are being proposed to clarify, update, and improve the readability of existing guidance. A few of the more substantive changes include

 allowing CRA consideration for investments made by banks to minorityor women-owned financial institutions when that investment benefits

^{25.} See the testimony of Sandra F. Braunstein, director, Division of Consumer and Community Affairs, October 24, 2007 (www.federalreserve.gov/newsevents/testimony/braunstein20071024a.htm).

^{26.} See the testimony of Sandra F. Braunstein, director, Division of Consumer and Community Affairs, May 21, 2007 (www.federalreserve.gov/ newsevents/testimony/braunstein20070521a.htm).

^{27.} The 2007 reporting period for examination data was July 1, 2006, through June 30, 2007.

^{28.} See www.federalreserve.gov/newsevents/ press/other/20070216a.htm.

^{29.} See www.federalreserve.gov/newsevents/ press/bcreg/20070417a.htm.

the minority or women-owned financial institution's local community, even if the investment does not benefit the bank's own assessment area;

- providing flexibility to certain intermediate small banks in the evaluation of their home mortgage, small business, and small farm loans; and
- clarifying that an institution that makes a loan or investment in a national or regional community development fund should be able to demonstrate that the fund will benefit the institution's assessment area(s) or the broader statewide or regional area that includes the bank's assessment area(s) as contemplated by the regulation, provided the fund meets certain definition and geographic requirements.

Analysis of Applications for Mergers and Acquisitions in Relation to the CRA

During 2007, the Board considered applications for several significant banking mergers. The Board approved two applications by Bank of America Corporation, Charlotte, North Carolina, the second largest depository institution in the United States. The company's acquisition of U.S. Trust Corporation, New York, New York, was approved by the Board in March and its application to acquire ABN AMRO North America Holding Company, Chicago, Illinois, was approved in September. The merger of two historic bank holding companies, The Bank of New York, New York, New York, and Mellon Financial Corporation, Pittsburgh, Pennsylvania, was approved by the Board in June. Several other significant applications are listed below.

• An application by PNC Financial Services Group, Inc., Pittsburgh, Pennsylvania, to acquire Mercantile Bankshares Corporation, Baltimore, Maryland, was approved in February.

- An application by Huntington Bancshares, Inc., Columbus, Ohio, to acquire Sky Financial Group, Inc., Bowling Green, Ohio, was approved in June.
- An application by Wells Fargo & Company, San Francisco, California, to acquire Greater Bay Bancorp, East Palo Alto, California, was approved in August.

The public submitted comments on nine applications, including those mentioned above. 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' 2005 and 2006 HMDA pricing data. Other issues raised by commenters involved minority applicants being denied mortgage loans more frequently than nonminority applicants; potentially predatory lending practices by subprime and payday lenders; the potential adverse effects of branch closings; and lenders' failure to address the convenience and 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 forty-two applications with outstanding issues involving compliance with consumer protection statutes and regulations, including fair lending laws, and the CRA.³⁰ Thirty-seven of those applications were approved and five were withdrawn, including one with an adverse CRA rating.

^{30.} The forty-two applications do not include the nine protested applications.

Initiatives for Minority-Owned Financial Institutions

The Federal Reserve is committed to ensuring the provision of financial services to all consumers and communities. One of the many ways the Board achieves this goal is by promoting the safety and soundness of all the institutions subject to System supervision, including those that are minority owned. Through its regulatory, supervisory, and community development functions, the Board consistently addresses the unique challenges and needs of minority-owned banks. At the same time, the Board holds these institutions to the supervisory standards that are applied to all state member banks. The Board views this strategy as integral to its efforts to promote a safe, sound, and competitive banking system that also protects consumer interests.

To enhance its support of minorityowned institutions, the Federal Reserve has been developing an innovative and comprehensive training and technical assistance program for minority-owned depository institutions. Designed to address issues that might inhibit or limit the financial and operating performance of minority-owned institutions, the program includes outreach and technical assistance for institution directors. It also fosters relationship-building between institutions and supervisory staff, and raises supervisory awareness of the unique challenges faced by minorityowned institutions. The program is scheduled to be fully operational in 2008.31

Bank Examiner Guidance and Training

Examiner Guidance on Unfair and Deceptive Acts and Practices

Periodically, the Board issues guidance on consumer protection laws and regulations to Reserve Bank examiners. Some guidance is developed and updated in concert with the other federal financial institution regulatory agencies, and some is issued solely by the Board. In 2007, the Board issued examination procedures designed to help examiners determine whether specific acts or practices conducted by state-chartered banks are unfair or deceptive. These procedures incorporate general guidance provided in the March 11, 2004, "Statement on Unfair or Deceptive Acts or Practices (UDAP) by State-Chartered Banks" issued jointly by the Board and the Federal Deposit Insurance Corporation. The Board's guidance helps examiners analyze potential UDAP issues during a consumer compliance examination or a complaint investigation.

Training for Bank Examiners

Ensuring that financial institutions comply with laws that protect consumers and encourage community reinvestment is an important part of the bank examination and supervision process. As the number and complexity of consumer financial transactions grow, training for staff that review and examine the organizations under the Federal Reserve's supervisory responsibility becomes even more important. The consumer compliance examiner training curriculum consists of six courses focused on various consumer protection laws, regulations, and examination concepts. In 2007, these courses were offered in eleven sessions to more than 193 consumer com-

^{31.} See the speech by Governor Randall S. Kroszner, August 1, 2007 (www.federalreserve.gov/ newsevents/speech/kroszner20070801a.htm). See also the testimony of Sandra F. Braunstein, director, Division of Consumer and Community Affairs, October 30, 2007 (www.federalreserve.gov/ newsevents/testimony/braunstein20071030a.htm).
pliance examiners and System staff members.

Board and Reserve Bank staff regularly review the core curriculum for examiner training, updating subject matter and adding new elements as appropriate. During 2007, staff conducted a curriculum review of the Introduction to Consumer Compliance Examinations I (CA I) course to incorporate technical changes in policy and laws, along with changes in instructional delivery techniques. This course, designed for assistant examiners, focuses on the (1) consumer laws and regulations that govern operations and non-real estate lending and (2) regulations affecting deposit and non-real estate lending operations. The course emphasizes examination techniques and procedures that demonstrate the practical application of these laws and regulations.

When appropriate, courses are delivered via alternative methods, such as the Internet or other distance-learning technologies. The CA I course uses 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. Opportunities for continuing development include special projects and assignments, self-study programs, rotational assignments, the opportunity to instruct at System schools, mentoring programs, and an annual senior examiner forum.

Flood Insurance

The National Flood Insurance Act imposes certain requirements on loans secured by buildings or mobile homes located in, or to be located in, areas determined to have special flood hazards. Under the Federal Reserve's Regulation H, which implements the act, state member banks are generally prohibited from making, extending, increasing, or renewing any such loan unless the building or mobile home 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.

During 2007, the Board imposed civil money penalties against eight state member banks. The penalties, which were assessed via consent orders, totaled \$246,050.

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 section summarizes data collected from the twelve Federal Reserve Banks and the FFIEC member agencies (collectively, the FFIEC agencies), as well as other federal enforcement agencies.³²

Regulation B (Equal Credit Opportunity)

The FFIEC agencies reported that 85 percent of the institutions examined during the 2007 reporting period were in compliance with Regulation B, com-

^{32.} Because the agencies use different methods to compile the data, the information presented here supports only general conclusions. The 2007 reporting period was July 1, 2006, through June 30, 2007.

pared with 87 percent for the 2006 reporting period. The most frequently cited violations involved

- the failure to properly collect information for monitoring purposes, including the 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 an applicant's 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
- the failure to provide a written notice of denial or other adverse action to a credit applicant that contains the specific reason for the adverse action, along with other required information

During this reporting period, the OTS issued two supervisory agreements and one cease-and-desist order to a savings association for alleged violations of the Equal Credit Opportunity Act (ECOA) and Regulation B, as well as other consumer regulations. The other FFIEC agencies did not issue any formal enforcement actions specific to Regulation B during the reporting period.

The other agencies that enforce the ECOA—the Farm Credit Administration (FCA), the Department of Transportation, the Securities and Exchange Commission (SEC), the Small Business Administration, and the Grain Inspection, Packers and Stockyards Administration of the Department of Agriculture reported substantial compliance among the entities they supervise. The FCA's examination activities revealed Regulation B violations involving the improper collection of government monitoring information.

Regulation E (Electronic Fund Transfers)

The FFIEC agencies reported that approximately 94 percent of the institutions examined during the 2007 reporting period were in compliance with Regulation E, compared with 95 percent in the 2006 reporting period. The most frequently cited violations involved the failure to take one or more of the following actions:

- determine whether an error occurred, within ten business days of receiving a notice of error from a consumer
- give the consumer provisional credit for the amount of an alleged error when an investigation into the alleged error cannot be completed within ten business days
- provide initial disclosures that contain required information, including limitations on the types of transfers permitted and error-resolution procedures, at the time a consumer contracts for an electronic fund transfer service
- when a determination is made that no error has occurred, provide a written explanation and note the consumer's right to request documentation supporting the institution's findings

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

The Federal Trade Commission (FTC) settled charges against one corporation that falsely marketed products and debited consumer accounts without obtaining consumers' authorization for preauthorized electronic fund transfers, in violation of Regulation E. The FTC also continued litigation against a group of defendants for allegedly enrolling consumers in a program and automatically billing them for charges without obtaining authorization for the recurring debits.

Regulation M (Consumer Leasing)

The FFIEC agencies reported that more than 99 percent of the institutions examined during the 2007 reporting period were in compliance with Regulation M, which equals the level of compliance for the 2006 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 2007 reporting period were in compliance with Regulation P, compared with 98 percent for the 2006 reporting period. The most frequently cited violations involved the failure to take one or more of the following actions:

- provide a clear and conspicuous annual privacy notice to customers
- disclose the institution's informationsharing practices in initial, annual, and revised privacy notices
- provide 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 82 percent of the institutions examined during the 2007 reporting period were in compliance with Regulation Z, compared with 85 percent for the 2006 reporting period. The most frequently cited violations involved the failure to take one or more of the following actions:

- accurately disclose the finance charge in closed-end credit transactions
- accurately disclose the amount financed, by subtracting any prepaid finance charge from the amount financed
- accurately disclose the payment schedule, including the number, amounts, and timing of payments scheduled to repay the obligation
- ensure that disclosures reflect the terms of the legal obligation between the parties

In addition, 185 banks supervised by the Federal Reserve, FDIC, OCC, and OTS were required, under the Interagency Enforcement Policy on Regulation Z, to reimburse a total of approximately \$2.75 million to consumers for understating the annual percentage rate or the finance charge in their consumer loan disclosures.

The OTS issued two supervisory agreements and two cease-and-desist orders for violations of a number of consumer regulations, including Regulation Z, during the reporting period. The other FFIEC agencies did not issue any formal 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.

The FCA identified creditors that were using incorrect templates, resulting in violations of Regulation Z. While all required disclosures were made, the format of the disclosures was not consistent with regulatory requirements.

The FTC continued litigation in federal district court against a mortgage broker for alleged violations of Regulation Z; the alleged violations involved the broker's advertisements and financecharge disclosures.

Regulation AA (Unfair or Deceptive Acts or Practices)

The FFIEC agencies reported that more than 99 percent of the institutions examined during the 2007 reporting period were in compliance with Regulation AA, which equals the level of compliance for the 2006 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 90 percent of institutions examined during the 2007 reporting period were in compliance with Regulation CC, compared with 92 percent for the 2006 reporting period. The most frequently cited violations involved the failure to take one or more of the following actions:

• make 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

- follow procedures when invoking the exception for large-dollar deposits
- provide required information when placing an exception hold on an account
- make funds from local and certain other checks available for withdrawal within the times prescribed by regulation

The OTS issued one supervisory agreement for violations of a number of consumer regulations, which included Regulation CC. The other FFIEC agencies did not issue any formal enforcement actions specific to Regulation CC during the reporting period.

Regulation DD (Truth in Savings)

The FFIEC agencies reported that 88 percent of institutions examined during the 2007 reporting period were in compliance with Regulation DD, compared with 91 percent for the 2006 reporting period. The most frequently cited violations involved the failure to take one or more of the following actions:

- provide a statement that fees could reduce the earnings on an account, when the term "annual percentage yield" is used in an advertisement
- use the term "annual percentage yield" if an advertisement states a rate of return
- provide initial account disclosures containing all required information
- provide adequate subsequent account disclosures for time accounts that have maturities greater than one year

The OTS issued one supervisory agreement and one cease-and-desist order for violations of a number of consumer regulations, including Regulation DD. The other FFIEC agencies did not issue any formal enforcement actions specific to Regulation DD during the reporting period.

Consumer Complaints

The Federal Reserve investigates complaints against state member banks and forwards those that involve other creditors and businesses to the appropriate enforcement agency. Each Reserve Bank investigates complaints against state member banks in its District. In 2007, the Federal Reserve received 1,540 consumer complaints concerning regulated practices by state member banks.

In November, the Federal Reserve System launched Federal Reserve Consumer Help (FRCH), an initiative that consolidates and streamlines the Federal Reserve's process for handling consumer complaints and inquiries. FRCH improves consumers' access to the Federal Reserve by providing a convenient, one-stop website and a toll-free number where consumers can get assistance with their banking problems or questions. (See related box "The Federal Reserve Consumer Help Center.")

Under the direction of the Federal Financial Institutions Examination Council (FFIEC), an interagency working group was formed in late 2007 to explore ways to improve consumers' experiences with contacting a banking agency and with submitting a complaint or inquiry to the appropriate regulator. A third-party contractor may be used to examine best practices and recommend improvements to the process consumers use to file a complaint or inquiry with one of the FFIEC agencies.³³

Complaints Against State Member Banks

The majority (61 percent) of complaints about regulated practices involved credit cards. The most common credit card problem fell into the complaint category called "other rates/terms/fees" (35 percent), followed by problems with billing-error resolution (19 percent) and banks' providing inaccurate account information (8 percent).³⁴

Complaints about checking accounts were the next largest category (19 percent) of complaints about regulated practices. The most common checking account concerns were insufficientfunds or overdraft charges and procedures (30 percent), funds availability (14 percent), and disputed withdrawals of funds by banks (13 percent).

Real estate–related complaints made up 5 percent of complaints involving regulated practices.³⁵ Of those, only 4 percent (or three complaints) concerned adjustable-rate mortgages. The most common real estate–related loan problems concerned escrow accounts (15 percent); other rates, terms, or fees (11 percent); and errors or delays in crediting loan payments (10 percent). Of all complaints involving regulated practices, 13 (0.8 percent) alleged discrimination on a basis prohibited by law (race, color, religion, national origin,

^{33.} FFIEC agencies represented on the working group are the Federal Reserve Board, the Office of

the Comptroller of the Currency, the Federal Deposit Insurance Corporation, the Office of Thrift Supervision, and the National Credit Union Administration. Representatives from the Conference of State Bank Supervisors are also participating.

^{34.} Includes complaints about interest rates, terms, or fees other than late fees, overlimit fees, prepayment fees, fees related to credit insurance, or the calculation of the finance charge.

^{35.} Includes adjustable-rate mortgages; residential construction loans, open-end home equity lines of credit, home improvement loans, home purchase loans, home refinance or closed-end loans; and reverse mortgages.

sex, marital status, handicap, age, the fact that the applicant's income comes from a public assistance program, or the fact that the applicant has exercised a right under the Consumer Credit Protection Act).

Complaint investigations determined that banks had handled customers' accounts in accordance with Federal Reserve regulations in the majority (96 percent) of the complaints reviewed. Investigations for the remaining 4 percent determined that the bank had violated a consumer protection regulation. The most common violations involved credit cards and checking accounts. (See tables.)

Unregulated Practices

As required by section 18(f) of the Federal Trade Commission Act, the Board continued to monitor complaints about banking practices that are not subject to existing regulations and to focus on those that concern possible unfair or deceptive practices. In 2007, the Board received more than 2,000 complaints against state member banks that involved unregulated practices. The product categories that contained the most complaints were credit cards and checking accounts. In those categories, conConsumer Complaints against State Member Banks That Involve Regulated Practices, by Classification, 2007

Classification	Number
Regulation AA (Unfair or Deceptive	
Acts or Practices)	85
Regulation B (Equal Credit Opportunity)	62
Regulation C (Home Mortgage Disclosure)	1
Regulation E (Electronic Fund Transfers)	98
Regulation H (Bank Sales of Insurance)	2
Regulation M (Consumer Leasing)	2 3
Regulation P (Privacy of Consumer	
Financial Information)	35
Regulation Q (Payment of Interest)	3
Regulation Z (Truth in Lending)	761
Regulation BB (Community Reinvestment)	6
Regulation CC (Expedited Funds	
Availability)	123
Regulation DD (Truth in Savings)	124
Regulations T, U, and X	0
Regulation V (Fair and Accurate	
Credit Transactions)	13
Fair Credit Reporting Act	138
Fair Debt Collection Practices Act	64
Fair Housing Act	1
Flood Insurance	1
Homeownership Counseling	2
HOPA (Homeowners Protection Act)	-
Real Estate Settlement Procedures Act	15
Right to Financial Privacy Act	2
Total	1,540

sumers most frequently complained about fraud, forgery, or theft (216 complaints); problems with opening or closing an account (196 complaints); issues involving insufficient-funds or overdraft charges and procedures (190 complaints); and certain credit card interest rates, terms, and fees (129 complaints).

Complaints against State Member Banks That Involve Regulated Practices, 2007

Cubicat of complaint	All cor	nplaints	Complaints involving violations		
Subject of complaint	Number	Percent	Number	Percent	
Total	1,540	100	53	3	
Discrimination alleged Real estate loans Credit cards Other loans	13 1 8 4	.1 .5 .3	0 0 0	0 0 0	
Nondiscrimination complaints, total ¹ Credit cards Checking accounts Real estate loans	1,527 ¹ 939 295 80	61 19 5	39 13 0	3 .8 0	

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

The Federal Reserve Consumer Help Center: A New Resource for Expert, Immediate Help

Credit cards, mortgages, and electronic funds transfers are just a few of the services and products consumers use to conduct their financial business. The use of these products and services has become widespread, and it can be easy to lose sight of their complexity-until a consumer has a question or something goes wrong. Consumers often need help navigating the maze of terminology, regulations, and policies that governs financial products, services, and institutions. For more than 30 years, the Federal Reserve System has provided professional help to consumers who have complaints against a financial institution. In 2007, the Federal Reserve launched the Federal Reserve Consumer Help (FRCH) center, a centralized consumer complaint center that improves consumers' access to information and services. The FRCH website (www. federalreserveconsumerhelp.gov) provides comprehensive information on consumer financial issues, as well as contact information. Consumers can use the site to research their issue, or they may contact the Federal Reserve to ask a question or file a complaint via e-mail, a toll-free number, fax, or mail.

Consumer complaints are an important source of information for the Federal Reserve Board. Regardless of their outcome, complaints often identify areas of concern that the Board considers when writing regulations or guidance for bank examiners. Complaints can also reveal emerging consumer-protection issues and trends in banking practices. The Federal Reserve established its program for receiving consumer complaints and inquiries in 1976. Drawing on the resources of the Federal Reserve System's twelve Reserve Bank Districts, the program answers consumers' questions, investigates complaints against state member banks (those institutions under the Federal Reserve's supervisory authority), or refers consumers to the appropriate agency for a response. In addition, the Board responds to issues raised by congressional representatives on behalf of their constituents. Over the last decade, the consumer financial services marketplace has dramatically changed. Technological developments and increased access to technology have also changed both the way institutions operate and how consumers want to communicate with financial

Complaint Referrals to HUD

In 2007, the Federal Reserve received one housing-related discrimination complaint and forwarded it to HUD in accordance with a memorandum of understanding between HUD and the federal bank regulatory agencies regarding complaints alleging a violation of the Fair Housing Act. The Federal Reserve's investigation of this complaint revealed no evidence of illegal credit discrimination.

Responding to Community Economic Development Needs in Historically Underserved 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. As a decentralized function, the Community Affairs Offices (CAOs) at each of the twelve Reserve institutions and others. In 2007, the Federal Reserve responded to these forces by launching FRCH, while continuing to tap staff expertise and knowledge of regional banking markets.

The Federal Reserve is committed to providing superior service to consumers. The call center is staffed by highly trained professionals; 80 percent of incoming calls or e-mail inquiries are answered by a representative within 60 seconds or less. Complaints against banking institutions supervised by the Federal Reserve continue to be investigated by the Reserve Bank responsible for examining the institution in question. This approach ensures that complaints are investigated by examiners who are knowledgeable about an institution and its regional banking market-and who can leverage the bank-supervisor relationship to resolve an issue. If a consumer has a complaint against an institution not supervised by the Federal Reserve, FRCH can seamlessly connect him or her with the appropriate agency.

FRCH tracks all incoming questions and requests for assistance, by issue and volume. Data will be shared with the other federal banking regulatory agencies. The Federal Reserve and other agencies analyze the data so that they can identify shared issues, develop best practices for customer service and complaint investigation, and develop consumer education materials. Such collaboration is critical to addressing consumer protection issues in the broader financial services marketplace and developing consumer information materials to educate consumers about trends in banking products and their rights. In addition, FRCH is establishing a mechanism for tracking customer satisfaction, that is, whether consumers feel the center helped them with their financial services issues.

Early reviews of available data on FRCH call volume and website visits indicate that consumers are contacting the the Federal Reserve in record numbers. The Federal Reserve is dedicated to providing superior access to consumers who need assistance and will continue to monitor the performance of FRCH, with the goal of identifying further opportunities to help consumers exercise their rights and work through their financial services challenges. The Federal Reserve plans to launch a Spanish-language version of the website in the first quarter of 2008.

Banks design activities in response to the needs of communities in the Districts they serve, with oversight from Board staff. The CAOs focus on providing information and promoting awareness of investment opportunities to financial institutions, government agencies, and organizations that serve lowand moderate-income communities and populations. Similarly, the Board's CAO promotes and coordinates Systemwide high-priority efforts; in particular, Board community affairs staff focus on issues that have public policy implications.³⁶

In 2007, disruptions in the housing market made collaboration among the financial services community, the Board, and the Reserve Banks impera-

^{36.} See www.federalreserve.gov/communitydev/ default.htm.

tive. The CAOs worked diligently to identify solutions that would help mitigate the adverse consequences of the increasing numbers of mortgage defaults and foreclosures in many Districts. (See "Mortgage Credit.") System staff also continued work on a number of important topics: improving the sustainability and financial capacity of community development organizations, creating assetbuilding opportunities for low- and moderate-income populations, and developing programs to promote community development and consumer education. Activities included conducting research, sponsoring conferences and seminars, publishing newsletters and articles, and supporting the dissemination of information to both general and targeted audiences.

System Collaborative Efforts

The Reserve Banks and the Board continued their work on two substantial collaborative efforts over the past year. The first effort, an initiative undertaken by System Community Affairs staff and the Brookings Institution, analyzes and compares communities that have high concentrations of poverty. Using sixteen case studies from selected communities. the project employs both quantitative and qualitative analyses to explore the dynamics of the communities, their residents, their economies, and programs that are helping or hindering a community's integration into the economic mainstream. The data generated by this ongoing initiative help Reserve Banks, local financial institutions, business leaders, service providers, and philanthropic organizations better understand their regional economies and the capital and credit needs of the communities they serve.

The second major collaborative effort in 2007 was the Community Affairs System Research Conference, "Financing Community Development: Learning from the Past, Looking to the Future," cosponsored by the Board and the Federal Reserve Bank of Philadelphia. The conference brought together a diverse audience from academia, financial institutions, community organizations, foundations, and the government. Approximately 400 participants learned about and discussed original studies on the opportunities and obstacles to helping lowand moderate-income communities and people build wealth by using home loans, small business loans, or other financial services. System community affairs staff were actively involved in the planning and execution of the conference: staff reviewed papers, developed the agenda, presented research, and served as moderators and participants in formal discussion groups. The Board's Community Affairs officer delivered a keynote address during the conference, and Chairman Ben Bernanke provided remarks on the history, evolution, and new challenges of the Community Reinvestment Act.37

Identifying Strategies to Enhance Access to Community Development Financing and Asset-Building

In 2007, Community Affairs staff from around the System continued working on several initiatives to not only enhance access to affordable credit in currently underserved markets but also to provide information and promote awareness of investment opportunities to financial institutions, government agencies, and organizations. The St. Louis Reserve Bank hosted "Exploring Innovation: A Conference on Community

^{37.} See www.federalreserve.gov/newsevents/ speech/bernanke20070330a.htm.

Development Finance" to explore how organizational creativity, learning, and innovation can improve community development projects, increase their access to capital, and help projects achieve scale and sustainability. The San Francisco Reserve Bank's Center for Community Investments hosted two conferences focused on community development investment. One conference, which was cosponsored with the Board, focused on the availability of rural venture capital; the other, cosponsored with the New York Reserve Bank, discussed issues related to the creation of a secondary market for community development loans. Other Reserve Banks hosted symposiums on this topic as well, such as the Federal Reserve Bank of Richmond's Community Development Financial Institution (CDFI) workshops that gathered community development lenders, local bankers, and representatives from the CDFI Fund to discuss capitalizing and certifying potential CDFIs. The Federal Reserve Bank of Boston and the Aspen Institute, a national research and leadership development organization, cohosted a conference on socially responsible investment and the role of subsidy dollars in public investment. In a related initiative, the Boston Reserve Bank collaborated with the Massachusetts Small Business Assistance Advisory Council on the launch of a loan program for small businesses.

Asset-building and financial education remained major areas of focus for the Community Affairs Offices in 2007. System staff continued to collaborate with constituent organizations on efforts to provide advisory services and conduct outreach to low- and moderateincome communities. The Federal Reserve Bank of Atlanta worked with the Federal Deposit Insurance Corporation to create MoneySmart curriculum modules on low-income investment. The Kansas City Reserve Bank cosponsored a major conference on entrepreneurship with the Association for Enterprise Opportunity. Together with the San Francisco and Minneapolis Reserve Banks, the Kansas City Reserve Bank also continued work on several Indian country initiatives focused on improving the financial literacy and housing options of Native Americans. The three Banks continued to promote the adoption of uniform commercial codes to facilitate tribes' efforts to borrow from offreservation partners or other tribes. The Federal Reserve Bank of Dallas engaged in efforts to promote financial education in the workplace, including sponsorship of a highly successful seminar for human resource professionals attended by approximately 80 employers, who in turn represented 380,000 employees. The Richmond Reserve Bank released two issues of its journal MarketWise, one which featured an article on the earned-income tax credit (EITC). The New York Reserve Bank cosponsored a conference with the New York City Office of Financial Empowerment that promoted the EITC. As a result of the conference, a statewide coalition of EITC practitioners was created, and several statewide asset-building strategies for low- and moderate-income communities were adopted.

Advice from the Consumer Advisory Council

The Board's Consumer Advisory Council—whose members represent consumer and community organizations, the financial services industry, academic institutions, and state agencies—advises the Board of Governors on matters concerning laws and regulations that the Board administers and on other issues related to consumer financial services. Council meetings are held three times a year, in March, June, and October, and are open to the public. (For a list of members of the council, see the section "Federal Reserve System Organization.") Among other issues, council discussions in 2007 focused on two significant topics:

- various issues related to mortgage lending, specifically the Board's rulemaking authority under the Home Ownership and Equity Protection Act (HOEPA) to address concerns about abusive lending practices in the home mortgage market, and concerns about foreclosures and the subprime lending market
- proposed amendments to Regulation Z that would revise the disclosure requirements for credit card accounts and other open-end (revolving) credit plans that are not secured by a borrower's home

Mortgage Lending Issues

HOEPA

In its June and October meetings, the council addressed several issues related to the Board's rulemaking authority under HOEPA: whether the Board should issue rules or guidance, the possibility of prohibiting or restricting certain loan terms or practices in subprime loans, the definition of "subprime," and the role and timing of the disclosures provided to consumers during the loan-making process.

Several consumer representatives strongly supported issuing rules under HOEPA rather than guidance. Consumer representatives expressed the view that guidance puts supervised institutions at a competitive disadvantage to other mortgage lenders that do not have to comply with guidance. Rules, however, would apply to all mortgage lenders, not just federally supervised institutions. Consumer representatives noted that rules would also provide consumers with a private right of action. Several members stated that rulemaking may be appropriate for areas in which the Board can establish clear, bright lines for regulatory supervision but that guidance is the best way to ensure that institutions have appropriate flexibility to meet consumers' needs.

In considering whether proposed rules on mortgage lending should apply to the subprime mortgage market, council members generally urged the Board to define "subprime" not by borrower characteristics but according to the type of loan or its terms, such as a loan's annual percentage rate. An industry member endorsed the definition of "subprime" that the Board used in earlier guidance and cautioned against using Home Mortgage Disclosure Act (HMDA) standards as a pricing criterion for subprime loans, because the HMDA standards may not capture all subprime loans.

Several members urged the Board to ban prepayment penalties, particularly for subprime loans. They expressed concerns that, for subprime borrowers, prepayment penalties are not balanced by lower interest rates and often prevent borrowers from graduating into prime loans. Other members acknowledged problems with using prepayment penalties in the subprime market but said the penalties can be a useful tool and yield lower interest rates for consumers. These members urged the Board to regulate prepayment penalties to ensure that borrowers receive a choice about whether to have a prepayment penalty, which may result in a lower interest rate for them. A consumer representative suggested that prepayment penalties for adjustable-rate mortgages should expire 60 days before the first interest-rate reset on such a loan.

Council members generally agreed that it is a sound underwriting practice to require borrowers to make monthly payments to escrow accounts for taxes and insurance, as loans that include escrow payments generally perform better. There was also consensus on the importance of clearly disclosing whether an advertised payment amount includes a borrower's taxes and insurance. Recognizing the financial vulnerability of subprime borrowers, members generally agreed that the Board should mandate that escrow accounts be established for subprime loans. Some members suggested that escrow accounts should not be required for borrowers who take out prime loans. Members had a variety of views about initially mandated escrow accounts that borrowers could later opt out of. Both consumer and industry representatives generally agreed that any opt-out decision should not be made at loan closing and that clear disclosure of any escrow requirement and opt-out provision is paramount.

Several council members commented on the need for stated-income loans, especially in immigrant communities and for borrowers who engage in cash transactions or are otherwise not connected with mainstream financial institutions. The members emphasized the importance of sound, responsible underwriting for stated-income loans and urged that lenders be given flexibility to use nontraditional, third-party forms of income documentation. Some members highlighted the importance of providing borrowers with clear disclosures for stated-income loans to ensure that these borrowers are aware they may not be receiving the lowest rate for which they qualify.

Council members generally agreed that the Board should require lenders to ensure borrowers' ability to repay a loan for a reasonable term by underwriting the loan to the fully indexed rate. Some members commented that such a standard would also benefit investors by giving them greater assurance about the quality of the loans they are purchasing. Members disagreed about the length of time for which ability to repay should be considered. Some industry representatives cautioned that setting too strict a standard could inappropriately restrict access to credit.

Members agreed on the importance of providing consumers with simplified, plain-language disclosures for mortgage products. Several members identified key terms that should be clearly and concisely disclosed. Some members expressed concern, however, that simplified disclosures may not sufficiently inform borrowers about the more complex or exotic mortgage products being offered; they suggested such products may require a different type of disclosure. Some members supported a requirement that Truth in Lending Act (TILA) disclosures be provided earlier in the loanmaking process for nonpurchase mortgage loans. They also emphasized that TILA disclosures should accurately reflect the terms of the transaction.

In a discussion of yield-spread premiums (YSPs), several members stated that many consumers do not know about YSPs or understand how they work. Members agreed on the importance of providing borrowers with transparent YSP disclosures. Several consumer representatives expressed concern about abusive practices related to YSPs; for example, a consumer may receive a higher interest rate because his or her mortgage broker has an agreement to receive a YSP from a certain lender, or some lenders may combine YSPs and discount points, resulting in higher fees for borrowers. An industry member expressed the view that banning YSPs would hurt small broker businesses by

eliminating a key source of their compensation and would put small loan originators at a competitive disadvantage to large lenders, thereby leaving consumers with fewer choices in the marketplace.

Foreclosures and Subprime Lending Issues

At its March meeting, the council discussed the recent increase in home foreclosures in a number of markets across the country. Several members described the impact of defaults and foreclosures on their communities: large concentrations of abandoned and vacant properties and the associated need to enhance policing efforts and other city services, a rise in homelessness, decreasing property values, and declining tax revenues for local governments. Some members noted a disproportionate concentration of foreclosures in communities that are predominately Latino or African American; members also shared concerns about foreclosure "rescue" scams and the "flipping" of previously foreclosed homes, and they stressed the importance of having community-based organizations coordinate and manage rescue funds for homeowners facing foreclosure. Members discussed possible ways to assist households facing default or foreclosure. Several consumer representatives described the difficulty credit counselors face when they try to contact servicers on behalf of borrowers. Members also noted the challenges associated with restructuring mortgages that have been securitized.

Members commented on the proposed statement on subprime mortgage lending issued by the federal financial regulatory agencies in March. The proposal addressed concerns that (1) subprime borrowers may not fully understand the risks and consequences of products like

adjustable-rate mortgage loans and (2) these products may pose an elevated risk to financial institutions. Most members supported the guidance. Several members voiced approval for the provision recommending that lenders underwrite a loan at its fully indexed rate. They were also supportive of the recommendation that a loan's underwriting include an escrow component for taxes and insurance. Some members supported extending the principles of the guidance to prime mortgage lending, but others noted possible difficulties to segmenting the mortgage market in this way. Several members shared concerns that applying the guidance to prime loans might reduce the variety of loan products available to consumers. Members representing the financial services industry questioned whether the guidance might lead to the creation of a loansuitability standard, that is, a requirement that lenders gauge the suitability of a loan product for certain borrowers. Industry members generally thought such a standard could limit the array of loan products available to consumers. Several members emphasized the need for a new Federal Housing Administration loan product that could meet the needs of subprime borrowers.

Credit Cards

In May, the Board issued proposed amendments to Regulation Z, which implements the Truth in Lending Act, that would affect the content, format, and timing of credit card disclosures. The council's discussions in June and October focused on several dimensions of the proposal: the summary table, or "Schumer box," for application and solicitation disclosures; account-opening disclosures; periodic statements; and change-in-terms notices.

Several members commended the Board for proposed revisions to the Schumer box. By highlighting key information on credit card terms, the revisions would facilitate consumers' ability to compare different credit cards, members said. Several consumer representatives urged the Board to include a "typical APR" in the Schumer box. This APR would include the fees that consumers typically pay during a billing cycle and could alert them to the potential costs of using the credit card. A typical APR would also allow consumers to compare the fees different cards charge. Several industry members objected to the idea of a typical APR, however, expressing concerns that such a rate would be misleading and unhelpful, as many fees are not necessarily incurred by every consumer. Industry representatives supported the disclosure of fees in dollar amounts rather than as a percentage of the balance, noting that the Board's consumer testing found that consumers more readily understand dollar amounts than percentages. Several consumer representatives commended the Board for proposing a disclosure to inform consumers about the amount of available credit if the account-opening fees are 25 percent or more of the credit limit, as is sometimes the case with subprime credit cards.

For account-opening disclosures, members generally supported the Board's proposal to require a summary table similar to the Schumer box. They noted that a summary would make it easy for consumers to compare the actual account terms with those they were originally offered. Some industry and consumer representatives disagreed about the proposal to allow the verbal disclosure of some fees at the time a consumer incurs a charge, instead of relying on account-opening disclosures to disclose all fees.

Members generally approved of the new format for periodic statements, particularly the clear grouping of fees and the year-to-date totals for interest charges and fees. They noted the importance of highlighting the late-payment notice by requiring its placement on the front of the statement and emphasized the importance of clearly disclosing day and time deadlines for payments (that is, the cutoff before late-payment charges apply). Several consumer representatives stated that the effective APR disclosure should be retained because it more accurately accounts for the total cost of credit. Industry representatives, however, expressed their preference for eliminating the effective APR disclosure on the basis that, even with the change in labeling, the figure is confusing to consumers. The industry members stated that the proposed year-to-date totals for interest and fees represent the most meaningful disclosure to consumers of the total cost. Several members commended the Board on its use of consumer testing to develop the credit card disclosures and urged the Board to continue using both qualitative and quantitative testing as it determines how best to communicate complicated financial terms to consumers.

For change-in-terms notices, several consumer representatives expressed support for requiring 45 days' advance notice for rate increases triggered by a consumer's default or delinquency. They emphasized that advance notice will give consumers the opportunity to pursue other credit options. Industry representatives disagreed with providing a 45-day advance notice of increased rates when the increase is prompted by consumer default. They noted that default pricing is properly disclosed to consumers at account opening and that the triggering of a default rate by a consumer's action does not constitute a change in terms. Industry representatives expressed support for 45 days' advance notice of charges or changes in terms that have not been previously disclosed. Several industry representatives opposed having an optout when a rate increase is prompted by default or delinquency, but they supported a consumer's right to opt out in other cases.

The council also discussed credit card issuers' practice of offering a 0 percent APR for consumers' balance transfers from other credit cards and a higher APR for purchases. Typically, issuers then typically allocate consumers' payments to balances that have the lowest APR—allowing high-APR balances to remain high. Several consumer representatives urged the Board to prohibit policies that apply all payments to the lowest-rate balance first, noting that many consumers do not understand how such low-APR products work. Several industry representatives expressed the view that such payment-allocation methods are appropriate business practices and that consumers benefit from low-APR cards because they receive an interest-free loan for a certain period of time. Industry representatives did acknowledge the need for better disclosures.

There was consensus among council members on what they consider to be best practices for due dates on credit card payments: if creditors do not receive mail or post payments on weekends or holidays, then payments that arrive on those days should be posted on the next business day and should be credited as on time if the due date fell on that weekend or holiday. Similarly, a payment that has a weekend or holiday due date should be credited as on time if it is received on the next business day.

Other Issues

At their March meeting, council members discussed additional topics, including model privacy notices, proposed amendments to Regulation E, and several aspects of Regulation CC.

To comply with their disclosure obligations on the sharing of consumer information under the Gramm-Leach-Bliley Act, financial institutions may use the model privacy form developed jointly by the federal financial regulatory agencies and the Federal Trade Commission. Members generally commended the agencies for the proposed form, noting that the prototype was a marked improvement over current privacy notices because it is clearer and easier to navigate-and thus makes it easier for consumers to compare different privacy policies. Some industry representatives expressed concerns that the form did not sufficiently address additional notice and opt-out requirements that may exist under state laws; they urged the agencies to preempt state privacy law requirements. Institutions may not use the form if they lack confidence that doing so would satisfy their obligations under state laws, industry representatives said.

The council provided feedback on proposed amendments to Regulation E, which implements the Electronic Fund Transfer Act, that would eliminate the receipt requirement at point-of-sale and other electronic terminals for debit card transactions of \$15 or less. Members acknowledged that consumers increasingly use credit and debit cards for smalldollar transactions but disagreed about whether receiving a receipt helps consumers manage their finances. Industry members generally expressed the view that consumers receive minimal benefit from receipts for small-dollar transactions. They noted that consumers would continue to receive information about each of their transactions on periodic statements. Several consumer representatives opposed the Board's proposal, stating that receipts are an important tool to help consumers accurately track their transactions, obtain reimbursements, and provide documentation in a dispute. Several industry representatives expressed concern that the costs associated with providing terminal receipts for debit card transactions are burdensome and impede industry efforts to create cashless payment options in certain retail settings. Consumer representatives generally regarded the proposed \$15 threshold as too high. Industry representatives, however, suggested that the threshold should be increased to \$25. consistent with current credit card rules that waive requirements for authorization by signature or personal identification number for transactions less than this amount.

Members discussed several aspects of Regulation CC, which governs the availability of funds deposited in checking

accounts and the collection and return of checks. They focused particularly on scams involving fraudulent checks and on the exception-hold practices that financial institutions can use to protect themselves and their customers from these scams. Members expressed concern that the brief hold periods permitted under Regulation CC for certain checks may impede financial institutions' ability to conduct appropriate due diligence. Several industry representatives emphasized the importance of coinformation-sharing operation and among financial institutions when an institution has concerns that a check may be fraudulent. Some members suggested that enhanced enforcement to require a paying institution to return a check item promptly could be helpful in this process. Others recommended that the federal financial regulatory agencies standardize and coordinate fraudulent-check alerts rather than issue separate alerts. Members highlighted the importance of education to increase awareness of fraudulent-check issues among both financial institution employees and consumers.

Federal Reserve Banks

In addition to contributing to setting national monetary policy and supervising and regulating banks and other financial entities (discussed in preceding chapters), 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.

Developments in Federal Reserve Priced Services

The Federal Reserve Banks provide a range of payment and related services to depository institutions, including collecting checks, operating an automated clearinghouse 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 ten years, the Reserve Banks have recovered 99.1 percent of their priced services costs, including the PSAF (table).³

In 2007, the Reserve Banks recovered 101.9 percent of total costs of \$993.7 million, including the PSAF.⁴ Revenue from priced services amounted to \$878.4 million, other income was \$133.8 million, and costs were \$913.3 million, resulting in net income from priced services of \$98.9 million.

^{1.} Financial data reported throughout this chapter—revenue, other income, cost, 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 is made up of three imputed costs: interest on debt, sales taxes, and assessments for deposit insurance by the Federal Deposit Insurance Corporation (FDIC). Board of Governors assets and costs that are related to priced services are 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 \$237.9 million reduction in equity related to the priced services' benefit plans through 2007. Including this reduction in equity, which represents a decline in economic value, results in cost recovery of 96.7 percent for the tenyear period. For details on how implementing SFAS No. 158 affected the pro forma financial statements, refer to notes 2, 3, and 5 at the end of this chapter.

^{4.} Other income is revenue from investment of clearing balances net of earnings credits, an amount termed net income on clearing balances. *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.

Priced Services Cost Recovery, 1998–2007

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}
1998 1999 2000 2001 2002 2003 2004 2005 2006	839.8 867.6 922.8 960.4 918.3 881.7 914.6 994.7 1,031.2	743.2 775.7 818.2 901.9 891.7 931.3 842.6 834.7 875.5 913.3	66.8 57.2 98.4 109.2 92.5 104.7 112.4 103.0 72.0 80.4	809.9 832.9 916.6 1,011.1 984.3 1,036.1 955.0 937.7 947.5 993.7	103.7 104.2 100.7 95.0 93.3 85.1 95.8 106.1 108.8 101.9
2007 1998–2007	1,012.3 9,343.4	8,528.0	896.6	993.7	99.1

NOTE: Here and elsewhere in this chapter, totals and percentages may not reflect components shown because of rounding.

1. For the ten-year period, includes revenue from services of \$8,816.8 million and other income and expense (net) of \$526.6 million.

2. For the ten-year period, includes operating expenses

Commercial Check-Collection Service

In 2007, the Reserve Banks recovered 100.7 percent of the total costs of their commercial check-collection service, including the PSAF. The Reserve Banks' operating expenses and imputed costs totaled \$743.3 million, of which \$26.1 million was attributable to the transportation of commercial checks between Reserve Bank check-processing centers. Revenue amounted to \$705.0 million, of which \$23.1 million was attributable to estimated revenues derived from the transportation of commercial checks between Reserve Bank check-processing centers. and other income was \$106.9 million. The resulting net income was \$68.6 million. Check-service revenue in 2007 decreased \$40.0 million from 2006, largely because of a drop in paper-check fee revenue; this drop was partially offset by an increase in Check 21 fee revenue.

The Reserve Banks handled 10.0 billion checks in 2007, a decrease of of \$7,938.1 million, imputed costs of \$227.2 million, and imputed income taxes of \$362.8 million.

3. Revenue from services divided by total costs.

4. For the ten-year period, cost recovery is 96.7 percent, including the net reduction in equity related to FAS 158 reported by the priced services in 2007.

9.8 percent from 2006 (table). 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.⁵ Of all the checks presented by the Reserve Banks to paying banks in 2007, 42.2 percent were deposited and 24.6 percent were presented using Check 21 products, compared with 14.0 percent and 4.3 percent, respectively, in 2006.⁶ By the end of 2007, this growth resulted in 57.5 percent of the Reserve Bank

^{5.} 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).

^{6.} The Reserve Banks also offer non-Check 21 electronic-presentment products. In 2007, 19.2 percent of the Reserve Banks' deposit volume was presented to paying banks using these products.

Activity in Federal Reserve Priced Services, 2005-2007

Thousands of items

Service	2007	2006	2005	Percent change		
	2007	2000	2003	2006 to 2007	2005 to 2006	
Commercial check Commercial ACH Funds transfer Multilateral settlement Securities transfer	10,001,289 9,363,429 137,555 505 10,110	11,083,122 8,230,782 136,399 470 9,053	12,227,718 7,338,950 135,227 440 9,235	-9.8 13.8 0.9 7.4 11.7	-9.4 12.2 0.9 6.8 -2.0	

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 *funds transfer* and

check deposits and 39.0 percent of Reserve Bank check presentments being made through Check 21 products.

In 2007, the Reserve Banks continued efforts to reduce check-service operating costs in response to the ongoing decline in check volume. These efforts included the consolidation of some checkprocessing sites. Check processing at Nashville has now been consolidated to Atlanta: San Francisco operations to Los Angeles; and Helena (Montana) operations to Denver. As part of a longerrange strategy, the Reserve Banks have selected Philadelphia, Cleveland, Atlanta, and Dallas as regional checkprocessing sites, which will provide a full range of check-processing services. The transition to this new structure is expected to begin in 2008. The Reserve Banks will continue to review their check infrastructure regularly to respond to further changes within the nation's payments system and to meet statutory requirements for long-term cost recovery.

Commercial Automated Clearinghouse Services

In 2007, the Reserve Banks recovered 107.6 percent of the total costs of their commercial automated clearinghouse (ACH) services, including the PSAF.

securities transfer, the number of transactions originated online and offline; and in *multilateral settlement*, the number of settlement entries processed.

The Reserve Banks' operating expenses and imputed costs totaled \$85.9 million. Revenue from ACH operations totaled \$88.3 million and other income totaled \$13.7 million, resulting in net income of \$16.0 million. The Banks processed 9.4 billion commercial ACH transactions, an increase of 13.8 percent from 2006.

In 2007, nationwide ACH volumes continued to grow at double-digit rates. This growth is largely attributable to volume increases associated with electronic check conversion applications including checks converted at lockbox locations or at the point of purchase. ACH rule changes that took effect in early 2007 permitted checks to be converted in processing centers or back offices, spurring further growth in the volume of ACH check conversions.

Fedwire Funds and National Settlement Services

In 2007, the Reserve Banks recovered 107.3 percent of the costs of their Fedwire Funds and National Settlement Services, including the PSAF. The Reserve Banks' operating expenses and imputed costs totaled \$63.1 million in 2007. Revenue from these operations totaled \$64.4 million and other income amounted to \$10.1 million, resulting in net income of \$11.4 million.

Fedwire Funds Service

The Fedwire Funds Service allows participants to use their reserve or clearing balances at the Reserve Banks to transfer funds to other participants. In 2007, the number of Fedwire funds transfers originated by depository institutions increased 0.9 percent from 2006, to approximately 137.6 million. The average daily value of Fedwire funds transfers in 2007 was \$2.7 trillion.

National Settlement Service

The National Settlement Service is a multilateral settlement system that allows participants in private-sector clearing arrangements to exchange and settle transactions on a net basis using reserve or clearing balances. In 2007, the service processed settlement files for approximately fifty-four local and national private arrangements, primarily check clearinghouse associations. The Reserve Banks processed slightly more than 17,000 files that contained almost 505,000 settlement entries for these arrangements in 2007.

Fedwire Securities Service

In 2007, the Reserve Banks recovered 103.7 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 \$21.0 million in 2007. Revenue from the service totaled \$20.6 million, and other income totaled \$3.2 million, resulting in net income of \$2.9 million.

The Fedwire Securities Service allows participants to electronically transfer securities issued by the U.S. Treasury, federal government agencies, government-sponsored enterprises, and certain international organizations to other participants in the service.⁷ In 2007, the number of non-Treasury securities transfers processed by the service increased 11.7 percent from 2006, to approximately 10.1 million.

In 2007, the Board published an assessment of the compliance of the Fedwire Securities Service with the Recommendations for Securities Settlement Systems that are included in the Federal Reserve Policy on Payments System Risk.⁸ The Fedwire Securities Service mostly complied with the recommendations' applicable standards.⁹ Both the Fedwire Funds Service and the Fedwire Securities Service assessments will be reviewed periodically to ensure that they remain accurate.

Float

The Federal Reserve had daily average credit float of \$604.9 million in 2007,

^{7.} The expenses, revenues, volumes, and fees reported here are for transfers of securities issued by federal government agencies, governmentsponsored enterprises, and certain international organizations. The 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.

^{8.} The Recommendations are a set of nineteen minimum standards, developed by the Committee on Payment and Settlement Systems (CPSS) and the Technical Committee of the International Organization of Securities Commissions (IOSCO), to address legal, presettlement, settlement, operational, and custody risks, among other issues, in securities settlement systems. See www. federalreserve.gov/paymentsystems/fedwiresecsvs/ fedwiresecsvs.pdf.

^{9.} In 2006, the Board published an assessment of the compliance of the Fedwire Funds Service with the Core Principles for Systemically ImportantPaymentSystems.Seewww.federalreserve.gov/ paymentsystems/coreprinciples/coreprinciples.pdf.

compared with credit float of \$85.9 million in 2006. 10

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 38.0 billion Federal Reserve notes from circulation in 2007, a 0.8 percent decrease from 2006, and made payments of 38.5 billion notes into circulation in 2007, a 1.5 percent decrease from 2006. They received 63.3 billion coins from circulation in 2007, a 5.9 percent increase from 2006, and made payments of 75.7 billion coins into circulation, a 2.2 percent increase from 2006.

In July, the Reserve Banks implemented the fee component of the Federal Reserve currency recirculation policy. The intent of the policy is to reduce the overuse of Federal Reserve currency-processing services by depository institutions. Under the policy, the Reserve Banks assess fees to institutions that, within a one-week period, deposit fit \$10 or \$20 notes and reorder currency of the same denomination, above a de minimis amount, within the same Reserve Bank office's service area. At the end of the first two billing quarters, the Reserve Banks had collected \$5.5 million in recirculation fees from institutions.

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 Federal Reserve note. The Reserve Banks issued the redesigned \$5 note in March 2008.

Board staff worked with the Reserve Banks and the United States Mint to implement the distribution strategy for the Presidential \$1 Coin Program. 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.

The Reserve Banks began implementing a program to extend to 2017 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 but retain the machines' frames, note-transport mechanisms, and large mechanical parts. Software problems and development delays have extended the schedule for completion of the program to the fourth quarter of 2009.

The Reserve Banks selected a vendor to design software to replace the current standard cash application. The multiyear project will begin in 2008; the target implementation date for the new automation system is 2010.

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 excess

^{10.} 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.

Expenses of the Federal Reserve Banks for Fiscal Agency and Depository Services, 2005–2007

Thousands of dollars

Agency and service	2007	2006	2005
Department of the Treasury			
Bureau of the Public Debt Treasury retail securities	74,149.2	73.931.4	86,503,2
Treasury securities safekeeping and transfer	8.687.7	7.535.2	6.055.8
Treasury auction	41,372.0	23,594.9	17,553.5
Computer infrastructure development and support	3,558.7	3,853.1	2,575.5
Other services	724.5	1,578.7	1,806.5
Total	128,492.1	110,493.2	114,494.5
Financial Management Service Payment services			
Government check processing	17,522.7	20.918.6	20,988.0
Automated clearinghouse	6,050.3	5.823.1	5,709,5
Fedwire funds transfers	116.8	123.1	109.4
Other payment programs	81,636.9	69,696.8	49,366.0
Collection services			
Tax and other revenue collections	38,254.5	37,095.5	39,736.0
Other collection programs	12,483.6	14,122.6	14,354.2
Cash-management services Computer infrastructure development and support	46,093.6 70,999.9	48,320.2 67.046.4	40,496.7 67.703.3
Other services	7,507.2	7,414.8	2,332.2
Total	280,665.7	270,561.2	2,332.2
	200,005.7	270,501.2	2-10,795.4
Other Treasury	17.007.1	16 796 2	15 706 7
Total	17,997.1 427,154.9	16,786.3 397,840.7	15,726.7 371,016.6
Iotal, Heasury	427,134.9	397,840.7	571,010.0
Other Federal Agencies			
Department of Agriculture			
Food coupons	2,706.0	2,929.8	2,642.4
United States Postal Service	0 0 1 2 2	0.224.4	76170
Postal money orders Other agencies	8,913.2	9,334.4	7,647.8
Other services	19,412.0	15,977.1	14,870.2
Total, other agencies	31,031.1	28,241.4	25,160.4
, C	,	,	,
Total reimbursable expenses	458,186.0	426,082.1	396,177.0

Treasury balances. The Reserve Banks also provide limited 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 2007 amounted to \$458.2 million, compared with \$426.1 million in 2006 (table). Treasury-related costs were \$427.2 million in 2007, compared with \$397.8 million in 2006, an increase of 7.4 percent. The cost of providing services to other entities was \$31.0 million, compared with \$28.2 million in 2006. In 2007, as in 2006, the Treasury and other entities

reimbursed the Reserve Banks for the costs of providing these services.

Debt Services

The Reserve Banks auction, provide safekeeping for, and transfer Treasury securities. Reserve Bank operating expenses for these activities totaled \$50.1 million in 2007, compared with \$31.1 million in 2006. The Banks processed 104,000 commercial tenders for Treasury securities in 2007 through the Fedwire Securities Service, compared with 148,000 in 2006. They originated

13.7 million transfers of Treasury securities in 2007, a 6.4 percent increase from 2006. The Reserve Banks are developing a new Treasury auction application and infrastructure that will provide increased functionality and security. The application will be operational in early 2008.

The Reserve Banks also operate computer applications and provide customer service and back-office support for the Treasury's retail securities programs. Reserve Bank operating expenses for these activities were \$74.1 million in 2007, compared with \$73.9 million in 2006. The Reserve Banks operate Legacy Treasury Direct, a program that allows investors to purchase and hold Treasury securities directly with the Treasury through the Reserve Banks instead of through a broker. The program held \$70.3 billion (par value) of Treasury securities as of December 31. Because the program was designed for investors who plan to hold their securities to maturity, it does not provide transfer services. Investors may, however, sell their securities for a fee through Sell Direct, a program operated by one of the Reserve Banks. Approximately 13,000 securities worth \$642.4 million were sold through Sell Direct in 2007, compared with 13,000 securities worth \$678.9 million in 2006. The Banks printed and mailed more than 25.1 million savings bonds in 2007, a 13.2 percent decrease from 2006. They issued more than 4.2 million Series I (inflationindexed) bonds and 20.6 million Series EE bonds.

Payments Services

The Reserve Banks process both electronic and check payments for the Treasury. Reserve Bank operating expenses for processing government payments and for payments-related programs to-

taled \$105.3 million in 2007, compared with \$96.6 million in 2006. The Banks processed 1,027 million ACH payments for the Treasury, an increase of 3.6 percent from 2007, and more than 618,000 Fedwire funds transfers. They also processed 214 million government checks, a decline of 3.6 percent from 2006. The proportion of government checks being processed as paper checks has been declining as an increasing number of checks are being presented by depository institutions in image form. Of all the government checks processed by the Banks in 2007, 54 percent of the checks were presented as paper and 46 percent were presented as images, compared with 87 percent and 13 percent, respectively, in 2006. In addition, the Banks issued more than 131,000 fiscal agency checks, a decrease of 22.6 percent from 2006.

Collection Services

The Reserve Banks support several Treasury programs to collect funds owed the federal government. Reserve Bank operating expenses related to these programs totaled \$50.7 million in 2007, compared with \$51.2 million in 2006. The Banks operate the Federal Reserve Electronic Tax Application (FR-ETA) as an adjunct to the Treasury's Electronic Federal Tax Payment System (EFTPS). EFTPS allows businesses and individual taxpayers to pay their taxes electronically. It uses the automated clearinghouse (ACH) to collect funds, so tax payments must be scheduled at least one day in advance. Some business taxpayers, however, do not know their tax liability until the tax due date. FR-ETA allows these taxpayers to use EFTPS by providing a same-day electronic federal tax payment alternative. FR-ETA collected \$519.8 billion for the Treasury in

2007, compared with \$456.3 billion in 2006.

In addition, the Reserve Banks operate Pay.gov, a Treasury program that allows members of the public to use the Internet to pay for goods and services offered by the federal government. They also operate 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 2007, the Reserve Banks originated more than 10.1 million ACH transactions through these programs, a significant increase from 2006 due to growth in the electronic check processing program.

Treasury Cash-Management Services

The Treasury maintains its bank account at the Reserve Banks and invests the funds it does not need for current payments with qualified depository institutions through the Treasury Tax and Loan (TT&L) program, which the Reserve Banks operate. Reserve Bank operating expenses related to this program and other cash-management initiatives totaled \$46.1 million in 2007, compared with \$48.3 million in 2006. The investments either are callable on demand or are for a set term. In 2007, the Reserve Banks placed a total of \$308.4 billion in immediately callable investments, which includes funds invested through retained tax deposits and direct, special direct, and dynamic investments, and \$687 billion in term investments. The rate for term investments is set by auction; the Reserve Banks held 126 such auctions in 2007, roughly the same number of auctions as in 2006. In 2007, the Treasury's income from the TT&L program was \$1.15 billion. The Treasury provides the Repurchase Agreement Program on a limited basis, which allows the Treasury to place a portion of its excess operating funds directly with TT&L depositaries through a repurchase transaction for a set period at an agreed-on interest rate. In 2007, the Reserve Banks placed a total of \$499 billion of investments through repurchase agreements.

In 2007, the Treasury announced the Collections and Cash Management Modernization (CCMM) initiative, which is a multiyear effort to streamline, modernize, and improve the process and systems supporting the Treasury's collections and cash-management programs. Several Federal Reserve Banks have been selected to work on the CCMM initiative.

Services Provided to Other Entities

The Reserve Banks provide fiscal agency and depository services to other domestic and international entities when required to do so by the Secretary of the Treasury or when required or permitted to do so by federal statute. The majority of the work is securities-related.

Electronic Access to Reserve Bank Services

In 2007, the Federal Reserve Banks continued to migrate their computer interface customers to FedLine Direct and FedLine Command. This migration, typically for high-volume depository institutions, comes after the Reserve Banks completed the FedLine Advantage migration, typically for low- to moderate-volume depository institutions, in 2006. FedLine Direct is an internet-protocol-based computer-tocomputer electronic access channel used to access critical payment services, such as Fedwire Funds, Fedwire Securities, National Settlement, and FedACH Services. FedLine Command is a lowercost internet-protocol-based computerto-computer electronic access channel for file delivery services, including the FedACH Service. The Reserve Banks began the migration to FedLine Direct and FedLine Command in 2006 and expect to complete the conversion in 2008.

Information Technology

In 2007, the Federal Reserve Banks enhanced their information technology (IT) governance framework to better align IT management authority and accountability with the business models used in the System. A System chief information officer (CIO) position and two advisory councils were established. The Business Technology Council represents the technology needs of the Federal Reserve's business lines, and the Technology Services Council represents the Federal Reserve's IT providers. The CIO leads System efforts to develop and implement the Federal Reserve's overall IT strategy at the Reserve Banks, manages national information-security risk, and analyzes and coordinates the System's IT investments.

The System continued to develop the National Information Security Assurance function as a central point of governance for enterprise-level information security. Associated roles and responsibilities within the function were clarified. Efforts to improve the function will continue as the Federal Reserve's information security environment continues to evolve.

To address the business implications of reduced demand for mainframe services, Federal Reserve Information Technology in mid-2007 implemented a multiyear strategic plan for mainframe technologies. These technologies are no longer considered strategic, and the System has decided not to make any further significant investments in the mainframe platform. System business owners are looking at alternative platforms for webbased access to applications and data, partly because of concerns about the continued availability of technical resources to support mainframe platforms.

In 2007, the Federal Reserve continued to implement the Information Security Architecture Framework (ISAF), a large program scheduled to be completed in 2008. ISAF is intended 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 by raising the level of enterprise-wide assurance. Major accomplishments in 2007 include improving the separation of sensitive infrastructure, limiting access to sensitive desktop functions, and strengthening desktop-access protections.

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 section "Federal Reserve Banks Combined Financial Statements") and audits the annual financial statements of each of the twelve Banks. 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 2007 met the requirements of the Sarbanes-Oxley Act of 2002. Within this framework, management of each Reserve Bank provides an assertion letter to its board of directors annually confirming adherence to COSO standards, and a public accounting firm confirms management's assertion and issues an attestation report to each Bank's board of directors and to the Board of Governors.

In 2007, the Board engaged Deloitte & Touche LLP (D&T) for the audits of the individual and combined financial statements of the Reserve Banks. Previously, PricewaterhouseCoopers LLP performed the audits. Fees for D&T's services totaled \$4.7 million. 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 Reserve Banks, or in any other way impairing its audit independence. In 2007, the Reserve Banks did not engage D&T for nonaudit services.

The Board's annual examination of the Reserve Banks 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 on-site reviews based on the division's riskassessment methodology. The examinations also include assessing the efficiency and effectiveness of the internal audit function. 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 at the Federal Reserve Bank of New York 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 accompanying table summarizes the income, expenses, and distributions of net earnings of the Federal Reserve Banks for 2006 and 2007. Income in 2007 was \$42,576 million, compared with \$38,410 million in 2006.

Expenses totaled \$4,382 million (\$3,270 million in operating expenses, \$240 million in earnings credits granted to depository institutions, \$296 million in assessments for expenditures by the Board of Governors, and \$576 million for the cost of new currency). Revenue from priced services was \$878.4 million. Net additions to and deductions from current net income showed a net profit of \$198 million. The profit was due primarily to unrealized gains on assets denominated in foreign currencies revalued to reflect current market exchange rates offset, in part, by interest expense on reverse repurchase agreements. Statutory dividends paid to mem-\$992 ber banks totaled million. \$121 million more than in 2006; 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 \$34,598 million in 2007, up from \$29,052 million in 2006; the payments equal net income after the de-

Income, Expenses, and Distribution of Net Earnings of the Federal Reserve Banks, 2007 and 2006

Millions of dollars

Item	2007	2006
Current income	42,576 3,510 3,270 240	38,410 3,264 2,987 276
Current net income Net additions to (deductions from, –) current net income Assessments by the Board of Governors For expenditures of Board For cost of currency Change in funded status of benefit plans ²	39,066 198 872 296	35,147 -159 793 301 492
Net income before payments to Treasury Dividends paid Transferred to (from) surplus and change in accumulated other comprehensive income	38,716 992 3,126	34,195 871 4,272
Payments to Treasury ³	34,598	29,052

1. Includes a net periodic pension expense of \$110 million in 2007 and \$53 million in 2006.

comprehensive income.

funded status of benefit plans as an element of other

2. Subsequent to the adoption of SFAS 158 in 2006, the Reserve Banks began to recognize the change in

duction 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 2007 and table 11 shows a condensed statement for each Bank for the years 1914 through 2007; 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."

Holdings of Securities and Loans

The Federal Reserve Banks' average daily holdings of securities and loans during 2007 amounted to \$816,115 mil-

3. Interest on Federal Reserve notes.

... Not applicable.

lion, an increase of \$28,243 million from 2006 (table). U.S. government securities holdings increased \$26,124 million, and loans increased \$1,297 million. In December 2007, the Federal Reserve established a Term Auction Facility (TAF) under which the Reserve Banks conduct auctions for a fixed amount of funds for a fixed term, with the interest rate determined by the auction process, subject to a minimum bid rate. All advances under the TAF must be fully collateralized. In 2007, average daily holdings of Term Auction Credit (TAC) under the TAF amounted to \$822 million.

The average rate of interest earned on the Reserve Banks' holdings of government securities increased to 4.95 percent, from 4.63 percent in 2006, and the average rate of interest earned on loans decreased to 2.18 percent, from 5.36 percent. The average interest rate on TAC was 4.66 percent.

Securities and Loans of the Federal Reserve Banks, 2005-2007

Millions of dollars except as noted

Item and year	Total	U.S. government securities ¹	Loans ²	Term Auction Credit ³
Average daily holdings ⁴ 2005 ⁵ 2006 ⁵ 2007	753,748 787,872 816,115	753,549 787,648 813,772	199 224 1,521	· · · · 822
Earnings ⁶ 2005	28,966 36,464 40,369	28,959 36,452 40,298	7 12 33	
Average interest rate (percent) 2005 ⁵	3.84 4.63 4.95	3.84 4.63 4.95	3.52 5.36 2.18	4.66

1. Includes federal agency obligations.

2. Does not include indebtedness assumed by the Federal Deposit Insurance Corporation.

3. Reflects temporary Term Auction Facility activity beginning in 2007.

4. Based on holdings at opening of business.

Volume of Operations

Table 12 in the "Statistical Tables" section shows the volume of operations in the principal departments of the Federal Reserve Banks for the years 2004 through 2007.

Federal Reserve Law Enforcement

In November, the Federal Reserve System became the eleventh federal law enforcement agency to be awarded accreditation from the Federal Law Enforcement Training Accreditation board of directors for its Basic Law Enforcement Course (BLEC). The primary benefit of accreditation is increased public confidence in the integrity, professionalism, and accountability of the law enforcement agencies. Accreditation is considered a "best practice" for federal law enforcement agencies and signifies compliance with 63 stringent standards. All law enforcement candidates complete the Federal Reserve's BLEC prior to their designation as Federal Reserve 5. Amounts in bold are restatements due to changes in previously reported data.

6. Earnings have not been netted with the interest expense on securities sold under agreements to repurchase.

... Not applicable.

law enforcement officers (FRLEOs). The 240-hour program covers a variety of topics related to the mission of an FRLEO. The Federal Reserve was granted federal law enforcement authority by the USA Patriot Act to protect and safeguard Board and Federal Reserve Bank premises, grounds, property, personnel, and operations.

Federal Reserve Bank Premises

In 2007, construction was largely completed on the Kansas City Bank's new headquarters building and the San Francisco Bank's new Seattle Branch building. The multiyear renovation program at the New York Bank's headquarters building continued. The St. Louis Bank continued a long-term facility redevelopment program that includes the ongoing construction of an addition to the Bank's headquarters building.

Security enhancement programs continued at several facilities. Construction of security improvements to the Richmond Bank's headquarters building is ongoing. The Philadelphia Bank completed the purchase of property behind its headquarters building for the construction of a remote vehicle-screening facility and is developing the facility's design. Design development of a similar screening facility for the Dallas Bank also continued.

During 2007, the Board approved the

final design of a new parking garage to be constructed adjacent to the Richmond Bank's headquarters building. Efforts to sell the St. Louis Bank's Little Rock Branch building continued.

Table 14 in the "Statistical Tables" section of this report 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 Priced Services, December 31, 2007 and 2006 Millions of dollars

Item	20	07	20	006
Short-term assets (Note 1) Imputed reserve requirements on clearing balances Imputed investments Materials and supplies Prepaid expenses Items in process of collection Total short-term assets	755.7 6,465.7 66.7 1.8 28.5 1,769.6	9,088.0	821.7 7,207.5 73.6 0.9 24.2 <u>3,391.0</u>	11,518.9
Long-term assets (Note 2) Premises Furniture and equipment Leases, leasehold improvements, and long-term prepayments Prepaid pension costs Deferred tax asset Total long-term assets	453.5 130.2 64.2 484.6 109.4	_1,242.0	424.9 127.9 83.3 453.0 130.0	1,219.0
Total assets		10,330.0		12,737.9
Short-term liabilities Clearing balances and balances arising from early credit of uncollected items	7,641.1 1,685.1 0.0 102.4	9,428.5	8,015.6 3,592.5 0.0 100.4	11,708.4
Long-term liabilities Long-term debt Postretirement/postemployment benefits obligation Total long-term liabilities	0.0	385.0	0.0 392.6	392.6
Total liabilities		9,813.5		12,101.0
Equity (including accumulated other comprehensive loss of \$237.9 million and \$306.1 million at December 31, 2007 and 2006, respectively)		516.5		636.9
Total liabilities and equity (Note 3)		10,330.0		12,737.9

NOTE: Components may not sum to totals because of rounding. Amounts in bold are restated due to changes in previously reported data.

The accompanying notes are an integral part of these pro forma priced services financial statements.

Item	20	007	20	006
Revenue from services provided to depository institutions (Note 4) Operating expenses (Note 5)		878.4 888.2		908.4 803.5
Income from operations		-9.8		104.8
Imputed costs (Note 6) Interest on float Interest on debt Sales taxes FDIC insurance	-32.0 0.0 11.6 0.0	-20.4	-4.9 0.0 10.8 0.0	5.9
Income from operations after imputed costs		10.6		98.9
Other income and expenses (Note 7) Investment income Earnings credits	362.3 -228.5	133.8	383.6 -260.8	122.8
Income before income taxes		144.5		221.8
Imputed income taxes (Note 6)		45.5		66.1
Net income		98.9		155.7
Мемо: Targeted return on equity (Note 6)		80.4		72.0

Pro Forma Income Statement for Federal Reserve Priced Services, 2007 and 2006

Millions of dollars

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, 2007 Millions of dollars

Item	Total	Commercial check collection	Commercial ACH	Fedwire funds	Fedwire securities
Revenue from services (Note 4)	878.4	705.0	88.3	64.4	20.6
Operating expenses (Note 5)	888.2	733.6	78.3	56.9	19.3
Income from operations	-9.8	-28.6	10.0	7.5	1.3
Imputed costs (Note 6)	-20.4	-21.8	0.2	0.9	0.3
Income from operations after imputed costs	10.6	-6.7	9.7	6.6	1.0
Other income and expenses, net (Note 7)	133.8	106.9	13.7	10.1	3.2
Income before income taxes	144.5	100.2	23.4	16.6	4.2
Imputed income taxes (Note 6)	45.5	31.6	7.4	5.2	1.3
Net income	98.9	68.6	16.0	11.4	2.9
Mемо: Targeted return on equity (Note 6)	80.4	63.2	8.8	6.3	2.0
Mемо: Cost recovery (percent) (Note 8)	101.9	100.7	107.6	107.3	103.7

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 non-earning 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 shoet. 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 (1) amounts due the Reserve Banks for priced services and (2) 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 is gross Federal Reserve cash items in process of collection (CIPC) stated on a basis comparable to that of a commercial bank. It reflects 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, and an estimate of the assets of the Board of Governors used in the development of priced services.

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. This resulted in a reduction to the prepaid pension asset 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) (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 core clearing balances. Long-term assets are financed with long-term liabilities and clearing balances. As a result, no short- or long-term debt is imputed. Other shortterm liabilities include clearing balances maintained at Reserve Banks and deposit balances arising from float. Other long-term liabilities consist of accrued postemployment, postretirement, and nonqualified pension benefits costs and obligations on capital leases.

In order to reflect the funded status of its benefit plans as required by SFAS No. 158, 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. In 2007, this resulted in a decrease to the benefits obligation related to the priced services with an offsetting adjustment, net of tax, to AOCI, which is included in equity.

Equity is imputed at 5 percent of total assets.

(4) REVENUE

Revenue represents charges 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 for staff members of the Board of Governors working directly on the development of priced services. The expenses for Board staff members were \$6.7 million in 2007 and \$7.5 million in 2006.

Effective January 1, 1987, the Reserve Banks implemented SFAS No. 87, *Employers' Accounting for Pensions*. Accordingly, the Reserve Banks recognized operating expenses for the qualified pension plan of \$21.3 million in 2007 and \$11.5 million in 2006. Operating expenses also include the nonqualified pension expense of \$3.1 million in 2007 and \$3.2 million in 2006. 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.

The income statement by service reflects revenue, operating expenses, imputed costs, 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 2007 and 2006 as follows (in millions):

	2007	2006
Check	34.7 4 3	30.6 4 1
Fedwire funds Fedwire securities	3.0	2.8 1.5
Total	43.7	39.0

(6) IMPUTED COSTS

Imputed costs consist of income taxes, return on equity, interest on debt, sales taxes, the 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 2007 or 2006.

Effective in 2007, the Reserve Bank priced services imputed a one-time FDIC assessment credit of \$16.6 million. In 2007, the credit fully offset the imputed \$4.0 million assessment, resulting in a remaining credit of \$12.6 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 2007 in millions of dollars:

Total float Unrecovered float	-603.3 $\underline{24.1}$
Float subject to recovery	-627.4
Sources of recovery of float	
Income on clearing balances	-62.7
As-of adjustments	-1.6
Direct charges	267.3
Per-item fees	-833.6

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 2007.

(7) OTHER INCOME AND EXPENSES

Other income and expenses consist of investment income on clearing balances and the cost of earnings credits. Investment income on clearing balances for 2007 and 2006 represents the average coupon-equivalent yield on three-month Treasury bills plus a constant spread, based on the return on a portfolio of investments. The return is applied to the total clearing balance maintained, adjusted for the effect of reserve requirements on clearing balances. Expenses for earnings credits granted to depository institutions on their clearing balances are derived by applying a discounted average coupon-equivalent yield on three-month Treasury bills to the required portion of the clearing balances, adjusted for the net effect of reserve requirements on clearing balances.

(8) COST RECOVERY

Annual cost recovery is the ratio of revenue 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 multiyear 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 performance measures, and discusses performance evaluation. The most recent strategic plan covers the period 2006–09.

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 data validation and results verification. The most recent performance plan covers the period 2006–07.

The performance report discusses the Board's performance in relation to its goals. The report covering the period 2006–07 will be completed in 2008. Pre-

liminary analysis indicates that the Board generally met its goals for 2006–07.

All of these documents are available on the Board's web site, 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 so as to promote optimal macroeconomic performance.

Goals and Objectives

The Federal Reserve has six primary goals with interrelated and mutually reinforcing elements.

Goal

To conduct monetary policy that promotes the achievement of maximum sustainable long-term growth and the price stability that fosters that goal

Objectives

• Stay abreast of recent developments and prospects in 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.
- Promote understanding of Federal Reserve policy among other government policy officials and the general public.

Goal

To 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.
- Provide a dynamic work environment that is challenging and rewarding. 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

To effectively implement federal laws designed to inform and protect the consumer, to encourage community development, and to promote access to banking services in historically underserved markets

Objectives

- Take a leadership role in shaping the national dialogue on consumer protection in financial services, address the rapidly emerging issues that affect today's consumers, strengthen consumer compliance supervision programs when required, and remain sensitive to the burden on supervised institutions.
- Promote, develop, and strengthen effective communications and collaborations within the Board, the Federal Reserve Banks, and other agencies and organizations.
- Increase public understanding of consumer protection and community development and the Board's role in these areas through increased outreach and by developing programs that address the information needs of consumers and the financial services industry.
- Develop a staff that is highly skilled, professional, innovative, and diverse; provide career development opportunities to improve retention; and recruit highly qualified and skilled employees.
- Promote an efficient and effective work environment by aligning busi-

ness functions with appropriate work processes and implementing solutions for work products and processes that can be handled more efficiently through automation.

Goal

To 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

To provide high-quality oversight of Reserve Banks

Objective

• Produce high-quality assessments and oversight of Federal Reserve System strategies, projects, and operations, including adoption of technology to the business and operational needs of the Federal Reserve. The oversight process 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

To foster the integrity, efficiency, and effectiveness of the Board's programs

Objectives

- Oversee a planning and budget process that clearly identifies the Board's mission, results in concise plans for the effective accomplishment of operations, transmits to the staff the information needed to attain objectives efficiently, and allows the public to measure our accomplishments.
- 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 financial management support needed for sound business decisions.
- Provide cost-effective and secure information resource management services to Board divisions and analyze information technology issues for the Board, Reserve Banks, other financial regulatory institutions, and other nations' central banks.
- Efficiently provide safe, modern, and secure facilities and necessary support for activities conducive to efficient and effective Board operations.

Records

Record of Policy Actions of the Board of Governors

Regulation A Extensions of Credit by Federal Reserve Banks

[Docket No. R-1304]

On December 10, 2007, the Board approved amendments establishing a temporary term auction facility (TAF), with the intention of permitting depository institutions to obtain credit from the Federal Reserve on a secured basis at rates that meet the market demand for credit of relatively short terms. The TAF allows depository institutions to obtain advances from their local Federal Reserve Banks at interest rates determined through auctions. The amendments are effective December 12, 2007.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

Regulation B Equal Credit Opportunity

Regulation E Electronic Fund Transfers

Regulation M Consumer Leasing

Regulation Z Truth in Lending

Regulation DD Truth in Savings

[Docket Nos. R-1281 through R-1285]

On October 23, 2007, the Board approved amendments to the requirements in several regulations and official staff commentaries for electronic disclosures to consumers concerning consumer financial services and fair lending. The amendments simplify and clarify the requirements by withdrawing unnecessary or unduly burdensome provisions in the interim final rules approved in March 2001 and by providing guidance on using electronic disclosures. The amendments are effective December 10, 2007, and compliance is mandatory by October 1, 2008.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

On December 11, 2007, technical amendments were approved, under delegated authority, to clarify certain amendments to the official staff commentaries to Regulations B and Z that were approved by the Board on October 23. The technical amendments are effective January 14, 2008, and compliance is mandatory by October 1, 2008.

Regulation D

Reserve Requirements of Depository Institutions

[Docket No. R-1262]

On April 2, 2007, the Board approved revisions to its 1980 interpretation of the

NOTE: Full texts of the policy 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.

regulation, which sets forth criteria for the exemption of bankers' banks from reserve requirements. The revisions allow the Board to make case-by-case determinations as to whether a bankers' bank may, to a limited extent, have as customers certain entities that are not specified in the interpretation without losing its exemption. The revised interpretation is effective May 7, 2007.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

[Docket No. R-1297]

On September 24, 2007, the Board approved amendments to reflect the annual indexing of the reserve requirement exemption amount and the low reserve tranche. For 2008, the reserve requirement exemption amount is \$9.3 million, an increase from \$8.5 million in 2007, and the low reserve tranche is \$43.9 million, a decrease from \$45.8 million in 2007. The Board also adjusted the non-exempt deposit cutoff level (\$216.2 million for 2008) and the reduced reporting limit (\$1.211 billion for 2008), which are used to determine the frequency of reporting by depository institutions.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

Regulation E Electronic Fund Transfers

[Docket No. R-1270]

On June 25, 2007, the Board approved amendments to the regulation and official staff commentary to exempt electronic fund transfers of \$15 or less from the requirement to make paper receipts available to consumers for transactions initiated at electronic terminals. The

amendments are effective August 6, 2007.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

Regulation H

Membership of State Banking Institutions in the Federal Reserve System

Regulation K

International Banking Operations

[Docket No. R-1279]

On September 14, 2007, the Board, acting with the other federal bank and thrift regulatory agencies, approved final rules to extend, from twelve to eighteen months, the on-site examination cycle for certain state member banks and U.S. offices of foreign banks. The extended schedule applies to (1) insured institutions that have up to \$500 million in total assets, are well capitalized and well managed, and receive a composite CAMELS rating of 1 or 2 and (2) U.S. branches and agencies of foreign banks that have up to \$500 million in total assets and meet comparable criteria. The final rules, which implement the Financial Services Regulatory Relief Act of 2006 and related legislation, are identical to interim final rules approved by the Board on March 16, 2007, and are effective September 25, 2007.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

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-1261]

On November 2, 2007, the Board, acting with the other federal bank and thrift regulatory agencies, approved a new risk-based capital adequacy framework for banking organizations (which include thrifts), popularly known as Basel II. The new framework requires some banking organizations, and permits other qualifying banking organizations, to calculate their regulatory capital requirements using an internal ratings-based approach for credit risk and advanced measurement approaches for operational risks. Basel II, which modernizes the Basel Capital Accord of 1988, consists of three components, or pillars: minimum regulatory capital requirements (pillar 1), supervisory review of capital adequacy (pillar 2), and market discipline through enhanced disclosure (pillar 3). The final rules set forth the qualifying criteria and applicable risk-based capital requirements for banking organizations operating under the new framework. They are effective April 1, 2008.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

Regulation L

Management Official Interlocks

[Docket No. R-1272]

On July 9, 2007, the Board, acting with the other federal bank and thrift regulatory agencies, approved a final rule to permit management interlocks between unaffiliated depository institutions that have offices in the same relevant metropolitan statistical area if one of the institutions has less than \$50 million (previously \$20 million) in total assets. The final rule, which implements provisions of the Financial Services Regulatory Re-

lief Act of 2006, is identical to an interim final rule approved in December 2006 and is effective July 16, 2007.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

Regulation O

Loans to Executive Officers, Directors, and Principal Shareholders of Member Banks

[Docket No. R-1271]

On May 23, 2007, the Board approved a final rule to eliminate certain reporting requirements that have not contributed significantly to effective monitoring or to prevention of insider lending abuse. The final rule, which implements provisions of the Financial Services Regulatory Relief Act of 2006, is identical to an interim final rule approved in December 2006 and is effective July 2, 2007.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

Regulation R

Exceptions for Banks from the Definition of Broker in the Securities Exchange Act of 1934

[Docket No. R-1274]

On September 24, 2007, the Board, acting with the Securities and Exchange Commission (SEC), approved a single set of joint final rules to implement certain exceptions for banks from the definition of *broker* under section 3(a)(4) of the Securities Exchange Act of 1934 (Exchange Act), as amended by the so-called push-out provisions of the Gramm-Leach-Bliley Act of 1999. The final rules help define the scope of securities activities that banks may conduct in providing banking services to their

customers without registering with the SEC as a securities broker or complying with the SEC's rules. Some portions of the final rules are effective September 28, 2007; the remaining portions are effective December 3, 2007. However, banks are exempt from complying with the final rules and the broker exceptions in section 3(a)(4)(B) of the Exchange Act until the first day of their first fiscal year that begins after September 30, 2008.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

Regulation V Fair Credit Reporting

[Docket No. R-1203]

On October 17, 2007, the Board, acting with the other federal financial institutions regulatory agencies, approved final rules requiring that a financial institution provide notice and a reasonable opportunity to opt out before using information from an affiliate to market its own products and services to a consumer. The final rules, which implement the affiliate-marketing provisions of the Fair and Accurate Credit Transactions Act of 2003, are effective January 1, 2008, and compliance is mandatory by October 1, 2008.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

[Docket No. R-1255]

On October 23, 2007, the Board, acting with the other federal financial institutions regulatory agencies and the Federal Trade Commission, approved final rules requiring financial institutions and creditors that open or hold certain accounts to develop and implement a writ-

ten identity theft prevention program that includes reasonable policies and procedures for detecting, preventing, and mitigating identity theft. The final rules provide guidelines for developing and implementing those programs and examples of "red flags" signaling possible identity theft. In addition, the final rules require (1) debit and credit card issuers to assess the validity of changeof-address notifications under certain circumstances and (2) users of consumer reports to establish and maintain reasonable policies and procedures regarding notifications of address discrepancies they receive from consumer reporting agencies. The final rules and guidelines, which implement provisions of the Fair and Accurate Credit Transactions Act of 2003, are effective January 1, 2008, and compliance is mandatory by November 1, 2008.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

Policy Statements and Other Actions

Policy on Payments System Risk

[Docket No. OP-1259]

On January 11, 2007, the Board approved revisions to part 1 of its Policy on Payments System Risk to address risk management in payments and settlement systems. The revisions establish an expectation that payments and settlement systems under the Board's authority that are systemically important will publicly disclose self-assessments of their compliance with the relevant principles or minimum standards set forth in the policy. Self-assessments should be updated after any material change and should be reviewed at least every two years. In addition, the revisions incorpo-

rate the Recommendations for Central Counterparties, which were developed jointly by international committees of central banks and securities commissions, as the Board's minimum standards for central counterparties. The revisions also clarify the purpose of and revise the scope of part 1 relating to central counterparties. The revisions are effective January 19, 2007, and the initial self-assessments are expected to be completed and published by December 31, 2007.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Bies, Warsh, Kroszner, and Mishkin.

Illustrations of Consumer Information for Nontraditional Mortgage Products

[Docket No. OP-1267]

On May 25, 2007, the Board, acting with the other federal financial institutions regulatory agencies, approved final illustrations of consumer information for nontraditional mortgage products to assist financial institutions in implementing the consumer protection provisions of the Interagency Guidance on Nontraditional Mortgage Product Risks issued in October 2006. Financial institutions may use the illustrations as provided, change their format, or tailor the information to specific transactions or products. The illustrations are effective June 8, 2007.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

Statement on Subprime Mortgage Lending

[Docket No. OP-1278]

On June 27, 2007, the Board, acting with the other federal financial institu-

tions regulatory agencies, approved interagency guidance intended to clarify how financial institutions may offer certain adjustable-rate mortgages in a manner that is safe and sound and also allows for clear disclosure of the risks assumed by the borrower. The guidance is effective July 10, 2007.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

Statement on Loss Mitigation Strategies for Servicers of Residential Mortgages

On August 29, 2007, the Board, acting with the other federal financial institutions regulatory agencies and the Conference of State Bank Supervisors, approved guidance to encourage federally regulated and state-regulated financial institutions and state-supervised servicers of residential mortgages to pursue strategies to mitigate losses while preserving home ownership to the extent possible and appropriate.

Votes for this action: Chairman Bernanke and Governors Warsh, Kroszner, and Mishkin. Absent and not voting: Vice Chairman Kohn.

Permissible Complementary Activities for Financial Holding Companies

On September 6, 2007, the Board determined under the Gramm-Leach-Bliley Act of 1999 that, subject to certain limitations, disease management and mail-order pharmacy services are complementary activities permissible for financial holding companies. To qualify, an activity must complement a financial activity and not pose a substantial risk to the safety or soundness of depository institutions or the financial system generally. The Board concluded that disease management and mail-order pharmacy services complement the financial activity of underwriting and selling health insurance and do not pose a substantial risk. The determination is effective September 7, 2007.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

On December 3, 2007, the Board similarly determined that, subject to certain limitations, energy management activities are permissible activities for financial holding companies because they complement the financial activities of engaging as principal in commodity derivatives activities and providing advisory services for derivatives transactions and do not pose a substantial risk. The determination is effective December 4, 2007.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

Permissible Financial Activities for Financial Holding Companies

On October 10, 2007, the Board determined under the Gramm-Leach-Bliley Act of 1999 and after consultation with the Secretary of the Treasury that, subject to certain limitations, the acquisition, management, and operation in the United Kingdom of certain third-party defined benefit pension plans are financial activities permissible for financial holding companies. The determination is effective October 12, 2007.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin.

Discount Rates in 2007

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 fourteen 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 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 2007, acting on recommendations of the Reserve Bank boards of directors, the Board approved four reductions in the primary credit rate, bringing the rate from $6\frac{1}{4}$ percent to $4\frac{3}{4}$ percent. The first of these reductions came on August 17 in response to the emergence of severe financial market strains in previous weeks. The Board approved a temporary narrowing of the spread of the primary credit rate over the FOMC's target rate to 50 basis points, from 100 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 thirty days, renewable by the borrower. These changes remained in effect at the end of 2007. In the remaining three instances, the Board reached its determinations on the primary credit rate in conjunction with the FOMC's decisions to lower the target federal funds rate by a cumulative 1 percentage point, from 51/4 percent to 41/4 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 2007).

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 2007, 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 moneymarket yields, typically resulting in a rate close to the federal funds rate target.

At year-end, the secondary and seasonal credit rates were $5\frac{1}{4}$ percent and 4.70 percent, respectively.

Term Auction Facility Credit

In December, 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 two TAF auctions in 2007-on December 17 and December 20; the resulting rates were 4.65 percent and 4.67 percent, respectively.

Votes on Discount Rate Changes

About every two weeks during 2007, the Board approved proposals by the twelve Reserve Banks to maintain the formulas for computing the secondary and seasonal credit rates. In December, the Board approved proposals by the twelve Reserve Banks to establish the auction method by which the TAF credit rate is set. Details on the four actions by the Board to approve changes in the primary credit rate are provided below.

August 16, 2007. The Board approved actions taken by the directors of the Federal Reserve Banks of New York and San Francisco to lower the rate on discounts and advances under the primary credit program by 1/2 percentage point, to 5³/₄ percent, effective August 17, 2007. The Board also approved an identical action subsequently taken by the directors of the Federal Reserve Banks of Boston, Philadelphia, Cleveland, Richmond, Atlanta, Chicago, Minneapolis, Kansas City, and Dallas, effective August 17, 2007, and the Federal Reserve Bank of St. Louis, effective August 20, 2007.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin. Votes against this action: None.

September 18, 2007. Effective this date, the Board approved actions taken by the directors of the Federal Reserve Banks of Boston, New York, Cleveland, Minneapolis, Kansas City, and San Francisco to lower the rate on discounts and advances under the primary credit program by 1/2 percentage point, to 51/4 percent. The same change was approved for the Federal Reserve Bank of St. Louis, effective September 19, 2007. The Board also approved an identical action subsequently taken by the directors of the Federal Reserve Banks of Richmond, Atlanta, and Dallas, effective September 19, 2007, and the Federal Reserve Banks of Philadelphia and Chicago, effective September 20, 2007.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors

Warsh, Kroszner, and Mishkin. Votes against this action: None.

October 31, 2007. Effective this date, the Board approved actions taken by the directors of the Federal Reserve Banks of New York, Richmond, Atlanta, Chicago, and San Francisco to lower the rate on discounts and advances under the primary credit program by 1/4 percentage point, to 5 percent. The same change was approved for the Federal Reserve Bank of St. Louis, effective November 1, 2007. The Board also approved an identical action subsequently taken by the directors of the Federal Reserve Banks of Boston, Philadelphia, Cleveland, Minneapolis, Kansas City, and Dallas effective November 1, 2007.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin. Votes against this action: None.

December 11, 2007. Effective this date, the Board approved actions taken by the directors of the Federal Reserve Banks of New York, Philadelphia, Cleveland, Richmond, Atlanta, and Chicago to lower the rate on discounts and advances under the primary credit program by ¹/₄ percentage point, to 4³/₄ percent. The same change was approved for the Federal Reserve Bank of St. Louis. effective December 12, 2007. The Board also approved identical actions subsequently taken by the directors of the Federal Reserve Banks of San Francisco, effective December 11, 2007; Boston, Minneapolis, and Dallas, effective December 12, 2007; and Kansas City, effective December 13, 2007.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin. Votes against this action: None.

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, 2007, the Federal Reserve Bank of New York was operating under the Domestic Policy Directive approved at the December 12, 2006, 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, 2007, were approved at the January 31, 2006, meeting.

Meeting Held on January 30–31, 2007

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 30, 2007 at 2:00 p.m., and continued on Wednesday, January 31, 2007 at 9:00 a.m.

Present:

- Mr. Bernanke, Chairman
- Mr. Geithner, Vice Chairman
- Ms. Bies
- Mr. Hoenig
- Mr. Kohn
- Mr. Kroszner
- Ms. Minehan
- Mr. Mishkin
- Mr. Moskow
- Mr. Poole
- Mr. Warsh
- Mr. Fisher, Ms. Pianalto, and Messrs. Plosser and Stern, Alternate Members of the Federal Open Market Committee
- Mr. Lacker and Ms. Yellen, Presidents of the Federal Reserve Banks of Richmond and San Francisco, respectively
- Mr. Barron, First Vice President, Federal Reserve Bank of Atlanta
- Mr. Reinhart, Secretary and Economist
- Ms. Danker, Deputy Secretary
- Ms. Smith, Assistant Secretary
- Mr. Skidmore, Assistant Secretary
- Mr. Alvarez, General Counsel
- Mr. Baxter, Deputy General Counsel
- Ms. Johnson, Economist
- Mr. Stockton, Economist
- Messrs. Connors, Evans, Fuhrer, Kamin, Madigan, Rasche, Sellon, Slifman, Tracy, and Wilcox, Associate Economists
- Mr. Dudley, Manager, System Open Market Account
- Messrs. Clouse and English, Associate Directors, Division of Monetary Affairs, Board of Governors

- Ms. Liang and Mr. Struckmeyer, Associate Directors, Division of Research and Statistics, Board of Governors
- Messrs. Gagnon, Reifschneider, and Wascher, Deputy Associate Directors, Divisions of International Finance, Research and Statistics, and Research and Statistics, respectively, Board of Governors
- Messrs. Dale and Orphanides, Senior Advisers, Division of Monetary Affairs, Board of Governors
- Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors
- Ms. Kole² and Mr. Lebow,² Section Chiefs, Divisions of International Finance, and Research and Statistics, respectively, Board of Governors
- Messrs. Doyle,² Schindler,³ and Wood,² Senior Economists, Division of International Finance, Board of Governors
- Messrs. Engen³ and Tetlow,² Senior Economists, Division of Research and Statistics, Board of Governors
- Ms. Weinbach, Senior Economist, Division of Monetary Affairs, Board of Governors
- Ms. Roush,³ Economist, Division of Monetary Affairs, Board of Governors
- Mr. Hambley,² Assistant to the Board, Office of Board Members, Board of Governors
- Mr. Gross, Special Assistant to the Board, Office of Board Members, Board of Governors

^{2.} Attended portion of the meeting relating to the role of economic forecasts in policy communications.

^{3.} Attended portion of the meeting relating to the economic outlook and monetary policy discussion.

- Mr. Luecke, Senior Financial Analyst, Division of Monetary Affairs, Board of Governors
- Ms. Low, Open Market Secretariat Specialist, Division of Monetary Affairs, Board of Governors
- Messrs. Judd and Rosenblum, Executive Vice Presidents, Federal Reserve Banks of San Francisco and Dallas
- Mses. Mester and Mosser and Messrs. Sniderman and Weinberg, Senior Vice Presidents, Federal Reserve Banks of Philadelphia, New York, Cleveland, and Richmond, respectively
- Mr. Cunningham, Vice President, Federal Reserve Bank of Atlanta
- 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 30, 2007 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.
- Cathy E. Minehan, President of the Federal Reserve Bank of Boston, with Charles I. Plosser, President of the Federal Reserve Bank of Philadelphia, as alternate.
- Michael H. Moskow, President of the Federal Reserve Bank of Chicago, with Sandra Pianalto, President of the Federal Reserve Bank of Cleveland, as alternate.
- William Poole, President of the Federal Reserve Bank of St. Louis, with Richard

W. Fisher, President of the Federal Reserve Bank of Dallas, as alternate.

Thomas M. Hoenig, President of the Federal Reserve Bank of Kansas City, with Gary H. Stern, President of the Federal Reserve Bank of Minneapolis, 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 2008, with the understanding that in the event of the discontinuance of their official connection with the Board of Governors or with a Federal Reserve Bank, they would cease to have any official connection with the Federal Open Market Committee:

Ben S. Bernanke Timothy F. Geithner	Chairman Vice Chairman
Vincent R. Reinhart	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
Karen H. Johnson	Economist
David J. Stockton	Economist

Thomas A. Connors, Charles L. Evans, Jeffrey C. Fuhrer, Steven B. Kamin, Brian F. Madigan, Robert H. Rasche, Gordon H. Sellon, Lawrence Slifman, Joseph S. Tracy, and David W. Wilcox, Associate Economists

By unanimous vote, the Committee amended its Rules of Organization by making a provision for a backup to the Manager of the System Open Market Account should he/she be unable to serve, and it made several technical changes to its Program for Security of FOMC Information.

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.⁴

By unanimous vote, the Committee approved the Authorization for domestic Open Market Operations with an amendment to paragraph 1(b) that brings the language for repurchase agreements into conformity with the authorization's existing language for outright purchases and reverse repurchase agreements. Accordingly, the Authorization for Domestic Open Market Operations was adopted, effective January 30, 2007, as shown below.

Authorization for Domestic Open Market Operations (Amended January 30, 2007)

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

^{4.} Secretary's note: Advice subsequently was received that the selection of Mr. Dudley as Manager was satisfactory to the board of directors of the Federal Reserve Bank of New York.

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 during the intermeeting developments period. Consistent with Committee practice, the Chairman, if feasible, will consult with the Committee before making any adjustment.

By unanimous vote, the Authorization for Foreign Currency Operations was reaffirmed in the form shown below.

Authorization for Foreign Currency Operations (Reaffirmed January 30, 2007)

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	
Danish kroner	
Euro	
Pounds sterling	
Japanese yen	

Mexican pesos Norwegian kroner Swedish kronor Swiss francs

B. To hold balances of, and to have outstanding forward contracts to receive or to deliver, the foreign currencies listed in paragraph A above.

C. To draw foreign currencies and to permit foreign banks to draw dollars under the reciprocal currency arrangements listed in paragraph 2 below, provided that drawings by either party to any such arrangement shall be fully liquidated within 12 months after any amount outstanding at that time was first drawn, unless the Committee, because of exceptional circumstances, specifically authorizes a delay.

D. To maintain an overall open position in all foreign currencies not exceeding \$25.0 billion. For this purpose, the overall open position in all foreign currencies is defined as the sum (disregarding signs) of net positions in individual currencies. 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	

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 30, 2007)

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 Interna-

tional 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 30, 2007)

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 transactions 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, showed that economic expansion had picked up in the fourth quarter of 2006, but was uneven across sectors. Considerable vigor in consumer spending late last year boosted economic growth in the fourth quarter, supported by further increases in employment and income. A surge in net exports and a pickup in defense spending also raised output growth last quarter, but these factors

were expected to prove largely transitory. The decline in residential construction continued to weigh on overall activity, but some indications of stabilization in the demand for homes had emerged. Outlays for business fixed investment softened in the fourth quarter. Although a spike in energy prices lifted total consumer price inflation in December, readings on core inflation had edged lower in recent months.

The labor market exhibited continued strength through year-end. Nonfarm payrolls rose robustly again in December, driven by further gains in the service-producing sectors. Employment in the manufacturing and construction industries declined further, but by less than in the previous several months. Aggregate hours of private production or nonsupervisory workers edged up further. The unemployment rate held steady at 4.5 percent.

Industrial production firmed in December after having softened in the preceding three months. Output of manufacturing industries rose noticeably in December after being flat in November; the increase was associated with sizable gains in the production of semiconductors, computers, and commercial aircraft. Motor vehicle output turned up in November and December, but remained low compared with earlier in the year as vehicle makers continued their efforts to pare inventories. After contracting in November, output in the mining sector increased in December, boosted by a rise in the production of crude oil. In conunseasonably warm trast, weather caused a sharp cutback in the output of utilities in December.

Real consumer spending rose briskly in November and December, buoyed by sizable increases in outlays for non-auto consumer goods. Spending on services, in contrast, appeared to be expanding only moderately toward year-end, as warmer-than-usual temperatures led to a drop in real outlays for energy services in November and probably damped expenditures in that category again in December. Real disposable income posted solid gains in October and November and likely rose further in December, reflecting increases in wages and salaries and further declines in energy prices. Although house-price appreciation appeared to have slowed further since the end of the third quarter, robust gains in equity prices likely resulted in a small rise in the ratio of household wealth to disposable income last quarter. Readings on consumer sentiment moved up at the end of last year and held steady in early 2007.

Residential construction activity remained quite weak late last year, but home sales showed some tentative signs of stabilization. Single-family housing starts declined modestly in December, reversing about half of November's gain. However, new permit issuance edged up in December after having moved down steadily for nearly a year. Construction in the multifamily sector, which accounts for a much smaller share of new home construction, rose sharply in December to the upper end of the range that has prevailed over the past decade. Sales of existing single-family homes held steady in November and rose in December, while sales of new homes inched up in both months. Inventories of unsold homes remained considerable although they ticked down in December for the second straight month. The most timely indicators of home prices, which are not adjusted for changes in quality or the mix of homes sold, pointed to small declines.

After having risen at a solid average pace in the first three quarters of last year, real investment in equipment and software fell in the fourth quarter. Business outlays on transportation equipment, a volatile spending category, dropped considerably. Sales of light vehicles to business customers declined to their lowest level in two years, which more than offset a surge in sales of medium and heavy trucks ahead of stricter regulations on truck engine emissions that went into effect this year. Spending on high-tech capital goods moderated. Outside of the transportation and hightech sectors, real spending declined last quarter. That weakness appeared to be concentrated in equipment related to construction and motor vehicle manufacturing. Nonresidential construction activity decelerated late last quarter; however, indicators of future expenditures in this sector remained firm, with office and industrial vacancy rates somewhat below their historical averages. Overall, prospects for business spending continued to be supported by robust corporate cash flow and a low cost of capital.

Business inventories remained elevated in the fourth quarter. In November, the book-value ratio of inventories to sales for the manufacturing and trade sectors (excluding motor vehicles) stood near its highest level since early 2005. Although relatively high ratios of inventories to sales appeared to be associated in part with developments in the homebuilding and motor vehicle sectors, some indications of inventory imbalances in other sectors had recently become evident.

The U.S. international trade deficit narrowed again in October, primarily reflecting declines in both the price and volume of imported oil. In addition, imports of non-oil industrial supplies, capital goods, and automotive products fell, offsetting small increases in imports of consumer goods, food, and services. In November, the trade deficit edged down further—to its smallest level since mid-2005—as export growth outpaced a modest increase in non-oil imports, and oil imports remained flat.

Economic activity in the advanced foreign economies appeared to have accelerated in the fourth quarter, supported by a broad-based firming of domestic demand and strong employment gains. In the euro area, consumer sentiment was lifted by lower unemployment, and economic growth continued at a solid pace. After contracting in the third quarter, consumption spending in Japan apparently rebounded last quarter, providing significant support to economic activity. The expansion in the United Kingdom's economy strengthened, likely reflecting a pickup in consumption growth. Output growth in Canada seemed to have firmed but likely remained below trend. Recent economic data for the emerging-market economies pointed to some moderation in the pace of growth in the fourth quarter. In China, the most recent evidence suggested that growth had remained strong.

While large fluctuations in energy prices continued to cause swings in overall consumer price inflation in recent months, readings on core inflation improved. Overall consumer prices were flat in November, but turned up in December because of a surge in retail energy prices that month. Still, the rise in the price index for personal consumption expenditures over the twelve months ending in December was estimated to have been noticeably less than that of the year-earlier period. Prices for personal consumption expenditures other than those for food and energy were estimated to have increased slightly faster over the twelve months of 2006 than they did a year earlier. However, the three-month change in core prices in December likely was down considerably from its peak in May. Yearover-year increases in average hourly earnings late last year continued to run

ahead of those a year earlier. However, hourly compensation of private industry workers, as measured by the employment cost index, rose at a moderate rate in the three months ending in December, a touch below the pace registered in the previous quarter. Survey measures of households' year-ahead inflation expectations held steady through January at levels that were below those reported in the second and third quarters of last year, and respondents' longer-term inflation expectations had been unchanged since ticking down in the middle of 2006.

At its December meeting, the Federal Open Market Committee (FOMC) decided to maintain its target for the federal funds rate at 51/4 percent. The Committee's accompanying statement noted that economic growth had slowed over the course of the year, partly reflecting a substantial cooling of the housing market. Although recent indicators had been mixed, the economy seemed likely to expand at a moderate pace on balance over coming quarters. Readings on core inflation had been elevated, and the high level of resource utilization had the potential to sustain inflation pressures. However, inflation pressures seemed likely to moderate over time, reflecting reduced impetus from energy prices, contained inflation expectations, and the cumulative effects of monetary policy actions and other factors restraining aggregate demand. Nonetheless, the Committee judged that some inflation risks remained. The extent and timing of any additional firming that may be needed to address these risks would depend on the evolution of the outlook for both inflation and economic growth, as implied by incoming information.

The FOMC's decision at the December meeting to leave its target for the federal funds rate unchanged and to retain the language in the statement regarding the risks to inflation appeared to match investors' expectations. However, the characterization of recent economic growth was reportedly interpreted by market participants as suggesting a slight softening in the Committee's outlook for the expansion. As a result, the expected path of the federal funds rate beyond the near term edged down. The subsequent release of the minutes from the meeting elicited little market reaction. Investors' outlook for economic activity firmed over the intermeeting period, as economic data releases came in stronger than expected and oil prices declined notably. As a result, investors markedly reduced the extent of policy easing anticipated over coming quarters, and yields on nominal and inflationindexed Treasury coupon securities rose. Measures of inflation compensation were little changed on net. Spreads of investment-grade corporate bond yields over those of comparable-maturity Treasury securities moved down a bit, while those of speculative-grade issues declined significantly more. Broad equity indexes edged higher. The foreign exchange value of the dollar against other major currencies rose, on balance, particularly versus the yen.

Debt of the domestic nonfinancial sectors was estimated to have expanded in the fourth quarter at a pace that was close to that registered over the first three quarters of the year. A pickup in merger-related borrowing appeared to boost business debt growth last quarter, and a sharp rise in the issuance of bonds and commercial paper more than offset a moderation in bank loans. In the household sector, the ongoing deceleration in house prices further restrained the growth of home mortgage debt. M2 continued to expand briskly in December and January, primarily reflecting strength in its liquid deposit component.

In its forecast prepared ahead of the meeting, the staff had revised up its estimate of growth of aggregate economic activity in the fourth quarter. Nonetheless, real GDP in the second half of last year was still projected to have increased at a pace that was a bit below the economy's long-run potential, primarily because of the ongoing adjustment in the housing sector and the lower level of motor vehicle production. Looking ahead, the staff expected the rate of increase in real GDP to be little changed in 2007 relative to the projected pace for the second half of 2006. However, with the contraction in housing activity expected to abate this year, the pace of economic growth was anticipated to edge back up to a level that was close to the staff's estimate of potential output growth by the end of 2007 and to remain in that same range throughout 2008. In light of developments in futures markets, the paths of both energy and import prices were projected to be lower than was previously thought. Against this background and with the rate of increase of shelter prices slowing down, the staff expected core inflation to edge down in 2007 and 2008. The advance data on the national income and product accounts for the fourth quarter that were released on the morning of the second day of the FOMC meeting showed stronger-than-expected net exports and a larger-than-anticipated accumulation of inventories. The staff interpreted this information as suggesting some upward revision to its estimate of output growth in the fourth quarter and perhaps a slight downward revision to its forecast for the current quarter.

In their discussion of the economic situation and outlook, meeting participants noted that the economic information received since the last meeting pointed to a somewhat more favorable outlook regarding both inflation and economic growth than they had earlier anticipated. Incoming data suggesting a leveling out in housing demand and strength in consumer spending outside the housing sector supported the view that the expansion remained resilient despite the appreciable decline in housing activity and recent weakness in the manufacturing sector. Over the next several quarters, economic activity would likely advance at a pace at or modestly below the economy's trend rate of growth. Thereafter, growth was likely to return to around its trend rate, which several participants viewed as likely to be higher than the staff's estimate. Favorable readings on core inflation and lower energy prices had also improved the odds that inflation pressures would diminish. However, it was noted that the prevailing level of inflation was uncomfortably high, and resource utilization was elevated. The upside risks to inflation remained the Committee's predominant concern.

In preparation for the Federal Reserve's semiannual report to the Congress on the economy and monetary policy, the members of the Board of Governors and the presidents of the Federal Reserve Banks submitted individual projections of the growth of nominal and real GDP, the rate of unemployment, and core consumer price inflation for the years 2007 and 2008, conditioned on their views of the appropriate path for monetary policy. The projections of the growth of nominal GDP were in the range of $4^{3}/_{4}$ to $5^{1}/_{2}$ percent for both years, with a central tendency of 5 to $5\frac{1}{2}$ percent for 2007 and $4\frac{3}{4}$ to $5\frac{1}{4}$ percent for 2008. Projections of the rate of expansion in real GDP for 2007 were in the $2\frac{1}{4}$ to $3\frac{1}{4}$ percent range, with a central tendency of $2^{1/2}$ to 3 percent; for 2008 the forecasts were in the slightly higher range of $2\frac{1}{2}$ to $3\frac{1}{4}$ percent, with a central tendency of $2^{3}/_{4}$ to 3 percent.

These rates of growth were associated with a civilian unemployment rate in the range of $4\frac{1}{2}$ to $4\frac{3}{4}$ percent in the fourth quarter of 2007 and $4\frac{1}{2}$ to 5 percent in the fourth quarter of 2008; the central tendency of these projections was $4\frac{1}{2}$ to $4\frac{3}{4}$ percent for both years. The rate of inflation, as measured by the core PCE price index, was projected to edge down from a range of 2 to $2\frac{1}{4}$ percent in 2007, with the central tendency being the same, to a range of $1\frac{1}{2}$ to $2\frac{1}{4}$ percent.

In their discussion of the major sectors of the economy, participants noted that the housing market showed tentative signs of stabilization in most regions. Anecdotal reports presented a mixed picture, with fairly firm home sales in some areas but continuing decline in others. But aggregate data indicated that home sales, which had been essentially flat since mid-year, had risen a bit during the fourth quarter. Mortgage applications for home purchases had risen from their low levels of last summer. Sentiment among homebuilders reportedly had improved in the past few months, and the inventory of new homes for sale had fallen. Nonetheless, participants noted that inventories remained elevated and needed to be worked down before growth in this sector resumed. Unseasonably warm weather so far this winter complicated the interpretation of recent data, but participants were optimistic that the risk of a much larger contraction in housing had diminished and that the drag on growth from the housing sector would ease later this year.

Participants saw continued gains in employment and incomes and lower energy prices as sustaining solid growth in consumer spending. Contacts reported healthy holiday sales in many regions, particularly late in the Christmas season. In addition, the growth of gift cards was mentioned as a factor that likely boosted retail sales in January. To date, weakness in the housing market had not appeared to have spilled over to aggregate consumption, although some such effect could not be ruled out as the growth in households' home equity slowed. The recent strength of consumption spending, together with favorable readings from consumer sentiment surveys, suggested that households were optimistic about prospects for employment and income. Indeed, the possibility that the personal saving rate would fail to rise as in the staff forecast was cited by some participants as posing a significant upside risk to the outlook.

Meeting participants noted that continued gains in nonresidential construction spending were offsetting some of the weakness on the residential side. Further advances in nonresidential investment were likely. Office vacancy rates were reported as declining in some areas. However, the recent decrease in energy prices had already led to a reduction in drilling activity and was likely to reduce some investment in alternative fuels. Participants noted that business fixed investment overall continued to be weaker than anticipated, suggesting some caution on the part of businesses in expanding capacity. Nonetheless, participants expected that, going forward, favorable financial conditions, strong corporate balance sheets, high profitability, and growth in sales would support a firming of investment spending.

Net exports were unexpectedly strong in the fourth quarter. In part, this development could be attributed to a temporary reduction in petroleum imports as a result of the unseasonably warm weather. Although imports were likely to pick up again, global economic growth, which had been strong of late, was expected to continue to provide ongoing support for growth in exports. The more favorable budget positions of the state and local governments were seen as permitting additional spending by such governmental units and hence as an additional source of stimulus to the economy. Strong federal tax receipts suggested that personal incomes were expanding vigorously.

Participants reported some continuing softness in manufacturing, primarily in industries related to housing or automobiles. The recent slackness in manufacturing activity appeared to be largely an inventory correction, which participants expected would be completed this year. Participants noted that the tone of contacts in the industrial sector was generally more positive than at the time of the December meeting, and some survey information pointed to expectations of a rebound in manufacturing activity later this year. However, the recent declines in energy prices were likely to restrain energy extraction as well as activity in associated energy-producing sectors.

Many participants observed that labor markets remained relatively taut, with significant wage pressures being reported in some occupations. In addition to the continuing shortages of skilled workers in technical and professional fields, recent reports suggested a scarcity of less skilled and unskilled workers in some areas of the country. One participant observed that some of the sluggishness in manufacturing job growth could be due to difficulties in hiring rather than indicating weakness in demand. So far, aggregate measures of labor compensation were showing only moderate increases, but looking ahead, the possibility that labor costs might rise more rapidly as a result of the tightness in labor market was seen as an upside risk to inflation.

All meeting participants expressed some concern about the outlook for inflation. To be sure, incoming data had suggested some improvement in core inflation, and a further gradual decline was seen as the most likely outcome, fostered in part by the continued stability of inflation expectations. However, participants did not yet see a downtrend in core inflation as definitively established. Although lower energy prices, declining core import prices, and a deceleration in owners' equivalent rent were expected to contribute to slower core inflation in coming months, the effects of some of these factors on inflation could well be temporary. The influence of more enduring factors, importantly including pressures in labor and product markets and the behavior of inflation expectations, would primarily determine the extent of more persistent progress. In light of the apparent underlying strength in aggregate demand, risks around the desired path of a further gradual decline in core inflation remained mainly to the upside. Participants emphasized that a failure of inflation to moderate as expected could impair the long-term performance of the economy.

In the Committee's discussion of monetary policy for the intermeeting period, all members favored keeping the target federal funds rate at $5\frac{1}{4}$ percent at this meeting. The confluence of betterthan-expected news on economic activity and inflation suggested somewhat smaller downside risks to economic growth as well as improved prospects for core inflation. Recent developments were seen as supporting the Committee's view that maintaining the current target was likely to foster moderate economic growth and to further the gradual reduction of core inflation from its elevated level over the past year. Nonetheless, Committee members saw continued risks to the economic outlook. The ongoing contraction in the housing

sector and the potential for spillovers to other sectors remained notable downside risks to economic activity, although those risks had diminished somewhat, and continuing strength in consumption suggested upside risks as well. All members agreed that the predominant concern remained the risk that inflation would fail to moderate as desired.

In light of the recent economic data and anecdotal information, the Committee agreed that the statement to be released after the meeting should acknowledge evidence of somewhat firmer economic growth and tentative signs of stabilization in the housing market. They further agreed that the statement should reiterate that the economy seemed likely to expand at a moderate pace over coming quarters. The statement would also note the modest improvement in readings on core inflation and the Committee's view that inflation pressures seemed likely to moderate over time. The members discussed whether the balance of risks language in its recent statements still was the best way to represent the views of the Committee and decided that a change was not warranted at this time. All members agreed that the statement should continue to stress that some inflation risks remained and note that additional policy firming was possible.

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 51/4 percent.

The vote encompassed approval of the text below for inclusion in the statement to be released at 2:15 p.m.:

The Committee judges that some inflation risks remain. The extent and timing of any additional firming that may be needed to address these risks will depend on the evolution of the outlook for both inflation and economic growth, as implied by incoming information.

> Votes for this action: Messrs. Bernanke and Geithner, Ms. Bies, Messrs. Hoenig, Kohn, and Kroszner, Ms. Minehan, Messrs. Mishkin, Moskow, Poole, and Warsh. Votes against this action: None.

The Committee then moved on to a discussion of the role of economic projections in policy communications. Meeting participants reviewed the objectives, advantages, and disadvantages of potential changes to the production and communication of policymakers' forecasts of key economic variables. They expressed support for continuing to report summaries of their individual forecasts, which they now make twice a year and which are included in the Monetary Policy Report. Participants agreed to explore whether changes to current practices might facilitate improved communication internally among themselves during the policy debate and externally by providing the public with additional context for understanding the Committee's policy decisions. No decisions on any such changes were made at this meeting, and a further discussion of communications topics was planned for the next FOMC meeting, confirmed for March 20–21, 2007.

The meeting adjourned at 2:45 p.m.

Notation Votes

By notation vote completed on December 29, 2006, the Committee unani-

mously approved the minutes of the FOMC meeting held on December 12, 2006.

By notation vote completed on January 5, 2007, the Committee unanimously selected William C. Dudley to serve at the pleasure of the Committee as Manager, System Open Market Account, on the understanding that his selection was subject to being satisfactory to the Federal Reserve Bank of New York.

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

> Vincent R. Reinhart Secretary

Meeting Held on March 20–21, 2007

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 20, 2007 at 2:30 p.m., and continued on Wednesday, March 21, 2007 at 9:00 a.m.

Present:

- Mr. Bernanke, Chairman
- Mr. Geithner, Vice Chairman
- Mr. Hoenig
- Mr. Kohn
- Mr. Kroszner
- Ms. Minehan
- Mr. Mishkin
- Mr. Moskow
- Mr. Poole
- Mr. Warsh
- Ms. Cumming, Mr. Fisher, Ms. Pianalto, and Messrs. Plosser and Stern, Alternate Members of the Federal Open Market Committee
- Messrs. Lacker and Lockhart, and Ms. Yellen, Presidents of the Federal Reserve Banks of Richmond, Atlanta, and San Francisco, respectively

- Mr. Reinhart, Secretary and Economist
- Ms. Danker, Deputy Secretary
- Ms. Smith, Assistant Secretary
- Mr. Skidmore, Assistant Secretary
- Mr. Alvarez, General Counsel
- Ms. Johnson, Economist
- Mr. Stockton, Economist
- Messrs. Connors, Evans, Fuhrer, Kamin, Madigan, Rasche, Slifman, and Wilcox, Associate Economists
- Mr. Dudley, Manager, System Open Market Account
- Messrs. Clouse and English,⁵ Associate Directors, Division of Monetary Affairs, Board of Governors
- Mr. Struckmeyer, Associate Director, Division of Research and Statistics, Board of Governors
- Mr. Reifschneider, Deputy Associate Director, Division of Research and Statistics, Board of Governors
- Messrs. Dale⁶ and Oliner, Senior Advisers, Divisions of Monetary Affairs and Research and Statistics, respectively, Board of Governors
- Mr. Hambley,⁶ Assistant to the Board, Office of Board Members, Board of Governors
- Mr. Meyer, Visiting Reserve Bank Officer, Division of Monetary Affairs, Board of Governors
- Mr. Small,⁵ Project Manager, Division of Monetary Affairs, Board of Governors
- Mr. Kiley⁶ and Ms. Kole,⁶ Section Chiefs, Divisions of International Finance and Research and Statistics, respectively, Board of Governors
- Mr. Doyle,⁶ Ms. Mauskopf,⁶ and Mr. Wood,⁶ Senior Economists, Divisions of International Finance, Research and Statistics, and International Finance, respectively, Board of Governors

- Ms. Roush, Economist, Division of Monetary Affairs, Board of Governors
- Mr. Gross, Special Assistant to the Board, Office of Board Members, Board of Governors
- Mr. Luecke, Senior Financial Analyst, Division of Monetary Affairs, Board of Governors
- Ms. Low, Open Market Secretariat Specialist, Division of Monetary Affairs, Board of Governors
- Mr. Rosenblum, Executive Vice President, Federal Reserve Bank of Dallas
- Mr. Hakkio, Ms. Mester, Messrs. Rolnick, Rudebusch, and Sniderman, Senior Vice Presidents, Federal Reserve Banks of Kansas City, Philadelphia, Minneapolis, San Francisco, and Cleveland, respectively
- Messrs. Cunningham and Hilton, Vice Presidents, Federal Reserve Banks of Atlanta and New York, respectively
- Ms. Sbordone, Research Officer, 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 transactions 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 the economy appeared to be expanding at a

^{5.} Attended Wednesday's session.

^{6.} Attended portion of the meeting relating to the discussion of communications issues.

modest pace in the first quarter. Declines in residential construction activity continued to weigh on overall activity, and business investment had softened considerably over the preceding several months, especially in equipment used in the construction and motor vehicle industries. However, consumer spending had increased appreciably in the early part of the year, and labor demand continued to expand, albeit at a somewhat slower pace than last year. Meanwhile, the twelve-month increase in core consumer prices remained elevated relative to its pace one year earlier.

Employment gains moderated in early 2007. In February, employment in the construction industry contracted considerably, in part because of severe winter storms; manufacturing employment also declined, but hiring in service-producing sectors remained solid. A decline in the average workweek led to a contraction in aggregate hours. At the same time, the unemployment rate edged down from 4.6 percent in January to 4.5 percent in February.

Industrial production rose strongly in February and was revised up for both December and January. In February, production was boosted by a rebound in motor vehicle assemblies and by a temporary surge in output at utilities that reflected a swing from unseasonably warm temperatures in January to colder weather in February. Production rose at a solid pace in all major high-tech categories. Output of materials and defense and space equipment expanded as well. In contrast, production of consumer goods and business equipment changed little, while output of construction supplies declined.

Real consumer spending appeared on track to rise at a robust pace in the first quarter, buoyed in part by a weatherrelated surge in spending on energy services and by a jump in sales of light motor vehicles. Outside of these areas, however, real consumer spending moderated. The determinants of household spending were mixed. Disposable personal income was estimated to have risen sharply in January, but the increase was partly the result of special factors, such as pay raises for federal and military personnel and cost-of-living adjustments to Social Security payments. Meanwhile, readings on consumer sentiment, which had been favorable in recent months, edged down in early March. The boost to consumer spending from earlier gains in wealth was likely being muted by the lagged effects of the upward trend in borrowing costs. In addition, recent declines in equity prices and slowing house price appreciation pointed to a modest reduction in households' wealth-to-income ratio in the first quarter.

Housing starts declined in January, extending the downward trend that had been in place since early 2006, but bounced back in February. However, adjusted permit issuance in the singlefamily sector continued to step down, suggesting that builders were still slowing the pace of new construction to work off elevated inventories. The inventory of new homes for sale remained high, although cuts in residential construction in the last few months had reduced the number of unsold homes. As at the time of the January meeting, available data suggested that housing demand was stabilizing. Sales of both new and existing single-family homes in recent months were, on balance, in line with the pace seen since mid-2006. However, a tightening of standards for subprime borrowers in recent weeks seemed likely to restrain home sales. House price appreciation had slowed further, with some measures showing outright declines in home values.

Business fixed investment had been sluggish in recent months. Real spending on equipment and software fell in the fourth quarter, and nominal orders for and shipments of nondefense capital goods excluding aircraft posted widespread declines in January, with transportation equipment showing a very large drop. Business purchases of light vehicles remained low, and new orders for and deliveries of medium and heavy trucks plunged in the last few months after a surge in 2006. Investment in goods and services other than transportation and high-tech equipment softened more than fundamentals had suggested. Declines in spending for capital equipment that is used heavily in the construction and motor vehicle industries accounted for an outsized share of the drop in orders and shipments at manufacturers outside high-tech and transportation in January. Investment in categories such as industrial equipment; electromedical, measuring, and controlling devices; and other electrical equipment also softened. In contrast, computer imports surged in January, suggesting rising domestic purchases, and computer sales appeared to have picked up in February. The ample cash reserves held by firms and ongoing reductions in the user cost of high-tech capital goods remained supportive of investment going forward.

Businesses accumulated inventories of items other than motor vehicles at a slower pace in January than in the previous two quarters. Even so, the ratio of inventories to sales for manufacturing and trade excluding motor vehicles remained elevated. In addition, purchasing managers at manufacturing firms, on net, continued to view their customers' inventory levels as too high.

The U.S. international trade deficit narrowed considerably in the fourth quarter. Exports rose, partly reflecting a robust increase in deliveries of civilian aircraft to foreign buyers, while imports were pushed down by a fall in the volume and price of imported oil. In January, the trade deficit was little changed.

Economic activity in the advanced foreign economies accelerated in the fourth quarter. In Japan, private consumption rebounded strongly, and private investment and net exports continued to boost growth. The pace of economic expansion in the euro area picked up as investment and exports rose. Growth in the United Kingdom firmed because of brisk investment spending and a rebound in consumption growth. In contrast, output in Canada decelerated in the fourth quarter as inventory accumulation turned down sharply. Recent data for the emergingmarket economies pointed to continued strength in activity, although there were signs that growth was moderating in some countries. Growth remained solid in China but decelerated in several other Asian economies and Mexico.

In January, the overall PCE price index rose moderately as a decline in energy prices helped to offset a jump in food prices. Meanwhile, the PCE price index excluding food and energy rose at a faster pace than in the previous two months. Increases in consumer energy prices and higher prices for fruits and vegetables in February reflected a period of unusually cold weather and contributed to an acceleration in that month's CPI. Excluding food and energy, core CPI inflation slowed slightly in February but remained elevated. In recent months, prices had risen across a broad range of core goods. On a twelvemonth-change basis, core CPI inflation in February was considerably above its pace a year earlier, largely because of a sharp acceleration in shelter rents over the past year. Average hourly earnings also rose at a noticeably faster pace during the year ending in February than during the preceding twelve-month period. Surveys indicated that households' expectations of inflation over the next year were little changed in February while households' and professional forecasters' longer-term inflation expectations edged lower.

At its January meeting, the Federal Open Market Committee maintained its target for the federal funds rate at 51/4 percent. The Committee's accompanying statement noted that recent indicators had suggested somewhat firmer economic growth and that some tentative signs of stabilization had appeared in the housing market. Overall, the economy seemed likely to expand at a moderate pace over coming quarters. Readings on core inflation had improved in recent months, and inflation pressures seemed likely to moderate over time, but the high level of resource utilization had the potential to sustain inflation pressures. The Committee judged that some inflation risks remained. The extent and timing of any additional firming that might be needed to address these risks would depend on the evolution of the outlook for both inflation and economic growth, as implied by incoming information.

The FOMC's decision at its January meeting was in accord with market expectations, but the accompanying statement reportedly was read as a sign that the Committee was more sanguine about inflation prospects than in December, and the expected path for monetary policy beyond 2007 edged lower. Policy expectations declined a bit more in the wake of the Chairman's semiannual monetary policy testimony, which apparently reinforced investors' beliefs that the FOMC anticipated gradually diminishing inflation pressures. Economic data releases were somewhat weaker than expected on balance over the first few weeks of the intermeeting period, and policy expectations moved appreciably lower on net by mid-February. Financial market volatility increased sharply in the second half of the intermeeting period amid an apparent pullback from risk-taking that was reportedly spurred by mixed news on domestic economic activity, mounting concerns about the subprime mortgage sector, and significant declines in foreign equity prices. On net over the intermeeting period, investors tilted their anticipated path for monetary policy beyond mid-2007 down substantially, and yields on two- and ten-year nominal Treasury securities fell 30 to 40 basis points. Yields on inflation-indexed Treasury securities generally declined somewhat less than their nominal counterparts, leaving inflation compensation slightly lower across the term structure. Broad stock price indexes dropped several percent on net over the period. Yields on investment-grade corporate bonds fell about in line with those on Treasury securities of comparable maturity. In contrast, yields on speculative-grade bonds declined only modestly, leaving risk spreads noticeably wider, albeit still narrow by historical standards.

Domestic nonfinancial sector debt appeared to be continuing to rise at a relatively brisk rate in the first quarter. Despite the recent volatility in financial markets, funding in the bond and syndicated loan markets appeared to remain readily available. However, borrowing by nonfinancial corporations was estimated to be moderating somewhat in the first quarter, with a step-down in bond issuance associated with merger and acquisition activity. Indicators pointed to a continuing deceleration in house prices this quarter, and home mortgage borrowing probably continued to slow. M2 increased more moderately in February than at the end of 2006 as the expansion

of liquid deposits slowed from its outsized fourth-quarter rate.

In its forecast prepared for this meeting, the staff marked down the projected increase in real GDP in the first quarter in response to weaker-than-expected incoming data on business equipment spending and federal defense purchases. The recent increase in oil prices and decline in equity prices, along with increased strains in the subprime mortgage sector, were expected to exert some drag on real activity over the remainder of the year. Even so, real GDP growth was expected to pick up to a rate a little below that of the economy's long-run potential for the remainder of 2007, as declines in residential construction activity lessened, and to remain at a similar rate in 2008. The increase in energy prices over the intermeeting period led the staff to revise up its forecast for headline PCE inflation during the first half of this year, but the staff continued to expect that core PCE inflation would edge down over the remainder of this vear and next.

In their discussion of the economic situation and outlook, meeting participants agreed that, while recent economic data had been mixed, the economy was likely to expand at a moderate pace in coming quarters. Although the housing sector adjustment continued, accumulating data suggested that the demand for homes was leveling out. Business fixed investment had been soft in recent months, but financing conditions and other fundamentals remained favorable for a pickup in capital spending. Moreover, continuing gains in personal income could be expected to support growth in consumer spending. Thus economic growth likely would increase in coming quarters to a pace close to or modestly below the economy's trend growth rate. However, additional evidence of sluggish business investment and recent developments in the subprime mortgage market suggested that the downside risks relative to the expectation of moderate growth had increased in the weeks since the January FOMC meeting. At the same time, the prevailing level of inflation remained uncomfortably high, and the latest information cast some doubt on whether core inflation was on the expected downward path. Most participants continued to expect that core inflation would slow gradually, but the recent readings on inflation and productivity growth, along with higher energy prices, had increased the odds that inflation would fail to moderate as expected; that risk remained the Committee's predominant concern.

Participants reported signs of stabilization in housing demand in most regions of the country. At the national level, sales of new and existing homes, while fluctuating in recent months, did not display declining trends. The inventory of new homes for sale reportedly had fallen further from its recently elevated level. Participants noted, however, that such inventories likely would need to be worked down appreciably more before growth in housing construction would resume. The increase in delinguencies on subprime adjustable-rate mortgage loans and the ensuing increase in interest rates and tightening of credit standards in the subprime mortgage market likely would constrain home purchases by some borrowers, perhaps retarding the recovery in the housing sector. However, there was no sign of spillovers from the subprime market to the overall mortgage market; indeed, interest rates on prime mortgage loans had declined somewhat in recent weeks, along with yields on U.S. Treasury securities. Moreover, home-buying attitudes had improved and continuing job growth could be expected to support home sales.

Business fixed investment spending had been surprisingly weak of late, given strong corporate balance sheets, high profitability, anticipated growth in sales, and favorable financial conditions. Participants continued to expect these fundamentals to support a firming of investment spending going forward, and they saw no indication that recent market volatility had prompted a reduction in the availability of financing for business investment. Also, declining office vacancy rates in some areas were spurring gains in nonresidential construction activity, and further advances in commercial construction were seen as likely. Energy prices were high enough to encourage continued investment in alternative fuels. However, the relatively slow pace of investment in recent months might be signaling that business executives had become less certain about the outlook, and perhaps that they expected quite modest gains in sales. Participants agreed that the possibility of persistently sluggish investment spending was an important downside risk to the outlook for economic growth.

Growth in consumer spending would likely continue to be supported by gains in employment and incomes. Meeting participants noted that weakness in the housing market had not spilled over to aggregate consumption-though the flattening out in house prices likely would contribute to an increase in the personal saving rate-and turmoil in the subprime mortgage market did not appear to be generating any diminution in the availability of other types of household credit. The recent increase in oil prices and the reduction in household net worth resulting from the small net declines in equity prices during the intermeeting period warranted a modest downward adjustment in projected growth of consumer spending. Even so, the possibility that the personal saving

rate would fail to rise as projected in the staff forecast remained an upside risk to the outlook.

Growth in federal as well as state and local government spending probably would remain a source of stimulus to the economy. Moreover, continued expansion in domestic demand in our major trading partners could be expected to sustain solid growth in U.S. exports.

Many participants again reported softness in manufacturing, primarily but not exclusively in industries related to housing or automobiles. However, a number of firms outside of the housing sector including auto companies—appeared to have made progress in reducing inventories to more comfortable levels, and contacts in the industrial sector were generally optimistic about future growth. Such attitudes were consistent with national and regional surveys that pointed to a rebound in manufacturing activity later this year.

Anecdotal and statistical evidence suggested that labor markets remained relatively tight. Business contacts continued to report shortages of skilled workers in technical and professional fields, with significant wage pressures in some occupations, as well as a scarcity of less skilled and unskilled workers in some areas of the country. So far, aggregate measures of labor compensation were showing only moderate increases, but, looking ahead, the possibility that labor costs might rise more rapidly was seen as an upside risk to inflation. It was noted, however, that increases in compensation that exceeded productivity gains might be absorbed to some extent by a narrowing of firms' high profit margins. Participants expected that productivity growth would pick up as firms slowed hiring to a pace more in line with output growth but acknowledged that the improvement might be limited, particularly if business investment spending were to remain soft.

Most participants continued to expect a gradual decline in core inflation over the next year or two, fostered by stable inflation expectations, a likely deceleration in shelter costs, and a slight easing of pressures on resources. Nonetheless, all meeting participants expressed concern about the risks to this outlook. The latest readings on core inflation were higher than expected, and it was difficult to discern whether the apparent downward trend in core inflation during the past few quarters was continuing. Also, the recent increases in prices for energy and some non-energy imports likely would boost overall inflation in the near term and might put upward pressure on prices of some core goods and services. Moreover, rates of resource utilization that were near the high end of historical experience suggested a possibility that inflation pressures could build. Participants agreed that risks around the expected and desired path of a gradual decline in core inflation remained mainly to the upside; some noted that upside risks to inflation appeared to have increased slightly in recent months.

In the Committee's discussion of monetary policy for the period between its March and May meetings, all members favored keeping the target federal funds rate at 51/4 percent. Recent developments were seen as supporting the Committee's view that maintaining the current target was likely to foster moderate economic growth and to further the gradual reduction of core inflation from its elevated level. Nonetheless, the combination of generally weaker-thanexpected economic indicators and uncomfortably high readings on inflation suggested increased downside risks to economic growth and greater uncertainty that the expected gradual decline in core inflation would materialize.

In light of the recent economic data and anecdotal information, the Committee agreed that the statement to be released after the meeting should note that economic indicators had been mixed. that the adjustment in the housing market was ongoing, and that the economy seemed likely to expand at a moderate pace over coming quarters. Members agreed the statement also should indicate that inflation pressures seemed likely to moderate over time, but that recent readings on core inflation had been somewhat elevated and the high level of resource utilization had the potential to sustain inflation pressures. A persistence of inflation at recent rates could eventually have adverse consequences for economic performance. All members agreed the statement should indicate that the Committee's predominant policy concern remains the risk that inflation will fail to moderate as expected. The Committee agreed that further policy firming might prove necessary to foster lower inflation, but in light of the increased uncertainty about the outlook for both growth and inflation, the Committee also agreed that the statement should no longer cite only the possibility of further firming. Instead, the statement should indicate that future policy adjustments will depend on the evolution of the outlook for both inflation and economic growth, as implied by incoming information.

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 $5\frac{1}{4}$ percent.

The vote encompassed approval of the text below for inclusion in the statement to be released at 2:15 p.m.:

In these circumstances, the Committee's predominant policy concern remains the risk that inflation will fail to moderate as expected. Future policy adjustments will depend on the evolution of the outlook for both inflation and economic growth, as implied by incoming information.

Votes for this action: Messrs. Bernanke, Geithner, Hoenig, Kohn, and Kroszner, Ms. Minehan, Messrs. Mishkin, Moskow, Poole, and Warsh. Votes against this action: None.

The Committee then returned to the topic of improving policy communications. Participants expressed a range of views on the possible advantages and disadvantages of specifying a numerical price objective for monetary policy and on technical aspects of a quantification. Participants emphasized that any such move would need to be consistent with the Committee's statutory objectives for promoting maximum employment as well as price stability. The Committee made no decisions on this issue. Participants also discussed the communications role of the economic projections that are made periodically by the members of the Board of Governors and the Reserve Bank presidents. A number of substantive and practical issues would still need to be evaluated before the Committee could make decisions about an enhanced role for projections in explaining policy. The Committee planned to continue its review of communication issues at the FOMC meeting in June 2007.

It was agreed that the next meeting of the Committee would be held on Wednesday, May 9, 2007.

The meeting adjourned at 1:30 p.m.

Notation Vote

By notation vote completed on February 20, 2007, the Committee unanimously approved the minutes of the FOMC meeting held on January 30–31, 2007.

Vincent R. Reinhart Secretary

Meeting Held on May 9, 2007

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Wednesday, May 9, 2007 at 8:30 a.m.

Present:

- Mr. Bernanke, Chairman Mr. Geithner, Vice Chairman Mr. Hoenig Mr. Kohn Mr. Kroszner Ms. Minehan Mr. Mishkin Mr. Moskow Mr. Poole Mr. Warsh Mr. Fisher, Ms. Pianalto, and Messrs. Plosser and Stern, Alternate Mem-
- Mr. Fisher, Ms. Pianalto, and Messrs. Plosser and Stern, Alternate Members of the Federal Open Market Committee
- Messrs. Lacker and Lockhart, and Ms. Yellen, Presidents of the Federal Reserve Banks of Richmond, Atlanta, and San Francisco, respectively
- Mr. Reinhart, Secretary and Economist
- Ms. Danker, Deputy Secretary
- Ms. Smith, Assistant Secretary
- Mr. Skidmore, Assistant Secretary
- Mr. Alvarez, General Counsel
- Mr. Baxter, Deputy General Counsel
- Ms. Johnson, Economist
- Mr. Stockton, Economist
- Messrs. Connors, Evans, Kamin, Madigan, Rasche, Slifman, Tracy, and Wilcox, Associate Economists
- Mr. Dudley, Manager, System Open Market Account
- Messrs. Clouse and English, Associate Directors, Division of Monetary Affairs, Board of Governors
- Ms. Liang and Mr. Struckmeyer, Associate Directors, Division of Research and Statistics, Board of Governors
- Messrs. Leahy and Wascher, Deputy Associate Directors, Divisions of International Finance and Research and Statistics, respectively
- Mr. Dale, Senior Adviser, Division of Monetary Affairs
- 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. Luecke, Senior Financial Analyst, 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
- Ms. Green, First Vice President, Federal Reserve Bank of Richmond
- Mr. Rosenblum, Executive Vice President, Federal Reserve Bank of Dallas
- Mr. Hakkio, Ms. Perelmuter, Messrs. Rolnick, Rudebusch, Sniderman, and Weinberg, Senior Vice Presidents, Federal Reserve Banks of Kansas City, New York, Minneapolis, San Francisco, Cleveland, and Richmond, respectively
- Messrs. Dotsey, Tallman, and Tootell, Vice Presidents, Federal Reserve

Banks of Philadelphia, Atlanta, and Boston, 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 transactions 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 2007 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.

The information reviewed at the May meeting suggested that economic activity had expanded at a below-trend pace in recent months. Gains in payroll employment had moderated, and the unemployment rate appeared to have stabilized after a period of decline. Housing construction remained under pressure from weak demand and large inventories of unsold homes, and consumer spending appeared to have slowed in recent months. Business fixed investment remained subdued. Manufacturing production, however, showed signs of strengthening after a period of considerable softness. Rising energy prices pushed up total PCE price inflation in March, while the twelve-month increase in core PCE prices was just slightly above its year-earlier pace.

The average monthly increase in payroll employment through the first four months of this year was well below the relatively strong pace recorded in the fourth quarter of 2006. In April, the construction industry continued to shed jobs, manufacturing employment declined further, and retailers reduced hiring after a large gain in March. The unemployment rate stood at 4.5 percent in April, similar to its average in the first quarter, and the labor force participation rate moved down.

Industrial production increased at a modest annual rate of 1.4 percent in the first quarter, with the monthly pattern reflecting fluctuations in the output of utilities, which was influenced importantly by swings in weather conditions. Manufacturing output declined, on net, over the six months ending in February as a result of inventory-related adjustments in a number of industries. However, factory production turned up in March. The output of high-tech industries rose briskly; the production of consumer goods increased; and the output of business equipment, construction supplies, and materials picked up. The limited information available on industrial production for April suggested that output had been boosted by the scheduled pickup in motor vehicle assemblies.

Real consumer expenditures increased at a brisk pace in the first quarter, although monthly gains in spending slowed over the course of the quarter, in part because of swings in weatherrelated outlays on energy goods and energy services. Retail sales of both autos

and light trucks moved up in the first quarter, but eased a bit in April. Real spending on goods other than motor vehicles, which had shown exceptional vigor late last year, was broadly flat between December and March. However, outlays on non-energy services were reported to have posted solid gains, especially in March. Real disposable personal income rose smartly in the first quarter. Wages and salaries increased solidly, on average, and the Bureau of Economic Analysis estimated that income in January was boosted by unusually large bonus payments and stock option exercises. The household wealth-toincome ratio likely ticked down in the first quarter, as the stock market rose only a little and house prices remained soft. However, given the surge in stock prices in April, much of the lost ground had probably since been made up.

Residential construction activity remained soft as builders attempted to work off elevated inventories of unsold new homes. Single-family housing starts moved up in March, almost certainly boosted by unusually warm and dry weather; single-family permit issuance also increased. Although existing home sales declined in March, the level of sales was only slightly below the steady pace that had prevailed in the second half of 2006. By contrast, new home sales fell sharply in the first two months of the year and had recovered only a bit in March. All told, recent readings on home sales suggested that housing demand had weakened further. Houseprice appreciation continued to slow, and some measures were again showing declines in home values.

Real spending on equipment and software rose modestly in the first quarter after having fallen in the fourth quarter of 2006. Spending on high-tech equipment, boosted by a surge in outlays on computers, posted a substantial increase in the first quarter. In addition, purchases of communications equipmentwhich tend to be volatile quarter to quarter-rebounded strongly after a fourth-quarter dip. By contrast, spending on transportation equipment declined significantly: Although domestic spending on aircraft jumped after three weak quarters, purchases of medium and heavy trucks dropped sharply, largely as a consequence of a pull-forward of truck purchases in the latter part of last year in anticipation of the tighter emissions standards that took effect in January. Business investment in equipment other high-tech and transportation than dropped in the first quarter, although the weakness in this broad category appeared to have been especially pronounced around the turn of the year and to have lessened somewhat over the course of the quarter. Robust corporate cash reserves and continuing declines in the user cost of high-tech goods remained supportive of equipment and software spending going forward. Real outlays for nonresidential construction regained some momentum in the first quarter of this year after having hit a lull in late 2006.

Real nonfarm inventory investment excluding motor vehicles increased at a slower pace in the first quarter of 2007 than in the previous quarter. The downshift in inventory investment had helped to reduce the apparent overhangs that had emerged in late 2006. In the motor vehicle sector, the sharp decline in the pace of assemblies over the past few quarters appeared to have brought inventories back into line with sales. In April, surveys indicated that the net number of firms who viewed their customers' inventory levels as too high had dropped back from elevated readings over the previous two quarters.

The U.S. international trade deficit narrowed in February, reflecting a steep

drop in imports, which more than offset a sizable decline in exports. Within imports, the value of oil imports plunged, reflecting decreases in both prices and quantities, and imports of industrial supplies, capital goods, and automotive parts also fell. The lion's share of the February decline in exports was of capital goods. Smaller decreases occurred in exports of industrial supplies, consumer goods, and services.

Economic activity in advanced foreign economies appeared to have grown at a steady rate in the first part of the year. Canada's growth seemed to have rebounded from a disappointing fourth quarter. Renewed household demand in Japan pointed to further strong growth in the first quarter, while investment demand seemed to be underpinning growth in the United Kingdom. Although euroarea exports had slowed from the rapid pace set in the fourth quarter and the hike in the German value-added tax likely depressed consumption, overall economic conditions remained solid. Economic activity in the emerging market countries appeared to have continued to advance at a robust pace in the first quarter. Surging growth in China was a highlight of the strong performance of most countries in Asia. In Latin America, indicators pointed to further lackluster growth in Mexico and some weakening in Argentina, but in other countries, especially Brazil, conditions appeared more positive.

The total PCE price index rose substantially in both February and March. The advance in February was distributed across a broad range of categories, while the March increase was driven largely by a jump in the index for energy. Core PCE prices were unchanged in March after an upswing in February. Smoothing through the high-frequency movements, the twelve-month change in the core PCE price index in March was just a touch higher than the increase over the year-earlier period. Accelerations in the costs of housing and medical services were major contributors to both core CPI and core PCE inflation over the past year. Household surveys conducted in April indicated that the median expectation for year-ahead inflation had moved up, consistent with the recent pickup in headline CPI inflation. Median expectations of longer-term inflation had edged higher but were still in the narrow range seen over the past few years. Average hourly earnings for production or nonsupervisory workers, which had accelerated noticeably over the past couple of years, posted moderate increases in March and April.

At its March meeting, the Federal Open Market Committee (FOMC) maintained its target for the federal funds rate at 51/4 percent. The Committee's accompanying statement noted that recent economic indicators had been mixed and that the adjustment in the housing sector was ongoing. Nevertheless, the economy seemed likely to expand at a moderate pace over coming quarters. Recent readings on core inflation had been somewhat elevated. Although inflation pressures seemed likely to moderate over time, the high level of resource utilization had the potential to sustain those pressures. The Committee's predominant policy concern remained the risk that inflation would fail to moderate as expected. Future policy adjustments would depend on the evolution of the outlook for both inflation and economic growth, as implied by incoming information.

Market participants had largely anticipated the FOMC's decision at its March meeting to leave the target federal funds rate unchanged. Nevertheless, the expected path for monetary policy moved lower on the announcement, as investors apparently interpreted the accompanying statement as suggesting that the Committee's economic outlook had become somewhat more balanced. Howsubsequent FOMC communever. ications—including the Chairman's testimony before the Joint Economic Committee, speeches by various FOMC members, and the minutes from the March meeting—were generally seen as emphasizing the Committee's concern about upside risks to inflation. Over the intermeeting period, yields on nominal Treasury securities edged up at all maturities. Measures of inflation compensation based on inflation-indexed Treasury securities were little changed despite a significant rise in oil prices. Yields on investment-grade corporate bonds rose in line with those on comparablematurity Treasury securities, leaving their spreads little changed at fairly low levels. Spreads on speculative-grade corporate bonds narrowed. Equity prices climbed steeply amid solid earnings reports and improved sentiment, more than reversing the declines in the previous intermeeting period. The foreign exchange value of the dollar against other major currencies moved lower, on balance.

Gross bond issuance by nonfinancial businesses slowed from its torrid firstquarter pace in April, but acquisitionrelated financing continued to fuel the issuance of both investment- and speculative-grade corporate bonds. Commercial paper outstanding declined, but bank lending accelerated. In the household sector, the rise in home mortgage debt likely slowed a bit further in the first quarter, as home-price appreciation appeared to have remained sluggish. Consumer credit continued to expand at a moderate pace early in the year. M2 accelerated during March and April, primarily reflecting faster growth in liquid deposits, which were likely boosted in April by tax-related flows.

In its forecast prepared for this meeting, the staff expected the pace of economic activity to pick up from weak first-quarter growth to a rate a little below that of the economy's long-run potential for the remainder of this year and to increase at a pace broadly in line with potential output in 2008. The projected gradual acceleration in economic activity largely reflected the expected waning of the drag from residential investment, although recent readings on sales and inventories of new homes had been interpreted by the staff as suggesting that the ongoing contraction in residential investment would continue for longer than previously expected. In response to data received over the past year, the staff had marked down slightly its estimate of structural productivity growth and nudged up its estimate for the increase in labor supply-leaving its estimate of the overall growth of potential GDP broadly unchanged. The increases in energy and other commodity prices over the intermeeting period had led the staff to revise up its forecast for headline PCE inflation during the first half of the year. Nonetheless, the staff continued to expect core inflation to edge lower over the course of the next two years.

In their discussion of the economic situation and outlook, participants noted that their assessments of the mediumterm prospects for economic growth and inflation had not changed materially from the previous meeting. The pace of economic expansion had slowed in the first part of this year, but the recent subpar performance probably exaggerated the weakness of underlying demand, and the rate of economic growth was expected to pick up in coming quarters. Meeting participants anticipated that real GDP would advance at a pace a little below the economy's trend rate of growth through the remainder of this year and then pick up to a rate broadly

in line with the economy's trend rate in 2008. Most participants continued to expect core inflation to slow gradually, although considerable uncertainty surrounded that judgment and the Committee's predominant concern remained the risk that inflation would fail to moderate as expected.

The incoming data on new home sales and inventories suggested that the ongoing adjustment in the housing market would probably persist for longer than previously anticipated. In particular, the demand for new homes appeared to have weakened further in recent months, and the stock of unsold homes relative to sales had increased sharply. That said, participants also noted that sales of existing homes appeared to have held up somewhat better since the beginning of the year. Moreover, the turmoil in the subprime market evidently had not spread to the rest of the mortgage market; indeed, mortgage rates available to prime borrowers remained well below their levels of last summer. Nevertheless, most participants agreed that, although the level of inventories of unsold homes that homebuilders desired was uncertain, the correction of the housing sector was likely to continue to weigh heavily on economic activity through most of this year-somewhat longer than previously expected.

Growth in consumer spending appeared to have slowed over the past few months. Real spending on goods had flattened out, and contacts in both the retail sector and the consumer credit sector reported a softening in the expansion of demand. In contrast to the rapid gains of recent years, meeting participants expected household expenditure to grow at a more moderate pace in coming quarters. Consumption was likely to be supported by continued advances in employment and incomes, as well as gains in stock prices; but the recent increases in gasoline prices probably would damp households' spending power in the near term, and the effect of the anticipated leveling out in home-price appreciation on household wealth was expected to contribute to a gradual increase in the personal saving rate over the medium run. Participants remained concerned that the housing market correction could have a more pronounced impact on consumer spending than currently expected, especially if house prices were to decline significantly.

The growth of business fixed investment seemed most likely to move higher in coming quarters, supported by strong corporate balance sheets and profits, favorable financial conditions, and a gradual strengthening in business output. The downside risks to business capital spending appeared to have diminished somewhat since the previous meeting. In particular, participants took note of the upturn in orders and shipments of capital goods, and of more upbeat surveys of business conditions. However, participants cautioned against drawing too much comfort from the most recent few data observations, and recognized that the current sluggishness of equipment outlays could persist for longer than currently anticipated, especially if financial market conditions became less supportive. Participants were also encouraged that, outside of the construction sector, the correction of inventories to more comfortable levels appeared well advanced, thus reducing the possibility that going forward this adjustment process could trigger shortfalls in business spending and output.

Economic activity in the rest of the world continued to advance briskly. Participants noted that strong foreign expansion should help to underpin demand for U.S. exports, but expressed some concern that the strength of global demand could contribute to price pressures at home. Prices of non-energy commodities, especially metals, had moved up markedly since the previous meeting. Moreover, inflationary pressures in a number of overseas economies appeared to have increased of late, perhaps partly in response to heightened levels of capacity utilization in those countries, and this development had the potential to add to the prices of U.S. imports. In that regard, several participants noted that the decline in the foreign exchange value of the dollar over the intermeeting period could reinforce the upward pressure on import prices.

Participants discussed how best to reconcile the slowdown in output growth over the past year with the relatively strong performance of the labor market. This apparent tension could partly reflect measurement issues; in particular, participants noted that the more-rapid gains in estimates of gross domestic income over this period might better capture the pace of activity than the modest advances in measured GDP. Aside from measurement problems, a possible explanation was that these differing trends largely related to the lagged adjustment of employment to the slowing pace of expansion. In that regard, several participants observed that the recent moderation in economic growth had been concentrated in the construction sector, but that measured employment in construction had not yet declined by a corresponding amount. This suggested that increases in overall employment in coming quarters may possibly be held down by notable declines in construction employment as the adjustment of the labor force in that sector played out. A slowing in employment could then occur in conjunction with a strengthening in productivity growth. Alternatively, some of the recent weakness in measured productivity growth could reflect a decline in the underlying trend in productivity and so might persist. Although this explanation might help account for some of the downshift in measured productivity growth, participants agreed that there appeared to be little other evidence pointing to a significant slowing of advances in structural productivity. In the context of this discussion, many participants commented that their view of potential output growth was somewhat more optimistic than that of the staff.

Labor markets appeared to remain relatively tight. Unemployment continued around the low levels seen since last fall, and many business contacts reported difficulties in recruiting suitably qualified workers, especially for certain types of professional and skilled positions. However, several participants observed that aggregate measures of labor compensation had so far increased only modestly, perhaps suggesting that the labor market might be less stretched than it appeared. Moreover, even if wages and salaries did accelerate, the resulting cost pressures might be absorbed by a narrowing in firms' profit margins from current elevated levels, rather than being passed on in the form of higher prices. On the other hand, some participants reported that their business contacts appeared very resistant to any squeeze in profit margins. All told, for most participants, the apparent tightness of the labor market remained a significant source of upside risk to inflation.

Nearly all participants viewed core inflation as remaining uncomfortably high and stressed the importance of further moderation. Although readings on core inflation in March had been more favorable, this followed several months of elevated inflation data and price pressures were not yet viewed as convincingly on a downward trend. Most participants expected core inflation to moderate gradually, fostered in part by stable inflation expectations and a likely deceleration in shelter costs. Some participants also expected the anticipated slight easing of pressures on resources to help nudge inflation lower, although others felt that small movements in resource utilization were unlikely to have discernible effects on inflation. All participants agreed that the risks around the anticipated moderation in inflation were to the upside; and some noted that a failure of inflation to moderate could entail significant costs particularly if it led to an upward drift in inflation expectations.

In the Committee's discussion of monetary policy for the intermeeting period, all members favored keeping the target federal funds rate at $5\frac{1}{4}$ percent. Recent developments were seen as supporting the Committee's view that maintaining the current target rate was likely to foster moderate economic growth and a gradual ebbing in core inflation. Members continued to view the risks to economic activity as weighted to the downside, although with turmoil in the subprime market appearing to have remained relatively well contained and business spending indicators suggesting a more encouraging outlook, these downside risks were judged to have diminished slightly. Members agreed that considerable uncertainty attended the prospects for inflation, and the risk that inflation would fail to moderate as desired remained the Committee's predominant concern.

In light of the recent economic data and anecdotal information, the Committee agreed that the statement to be released after the meeting should acknowledge that economic growth had slowed in the first part of the year. The Committee thought that the statement should reiterate the view that the adjustment in the housing market was ongoing, but that nevertheless the economy seemed likely to expand at a moderate pace over coming quarters. While readings on core inflation were lower in March, members felt that it was appropriate to emphasize that core inflation remained somewhat elevated. The Committee agreed that the statement should continue to note that their predominant policy concern was the risk that inflation would fail to moderate as expected, and that future policy adjustments would depend on the evolution of the outlook for both inflation and economic growth.

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 $5\frac{1}{4}$ percent.

The vote encompassed approval of the text below for inclusion in the statement to be released at 2:15 p.m.:

In these circumstances, the Committee's predominant policy concern remains the risk that inflation will fail to moderate as expected. Future policy adjustments will depend on the evolution of the outlook for both inflation and economic growth, as implied by incoming information.

Votes for this action: Messrs. Bernanke, Geithner, Hoenig, Kohn, and Kroszner, Ms. Minehan, Messrs. Mishkin, Moskow, Poole, and Warsh. Votes against this action: None.

Meeting participants briefly discussed the next steps in their review of communication issues and agreed to consider them at the next FOMC meeting, confirmed for June 27–28, 2007. The meeting adjourned at 1:15 p.m.

Notation Vote

By notation vote completed on April 10, 2007, the Committee unanimously approved the minutes of the FOMC meeting held on March 20–21, 2007.

Vincent R. Reinhart Secretary

Meeting Held on June 27–28, 2007

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Wednesday, June 27, 2007 at 2:00 p.m. and continued on Thursday, June 28, 2007 at 9:00 a.m.

Present:

- Mr. Bernanke, Chairman Mr. Geithner, Vice Chairman Mr. Hoenig Mr. Kohn Mr. Kroszner Ms. Minehan Mr. Mishkin Mr. Moskow Mr. Poole Mr. Warsh
- Mr. Fisher, Ms. Pianalto, and Messrs. Plosser and Stern, Alternate Members of the Federal Open Market Committee
- Messrs. Lacker and Lockhart, and Ms. Yellen, Presidents of the Federal Reserve Banks of Richmond, Atlanta, and San Francisco, respectively
- Mr. Reinhart, Secretary and Economist
- Ms. Smith, Assistant Secretary
- Mr. Skidmore, Assistant Secretary
- Mr. Alvarez, General Counsel
- Ms. Johnson, Economist
- Mr. Stockton, Economist
- Messrs. Connors, Evans, Fuhrer, Madigan, Rasche, Sellon, Slifman, and Wilcox, Associate Economists

- Mr. Dudley, Manager, System Open Market Account
- Messrs. Clouse and English, Associate Directors, Division of Monetary Affairs, Board of Governors
- Ms. Liang and Mr. Struckmeyer, Associate Directors, Division of Research and Statistics, Board of Governors
- Messrs. Leahy and Wascher, Deputy Associate Directors, Divisions of International Finance and Research and Statistics, respectively, Board of Governors
- Mr. Dale, Senior Adviser, Division of Monetary Affairs, Board of Governors
- Mr. Blanchard, Assistant to the Board, Office of Board Members, Board of Governors
- Mr. Gross,⁷ Special Assistant to the Board, Office of Board Members, Board of Governors
- Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors
- Mr. Ahmed⁸ and Ms. Kusko,⁸ Senior Economists, Divisions of International Finance and Research and Statistics, respectively, Board of Governors
- Mr. Luecke, Senior Financial Analyst, Division of Monetary Affairs, Board of Governors
- Ms. Beechey and Mr. Natalucci,⁸ Economists, 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 Cleveland

- Mr. Rosenblum, Executive Vice President, Federal Reserve Bank of Dallas
- Ms. Mester, Messrs. Sniderman, Weinberg, and Williams, Senior Vice Presidents, Federal Reserve Banks of Philadelphia, Cleveland, Richmond, and San Francisco, respectively
- Ms. McLaughlin and Mr. Tallman, Vice Presidents, Federal Reserve Banks of New York and Atlanta, respectively
- Ms. McConnell, Assistant Vice President, Federal Reserve Bank of New York
- Mr. Weber, Senior Research Officer, Federal Reserve Bank of Minneapolis

The information reviewed at the June meeting suggested that the expansion of economic activity rebounded in the second quarter from its subpar pace in the first quarter. Upswings in net exports and inventory investment were expected to contribute importantly to the rise in real GDP. Consumer spending appeared to have slowed from its rapid pace earlier in the year, while business fixed investment continued to rise at a modest rate. Residential construction remained weak as builders worked further to clear high inventories of unsold homes. Sharp increases in energy prices drove up overall inflation in April and appeared to have done so again in May; core inflation seemed to have remained subdued.

Employment continued to rise at a moderate pace; the average monthly increase in payroll employment in April and May was a little below that of the first quarter. In May, employment was boosted by strong hiring in the service sector, but the manufacturing and retail sectors continued to shed jobs. Larger payrolls and a slightly longer average workweek in May led to an increase in

^{7.} Attended portion of the meeting relating to monetary policy communications.

^{8.} Attended portion of the meeting relating to the economic outlook and monetary policy discussion.

aggregate hours; the unemployment rate held steady at 4.5 percent.

Industrial production increased modestly in April and May after having been little changed in the first quarter when some manufacturers restrained production to cope with a buildup in inventories. Manufacturing output edged up in recent months, reflecting increases in the output of light motor vehicles, other consumer durable goods, construction supplies, and durable materials. The production of high-tech industries also rose, albeit at a relatively sluggish pace compared with the brisk expansion seen around the turn of the year. Capacity utilization in the manufacturing sector in May was close to its long-run average and slightly below its level one year earlier.

The pace of real consumer spending appeared to have slowed somewhat in the second quarter after substantial increases late last year and early this year. The deceleration primarily reflected a flattening out of outlays for goods in recent months; spending on services continued to rise at a solid pace for the quarter as a whole, although the monthly pattern was affected by weather-related swings in outlays on energy services. The determinants of household spending were broadly supportive. Real disposable personal income rose at a moderate pace, on average, in the first four months of the year, boosted not only by ongoing gains in wages and salaries, but also by unusually large bonus payments and stock option exercises in the first quarter. Although the household wealthto-income ratio ticked down in the first quarter with the stock market up only a little and house prices remaining soft, the increase in stock prices in the second quarter likely made up much of the lost ground.

Elevated inventories of unsold new homes continued to weigh on residential

construction activity. In May, singlefamily housing starts declined, and adjusted permit issuance for the singlefamily sector stepped down further, indicating that builders were intending to slow further the pace of new construction. The monthly readings on sales of new and existing homes through May had fluctuated around levels lower than the average over the second half of 2006. Some, though not all, of this weakening in home sales was likely related to the tightening of lending standards for nonprime borrowers that began in February. Even though the inventory of new homes for sale ticked down in May, the months' supply in May remained noticeably above its level in late 2006. According to OFHEO's purchase-only price index for existing homes, house-price appreciation continued to slow in the first quarter.

Outlays for nonresidential construction appeared to have remained robust early in the second quarter. Business spending on equipment and software in recent months appeared to be about unchanged from the first quarter, although the softness was largely confined to outlays for transportation equipment. Shipments and orders for items other than transportation moved up markedly in March and April after weakness in earlier months, and, even with the small declines in May, the data pointed to a healthy rise in outlays in the second quarter. In particular, real spending on equipment other than high-tech and transportation seemed to be rebounding after sizable declines over the previous two quarters. After a surge in outlays on computers in the first quarter, spending on high-tech equipment appeared to be rising at a more modest pace in April and May. In contrast, spending on transportation equipment declined significantly. Purchases of medium and heavy trucks dropped further in May, continuing to reflect the payback from sales that were pulled forward into 2005 and 2006 in anticipation of tighter emissions standards that took effect in January. New orders for trucks picked up in May, albeit from very low levels. Shipments data indicated that spending on aircraft dropped back from the elevated level in the first quarter. The downtrend in the cost of capital was likely curtailed in recent weeks by the rise in corporate bond rates. Nonetheless, firms retained ample cash in reserve to finance investment.

Real nonfarm inventory investment excluding motor vehicles slowed appreciably in the first quarter of 2007, as firms in most industries appeared to have made considerable progress in addressing the inventory overhangs that developed in 2006. The adjustment apparently continued into the second quarter, as the ratio of inventories to sales for manufacturing and trade excluding motor vehicles ticked down further in April after a March decline. Inventories of light motor vehicles, which were pared down to more comfortable levels during the first quarter, continued to edge lower through May. Indeed, the inventory adjustment reached the point that, for the third month in a row, the May survey of purchasing managers indicated that, on net, more firms viewed their customers' inventory levels as too low rather than too high.

After no change between the fourth quarter and first quarter, the U.S. international trade deficit narrowed in April from its March level. The recent narrowing reflected a steep decline in many categories of goods imports and a modest increase in exports, especially of agricultural products. Nominal imports of petroleum were flat in April after surging in March despite steady increases in the price of imported oil.

Economic activity in advanced foreign economies appeared to have grown at a solid rate in the first quarter. Economic growth in Canada rebounded sharply from a disappointing fourth quarter, and growth picked up in the United Kingdom, owing primarily to a robust expansion in the service sector. In the euro area, export growth in the first quarter slowed from its rapid fourthquarter pace, and the hike in the German value-added tax likely temporarily depressed first-quarter consumption growth. Consumer spending showed signs of recovering in recent months, and overall, economic conditions in the euro area remained solid. In Japan, recent data suggested that growth in the second quarter had moderated from the vigorous first-quarter pace, with public spending and net exports likely sources of weakness. Recent data indicated that economic activity in emerging-market economies remained strong. Growth in China and India appeared to have moderated somewhat from the very high rates of the first quarter. In Latin America, indicators for Mexico suggested some recovery from the marked slowdown of the previous few quarters, while growth in Argentina and Brazil appeared to pick up as well.

Headline consumer price inflation stepped up in recent months, driven by large increases in the index for energy. However, readings on core inflation had declined. Core PCE prices rose 0.1 percent in April and were estimated to have posted a similar, modest increase in May. The recent readings had been held down, in part, by declines in volatile categories such as apparel and tobacco products that were likely to prove transitory; the rent components had also decelerated. The twelve-month change in core PCE prices in May was expected to be lower than the increase over the yearearlier period; however, over that longer period, the decline in core PCE inflation was almost entirely the result of a slowing in its nonmarket component. Household surveys conducted in early June indicated that the median expectation for year-ahead inflation increased further, consistent with the energy-driven acceleration in overall consumer prices in recent months. After edging higher in April and May, median expectations of longer-term inflation fell back in June and remained in the narrow range seen over the past two years. The twelvemonth change in average hourly earnings for production or nonsupervisory workers edged lower in recent months.

At its May meeting, the Federal Open Market Committee (FOMC) maintained its target for the federal funds rate at 5¹/₄ percent. The Committee's accompanying statement noted that economic growth slowed in the first part of the year and that the adjustment in the housing sector was ongoing. Nevertheless, the economy seemed likely to expand at a moderate pace over coming quarters. Core inflation remained somewhat elevated. Although inflation pressures seemed likely to moderate over time, the high level of resource utilization had the potential to sustain those pressures. The Committee's predominant policy concern remained the risk that inflation would fail to moderate as expected. Future policy adjustments would depend on the evolution of the outlook for both inflation and economic growth, as implied by incoming information.

Market participants had largely anticipated the FOMC's decision at its May meeting to leave the target federal funds rate unchanged, but some market participants were reportedly surprised by the retention of the assessment that inflation was "somewhat elevated." The publication of the minutes of the May meeting elicited little market response. Over the intermeeting period, however, investors seemed to reappraise their beliefs that the economic expansion would slow and that monetary policy easing would be forthcoming. This reappraisal seemed to be based in part on the release of some economic data in the United States and abroad that were more favorable than expected. As a result, the expected path of the federal funds rate over the coming year was marked up sharply in financial markets. Yields on nominal Treasury securities at all maturities also rose over the intermeeting period, with the most pronounced gains in forward rates three to five years ahead. Measures of long-horizon inflation compensation based on inflation-indexed Treasury securities edged slightly higher. Yields on investment-grade corporate bonds rose in line with those on comparablematurity Treasury securities, leaving their spreads little changed. In contrast, spreads on speculative-grade corporate bonds narrowed. Equity prices were volatile at times during the intermeeting period, but broad stock price indexes advanced modestly, on net, as favorable news on the economy and announcements of mergers and acquisitions outweighed the drag of higher bond yields. The foreign exchange value of the dollar against other major currencies was little changed, on balance.

Gross bond issuance by nonfinancial businesses surged in May from the already robust pace of earlier in the year. Acquisition-related financing continued to support corporate bond issuance, but a significant share of recent issues was reportedly designated for capital expenditures. Commercial paper outstanding was unchanged in May, but bank lending maintained a strong pace. In the household sector, mortgage debt expanded at a slower pace in the first quarter, reflecting the slowdown in homeprice appreciation over the past year and the lower pace of home sales. Interest rates available to prime borrowers on both fixed-rate and variable-rate mortgages increased along with other market interest rates. Consumer credit continued to expand at a moderate pace in the first quarter. After rising at a particularly rapid rate in the first quarter, M2 increased at a more moderate pace in April and May.

In preparation for this meeting, the staff reduced its estimate of the increase in real GDP in the first quarter and marked up its forecast of the rebound in economic activity in the second quarter, in large part because of a more substantial swing in inventory investment than previously expected. The revisions, however, left the projection of economic growth over the first half of the year unchanged. As was the case in May, economic activity was expected to increase at a rate a little below that of the economy's long-run potential for the remainder of the year and to rise at a pace broadly in line with potential output growth in 2008. The projected gradual acceleration in economic activity in coming quarters largely reflected the expected waning of the drag from residential investment and improvements in the pace of business fixed investment. Increases in energy and food prices over the intermeeting period led the staff to revise up its forecast for headline PCE inflation during the second quarter, but its projection of core PCE inflation was revised down. Although some of the recent slowing in readings on core PCE inflation was likely due to transitory factors, the staff took some signal from the data and trimmed its forecast for core PCE inflation slightly in coming quarters. Over the next several quarters, total PCE inflation was projected to moderate to a pace close to core PCE inflation.

In their discussion of the economic situation and outlook, participants noted that economic activity appeared to have

expanded at a moderate pace on balance over the first half of the year. In view of incoming data and anecdotal information, participants continued to anticipate moderate economic growth in coming quarters, with growth rising gradually to a pace close to that of potential output. Participants interpreted the most recent information on business spending, business sentiment, and the labor market as suggesting that the risks to growth were more balanced than at the time of the May meeting, despite the ongoing adjustment in the housing sector and the significant recent increases in longerterm interest rates. Participants generally expected that inflation would probably edge lower over the next two years, reflecting the waning of temporary factors that had boosted prices last year and a slight easing of pressures on resources. Recent data on core consumer prices were encouraging in this regard, but participants were wary of drawing any firm conclusions about future trends from a few monthly readings that could reflect transitory influences and remained concerned about forces that could contribute to inflation pressures. Against this backdrop, participants agreed that the risk that inflation would fail to moderate as expected remained their predominant concern.

In preparation for the Federal Reserve's semiannual report to the Congress on the economy and monetary policy, the members of the Board of Governors and the presidents of the Federal Reserve Banks submitted individual projections of the growth of nominal and real GDP, the rate of unemployment, and core consumer price inflation for the years 2007 and 2008, conditioned on their views of the appropriate path for monetary policy. The projections for the growth of nominal GDP were in the range of $4\frac{1}{2}$ to $5\frac{1}{2}$ percent, with a central tendency of $4\frac{1}{2}$ to 5 percent for 2007; for 2008, the projections for nominal GDP growth ranged between $4\frac{1}{2}$ to $5\frac{1}{2}$ with a central tendency of $4\frac{3}{4}$ to 5 percent. Projections for the rate of expansion in real GDP in 2007 were in a range from 2 to $2\frac{3}{4}$ percent in 2007, with a central tendency of $2^{1}/_{4}$ to $2\frac{1}{2}$ percent; for 2008, the projections ranged between $2\frac{1}{2}$ to 3 percent, with a central tendency of $2^{1/2}$ to $2^{3/4}$ percent. These rates of growth were associated with civilian unemployment rates in the range of $4\frac{1}{2}$ to $4\frac{3}{4}$ percent in the fourth quarter of 2007 and $4\frac{1}{2}$ to 5 percent in the fourth quarter of 2008; the central tendency of these projections was $4\frac{1}{2}$ to 4³/₄ percent in 2007 and about 4³/₄ percent in 2008. Projections for the rate of inflation, as measured by the core PCE price index, in 2007 were in a range of 2 to $2\frac{1}{4}$ percent in 2007 and $1\frac{3}{4}$ to 2 percent in 2008. The central tendencies of these projections in 2007 and 2008 were identical to the ranges for those years.

Participants generally agreed that the housing sector was likely to remain a drag on growth for some time yet and represented the most significant downside risk to the economic outlook. Although starts of single-family homes had moved up, on balance, over recent months, permits for new construction continued to decline. A number of participants noted that inventories of new homes for sale remained quite elevated. Housing activity was seen as likely to continue to contract for several more quarters. Participants also identified a number of downside risks associated with their outlook for residential construction. The recent increase in interest rates for prime mortgages could further dampen the demand for housing. Moreover, a number of participants pointed to rising mortgage delinquency rates and related difficulties in the subprime mortgage market as factors that could crimp

the availability of mortgage credit and the demand for housing.

Spillovers from the strains in the housing market to consumption spending had apparently been quite limited to date. To be sure, personal consumption expenditures appeared to be rising more slowly in recent months than earlier in the year, but that development was probably, at least in part, a result of the rise in gasoline prices, which was not expected to be extended. Participants generally anticipated moderate gains in consumption spending over coming months, supported by the strong labor market and solid growth in personal income. Still, the advance in spending was expected to fall short of income growth, and the saving rate was anticipated to trend higher over coming quarters from the unusually low levels of recent years. Some participants noted a risk that the saving rate could rise more than currently foreseen, particularly if household wealth were depressed by a further softening in house prices or by a less buoyant equity market that might accompany a potential slowing in the growth of corporate earnings. Several participants noted that higher interest rates and a potential tightening in credit availability might also be factors that could contribute to a rise in the personal saving rate. At the same time, participants recognized that consumption growth had held up to date and saw a risk that the saving rate could fail to rise as much as currently expected, particularly if equity markets continued to register significant gains.

A number of participants remarked that the recent data on business spending were more encouraging than those available at the time of the May meeting. In particular, orders and shipments for nondefense capital goods had stepped up, on balance, from March through May, and survey indicators of business conditions had improved of late. Strength in foreign demand for U.S. goods and services was another factor that seemed likely to contribute to the firming of business spending. Participants noted that inventories appeared to be better aligned with sales, boding well for a resumption of inventory accumulation and a pickup in manufacturing activity. At the same time, some recognized the possibility that downside risks investment spending persisted. to Longer-term interest rates and the cost of credit generally had moved higher of late, the growth of business profits seemed to be moderating, and measured productivity growth had been slower. Although credit market conditions seemed to remain generally quite accommodative, in the days just prior to the meeting, the availability of credit to some highly leveraged and other lowerrated borrowers appeared to be tightening a bit and investors seemed to reevaluate the risks associated with investments in complex and illiquid financial instruments.

Strength in spending abroad and the decline in the exchange value of the dollar were seen as factors boosting U.S. exports. The rise in global interest rates was cited as evidence of increasing global demand, and some participants pointed to strength of aggregate demand worldwide and its potential effect on the prices of imports and globally traded commodities as contributing to upside risks to U.S. inflation.

Most participants judged labor market conditions to remain rather tight, particularly for the most skilled workers. The continued tautness of labor markets was something of a puzzle in light of below-trend economic growth over recent quarters, and this development seemed to be connected with slower productivity growth lately. In their discussion of this issue, participants noted that employment data for 2006 could ultimately be revised down, resulting in a corresponding upward revision to productivity. Some participants also pointed to evidence of lags in employment adjustments, particularly in the construction industry, as a factor depressing productivity in recent quarters. These observations suggested that the recent decline in productivity growth might prove smaller than now estimated and largely transitory. Still, some decline in the pace of trend productivity growth could not be ruled out-a development that could have implications for business costs and price pressures. Some participants further noted that the level of the unemployment rate consistent with stable inflation could be lower than previously thought-a possibility that would help to explain the absence of outsized wage pressures in the current environment.

The incoming data on core consumer prices were viewed as favorable, but were not seen as convincing evidence that the recent moderation of core inflation would be sustained. Participants noted that monthly data on consumer prices are noisy, and recent readings on core inflation seemed to have been depressed by transitory factors. Moreover, a number of forces could sustain inflation pressures, including the generally high level of resource utilization, elevated energy and commodity prices, the decline in the exchange value of the dollar over recent quarters, and slower productivity growth. In addition, while core consumer price inflation had moderated of late, total consumer price inflation had moved substantially higher, boosted by rising energy and food prices. While total inflation was expected to slow toward the pace of core inflation over time, a number of participants noted that recent elevated readings posed some risk of a deterioration in

inflation expectations. On this point, several participants cited the uptick in forward measures of inflation compensation over the intermeeting period derived from Treasury inflation-indexed securities. However, a portion of this increase might be attributed to technical factors, and survey measures of longterm inflation expectations had held steady over recent weeks. Nonetheless, several participants emphasized that holding long-run inflation expectations at or below current levels would likely be necessary for core inflation to moderate as expected over coming quarters.

In their discussion of monetary policy for the intermeeting period, members generally regarded the risks to economic growth as more balanced than at the time of the May meeting. Although the housing market remained a key source of uncertainty about the outlook, members thought it most likely that the overall economy would expand at a moderate pace over coming quarters. Members generally anticipated that core inflation would remain relatively subdued but concurred that a sustained moderation in inflation had not yet been convincingly demonstrated. In these circumstances, members agreed that maintaining the target federal funds rate at 5¹/₄ percent for this meeting was appropriate and that future policy adjustments would depend on the outlook for economic growth and inflation, as implied by incoming information.

In light of the recent economic data and anecdotal information, the Committee agreed that the statement to be released after the meeting should indicate that the economy seemed to be expanding at a moderate pace over the first half of the year. Members agreed that while measures of core inflation had improved lately, the statement should indicate that a sustained moderation of inflation remained in question and that high levels of resource utilization had the potential to fuel inflation pressures. Against this backdrop, members judged that the risk that inflation would fail to moderate as expected remained their predominant concern.

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 $5^{1}/_{4}$ percent.

The vote encompassed approval of the text below for inclusion in the statement to be released at 2:15 p.m.:

In these circumstances, the Committee's predominant policy concern remains the risk that inflation will fail to moderate as expected. Future policy adjustments will depend on the evolution of the outlook for both inflation and economic growth, as implied by incoming information.

Votes for this action: Messrs. Bernanke, Geithner, Hoenig, Kohn, and Kroszner, Ms. Minehan, Messrs. Mishkin, Moskow, Poole, and Warsh. Votes against this action: None.

The Committee then again took up the topic of monetary policy communications. The discussion at this meeting focused on several key elements of the Committee's communications vehicles: the statement released after each FOMC meeting; the minutes of FOMC meetings; and the projections of FOMC participants that are summarized in the Federal Reserve's semiannual monetary policy reports to the Congress. The Committee made no decisions at this meeting, and it was understood that the subcommittee on communications issues would review the Committee's discussions to date on these matters.

It was agreed that the next meeting of the Committee would be held on Tuesday, August 7, 2007.

The meeting adjourned at 2:20 p.m.

Notation Vote

By notation vote completed on May 29, 2007, the Committee unanimously approved the minutes of the FOMC meeting held on May 9, 2007.

Vincent R. Reinhart Secretary

Meeting Held on August 7, 2007

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 7, 2007 at 8:30 a.m.

Present:

- Mr. Bernanke, Chairman
- Mr. Geithner, Vice Chairman
- Mr. Hoenig
- Mr. Kohn
- Mr. Kroszner
- Mr. Mishkin
- Mr. Moskow
- Mr. Poole
- Mr. Rosengren
- Mr. Warsh
- Ms. Cumming, Mr. Fisher, Ms. Pianalto, and Messrs. Plosser and Stern, Alternate Members of the Federal Open Market Committee
- Messrs. Lacker and Lockhart, and Ms. Yellen, Presidents of the Federal Reserve Banks of Richmond, Atlanta, and San Francisco, respectively
- Mr. Madigan, Secretary and Economist Ms. Danker, Deputy Secretary

- Ms. Smith, Assistant Secretary
- Mr. Skidmore, Assistant Secretary
- Mr. Alvarez, General Counsel

Mr. Baxter, Deputy General Counsel

Ms. Johnson, Economist

- Messrs. Connors, Evans, Fuhrer, Kamin, Rasche, Sellon, Slifman, Tracy, 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
- Messrs. Clouse and English, Senior Associate Directors, Division of Monetary Affairs, Board of Governors
- Ms. Liang and Mr. Reifschneider, Associate Directors, Division of Research and Statistics, Board of Governors
- Messrs. Dale and Reinhart, Senior Advisers, Division of Monetary Affairs, Board of Governors
- Mr. Blanchard, Assistant to the Board, Office of Board Members, Board of Governors
- Mr. Meyer, Visiting Reserve Bank Officer, Division of Monetary Affairs, Board of Governors
- Ms. Dykes, Project Manager, Division of Monetary Affairs, Board of Governors
- 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
- Mr. Connolly, First Vice President, Federal Reserve Bank of Boston
- Messrs. Judd and Rosenblum, Executive Vice Presidents, Federal Re-

serve Banks of San Francisco and Dallas, respectively

- Ms. Mosser and Mr. Sniderman, Senior Vice Presidents, Federal Reserve Banks of New York and Cleveland, respectively
- Mr. Cunningham, Vice President, Federal Reserve Bank of Atlanta
- Mr. Chatterjee, Senior Economic Adviser, Federal Reserve Bank of Philadelphia
- Mr. Hetzel, Senior Economist, Federal Reserve Bank of Richmond
- 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 Eric S. Rosengren as a member of the Federal Open Market Committee had been received and that he had executed his oath of office.

By unanimous vote, the Federal Open Market Committee selected Brian F. Madigan to serve as Secretary and Economist until the selection of a successor at the first regularly scheduled meeting of the Committee in 2008.

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 suggested that economic activity picked up in the second quarter from the slow pace in the first quarter. On average, the economy expanded at a moderate pace during the first half of the year despite the ongoing drag from the housing sector. While the growth of consumer spending slowed in the second quarter from its rapid pace in prior quarters, wages and salaries increased solidly and household sentiment appeared supportive of further gains in spending. Business fixed investment picked up in the second quarter after little net change in the preceding two quarters. Inventories generally appeared to be well aligned with sales at midyear. Overall inflation receded in June because of a decline in energy prices, while the core personal consumption expenditure (PCE) price index rose a bit less than its average pace over the past vear.

Private nonfarm payroll employment continued to increase at a healthy pace; the rise in July was about equal to the average increase over the first half of the year. Solid hiring in the service sector was partly offset by declines in construction and manufacturing employment. Most of the drop in construction employment occurred in jobs typically associated with nonresidential construction. Both the average workweek and aggregate hours ticked down in July. The unemployment rate edged up to 4.6 percent; it had remained between 4.4 percent and 4.6 percent since September 2006.

Industrial production picked up in the second quarter after little net change over the preceding two quarters. The increase was largely attributable to a smaller drag from inventory liquidation and a modest improvement in net exports. Manufacturing production rose solidly in the second quarter because of substantial increases in the output of light motor vehicles, other durable consumer goods, business equipment, construction supplies, and materials. Production in high-tech industries rose relatively modestly in comparison to its longer-run growth.

The growth of real consumer spending slowed considerably in the second quarter after substantial increases earlier in the year. The deceleration primarily reflected sharply slower growth in outlays for goods as purchases of motor vehicles decreased noticeably. Although a spike in energy prices eroded real income growth in the second quarter, there were solid gains in wages and salaries. Despite continued softness in house prices, household wealth moved markedly higher in the second quarter, mostly reflecting rising equity prices.

Demand for housing in the second quarter was restrained by higher interest rates and by tightening credit conditions in the subprime mortgage market. Sales of new and existing homes in the second quarter were down substantially from their average levels in the second half of 2006. In June, single-family housing starts held steady at their May rate, although adjusted permit issuance slipped further. The combination of decreased sales and unchanged production left inventories of new homes for sale still elevated. House-price appreciation continued to slow, with some measures again showing declines in home values.

Outlays for nonresidential construction rose rapidly in the second quarter. Business spending on equipment and software, other than transportation equipment, posted a solid increase after being flat, on net, in the preceding two quarters. The rise was led by a rebound in purchases of industrial machinery. Expenditures for computers, software, and communications equipment grew moderately in the second quarter after a brisk first-quarter increase. Spending on transportation equipment again declined sharply. The drop was largely a continuation of the payback from exceptionally strong purchases of heavy trucks in 2005

and 2006 in anticipation of tighter emissions standards on diesel engines. New orders for medium and heavy trucks edged up in the second quarter, though they remained at low levels, suggesting that the downturn in business spending on motor vehicles may be ending.

Real nonfarm inventory investment was a roughly neutral influence on real GDP growth in the second quarter after having held down the growth rate by an average of 1 percentage point in the previous two quarters. Businesses made considerable progress in reducing the apparent inventory overhangs that had emerged at the end of 2006. In the motor vehicle sector, low rates of assemblies in the first half of this year left inventories of domestic light vehicles at the end of the second quarter fairly well aligned with sales; however, inventories rose again in July as production accelerated and sales remained weak. More broadly, the number of purchasing managers who viewed their customers' inventory levels as too high in July only slightly exceeded the number who saw them as too low.

The U.S. international trade deficit widened in May, as a rise in imports more than offset an increase in exports. Within imports, most categories of goods recorded an increase, as did services. The value of oil imports rose sharply, boosted by a jump in the price of imported oil. The increase in exports was largely attributable to capital goods, including aircraft, computers and semiconductors, and industrial supplies.

Economic activity in advanced foreign economies expanded somewhat less rapidly in the second quarter than in the prior quarter, but nonetheless appeared to have grown faster than trend, reflecting upbeat business and consumer confidence as well as favorable labor market conditions. Although many of those economies recently experienced sharp declines in equity prices and widening credit spreads amid deepening concerns about credit quality, these developments occurred too late in the intermeeting period to have any apparent effect on incoming data. In Japan, survey evidence suggested that its economy expanded moderately. Survey evidence indicated high levels of economic sentiment and strong capital spending plans among large manufacturers. In the euro area, survey measures of business and consumer confidence remained near record highs in July, and labor market conditions generally continued to improve in May and June. In the United Kingdom, real GDP growth rose in the second quarter, an increase driven mainly by robust expansion in the service sector. Canada's growth seemed to continue to pick up from its disappointing rate posted in much of last year.

Recent data indicated that economic activity in emerging-market economies remained generally strong. The Chinese economy continued to expand at a rapid pace, and activity elsewhere in emerging Asia appeared to have accelerated. In Latin America, Mexican indicators pointed to a weaker-than-expected rebound in the second quarter, whereas Brazil and Argentina appeared to have experienced solid growth. While equity prices fell and bond spreads widened in several emerging-market economies, particularly in Latin America, there was no evidence that this increased volatility had yet weighed on economic activity.

U.S. headline consumer price inflation slowed in June as energy prices flattened out after a rapid increase over the preceding three months. Core PCE prices rose 0.1 percent in June, as a decline in the price index for core goods nearly offset a rise in the index for core services. The readings on core PCE price inflation in recent months had been held down, in part, by declines in prices of some categories of goods, such as apparel, that tend to be volatile on a monthly basis. Household surveys conducted in early July indicated that the median expectation for inflation over the next year remained unchanged from June's elevated level despite declines in gasoline prices in both months. Median expectations of longer-term inflation ticked up and were near the top of the narrow range that had prevailed over the past few years. The employment cost index rose somewhat faster in the second quarter than over the preceding three months, and the twelve-month change was slightly higher than that of a year ago.

At its June meeting, the Federal Open Market Committee (FOMC) maintained its target for the federal funds rate at 5¹/₄ percent. The statement announcing the policy decision noted that economic growth appeared to have been moderate during the first half of the year, despite the ongoing adjustment in the housing sector. The economy seemed likely to continue to expand at a moderate pace over coming quarters. Readings on core inflation had improved modestly in recent months. However, a sustained moderation in inflation pressures had yet to be convincingly demonstrated. Moreover, the high level of resource utilization had the potential to sustain those pressures. The Committee's predominant policy concern remained the risk that inflation would fail to moderate as expected. Future policy adjustments would depend on the evolution of the outlook for both inflation and economic growth, as implied by incoming information.

Market participants had largely anticipated the FOMC's decision at its June meeting to leave the target for the federal funds rate unchanged, although the accompanying statement expressed greater concern about inflation than investors reportedly had foreseen and caused the expected path for the federal funds rate to edge higher. Expectations for a policy easing diminished somewhat more in the wake of favorable economic news early in the period. Subsequently, the semiannual Monetary Policy Report to the Congress and the accompanying testimony, which reported lower projections for real GDP growth than investors apparently expected, appeared to prompt a downward shift in investors' expected path for the federal funds rate. Later in the intermeeting period, growing apprehension that turmoil in markets for subprime mortgages and some low-rated corporate debt might have adverse effects on economic growth led investors to mark down their expectations for the future path of policy considerably further. At the same time, measures of long-horizon inflation compensation based on inflation-indexed Treasury securities edged down.

Financial market conditions were volatile during the intermeeting period, particularly over the last few weeks of the interval. Yields on nominal Treasury securities fell on balance, possibly reflecting an increased preference by investors for safe assets as well as revisions in policy expectations. Conditions in markets for subprime mortgages and related instruments, including segments of the asset-backed commercial paper market, deteriorated sharply toward the end of the period. Credit conditions for speculative-grade corporate borrowers tightened substantially, as investors pulled back from higher-risk assets. Spreads on speculative-grade bonds increased to near their highest levels in the past four years. A number of high-yield bond and leveraged loan deals intended to finance leveraged buyouts were delayed or restructured, though other highyield bonds were issued. In contrast,

credit conditions for investment-grade businesses and prime households were relatively little affected by the market turbulence. Issuance of investmentgrade bonds continued. Yields on investment-grade corporate issues rose relative to yields on Treasury securities, but because yields on Treasuries declined, yields on investment-grade bonds were about unchanged on net. Nonfinancial commercial paper outstanding posted a modest gain in July, while the pace of bank lending to businesses picked up from an already solid clip. Mortgage loans and consumer credit appeared to remain readily available to households with strong balance sheets, although late in the period some evidence pointed to diminishing availability of jumbo mortgages.

Broad stock price indexes declined substantially, on net, over the intermeeting period despite generally solid second-quarter earnings reports. Share prices of financial firms fell especially sharply, reportedly a reflection, in part, of concerns about exposures to subprime mortgages and about the effect of a potential slowdown in merger activity on operating profits. The foreign exchange value of the dollar against other major currencies fell, on balance.

Growth of home mortgage debt likely slowed again in the second quarter, mainly reflecting the decline in homeprice appreciation over the past year and the drop in home sales. Overall consumer credit expanded moderately through the year ending in May. The debt of nonfinancial businesses expanded at a robust pace in the second quarter but slowed in July. After rising at a rapid pace in the first half of the year, M2 grew at a more moderate rate in July.

In preparation for this meeting, the staff lowered somewhat its forecast of real GDP growth in the second half of 2007 and in 2008. The reduction was in part due to the annual revision of national income and product accounts (NIPA), which revealed somewhat less rapid growth in output and productivity during the past three years than previously reported and led the staff to trim its estimates of the growth rates of structural productivity and potential GDP; the reduction also reflected less accommodative financial conditions and the softer tone of some near-term indicators. The near-parallel revisions to the forecasts for potential and actual GDP left the staff's projections for resource utilization about unchanged. Although part of the recent favorable monthly readings on core PCE price changes was expected to be transitory, the staff revised down slightly its forecast for core PCE price inflation in the second half of 2007; however, in light of slower growth in structural productivity and prospects of somewhat greater pressure from import prices, the staff left its projection for core PCE inflation unchanged for 2008. Overall PCE inflation was expected to slow in the second half of 2007 from the elevated pace of the first half, as the effects of the sizable increases in food and energy prices earlier this year abated, and then to move down a bit further in 2008.

In their discussion of the economic situation and outlook, meeting participants indicated that they still saw moderate economic expansion in coming quarters as the most likely outcome but that the downside risks to growth had increased. Participants reported that economic expansion had continued at a moderate pace in many regions of the country despite further weakness in the housing sector. Going forward, most participants anticipated that growth in aggregate demand would be supported by rising employment, incomes, and exports, with the result that growth in actual output probably would remain close to growth of potential GDP despite the ongoing adjustment in the housing sector. Several mentioned that the revisions to the NIPA pointed to a modest downward adjustment in projected growth of actual and potential GDP, but thought that potential output growth was likely to be a bit higher than forecast by the staff. However, recent spending indicators had been mixed, and credit conditions had become tighter, suggesting greater downside risks to growth. Participants generally expected that core inflation would edge lower over the next two years, reflecting a slight easing of pressures on resources, well-anchored inflation expectations, and the waning of temporary factors that had boosted prices last year and early this year. Participants anticipated that total inflation would slow as well, particularly if market expectations of a modest decline in energy prices in coming quarters were to prove correct. But they were concerned that the high level of resource utilization and slower productivity growth could augment inflation pressures. Against this backdrop, the Committee agreed that the risk that inflation would fail to moderate as expected remained its predominant policy concern.

Participants agreed that the housing sector was apt to remain a drag on growth for some time and represented a significant downside risk to the economic outlook. Indeed, developments in mortgage markets during the intermeeting period suggested that the adjustment in the housing sector could well prove to be both deeper and more prolonged than had seemed likely earlier this year. Participants noted that investors had become much more uncertain about the likely future cash flows from subprime and certain other nontraditional mortgages, and thus about the valuation of securities backed by such mortgages.

Consequently, the markets for securities backed by subprime and other nontraditional mortgages had become illiquid, and originations of new subprime mortgages had dropped sharply. While these markets were expected to recover over time, it was anticipated that credit standards for these types of mortgages would be tighter, and interest rates higher relative to rates on conforming mortgages, in the future than in recent years. However, participants also observed that mortgage loans remained readily available to most potential borrowers, and that interest rates on conforming, conventional mortgage loans had declined in recent weeks, providing some support to the housing sector.

Participants thought that consumer expenditures likely would expand at a moderate pace in coming quarters, supported by solid gains in employment and real income. Though growth in consumer spending had slowed in the second quarter, the slowing likely reflected temporary factors in part, including some payback from unusually strong growth in prior quarters and the surge in gasoline prices. Several participants noted the risks that house prices could decline significantly and that credit standards for home equity loans could be tightened substantially as factors that could weigh on consumer spending. However, the sizable upward revision from negative to positive-in estimates of the personal saving rate during the past three years suggested somewhat less need for households to rebuild their savings.

Participants expected that business investment would be supported by solid fundamentals, including high profits, strong business balance sheets, and moderate growth in output. Recent financial market developments were thought unlikely to have an appreciable adverse effect on capital spending. Although lenders recently appeared to be less willing to extend credit for financial restructuring, the supply of credit to finance real investment did not appear significantly diminished. Funding had become more costly and difficult to obtain for riskier corporate borrowers, but there had been little net change in the cost of credit for investment-grade businesses. Also, businesses in the aggregate continued to have sufficient internally generated funds to finance the expected level of real investment. Nonetheless, participants recognized that conditions in corporate credit markets could change rapidly, and that adverse effects on business spending were possible. Moreover, heightened asset market volatility and the associated increase in uncertainty, if they were to persist for long, could lead businesses to pare capital spending plans. Still, participants judged that continued growth of investment outlays going forward was the most likely outcome.

Rapid economic growth abroad and the decline in the foreign exchange value of the dollar in recent quarters were seen as likely to boost U.S. exports and thus support the economic expansion. Some participants also anticipated that growth in government purchases of goods and services would support continued growth in output.

The data on core inflation received during the intermeeting period were favorable, but meeting participants believed that the readings for the past few months likely had been damped by transitory factors and did not provide reliable evidence that the recent level would be sustained. Still, participants thought that a slight decrease in pressures on resources and the stability of inflation expectations likely would foster over time a gradual moderation in core inflation. Participants anticipated that total inflation would slow as well, particularly if market expectations for a modest decline in energy prices in coming quarters were to prove correct. Participants remained concerned about factors that could augment inflation pressures, including the continuing high level of resource utilization and slower trend growth in productivity. Some also pointed to the strength of aggregate demand worldwide and the depreciation of the dollar, and their potential effects on the prices of imports and globally traded commodities, as contributing to upside risks to U.S. inflation. Several participants noted significant increases in wages in their Districts, particularly in the service sector, but it was also observed that overall gains in labor compensation had remained moderate, suggesting that sustainable rates of resource utilization could be slightly higher than typically estimated. On balance, participants continued to agree that risks to the outlook for sustained moderation in inflation pressures remained tilted to the upside.

In their discussion of monetary policy for the intermeeting period, Committee members again agreed that maintaining the existing stance of policy at this meeting was likely to be consistent with the overall economy expanding at a moderate pace over coming quarters and inflation pressures moderating over time. The expansion would be supported by solid job gains and rising real incomes that would bolster consumption, and by increasing foreign demand for goods and services produced in the United States. The ongoing adjustment in housing markets likely would exert a restraining influence on overall growth for several more quarters and remained a key source of uncertainty about the outlook. The recent strains in financial markets posed additional downside risks to economic growth. Members expected a return to more normal market conditions, but recognized that the process likely would take some time, particularly in markets related to subprime mortgages. However, a further deterioration in financial conditions could not be ruled out and, to the extent such a development could have an adverse effect on growth prospects, might require a policy response. Policymakers would need to watch the situation carefully. For the present, however, given expectations that the most likely outcome for the economy was continued moderate growth, the upside risks to inflation remained the most significant policy concern. In these circumstances, members agreed that maintaining the target federal funds rate at 5¹/₄ percent at this meeting was appropriate.

In light of the recent economic data, anecdotal information. and financial market developments, the Committee agreed that the statement to be released after the meeting should indicate that economic growth was moderate during the first half of the year and that the economy seemed likely to continue to expand moderately in coming quarters, supported by solid growth in employment and incomes and by robust economic growth abroad. Members also agreed that the statement should incorporate their view that downside risks to growth had increased somewhat, and should mention volatile financial markets, tighter credit conditions for some households and businesses, and the ongoing correction in the housing market. In addition, the Committee agreed that the statement should again note that readings on core inflation had improved modestly in recent months but did not yet convincingly demonstrate a sustained moderation of inflation pressures, and that the high level of resource utilization had the potential to sustain inflation pressures. Against this backdrop, members judged that the risk that inflation would fail to moderate as expected continued to outweigh other policy concerns.

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 $5^{1}/_{4}$ percent.

The vote encompassed approval of the text below for inclusion in the statement to be released at 2:15 p.m.:

Although the downside risks to growth have increased somewhat, the Committee's predominant policy concern remains the risk that inflation will fail to moderate as expected. Future policy adjustments will depend on the outlook for both inflation and economic growth, as implied by incoming information.

> Votes for this action: Messrs. Bernanke, Geithner, Hoenig, Kohn, Kroszner, Mishkin, Moskow, Poole, Rosengren, and Warsh. Votes against this action: None.

It was agreed that the next meeting of the Committee would be held on Tuesday, September 18, 2007.

The meeting adjourned at 1:25 p.m.

Notation Vote

By notation vote completed on July 18, 2007, the Committee unanimously approved the minutes of the FOMC meeting held on June 27–28, 2007.

Brian F. Madigan Secretary

Meeting Held on September 18, 2007

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 18, 2007 at 8:30 a.m.

Present:

- Mr. Bernanke, Chairman
- Mr. Geithner, Vice Chairman
- Mr. Evans
- Mr. Hoenig
- Mr. Kohn
- Mr. Kroszner Mr. Mishkin
- Mr. Mishk
- Mr. Poole
- Mr. Rosengren
- Mr. Warsh
- Mr. Fisher, Ms. Pianalto, and Messrs. Plosser and Stern, Alternate Members of the Federal Open Market Committee
- Messrs. Lacker and Lockhart, and Ms. Yellen, Presidents of the Federal Reserve Banks of Richmond, Atlanta, and San Francisco, respectively
- Mr. Madigan, Secretary and Economist
- Ms. Danker, Deputy Secretary
- Ms. Smith, Assistant Secretary
- Mr. Skidmore, Assistant Secretary
- Mr. Alvarez, General Counsel
- Mr. Baxter, Deputy General Counsel
- Ms. Johnson, Economist
- Mr. Stockton, Economist
- Messrs. Clouse, Connors, Fuhrer, Kamin, Rasche, Slifman, and Wilcox, Associate Economists
- Mr. Dudley, Manager, System Open Market Account
- Ms. J. Johnson,⁹ Secretary, Office of the Secretary, Board of Governors

^{9.} Attended portion of the meeting relating to the discussion of approaches to stabilizing money markets.

- Mr. Frierson,⁹ Deputy Secretary, Office of the Secretary, Board of Governors
- Ms. Bailey⁹ and Mr. Roberts,⁹ Deputy Directors, Division of Banking Supervision and Regulation, Board of Governors
- Mr. English, Senior Associate Director, Division of Monetary Affairs, Board of Governors
- Ms. Liang and Mr. Reifschneider, Associate Directors, Division of Research and Statistics, Board of Governors
- Mr. Wright, Deputy Associate Director, Division of Monetary Affairs, Board of Governors
- Mr. G. Evans,⁹ Assistant Director, Division of Reserve Bank Operations and Payment Systems, Board of Governors
- Mr. Blanchard, Assistant to the Board, Office of Board Members, Board of Governors
- Mr. Oliner, Senior Adviser, Division of Research and Statistics, Board of Governors
- Mr. Meyer, Visiting Reserve Bank Officer, Division of Monetary Affairs, Board of Governors
- Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors
- Mr. Natalucci, Senior Economist, Division of Monetary Affairs, Board of Governors
- Mr. Luecke, Senior Financial Analyst, 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. Holcomb, First Vice President, Federal Reserve Bank of Dallas

- Messrs. Judd, Rosenblum, and Sniderman, Executive Vice Presidents, Federal Reserve Banks of San Francisco, Dallas, and Cleveland, respectively
- Messrs. Dzina and Hakkio, Mses. Krieger⁹ and Mester, and Messrs. Rolnick and Weinberg, Senior Vice Presidents, Federal Reserve Banks of New York, Kansas City, New York, Philadelphia, Minneapolis, and Richmond, respectively
- Messrs. Krane, Peach, and Robertson, Vice Presidents, Federal Reserve Banks of Chicago, New York, and Atlanta, respectively

In the agenda for this meeting, it was reported that advices of the election of Charles L. Evans as a member of the Federal Open Market Committee had been received and that he had executed his oath of office.

By unanimous vote, the Federal Open Market Committee selected James A. Clouse and Daniel G. Sullivan to serve as Associate Economists until the selection of their successors at the first regularly scheduled meeting of the Committee in 2008.

The Manager of the System Open Market Account (SOMA) 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 September meeting suggested that economic activity advanced at a moderate rate early in the third quarter. After expanding at a robust pace in July, retail sales rose at a somewhat slower rate in August. Orders and shipments of capital goods posted solid gains in July. However, residential investment weakened further, even before the recent disruptions in mortgage markets. In addition, private payrolls posted only a small gain in August, and manufacturing production decreased after gains in the previous two months. Meanwhile, core inflation rose a bit from the low rates observed in the spring but remained moderate through July.

Private nonfarm payroll employment rose only modestly in August, and the levels of employment in June and July were revised down. The weakness in employment was spread fairly widely across industries. Residential construction and manufacturing posted noticeable declines in jobs, employment in wholesale trade and transportation was little changed, and hiring at business services was well below recent trends. Both the average workweek and aggregate hours were unchanged in August. The unemployment rate held steady at 4.6 percent, 0.1 percentage point above its second-quarter level and equal to its 2006 average.

After posting solid gains in June and July, total industrial production edged up only a bit in August. This increase was attributable to a surge in electricity generation, as temperatures swung from mild in July to very warm in August. After large gains in the preceding two months, manufacturing output declined in August, held down by a decrease in the production of motor vehicles and parts. High-tech output rose only modestly in August, but production gains in June and July were revised up considerably.

Consumer spending appeared to have strengthened early in the summer from its subdued second-quarter pace. Although auto sales were weak in July, real outlays for other goods rose briskly. At the same time, spending on services was up moderately despite a drop in outlays for energy associated with relatively cool weather in the eastern part of the United States. In August, consumption appeared to have posted another solid gain. Although nominal retail sales outside the motor vehicle sector were about flat (abstracting from a drop in nominal sales at gasoline stations associated with falling gas prices), vehicle sales stepped up and warmer weather likely caused an increase in energy usage. Real disposable income rose further in July, as wages and salaries posted a strong gain and energy prices came down. However, household wealth likely was providing a diminishing impetus to the pace of spending, reflecting recent declines in stock market wealth and an apparent further deceleration in house prices. Readings on consumer sentiment turned down in August after having risen in July, and the Reuters/ Michigan index remained near its relatively low August level in early September.

The housing sector remained exceptionally weak. Home sales had dropped considerably this year: Sales of new and existing single-family homes in July were down substantially from their averages over the second half of last year. Demand was restrained by deteriorating conditions in the subprime mortgage market and by an increase in rates for thirty-year fixed-rate conforming mortgages. In the nonconforming mortgage market, the availability of financing to borrowers recently appeared to have been crimped even further. Most forward-looking indicators of housing demand, including an index of pending home sales, pointed to a further deterioration in sales in the near term. Singlefamily starts slid in July to their lowest

reading since 1996, and adjusted permit issuance continued on a downward trajectory. Although single-family housing starts had come down substantially from their peak, the drop had lagged the decline in demand, and as a result, inventories of new homes had risen considerably. In the multifamily sector, starts in July were in line with readings thus far this year and at the low end of the fairly narrow range seen since 1997. Meanwhile, house prices generally continued to decelerate.

Orders and shipments of capital goods posted a strong gain early in the third quarter. In particular, orders and shipments of equipment outside the hightech and transportation sector registered a robust increase in July, and data on computer production and shipments of high-tech goods pointed to solid increases in business demand for hightech. In contrast, indicators of spending transportation equipment for were mixed. Aircraft shipments in July and public information on Boeing's deliveries suggested that domestic spending on aircraft was retreating somewhat in the current quarter. While fleet sales of light vehicles appeared to have moved up in July and August, sales of medium and heavy trucks remained below the second-quarter average. More generally, surveys of business conditions suggested that increases in business activity were somewhat slower in August than in the second quarter.

Book-value data for the manufacturing and trade sectors excluding motor vehicles and parts suggested that inventory accumulation stepped down noticeably in July from the second-quarter pace. Inventories of light motor vehicles rose again in July and August. The number of manufacturing purchasing managers who viewed their customers' inventory levels as too low in August slightly exceeded the number who saw them as too high.

The U.S. international trade deficit narrowed slightly in July, as exports increased more than imports. Sharp increases in exports of both aircraft and automobiles contributed importantly to the overall gain. Exports of agricultural products and consumer goods were also strong. In contrast, exports of industrial supplies and semiconductors exhibited declines. The value of imported goods and services was boosted by a large increase in imports of automotive products. Higher imports of capital goods excluding aircraft, computers, and semiconductors and of oil also contributed to the overall gain in imports.

Economic growth slowed in the second quarter in most advanced foreign economies, except the United Kingdom. The step-down was most pronounced in Japan, where GDP contracted, but was also substantial in the euro area, where total domestic demand rose only slightly. Although growth remained robust in Canada, data late in the quarter, including retail sales, indicated a more significant weakening in activity. This softness appeared to have continued into the third quarter in some economies. In July, indicators for Europe generally moderated, on balance, from their second-quarter levels; those for Canada and Japan, however, slowed more notably. Most of the readings available on economic developments after August 9, when financial turmoil intensified, were measures of confidence. They dropped, on average, but otherwise were consistent with the indicators reported for July.

Data through July suggested that economic activity in emerging-market countries remained robust. Output in the Asian economies soared in the second quarter, and several countries posted growth at or near double-digit rates. In Latin America, output in Mexico and Venezuela rebounded sharply from earlier weakness. Indicators for China in July pointed to only a modest slowing of output growth from its torrid pace in the first half of the year. The scant data for August received thus far provided little indication that the turmoil in financial markets had a significant negative impact on real economic activity in emerging-market economies.

After rapid price increases earlier this year, U.S. headline consumer price inflation was moderate in both June and July. Although food prices continued their string of sizable increases, energy prices fell in June and July and gasoline prices appear to have dropped further in August. Core PCE prices rose 0.2 percent in June and 0.1 percent in July. On a twelve-month-change basis, core PCE inflation in July was below the comparable rate twelve months earlier. Stepdowns in price inflation for prescription drugs, motor vehicles, and nonmarket services accounted for nearly all of the deceleration in core PCE prices. Although owners' equivalent rent decelerated over the past year, this change was largely offset by an acceleration in tenants' rent and lodging away from home. Household surveys indicated that the median expectation for year-ahead inflation declined in August and edged down further in early September to a level only slightly above the reading at the turn of the year; the median expectation of longer-term inflation in early September remained in the range seen over the past couple of years. The producer price index for core intermediate materials rose only modestly in July. Compensation per hour decelerated in the second quarter. Nonetheless, the increase over the four quarters ending in the second quarter was noticeably above the increase in the preceding four quarters and well above the rise in the employment cost index over the same period.

At its August meeting, the FOMC decided to maintain its target for the federal funds rate at 51/4 percent. In the statement, the Committee acknowledged that financial markets had been volatile in recent weeks, credit conditions had become tighter for some households and businesses, and the housing correction was ongoing. The Committee reiterated its view that the economy seemed likely to continue to expand at a moderate pace over coming quarters, supported by solid growth in employment and incomes and a robust global economy. Readings on core inflation had improved modestly in recent months. However, a sustained moderation in inflation pressures had yet to be convincingly demonstrated. Moreover, the high level of resource utilization had the potential to sustain these pressures. Although the downside risks to growth had increased somewhat, the Committee repeated that its predominant policy concern remained the risk that inflation would fail to moderate as expected. Future policy adjustments would depend on the outlook for both inflation and economic growth, as implied by incoming information. The FOMC's policy decision and the accompanying statement were about in line with market expectations, and reactions in financial markets were muted.

In the days after the August FOMC meeting, financial market participants appeared to become more concerned about liquidity and counterparty credit risk. Unsecured bank funding markets showed signs of stress, including volatility in overnight lending rates, elevated term rates, and illiquidity in term funding markets. On August 10, the Federal Reserve issued a statement announcing that it was providing liquidity to facilitate the orderly functioning of financial markets. The Federal Reserve indicated that it would provide reserves as neces-

sary through open market operations to promote trading in the federal funds market at rates close to the target rate of $5^{1/4}$ percent. The Federal Reserve also noted that the discount window was available as a source of funding.

On August 17, the FOMC issued a statement noting that financial market conditions had deteriorated and that tighter credit conditions and increased uncertainty had the potential to restrain economic growth going forward. The FOMC judged that the downside risks to growth had increased appreciably, indicated that it was monitoring the situation, and stated that it was prepared to act as needed to mitigate the adverse effects on the economy arising from the disruptions in financial markets. Simultaneously, the Federal Reserve Board announced that, to promote the restoration of orderly conditions in financial markets, it had approved a 50 basis point reduction in the primary credit rate to 5³/₄ percent. The Board also announced a change to the Reserve Banks' usual practices to allow the provision of term financing for as long as thirty days, renewable by the borrower. In addition, the Board noted that the Federal Reserve would continue to accept a broad range of collateral for discount window loans, including home mortgages and related assets, while maintaining existing collateral margins. On August 21, the Federal Reserve Bank of New York announced some temporary changes to the terms and conditions of the SOMA securities lending program, including a reduction in the minimum fee. The effective federal funds rate was somewhat below the target rate for a time over the intermeeting period, as efforts to keep the funds rate near the target were hampered by technical factors and financial market volatility. In the days leading up to the FOMC meeting, however, the funds rate traded closer to the target.

Short-term financial markets came under pressure over the intermeeting period amid heightened investor unease about exposures to subprime mortgages and to structured credit products more generally. Rates on asset-backed commercial paper and on low-rated unsecured commercial paper soared, and some issuers, particularly asset-backed commercial paper programs with investments in subprime mortgages, found it difficult to roll over maturing paper. These developments led several programs to draw on backup lines, exercise options to extend the maturity of outstanding paper, or even default. As a result, asset-backed commercial paper outstanding contracted substantially. Investors sought the safety and liquidity of Treasury securities, and yields on Treasury bills dropped sharply for a period; trading conditions in the bill market were impaired at times. Meanwhile, banks took measures to conserve their liquidity and were cautious about counterparties' exposures to asset-backed commercial paper. Term interbank funding markets were significantly impaired, with rates rising well above expected future overnight rates and traders reporting a substantial drop in the availability of term funding. Pressures eased a bit in mid-September, but short-term financial markets remained strained.

Conditions in corporate credit markets were mixed. Investmentand speculative-grade corporate bond spreads edged up; they were near their highest levels in four years, although they remained far below the peaks seen in mid-2002. Investment-grade bond issuance was strong in August as yields declined, but issuance of speculativegrade bonds was scant. Speculativegrade bond deals and leveraged loans slated to finance leveraged buyouts continued to be delayed or restructured. Bank lending to businesses surged in August, apparently because some banks funded leveraged loans that they had intended to syndicate to institutional investors and perhaps because some firms substituted bank credit for commercial paper. Although markets for nonconforming mortgages were impaired over the intermeeting period, the supply of conforming mortgages seemed to have been largely unaffected by recent developments. Broad stock price indexes were volatile but about unchanged, on net, over the intermeeting period. The foreign exchange value of the dollar against other major currencies fell, on balance.

Investors appeared to mark down significantly their expected path for the federal funds rate during the intermeeting period, evidently in response to the strains in money and credit markets and a few key data releases, including weaker-than-expected reports on housing activity and employment. Yields on nominal Treasury securities fell appreciably across the term structure. TIPSbased inflation compensation at the fiveyear horizon was about unchanged, while inflation compensation at longer horizons crept higher.

Growth of nonfinancial domestic debt was estimated to have slowed a little in the third quarter from the average pace in the first half of the year. The deceleration in total nonfinancial debt reflected a projected slowdown in borrowing across all major sectors of the economy excluding the federal government. Although it decelerated in the third quarter, business-sector debt continued to advance at a solid pace, boosted by a surge in business loans. In the household sector, mortgage borrowing was estimated to have slowed notably, as mortgage interest rates moved up, nonconforming mortgages became harder to obtain, and as home sales slowed and house prices decelerated. M2 increased

at a brisk pace in August. The rise was led by a surge in liquid deposits and in retail money funds as investors adjusted their portfolios in response to the turmoil in financial markets.

In preparation for this meeting, the staff continued to estimate that real GDP increased at a moderate rate in the third quarter. However, the staff marked down the fourth-quarter forecast, reflecting a judgment that the recent financial turbulence would impose restraint on economic activity in coming months, particularly in the housing sector. The staff also trimmed its forecast of real GDP growth in 2008 and anticipated a modest increase in unemployment. Softer demand for homes amid a reduction in the availability of mortgage credit would likely curtail construction activity through the middle of next year. Moreover, lower housing wealth, slower gains in employment and income, and reduced confidence seemed likely to restrain consumer spending in 2008. Despite the recent difficulties in some corporate credit markets, financial conditions confronting most nonfinancial businesses did not appear to have tightened appreciably to date. But going forward, the staff anticipated that businesses would scale back their capital spending a touch in response to financing conditions that were likely to become a little less accommodative and to more modest gains in sales. With credit markets expected to largely recover over coming quarters, growth of real GDP was projected to firm in 2009 to a pace a bit above the rate of growth of its potential. Incoming data on consumer price inflation that were slightly to the low side of the previous forecast, in combination with the easing of pressures on resource utilization in the current forecast, led the staff to trim slightly its forecast for core PCE inflation. Headline PCE inflation, which was boosted by sizable increases in energy and food prices earlier in the year, was expected to slow in 2008 and 2009.

In their discussion of the economic situation and outlook, meeting participants focused on the potential for recent credit market developments to restrain aggregate demand in coming quarters. The disruptions to the market for nonconforming mortgages were likely to reduce further the demand for housing, and recent financial developments could well lead to a more general tightening of credit availability. Moreover, some recent data and anecdotal information pointed to a possible nascent slowdown in the pace of expansion. Given the unusual nature of the current financial shock, participants regarded the outlook for economic activity as characterized by particularly high uncertainty, with the risks to growth skewed to the downside. Some participants cited concerns that a weaker economy could lead to a further tightening of financial conditions, which in turn could reinforce the economic slowdown. But participants also noted that the resilience of the economy in the face of a number of previous periods of financial market disruptions left open the possibility that the macroeconomic effects of the financial market turbulence would prove limited.

Although financial markets were expected to stabilize over time, participants judged that credit markets were likely to restrain economic growth in the period ahead. Given existing commitments to customers and the increased resistance of investors to purchasing some securitized products, banks might need to take a large volume of assets onto their balance sheets over coming weeks, including leveraged loans, assetbacked commercial paper, and some types of mortgages. Banks' concerns about the implications of rapid growth in their balance sheets for their capital ratios and for their liquidity, as well as

the recent deterioration in various term funding markets, might well lead banks to tighten the availability of credit to households and firms. Tighter credit conditions were likely to weigh particularly on residential investment and to a lesser extent on other components of aggregate demand in coming quarters. Meeting participants also noted that financial market conditions, while seeming to have improved somewhat in the most recent days, were still fragile and that further adverse credit market developments could well increase the downside risks to the economy. Even after market volatility subsided and the recent strains eased, risk spreads probably would be wider and credit terms tighter than they had been a few months ago. Although these developments would likely be consistent with longer-term financial stability, they were likely to exert some restraint on aggregate demand.

In their discussion of individual sectors of the economy, participants noted that recent data suggested greater weakness in the housing market than had previously been expected. Furthermore, recent financial developments had the potential to deepen further and prolong the downturn in the housing market, as subprime mortgages remained essentially unavailable, little activity was evident in the markets for other nonprime mortgages, and prime jumbo mortgage borrowers faced higher rates and tighter lending standards. The faster pace of foreclosures as subprime mortgage rates reset was also seen as posing a downside risk to the housing market. Nonetheless, participants observed that conforming mortgages remained readily available to creditworthy borrowers and that rates on these mortgages had declined in recent weeks. Moreover, conditions in the jumbo mortgage market were expected to improve gradually over time.

Although employment probably was not as weak as the most recent monthly data had suggested, trend growth in jobs had fallen off even prior to the recent financial market strains, and participants judged that some further slowing of employment growth was likely. Indeed, financial services firms had already announced layoffs, largely reflecting mortgage market developments, the demand for temporary workers appeared to have softened, and the most recent weakening in construction employment was likely to continue for a while. Moreover, if declines in house prices were to damp consumption, that could feed back on employment and income, exerting additional restraint on the demand for housing. Nonetheless, to date, initial claims for unemployment insurance did not indicate a substantial and widespread weakening in labor demand, and labor markets across the country generally remained fairly tight, with several participants citing continued reports of shortages of labor from their contacts in some sectors.

Participants thought that the most likely prospect was for consumer expenditures to continue to expand at a moderate pace on average over coming quarters, supported by growth in employment and income. However, some participants saw indications of a possible weakening of consumer spending. Sales of automobiles and building materials had flagged of late, and survey measures suggested that consumer confidence had been adversely affected by the recent financial market developments. Also, a further tightening of terms for home equity lines of credit and second mortgages seemed possible, which could weigh on consumer spending, especially for consumer durables.

Participants reported that recent financial market developments generally appeared to have had limited effects to date on business capital spending plans and expected that business investment was likely to remain healthy in coming quarters. The access of investment-grade corporate borrowers to credit so far remained unimpeded, and rates on investment-grade bonds had declined in recent weeks. Moreover, participants noted that many capital expenditures were internally financed, making them less sensitive to credit market conditions. Nonetheless, the pace of financing for lower-rated firms-including issuance of both speculative-grade bonds and leveraged loans-had slowed sharply over the summer. Participants also noted that standards and terms for commercial real estate credit reportedly had tightened, and that credit availability for homebuilders could be trimmed going forward. In addition, contacts indicated that business executives in parts of the country had apparently become somewhat more cautious and that some were delaying investment outlays in view of heightened economic and financial uncertainty.

Some participants noted that foreign demand remained robust and net exports appeared strong. Port utilization rates reportedly remained high. Participants discussed the turbulence in foreign financial markets and noted that unusually high precautionary demand for dollardenominated term funding in Europe had added to strains in U.S. interbank markets and contributed to a wide spread between libor and federal funds rates.

Participants made only modest revisions to their outlook for inflation in the period since the Committee's last regular meeting. Still, they recognized that incoming data on core inflation continued to be favorable, and they generally were a little more confident that the decline in inflation earlier this year would be sustained. Inflation expectations seemed to be contained, and the less robust economic outlook implied somewhat less pressure on resources going forward. Participants nonetheless remained concerned about possible upside risks to inflation. Higher benefit costs, rising unit labor costs more generally, reduced markups, and levels of resource utilization both in the United States and abroad that remained relatively high were all cited as factors that could contribute to inflationary pressures. Inflation risks could be heightened if the dollar were to continue to depreciate significantly.

In the Committee's discussion of policy for the intermeeting period, all members favored an easing of the stance of monetary policy. Members emphasized that because of the recent sharp change in credit market conditions, the incoming data in many cases were of limited value in assessing the likely evolution of economic activity and prices, on which the Committee's policy decision must be based. Members judged that a lowering of the target funds rate was appropriate to help offset the effects of tighter financial conditions on the economic outlook. Without such policy action, members saw a risk that tightening credit conditions and an intensifying housing correction would lead to significant broader weakness in output and employment. Similarly, the impaired functioning of financial markets might persist for some time or possibly worsen, with negative implications for economic activity. In order to help forestall some of the adverse effects on the economy that might otherwise arise, all members agreed that a rate cut of 50 basis points at this meeting was the most prudent course of action. Such a measure should not interfere with an adjustment to more realistic pricing of risk or with the gains and losses that implied for participants in financial markets.

With economic growth likely to run below its potential for a while and with incoming inflation data to the favorable side, the easing of policy seemed unlikely to affect adversely the outlook for inflation.

The Committee agreed that the statement to be released after the meeting should indicate that the outlook for economic growth had shifted appreciably since the Committee's last regular meeting but that the 50 basis point easing in policy should help to promote moderate growth over time. They also agreed that the inflation situation seemed to have improved slightly and judged that it was no longer appropriate to indicate that a sustained moderation in inflation pressures had yet to be shown. Nonetheless, all agreed that some inflation risks remained and that the statement should indicate that the Committee would continue to monitor inflation developments carefully. Given the heightened uncertainty about the economic outlook, the Committee decided to refrain from providing an explicit assessment of the balance of risks, as such a characterization could give the mistaken impression that the Committee was more certain about the economic outlook than was in fact the case. Future actions would depend on how economic prospects were affected by evolving market developments and by other factors.

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 $4^{3}/_{4}$ percent.

The vote encompassed approval of the text below for inclusion in the statement to be released at 2:15 p.m.:

Developments in financial markets since the Committee's last regular meeting have increased the uncertainty surrounding the economic outlook. The Committee will continue to assess the effects of these and other developments on economic prospects and will act as needed to foster price stability and sustainable economic growth.

> Votes for this action: Messrs. Bernanke, Geithner, Evans, Hoenig, Kohn, Kroszner, Mishkin, Poole, Rosengren, and Warsh. Votes against this action: None.

The Committee then resumed its discussion of monetary policy communication issues. Subsequently, in a joint session of the Federal Open Market Committee and the Board of Governors, Board members and Reserve Bank presidents discussed additional policy options to address strains in money markets. No decisions were made in this session, but it was agreed that policymakers should continue to consider such options carefully.

It was agreed that the next meeting of the Committee would be held on Tuesday-Wednesday, October 30–31, 2007.

The meeting adjourned at 3:55 p.m.

Notation Vote

By notation vote completed on August 27, 2007, the Committee unanimously approved the minutes of the FOMC meeting held on August 7, 2007.

Conference Calls

On August 10, 2007, the Committee reviewed developments in money and credit markets, where strains had worsened in the days since its last meeting. Participants discussed the condition of domestic and foreign financial markets, the Open Market Desk's approach to open market operations, possible adjustments to the discount rate, and the statement to be issued immediately after the conference call.

On August 16, 2007, the Committee again met by conference call. With financial market conditions having deteriorated further, meeting participants discussed the potential usefulness of various policy responses. The discussion focused primarily on changes associated with the discount window that would be directed at improving the functioning of the money markets. Most participants expressed strong support for taking such steps, although some concern was noted about the likely effectiveness of these measures and one participant also questioned their appropriateness. In light of the risks posed to the economic outlook by the tighter credit conditions and the increased uncertainty in financial markets, the Committee felt that the downside risks to growth had increased appreciably, but that a change in the federal funds rate target was not yet warranted. However, the situation bore close watching.

At the conclusion of the discussion, the Committee voted to approve the text below to be released the following morning:

Financial market conditions have deteriorated, and tighter credit conditions and increased uncertainty have the potential to restrain economic growth going forward. In these circumstances, although recent data suggest that the economy has continued to expand at a moderate pace, the Federal Open Market Committee judges that the downside risks to growth have increased appreciably. The Committee is monitoring the situation and is prepared to act as needed to mitigate the adverse effects on the economy arising from the disruptions in financial markets. Votes for: Messrs. Bernanke, Geithner, Fisher, Hoenig, Kohn, Kroszner, Mishkin, Moskow, Rosengren, and Warsh. Votes against: None. Mr. Fisher voted as alternate member.

> Brian F. Madigan Secretary

Meeting Held on October 30–31, 2007

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 30, 2007 at 2:00 p.m. and continued on Wednesday, October 31, 2007 at 9:00 a.m.

Present:

- Mr. Bernanke, Chairman
- Mr. Geithner, Vice Chairman
- Mr. Evans
- Mr. Hoenig
- Mr. Kohn
- Mr. Kroszner
- Mr. Mishkin
- Mr. Poole
- Mr. Rosengren
- Mr. Warsh
- Ms. Cumming, Mr. Fisher, Ms. Pianalto, and Messrs. Plosser and Stern, Alternate Members of the Federal Open Market Committee
- Messrs. Lacker and Lockhart, and Ms. Yellen, Presidents of the Federal Reserve Banks of Richmond, Atlanta, and San Francisco, respectively
- Mr. Madigan, Secretary and Economist
- Ms. Danker, Deputy Secretary
- Ms. Smith, Assistant Secretary
- Mr. Skidmore, Assistant Secretary
- Mr. Alvarez, General Counsel
- Mr. Baxter, Deputy General Counsel
- Mr. Sheets, Economist
- Mr. Stockton, Economist
- Messrs. Clouse, Connors, Fuhrer, Kamin, Rasche, Slifman, Sullivan, and Wilcox, Associate Economists

- Mr. Dudley, Manager, System Open Market Account
- Mr. Struckmeyer, Deputy Staff Director, Office of Staff Director for Management
- Mr. English, Senior Associate Director, Division of Monetary Affairs, Board of Governors
- Messrs. Reifschneider¹⁰ and Wascher, Associate Directors, Division of Research and Statistics, 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. Blanchard, Assistant to the Board, Office of Board Members, Board of Governors
- Ms. K. Johnson, Senior Adviser, Division of International Finance, Board of Governors
- Mr. Oliner, Senior Adviser, Division of Research and Statistics, Board of Governors
- Mr. Dale,¹⁰ Senior Adviser, Division of Monetary Affairs, Board of Governors
- Mr. Gross,¹⁰ Special Assistant to the Board, Office of Board Members, Board of Governors
- Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors
- Messrs. Kumasaka¹¹ and Luecke,¹² Senior Financial Analysts, Division of Monetary Affairs, Board of Governors
- Ms. Judson, Economist, Division of Monetary Affairs, Board of Governors

10. Attended portion of meeting relating to the discussion of communication issues.

- 11. Attended Tuesday session.
- 12. Attended Wednesday session.
- Ms. Low, Open Market Secretariat Specialist, Division of Monetary Affairs, Board of Governors
- Mr. Lyon, First Vice President, Federal Reserve Bank of Minneapolis
- Messrs. Judd and Sniderman, Executive Vice Presidents, Federal Reserve Banks of San Francisco and Cleveland, respectively
- Mr. Altig and Ms. Mester, Senior Vice Presidents, Federal Reserve Banks of Atlanta and Philadelphia, respectively
- Mr. Hakkio, Special Adviser, Federal Reserve Bank of Kansas City
- Messrs. Hilton, Koenig, and Potter, Vice Presidents, Federal Reserve Banks of New York, Dallas, and New York, respectively
- Mr. Weber, Senior Research Officer, Federal Reserve Bank of Minneapolis
- Mr. Hetzel, Senior Economist, Federal Reserve Bank of Richmond

By unanimous vote, the Federal Open Market Committee selected D. Nathan Sheets to serve as Economist until the selection of his successor at the first regularly scheduled meeting of the Committee in 2008.

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 provided to the Committee on the first day of the meeting, prior to the release of the advance esti-

mates of the third-quarter national income and product accounts, indicated that economic activity expanded at a solid pace in the third quarter. Consumer spending rose more strongly after a tepid increase in the second quarter, and the pace of expansion of business outlays for equipment and structures remained reasonably solid. Manufacturing posted a sizable gain for the third quarter as a whole. In contrast, the slump in residential investment intensified during the third quarter, at least partly because of ongoing disruptions in the markets for nonconforming mortgages. The average monthly gain in private employment also slowed significantly. Headline inflation eased during the third quarter, reflecting a decline in energy prices; core inflation continued to be moderate.

Employment increased more slowly in the third quarter than in the first half of the year. Private payroll employment registered a considerably smaller average monthly gain; employment in residential construction, manufacturing, and industries related to mortgage lending continued to decline, but most serviceproducing industries added jobs at a moderate pace. With gains in employment smaller and the workweek flat, the growth of aggregate hours of private production or nonsupervisory workers stepped down from its second-quarter pace. The labor force participation rate was unchanged, on average, in the third quarter, and the unemployment rate ticked up to 4.7 percent in September.

Industrial production changed little in August and September after having posted solid advances in June and July. Manufacturing output expanded in the third quarter overall at about the same pace as in the second quarter but declined modestly on net in August and September. During those two months, production was damped by declines in the output of motor vehicles and parts. In addition, output of construction supplies and products fell, likely reflecting the ongoing decline in residential investment. Meanwhile, production in the high-tech sector rose at a moderate rate.

Consumer spending was well maintained in August and September. Motor vehicle sales improved, and real spending on other goods posted solid gains in both months. Real outlays on consumer services were strong in August because of a weather-induced jump in energy services. Solid increases in nominal wages and salaries and lower headline inflation led to robust gains in real income over the summer. However, other factors affecting consumer spending were mixed. Short-term interest rates dropped and stock prices rose, on balance, after August. By contrast, house prices continued to decelerate, standards on consumer and mortgage credit tightened after midsummer, and the turmoil in financial markets that started in the summer likely exerted some restraint on consumer spending. Moreover, measures of consumer confidence had declined in recent months.

The housing downturn deepened as sales of new and existing single-family homes continued to fall. Deterioration in nonprime mortgage markets as well as higher mortgage interest rates and tighter lending conditions for prime jumbo loans since earlier in the year appeared to be restraining housing demand. Forward-looking indicators, including an index of pending home sales and adjusted single-family permit issuance, continued to point to a further slowing in housing activity over the near term. Single-family housing starts declined significantly over August and September. Nonetheless, with singlefamily home sales continuing to sag, inventories of unsold homes remained quite elevated. In the multifamily sector, starts declined sharply in September;

however, the third-quarter reading remained within the fairly narrow range observed over the past decade.

Orders and shipments of nondefense capital goods excluding aircraft rose on average over August and September. In the high-tech category, orders and shipments of computers and peripherals posted robust gains over the same pe-Shipments of communication riod. equipment also rose in August and September, but orders were little changed on balance over the same period. Outside the technology sector, shipments of nondefense capital goods excluding aircraft increased at a solid rate over August and September but orders declined in August and were flat in September. Sales of medium and heavy trucks leveled off in the third quarter after a sharp drop in the first half of the year. Domestic outlays for aircraft likely stepped down somewhat in the third quarter. Nonresidential building activity remained vigorous through August after having posted very strong gains in the second quarter; anecdotal evidence through early October indicated that the recent turbulence in commercial credit markets had done little to slow the pace of commercial construction. More generally, surveys of business conditions continued to point to further near-term gains in spending, although reports from business contacts indicated that some firms had marked down their capital spending plans.

Data on the book value of business inventories through August suggested that real nonfarm inventory investment excluding motor vehicles moved down in the third quarter after having risen at a moderate pace in the second quarter. The ratio of book-value inventories to sales in the manufacturing and trade sector excluding motor vehicles, which was available through August, remained well below the elevated values seen around the turn of the year. Purchasing managers, on average, viewed the level of their customers' inventories as about right in September.

The U.S. international trade deficit narrowed in August as exports increased and imports decreased. Goods exports were boosted by a jump in exports of agricultural products and of gold, which more than offset a decline in exports of other goods. Exports of automotive products fell back sharply after a surge in July. Exports of capital goods contracted slightly, led by a drop in aircraft exports. Exports of semiconductors declined, while exports of computers were about flat. On the import side, the decline was concentrated in goods; service imports were flat. Higher imports of oil and of capital goods, particularly computers and semiconductors, were more than offset by lower imports of automotive products, consumer goods, and industrial supplies excluding oil.

Indicators of economic activity in the third quarter for advanced foreign economies were solid on balance. In the euro area, production and sales picked up in the third quarter from their secondquarter levels. However, recent survey data, including the purchasing managers' index for the service sector in the euro area, pointed to a possible slowing in the pace of growth. Likewise, notwithstanding a strong preliminary estimate of third-quarter GDP growth in the United Kingdom, more recent surveys pointed to some softening. Recent Canadian data were mixed, with relatively strong employment growth and some weakness in retail sales. In contrast, Japan's retail sales and exports rebounded in August, and the October Tankan survey seemed to suggest that the second quarter's sharp contraction in investment was temporary.

In emerging-market economies, recent information, mostly through August, gave no signs that the turmoil in financial markets was having a significant negative effect on real economic activity. In emerging Asia, activity appeared to have remained robust, although growth slowed from its elevated second-quarter pace. Economic indicators for Mexico pointed to moderate growth in the third quarter. In South America, activity was strong, boosted by high prices for commodities and, in Argentina and Venezuela, by expansionary macroeconomic policies. Food prices continued to be a major source of inflationary pressures in emergingmarket economies, and Chinese authorities took several steps aimed at quelling rising prices.

After having risen rapidly in the first half of the year, headline consumer prices decelerated considerably over the summer, largely because of a fall in energy prices. Over September and October, gasoline prices appeared to have risen only moderately despite a jump in crude oil costs. Consumer food prices posted further sizable increases in August and September and continued to run well above the change in core prices. Core consumer price inflation remained moderate in August and September and, on a twelve-month change basis, was down noticeably from a year earlier. Core goods prices fell over the year ending in September after having risen little over the preceding year; noticeable decelerations occurred in the prices of apparel, prescription drugs, and motor vehicles. In addition, increases in owners' equivalent rent slowed noticeably, while rent inflation remained about the same as a year earlier. The producer price index for core intermediate materials edged up in September. The twelvemonth change in that index stepped down considerably from last year, in part because of softer prices for a variety of energy-intensive and

construction-related items. Household surveys indicated that median yearahead inflation expectations inched down in September and October to about the level observed in the first quarter, and longer-term inflation expectations slipped to their lowest level in two years. Average hourly earnings posted a moderate increase over the twelve months ending in September.

At its September meeting, the FOMC lowered its target for the federal funds rate 50 basis points, to $4^{3}/_{4}$ percent. The Board of Governors also approved a 50 basis point decrease in the discount rate, to 51/4 percent, leaving the gap between the federal funds rate target and the discount rate at 50 basis points. The Committee's statement noted that, while economic growth had been moderate during the first half of the year, the tightening of credit conditions had the potential to intensify the housing correction and to restrain economic growth more generally. The Committee indicated that its action was intended to help forestall some of the adverse effects on the broader economy that could otherwise arise from the disruptions in financial markets and to promote moderate growth over time. Readings on core inflation had improved modestly during the year, but the Committee judged that some inflation risks remained, and the Committee planned to continue to monitor inflation developments carefully. The Committee further noted that developments in financial markets since the last regular FOMC meeting had increased the uncertainty surrounding the economic outlook. Accordingly, the Committee would continue to assess the effects of these and other developments on economic prospects and remained ready to act as needed to foster price stability and sustainable economic growth.

The expected path for monetary policy as inferred from futures markets

declined in the wake of the September policy action, as many investors were surprised by the magnitude of the reduction in the target rate. Over the intermeeting period, many investors came to expect that the Committee would reduce the target federal funds rate at its October meeting; in addition, the anticipated policy path further ahead moved down a bit more, on net, over the remainder of the intermeeting period, apparently in response to heightened concerns among investors about economic growth.

Early in the intermeeting period, the functioning of short-term funding markets improved somewhat, but conditions in these markets remained strained. The effective federal funds rate was very close to the target, on average, but the average absolute daily deviation of the effective rate from the target and the intraday standard deviation remained elevated. Credit spreads declined in the commercial paper and term interbank funding markets but stayed well above longer-term norms. Liquidity in the Treasury bill market was poor at times. Corporate bond spreads narrowed somewhat, leaving private yields a little lower. Nonfinancial bond issuance was robust; speculative-grade offerings increased markedly. The credit quality of most households remained strong, but delinquency rates on subprime mortgages climbed further. Securitization of nonconforming mortgages remained limited, and spreads on jumbo mortgages relative to conforming mortgages stayed high. Two-year Treasury yields declined roughly in line with the lower expected policy path, while yields on ten-year Treasuries were little changed, on net. TIPS-based inflation compensation was about unchanged on balance over the intermeeting period despite a sharp rise in spot oil prices. Stock prices jumped early in the intermeeting period in response to the cut in the target federal funds rate and some favorable economic news but later dropped back, leaving broad indexes up only a bit on net. The foreign exchange value of the dollar against other major currencies declined notably.

Debt of the domestic nonfinancial sectors was estimated to have expanded slightly more quickly in the third quarter than in the previous quarter. Despite evidence that bank lending standards and terms had tightened over the previous three months, business debt was still rising strongly, reflecting a continued surge in commercial and industrial (C&I) lending by banks and robust issuance of investment-grade bonds. The expansion of business loans was apparently due in part to financings for leveraged buyouts that underwriters could not syndicate to institutional investors. Household mortgage borrowing was estimated to have decelerated again in the third quarter. M2 increased significantly more slowly in September and October than the rapid pace observed in August, when the financial market turmoil apparently drove investors to the safety of M2 assets. Inflows to retail money market funds and small time deposits were especially strong in September and October; small time deposits were apparently boosted by the attractive rates that banks were offering in order to help fund their expanding loan portfolios.

In the forecast prepared for this meeting, which was formulated prior to the release of the advance estimates of the third-quarter national income and product accounts, the staff revised up its estimate of aggregate economic activity in the third quarter from its forecast presented at the September meeting in light of available indicators that suggested that consumer spending, business investment, and exports were stronger than previously expected. Nonetheless, the

staff expected real GDP growth to be considerably slower in the fourth quarter, reflecting steepening declines in residential construction, reductions in the pace of motor vehicle production, and a smaller contribution from net exports. Looking forward, the staff expected residential investment to remain weak in 2008 with modest declines in house prices. In addition, the staff continued to expect the stress in credit markets and the appreciably higher oil prices indicated by futures markets to restrain spending by businesses and consumers, although the lower foreign exchange value of the dollar suggested some boost to net exports. On balance, real GDP growth for 2008 was projected to slow to a pace a bit below that of its potential, and unemployment was expected to creep up slightly. For 2009, the forecast called for real output growth to step up to a pace slightly above potential as the drags on economic activity exerted by the contraction in residential investment and financial strains were expected to abate. The staff's forecast for core PCE inflation was little changed from that presented at the September meeting because favorable incoming figures on core PCE inflation were offset by expectations for some limited feed-through into retail prices of recent increases in energy prices and for slightly less easing in resource utilization. The forecast for headline inflation was in the same range as that for core inflation in 2008 and 2009, reflecting expectations that energy prices would level off and then turn down and that increases in food prices would slow to a pace more in line with core inflation.

The advance data on the national income and product accounts for the third quarter, which were released on the morning of the second day of the FOMC meeting, indicated a stronger increase in real GDP than the staff had forecast, mostly because inventory investment was estimated to be higher than projected by the staff. The staff interpreted this information as suggesting some upward revision to its estimate of output growth in the third quarter, a small downward revision to its forecast of growth in the current quarter, and no significant change to its forecast for coming quarters.

In conjunction with the FOMC meeting in October, all meeting participants (Federal Reserve Board members and Reserve Bank presidents) provided annual projections for economic growth, unemployment, and inflation for the period 2007 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 outlook and situation, and in the projections that they had submitted for this meeting, participants noted that economic activity had expanded at a somewhat faster pace in the third quarter than previously anticipated and that there was scant evidence of negative spillovers from the ongoing housing correction to other sectors of the economy. Conditions in financial markets had improved since the September FOMC meeting, but functioning in a number of markets remained strained. Even with some further easing of monetary policy, participants expected economic growth to slow over the next few quarters, reflecting continued sharp declines in the housing sector and tighter lending standards and terms across a broad range of credit products. The slowing of growth was likely to produce a modest increase in the unemployment rate from its recent levels, leading to the emergence of a little slack in labor markets. Looking further ahead, participants noted that economic growth should increase gradually to around its trend rate by 2009 as

weakness in the housing sector abated and stresses in financial markets subsided. With aggregate demand showing somewhat greater than expected strength in the third quarter and little evidence of significant spillovers from the housing sector to other components of spending, participants viewed the downside risks to growth as somewhat smaller than at the time of the September meeting, but those risks were still seen as significant. Participants generally expected that inflation would edge down over the next few years, a projection consistent with the recent string of encouraging releases on core consumer prices, futures prices pointing to a flattening of energy costs, and the anticipated easing of pressures on resources. Nonetheless, some upside risks to inflation remained, reflecting in part the potential feed-through to inflation expectations of increases in energy and import prices.

Financial market functioning was judged to have improved somewhat since the previous FOMC meeting, but the situation in a number of markets remained strained, and credit market conditions were thought likely to weigh on economic growth over coming quarters. In light of some improvement in the commercial paper and leveraged loan markets over the intermeeting period, participants were somewhat less concerned that banks would not have sufficient balance-sheet capacity to absorb large volumes of assets. Conditions in corporate credit markets also had improved in recent weeks, and most businesses were apparently having little difficulty raising external funds, 28 evidenced by strong issuance of investment-grade corporate bonds, a pickup in speculative-grade issuance, and surging C&I loans. Markets for nonconforming mortgages, by contrast, remained disrupted. Meeting participants also mentioned that while financial

market conditions had improved, the functioning of some markets remained somewhat impaired. Indeed, several participants noted some relapse in financial conditions late in the intermeeting period. Moreover, unusual pressures in funding markets persisted. Participants generally viewed financial markets as still fragile and were concerned that an adverse shock-such as a sharp deterioration in credit quality or disclosure of unusually large and unanticipated losses-could further dent investor confidence and significantly increase the downside risks to the economy. Participants were also concerned about a potential scenario in which unexpected economic weakness could cause a further tightening of credit conditions that could in turn reinforce weakness in aggregate demand.

In their discussion of individual sectors of the economy, participants noted that the recent declines in housing activity-while substantial-had largely been anticipated. Nonetheless, the potential for significant further weakening in housing activity and home prices represented a downside risk to the economic outlook. Most participants pointed to the deterioration in nonprime mortgage markets as well as higher interest rates and tighter credit standards for prime nonconforming mortgages as factors that had exacerbated the deterioration in housing markets, and they noted that these developments could further limit the availability of mortgage credit and depress the demand for housing. Some participants also pointed to downside risks to the housing market stemming from the large volume of substantial upward interestrate resets that were likely on subprime mortgages in coming quarters, which could lead to a faster pace of foreclosures in the near term, thereby intensifying the downward pressure on house prices.

Participants generally agreed that the available data suggested that consumer spending had been well maintained over the past several months and that spillovers from the strains in the housing market had apparently been quite limited to date. Nevertheless, a number of participants cited notable declines in survey measures of consumer confidence since the onset of financial turbulence in midsummer, along with sharply higher oil prices, declines in house prices, and tighter underwriting standards for home equity loans and some types of consumer loans, as factors likely to restrain consumer spending going forward. Moreover, anecdotal reports by business contacts suggested a softening in retail sales in some regions of the country. Participants expressed a concern that larger-than-expected declines in house prices could further sap consumer confidence as well as net worth, causing a pullback in consumer spending. All told, however, participants envisioned that the most likely scenario was for consumer spending to continue to advance at a moderate rate in coming quarters, supported by the generally strong labor market and further gains in real personal income.

Meeting participants noted that capital expenditures had grown at a solid pace in recent months and that the financial turmoil generally appeared to have had a limited effect on business capital spending plans to date. Nevertheless, business sentiment appeared to have eroded somewhat amid heightened economic and financial uncertainty, potentially restraining investment outlays in some industries. However, participants noted that conditions in corporate bond markets had improved since the September FOMC meeting, and that credit availability generally appeared to be ample, albeit on somewhat tighter terms. Participants judged that moderate growth of investment outlays going forward was the most likely outcome. A number of participants saw downside risk to the outlook for nonresidential building activity, reflecting elevated spreads on commercial-mortgagebacked securities and a further tightening of banks' lending standards for commercial real estate loans.

Data on economic growth outside the United States indicated that the global expansion, though likely to slow somewhat in coming quarters, was nevertheless on a firm footing. The continued strength of global growth and the recent decline in the foreign exchange value of the dollar were seen as likely to support U.S. exports going forward.

Readings on core inflation received during the intermeeting period continued to be generally favorable, and meeting participants agreed that the recent moderation in core inflation would likely be sustained. The slower pace of economic expansion anticipated for the next few quarters would help ease inflationary pressures. Nonetheless, participants expressed concern about the upside risks to the outlook for inflation. The recent increases in the prices of energy and other commodities, along with the significant decline in the foreign exchange value of the dollar, were cited as factors that could exert upward pressure on prices of some core goods and services in the near term. Increases in unit labor costs also could add to inflationary pressures. Moreover, participants expressed concern that some measures of inflation compensation calculated from TIPS securities had risen this year, although they viewed inflation expectations generally as remaining contained. Participants were concerned that if headline inflation remained above core measures for a sustained period, then longerterm inflation expectations could move higher, a development that could lead to greater inflation pressures over the longer term and be costly to reverse.

In the Committee's discussion of policy for the intermeeting period, members discussed the relative merits of lowering the target federal funds rate 25 basis points, to $4\frac{1}{2}$ percent, at this meeting or awaiting additional information on prospects for economic activity and inflation before assessing whether a further adjustment in the stance of monetary policy was necessary. Many members noted that this policy decision was a close call. However, on balance, nearly all members supported a 25 basis point reduction in the target federal funds rate. The stance of monetary policy appeared still to be somewhat restrictive, partly because of the effects of tighter credit conditions on aggregate demand. Moreover, most members saw substantial downside risks to the economic outlook and judged that a rate reduction at this meeting would provide valuable additional insurance against an unexpectedly severe weakening in economic activity. Many members were concerned about the still-sensitive state of financial markets and thought that an easing of policy would help to support improvements in market functioning, thereby mitigating some of the downside risks to economic growth. With real GDP likely to expand below its potential over coming quarters, recent price trends favorable, and inflation expectations appearing reasonably well anchored, the easing of policy at this meeting seemed unlikely to affect adversely the outlook for inflation. A number of members noted that the recent policy moves could readily be reversed if circumstances evolved in a manner that would warrant such action.

The Committee agreed that the statement to be released at this meeting should indicate that economic growth was solid in the third quarter and that strains in financial markets had eased somewhat on balance. Members also agreed that economic growth seemed likely to slow over coming quarters, but that the easing action taken at the meeting-combined with the 50 basis point cut in the target federal funds rate at the September meeting-should help to promote moderate growth over time, although some downside risks to growth would remain. Members felt that it was appropriate to underscore the upside risks to inflation stemming from the recent increases in the prices of energy and other commodities, even though recent readings on core inflation had been favorable. While the Committee saw uncertainty regarding the economic outlook as still elevated, it judged that, after this action, the upside risks to inflation roughly balanced the downside risks to growth.

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 4¹/₂ 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 4¹/₂ percent.

Economic growth was solid in the third quarter, and strains in financial markets have eased somewhat on balance. However, the pace of economic expansion will likely slow in the near term, partly reflecting the intensification of the housing correction. Today's action, combined with the policy action taken in September, should help forestall some of the adverse effects on the broader economy that might otherwise arise from the disruptions in financial markets and promote moderate growth over time.

Readings on core inflation have improved modestly this year, but recent increases in energy and commodity prices, among other factors, may put renewed upward pressure on inflation. In this context, the Committee judges that some inflation risks remain, and it will continue to monitor inflation developments carefully.

The Committee judges that, after this action, the upside risks to inflation roughly balance the downside risks to growth. The Committee will continue to assess the effects of financial and other developments on economic prospects and will act as needed to foster price stability and sustainable economic growth.

> Votes for this action: Messrs. Bernanke, Geithner, Evans, Kohn, Kroszner, Mishkin, Poole, Rosengren, and Warsh. Votes against this action: Mr. Hoenig.

Mr. Hoenig dissented because he believed that policy should remain unchanged at this meeting. Projections for the U.S. and global economies suggested that growth was likely to proceed at a reasonable pace over the outlook period. To better assure that outcome, the FOMC had moved rates down significantly at its September meeting. At this meeting, inflation risks appeared elevated and Mr. Hoenig felt that the target federal funds rate was currently close to neutral. In these circumstances. he judged that policy needed to be slightly firm to better hold inflation in check. Going forward, if the data suggested the Committee needed to ease further, it could do so. He also recognized that liquidity remains a near-term challenge and that the Federal Reserve would be prepared to act if needed. Mr.

Hoenig saw the risks to both economic growth and inflation to be elevated and preferred to wait, watch, and be ready to act depending on how events developed.

The Committee then resumed its discussion of an enhanced role for the economic projections that are made periodically by the members of the Board of Governors and the Reserve Bank presidents. At this meeting, participants reached a consensus on increasing the frequency and expanding the content of the projections that in the past have been released to the public in summary form twice a year. They agreed to publish with the minutes a summary of participants' economic projections made for this meeting and to release a press statement describing the plan for the future. The release of more frequent forecasts

Summary of Economic Projections

In conjunction with the October 2007 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 2007, 2008, 2009, and 2010. Projections were based on information available through the conclusion of the October meeting, on each participant's assumptions regarding a range of factors likely to affect economic outcomes, and his or her assessment of appropriate monetary policy. "Appropriate monetary policy" is defined as the future policy 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.

covering longer time spans and accompanied by explanations of those forecasts was seen as providing the public with more context for understanding the Committee's monetary policy decisions.

It was agreed that the next meeting of the Committee would be held on Tuesday, December 11, 2007.

The meeting adjourned at 12:00 noon.

Notation Vote

By notation vote completed on October 5, 2007, the Committee unanimously approved the minutes of the FOMC meeting held on September 18, 2007 and of the conference calls on August 10, 2007 and August 16, 2007.

Brian F. Madigan Secretary

The projections, which are summarized in table 1 and chart 1, suggest that FOMC participants expected that, in the near term, output will grow at a pace somewhat below its trend rate and the unemployment rate will edge higher, owing primarily to weakness in housing markets and to the tightening in the availability of credit resulting from recent strains in financial markets. Further ahead, output was projected to expand at a pace close to its long-run trend. Total inflation was expected to be lower in 2008 than in 2007, and then to edge down further in subsequent years.

The Outlook

Data available at the time of the October FOMC meeting indicated that economic growth had been solid during the second and third quarters, and evidence that the contraction in the housing sector had begun to spill over substantially to other sectors of the economy remained scant. Consequently, despite the recent finan-

	2007	2008	2009	2010
Central Tendencies				
Real GDP Growth	2.4 to 2.5 $2^{1/4}$ to $2^{1/2}$	1.8 to 2.5 $2^{1/2}$ to $2^{3/4}$	2.3 to 2.7	2.5 to 2.6
Unemployment Rate	4.7 to 4.8 $4^{1/2}$ to $4^{3/4}$	4.8 to 4.9 <i>about 4³</i> / ₄	4.8 to 4.9	4.7 to 4.9
PCE Inflation	2.9 to 3.0	1.8 to 2.1	1.7 to 2.0	1.6 to 1.9
Core PCE Inflation	1.8 to 1.9 2 to 2 ¹ / ₄	1.7 to 1.9 1 ³ /4 to 2	1.7 to 1.9	1.6 to 1.9
Ranges				
Real GDP Growth	2.2 to 2.7 2 to 2 ³ / ₄	1.6 to 2.6 2 ¹ / ₂ to 3	2.0 to 2.8	2.2 to 2.7
Unemployment Rate	4.7 to 4.8 $4^{1/2}$ to $4^{3/4}$	4.6 to 5.0 4 ¹ / ₂ to 5	4.6 to 5.0	4.6 to 5.0
PCE Inflation	2.7 to 3.2	1.7 to 2.3	1.5 to 2.2	1.5 to 2.0
Core PCE Inflation	1.8 to 2.1 2 to 2 ¹ / ₄	1.7 to 2.0 1 ³ / ₄ to 2	1.5 to 2.0	1.5 to 2.0

1. Economic Projections of Federal Reserve Governors and Reserve Bank Presidents¹

 Projections of real GDP growth, PCE inflation, and core PCE inflation are fourth-quarter-to-fourth-quarter growth rates, that is, percentage changes from the fourth quarter of the prior year to the fourth quarter of the indicated year. PCE inflation and core PCE inflation are the percentage rates of change in the price index for personal consumption expenditures and the price index for personal consumption expenditures excluding food and energy, respectively. Projections for the unemploy-

cial market turmoil, the central tendency of participants' projections for real GDP growth in 2007, at 2.4 to 2.5 percent, was little changed from the central tendency of the projections provided in conjunction with the June FOMC meeting and included in the Board's Monetary Policy Report to the Congress in July. However, the central tendency of participants' projections for real GDP growth in 2008 was revised down to 1.8 to 2.5 percent, notably below the $2\frac{1}{2}$ to $2^{3}/_{4}$ percent central tendency in June. These revisions to the 2008 outlook since June stemmed from a number of factors, including the tightened terms and reduced availability of subprime and jumbo mortgages, weaker-than-expected housing data, and rising oil prices. Partly in response to declining housing wealth, the personal saving rate was expected to rise over the next few years, contributing to restraint on the growth of personal consumption expenditures. Howment rate are for the average civilian unemployment rate in the fourth quarter of each year. Each participant's projections are based on his or her assessment of appropriate monetary policy. The range for each variable in a given year includes all participants' projections, from lowest to highest, for that variable in the given year; the central tendencies exclude the three highest and three lowest projections for each variable in each year.

ever, net exports were expected to provide some support to growth. The subpar economic growth projected in the near term was not anticipated to persist. Growth was expected to pick up as the adjustment in housing markets ran its course, financial markets gradually resumed more-normal functioning, and as the monetary policy easing at the September and October FOMC meetings provided support to aggregate demand. Economic activity was projected to expand at a pace broadly in line with participants' estimates of the rate of expansion of the economy's productive potential in 2009 and to continue at much the same pace in 2010. Participants read last summer's benchmark revisions to the national income and product accounts as suggesting a somewhat slower rate of trend growth than previously thought.

Most participants expected that, with output growth running somewhat below

1. Central Tendencies and Ranges of Economic Projections*



* See notes to table 1 for variable definitions

trend over the next year or so, the unemployment rate would increase modestly. The central tendency of participants' projections for the average rate of unemployment in the fourth quarter of 2008 was 4.8 to 4.9 percent, slightly above the 4³/₄ percent unemployment rate forecasted in June; these projections suggested the emergence of a little slack in labor markets. The central tendency of participants' projections was for the unemployment rate to stabilize in 2009 and to fall back a bit in 2010 as output and employment growth pick up.

Overall inflation was expected to edge down over the next few years, fostered by an assumed flattening of energy prices about in line with futures markets quotes, a modest easing of pressures on resource utilization, and fairly well anchored inflation expectations. Participants' projections for core inflation this year and next were marked down from those provided at the time of the June FOMC meeting, partly in light of recent generally favorable core inflation data that pointed to some reduction in underlying inflation pressures. The central tendency of projections for core PCE inflation in 2007 was 1.8 to 1.9 percent, down from 2 to 21/4 percent in June. The central tendency of core inflation projections for 2008 was 1.7 to 1.9 percent. Participants' projections for PCE inflation in 2009 and 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. The central tendency of participants' projections for both core and total inflation in 2010 ranged from 1.6 to 1.9 percent.

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. Financial market conditions had deteriorated sharply in August, and although there had been some signs of improvement since then, markets remained strained. The possibilities that markets could relapse or that current tighter credit conditions could exert unexpectedly large restraint on household and business spending were viewed as downside risks to economic activity. Participants were concerned about the possibility for adverse feedbacks in which economic weakness could lead to further tightening in credit

conditions, which could in turn slow the economy further. The potential for a more severe contraction in the housing sector and a substantial decline in house prices was also perceived as a risk to the central outlook for economic growth. But participants also noted that in recent decades, the U.S. economy had proved quite resilient to episodes of financial distress, suggesting that the adverse effects of financial developments on economic activity outside of the housing sector could prove to be more modest than anticipated.

Participants were more persuaded than they had been in June that the decline in core inflation readings this year represented a sustained albeit modest step-down rather than the effect of transitory influences. Nonetheless, participants saw some upside risks to their inflation projections. Recent increases in energy and commodity prices and the pass-through of dollar depreciation into import prices would raise inflation over the medium term. That increase could lead to an upward drift in inflation expectations that would add to price pressures and could be costly to reverse.

The possibility that financial market turbulence could have larger-thananticipated adverse effects on household and business spending heightened participants' uncertainty about the outlook for economic activity. Most participants judged that the uncertainty attending their October projections for real GDP growth 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.¹³) In

^{13.} 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.

8				
	2007	2008	2009	2010
Real GDP ² Unemployment rate ³	±0.2	±1.3 ±0.6	±0.9	±1.4 ±1.1
Total consumer prices ²	±0.3	± 1.0	± 1.0	± 1.0

2. Average Historical Projection Error Ranges¹

1. "Average historical projection error ranges" for the years 2007 through 2010 are measured as plus or minus the root mean squared error of projections that were released in the autumn from 1986 through 2006 for the current and following three years by various private and government forecasters. As described in the forecast uncertainty box, under certain assumptions, there is about a 70 percent probability that actual outcomes for real activity, unemployment, and inflation will fall in ranges implied by the average size of projection errors made in the past. For further information, see David Reifschneider and Peter Tulip, "Gauging the Uncertainty of the Economic Outlook from Historical Forecast Errors," Federal Reserve Board Financial and Economics Discussion Series #2007-60 (November 2007).

2. Overall consumer price index, as this is the price measure that has been most widely used in government and private economic forecasts. Percent change, fourth quarter of year relative to fourth quarter of preceding year.

3. Percent, fourth-quarter average.

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 total inflation was higher than usual, reflecting the possibility that the recent volatility in food and energy prices might persist.

Diversity of Participants' Views

Charts 2(a) and 2(b) provide more detail on the diversity of participants' views. The dispersion of participants' projec-

tions for real GDP growth in 2008 was markedly wider than in June. The dispersion of participants' projections for growth next year seemed largely to reflect differing assessments of the likely depth and duration of the correction in the housing market, the effect of financial market disruptions on real activity outside of the housing sector, and the speed with which financial markets will return to more normal functioning. The dispersion of participants' projections for the rate of unemployment over the next year or so had changed little. Participants' longer-term projections for real GDP growth and for the rate of unemployment were more heavily influenced by their views about, respectively, 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 the near term partly reflected different weights attached to the various factors expected to foster a moderation of inflation. Some participants judged that the anticipated modest easing in resource pressures was unlikely to have a marked effect on inflation. Similarly, views differed about the influence that inflation expectations would exert on inflation over the short and medium run. Participants' projections further out were also influenced by their views about the rate of inflation consistent with the Federal Reserve's dual mandate.



2(a). Distribution of Participants' Projections (percent)*

* See notes to table 1 for variable definitions. Those participants' June projections that were provided in quarter points have been rounded to the nearest tenth for the construction of these histograms.



2(b). Distribution of Participants' Projections (percent)*

* See notes to table 1 for variable definitions. Those participants' June projections that were provided in quarter points have been rounded to the nearest tenth for the construction of these histograms.

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 2.4 percent to 3.6 percent in the current year, 1.7 percent to 4.3 percent next 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 11, 2007

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, December 11, 2007, at 8:00 a.m.

Present:

- Mr. Bernanke, Chairman
- Mr. Geithner, Vice Chairman
- Mr. Evans
- Mr. Hoenig
- Mr. Kohn
- Mr. Kroszner
- Mr. Mishkin
- Mr. Poole
- Mr. Rosengren
- Mr. Warsh
- Ms. Cumming, Mr. Fisher, Ms. Pianalto, and Messrs. Plosser and Stern, Alternate Members of the Federal Open Market Committee
- Messrs. Lacker and Lockhart, and Ms. Yellen, Presidents of the Federal Reserve Banks of Richmond, Atlanta, and San Francisco, respectively
- Mr. Madigan, Secretary and Economist
- Ms. Danker, Deputy Secretary
- Ms. Smith, Assistant Secretary
- Mr. Skidmore, Assistant Secretary
- Mr. Alvarez, General Counsel
- Mr. Baxter, Deputy General Counsel
- Mr. Sheets, Economist
- Mr. Stockton, Economist
- Messrs. Clouse, Connors, Fuhrer, Kamin, Rasche, Sellon, Slifman, Sullivan, and Wilcox, Associate Economists
- Mr. Dudley, Manager, System Open Market Account
- Mr. Struckmeyer, Deputy Staff Director, Office of Staff Director for Management
- Mr. English, Senior Associate Director, Division of Monetary Affairs, Board of Governors

- Ms. Liang and Mr. Wascher, Associate Directors, Division of Research and Statistics, Board of Governors
- Mr. Blanchard, Assistant to the Board, Office of Board Members, Board of Governors
- Mr. Meyer, Visiting Reserve Bank Officer, Division of Monetary Affairs, Board of Governors
- Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors
- Mr. Luecke, Senior Financial Analyst, Division of Monetary Affairs, Board of Governors
- Ms. Low, Open Market Secretariat Specialist, Division of Monetary Affairs, Board of Governors
- Mr. Barron, First Vice President, Federal Reserve Bank of Atlanta
- Mr. Rosenblum, Executive Vice President, Federal Reserve Bank of Dallas
- Mr. Altig, Ms. Perelmuter, Messrs. Rolnick, Weinberg, and Williams, Senior Vice Presidents, Federal Reserve Banks of Atlanta, New York, Minneapolis, Richmond, and San Francisco, respectively
- Messrs. Bryan and Yi, Vice Presidents, Federal Reserve Banks of Cleveland and Philadelphia, respectively
- Mr. McCarthy, Research 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 Committee approved a foreign currency swap arrangement with the Swiss National Bank that paralleled the arrangement with the European Central Bank approved during the Committee's conference call on December 6, 2007. With Mr. Poole dissenting, the Committee voted to direct the Federal Reserve Bank of New York to establish and maintain a reciprocal currency (swap) arrangement for the System Open Market Account with the Swiss National Bank in an amount not to exceed \$4 billion. The Committee authorized associated draws of up to the full amount of \$4 billion, and the arrangement itself was authorized for a period of up to 180 days unless extended by the FOMC. Mr. Poole dissented because he viewed the swap agreement as unnecessary in light of the size of the Swiss National Bank's dollar-denominated foreign exchange reserves.

The information reviewed at the December meeting indicated that, after the robust gains of the summer, economic activity decelerated significantly in the fourth quarter. Consumption growth slowed, and survey measures of sentiment dropped further. Many readings from the business sector were also softer: Industrial production fell in October, as did orders and shipments of capital goods. Employment gains stepped down during the four months ending in November from their pace earlier in the year. Headline consumer price inflation moved higher in September and October as energy prices increased significantly; core inflation also rose but remained moderate.

The slowing in private employment gains was due in large part to the ongoing weakness in the housing market. Employment in residential construction posted its fourth month of sizable declines in November, and employment in housing-related sectors such as finance, real estate, and building-material and garden-supply retailers continued to trend down. Elsewhere, factory jobs declined again, while employment in most service-producing industries continued to move up. Aggregate hours of production or nonsupervisory workers edged up in October and November. Some indicators from the household survey also suggested softening in the labor market, but the unemployment rate held steady at 4.7 percent through November.

Industrial production fell in October after small increases in the previous two months. The index for motor vehicles and parts fell for the third consecutive month, and the index for construction supplies moved down for the fourth straight month. Materials output also declined in October, with production likely curbed by weak demand from the construction and motor vehicle sectors. Production in high-tech industries, however, increased modestly, and commercial aircraft production registered another solid gain. In November, output appeared to have edged up in manufacturing sectors (with the exception of the motor vehicles sector) for which weekly physical product data were available.

After posting notable gains in the summer, real consumer spending was nearly flat in September and October. Spending on goods excluding motor vehicles was little changed on net over that period. Spending on services edged down, reflecting an extraordinarily large drop in securities commissions in September. The most recent readings on weekly chain store sales as well as industry reports and surveys suggested subdued gains in November and an uneven start to the holiday shopping season. Sales of light motor vehicles in November remained close to the pace that had prevailed since the second quarter. Real disposable income was about unchanged in September and October. The Reuters/University of Michigan index of consumer sentiment ticked down further in early December as respondents took a more pessimistic view of the outlook for their personal finances and for business conditions in the year ahead.

In the housing market, new home sales were below their third-quarter pace, and sales of existing homes were flat in October following sharp declines in August and September. These declines likely were exacerbated by the deterioration in nonprime mortgage markets and by the higher interest rates and tighter lending conditions for jumbo loans. Single-family housing starts stepped down again in October after substantial declines in the June-September period. Yet, because of sagging sales, builders made only limited progress in paring down their substantial inventories. Single-family permit issuance continued along the steep downward trajectory that had begun two years earlier, which pointed toward further slowing in homebuilding over the near term. Multifamily starts rebounded in October from an unusually low reading in September, and the level of multifamily starts was near the midpoint of the range in which this series had fluctuated over the past ten years.

Real spending on equipment and software posted a solid increase in the third quarter. In October, however, orders and shipments of nondefense capital goods excluding aircraft declined, suggesting that some deceleration in spending was under way in the fourth quarter. The October decline in orders and shipments was led by weakness in the high-tech sector: Shipments of computers and peripheral equipment declined while the industrial production index for computers was flat; orders and shipments for communications equipment plunged. Some of that weakness may have been attributable to temporary production disruptions stemming from the wildfires in Southern California; cutbacks in demand from large financial institutions affected by market turmoil may have contributed as well. In the transportation equipment category, purchases of medium and heavy trucks changed little, and orders data suggested that sales would remain near their current levels in the coming months. Orders for equipment outside high-tech and transportation rose in October, but shipments were about flat, pointing to a weaker fourth quarter for business spending after two quarters of brisk increases. Some prominent surveys of business conditions remained consistent with modest gains in spending on equipment and software during the fourth quarter, but other surveys were less sanguine. In addition, although the cost of capital was little changed borrowers for in the investment-grade corporate bond market, costs for borrowers in the high-yield corporate bond market were up significantly. In the third quarter, corporate cash flows appeared to have dropped off, leaving firms with diminished internally generated funds for financing investment. Data available through October suggested that nonresidential building activity remained vigorous.

Real nonfarm inventory investment excluding motor vehicles increased slightly faster in the third quarter than in the second quarter. Outside of motor vehicles, the ratio of book-value inventories to sales had ticked up slightly in September but remained near the low end of its range in recent years. Bookvalue estimates of the inventory investment of manufacturers—the only inventory data available beyond the third quarter—were up in October at about the third-quarter pace.

The U.S. international trade deficit narrowed slightly in September as an increase in exports more than offset higher imports. The September gain in exports primarily reflected higher exports of goods; services exports recorded moderate growth. Exports of agricultural products exhibited particularly robust growth, with both higher prices and greater volumes. Exports of industrial supplies and consumer goods also moved up smartly in September. Automotive products exports, in contrast, were flat, and capital goods exports fell, led by a decline in aircraft. The increase in imports primarily reflected higher imports of capital goods, with imports of computers showing particularly strong growth. Imports of automotive products, consumer goods, and services also increased. Imports of petroleum, however, were flat, and imports of industrial supplies fell.

Output growth in the advanced foreign economies picked up in the third quarter. In Japan, real output rebounded, led by exports. In the euro area, GDP growth returned to a solid pace in the third quarter on the back of a strong recovery in investment. In Canada and the United Kingdom, output growth moderated but remained robust, as vigorous domestic demand was partly offset by rapid growth of imports. Indicators of fourth-quarter activity in the advanced foreign economies were less robust on net. Confidence indicators had deteriorated in most major economies in the wake of the financial turmoil and remained relatively weak. In November, the euro-area and U.K. purchasing managers indexes for services were well below their level over the first half of the year; nevertheless they pointed to moderate expansion. Labor market conditions generally remained relatively strong in recent months. Incoming data on emerging-market economies were positive on balance. Overall, growth in emerging Asia moderated somewhat in the third quarter from its double-digit pace in the second quarter, but remained strong. Economic growth was also solid in Latin America, largely reflecting stronger-than-expected activity in Mexico.

In the United States, headline consumer price inflation increased in September and October from its low rates in the summer as the surge in crude oil prices began to be reflected in retail energy prices. In addition, though the rise in food prices in October was slower than in August and September, it remained above that of core consumer prices. Excluding food and energy, inflation was moderate, although it was up from its low rates in the spring. The pickup in core consumer inflation over this period reflected an acceleration in some prices that were unusually soft last spring, such as those for apparel, prescription drugs, and medical services, as well as nonmarket prices. On a twelvemonth-change basis, core consumer price inflation was down noticeably from a year earlier. In October, the producer price index for core intermediate materials moved up only slightly for a second month, and the twelve-month increase in these prices was considerably below that of the year-earlier period. This pattern reflected, in part, a deceleration in the prices of a wide variety of construction materials, such as cement and gypsum, and in the prices of some metal products. In response to rising energy prices, household survey measures of expectations for year-ahead inflation picked up in November and then edged higher in December. Households' longer-term inflation expectations also edged up in both November and December. Average hourly earnings increased faster in November than in the previous two months. Over the twelve months that ended in November, however, this wage measure rose a bit more slowly than over the previous twelve months.

At its October meeting, the FOMC lowered its target for the federal funds rate 25 basis points, to 41/2 percent. The Board of Governors also approved a 25 basis point decrease in the discount rate, to 5 percent, leaving the gap between the federal funds rate target and the discount rate at 50 basis points. The Committee's statement noted that, while economic growth was solid in the third quarter and strains in financial markets had eased somewhat on balance, the pace of economic expansion would likely slow in the near term, partly reflecting the intensification of the housing correction. The Committee indicated that its action, combined with the policy action taken in September, should help forestall some of the adverse effects on the broader economy that might otherwise arise from the disruptions in financial markets and should promote moderate growth over time. Readings on core inflation had improved modestly during the year, but the statement noted that recent increases in energy and commodity prices, among other factors, may put renewed upward pressure on inflation. In this context, the Committee judged that some inflation risks remained and indicated that it would continue to monitor inflation developments carefully. The Committee also judged that, after this action, the upside risks to inflation roughly balanced the downside risks to growth. The Committee said 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.

The Committee's action at its October meeting was largely expected by market participants, although the assessment that the upside risks to inflation balanced the downside risks to growth was not fully anticipated and apparently led investors to revise up slightly the expected path for policy. During the intermeeting period, the release of the FOMC minutes and associated summary of economic projections, as well as various data releases, elicited only modest market reaction. In contrast, markets were buffeted by concerns about the potential adverse effects on credit availability and economic growth of sizable losses at large financial institutions and of financial market strains in general. Market participants marked down their expected path for policy substantially, and by the time of the December meeting, investors were virtually certain of a rate cut. Two-year Treasury yields fell on net over the intermeeting period by an amount about in line with revisions to policy expectations. Ten-year Treasury yields also declined, but less than shorter-term yields. The steepening of the vield curve was due mostly to sharply lower short- and intermediateterm forward rates, consistent with investors' apparently more pessimistic outlook for economic growth. TIPS yields fell less than their nominal counterparts, implying modest declines in inflation compensation both at the fiveyear and longer horizons.

After showing some signs of improvement in late September and October, conditions in financial markets worsened over the intermeeting period. Heightened worries about counterparty credit risk, balance sheet constraints, and liquidity pressures affected interbank funding markets and commercial paper markets, where spreads over riskfree rates rose to levels that were, in some cases, higher than those seen in August. Strains in those markets were exacerbated by concerns related to yearend pressures. In longer-term corporate markets, both investment- and speculative-grade credit spreads widened considerably; issuance slowed but remained strong. In housing finance,

subprime mortgage markets stayed virtually shut, and spreads on jumbo loans apparently widened further. Spreads on conforming mortgage products also widened after reports of losses and reduced capital ratios at the housingrelated government-sponsored enterprises. Broad-based equity indexes were volatile and ended the period down noticeably. Financial stocks were especially hard hit, dropping substantially more than the broad indexes. Similar stresses were evident in the financial markets of major foreign economies. The trade-weighted foreign exchange value of the dollar against major currencies moved up, on balance, over the intermeeting period.

Debt in the domestic nonfinancial sector was estimated to be increasing somewhat more slowly in the fourth quarter than in the third quarter. Nonfinancial business debt continued to expand strongly, supported by solid bond issuance and by a small rebound in the issuance of commercial paper. Bank loans outstanding also continued to rise rapidly. Household mortgage debt was expected to expand at a reduced rate in the fourth quarter, reflecting softer home prices and declining home sales, as well as a tightening in credit conditions for some borrowers. Nonmortgage consumer credit in the fourth quarter appeared to be expanding at a moderate pace. In November, M2 growth picked up slightly from its October rate. While liquid deposits continued to grow slowly, heightened demand for safety and liquidity appeared to boost holdings of retail money market mutual funds. Small time deposits continued to expand, likely in part due to high rates offered by some depository institutions to attract retail deposits. Currency outstanding was about flat in November.

In the forecast prepared for this meeting, the staff revised down its estimate of growth in aggregate economic activity in the fourth quarter. Although thirdquarter real GDP was revised up sharply, most available indicators of activity in the fourth quarter were more downbeat than had previously been expected. Faster inventory investment contributed importantly to the upward revision to third-quarter real GDP, but part of that upswing was expected to be unwound in the fourth quarter. The available data for domestic final sales also suggested a weaker fourth quarter than had been anticipated. In particular, real personal consumption expenditures had been about unchanged in September and October, and the contraction in singlefamily construction had intensified. Providing a bit of an offset to these factors, however, was further improvement in the external sector. The staff also marked down its projection for the rise in real GDP over the remainder of the forecast period. Real GDP was anticipated to increase at a rate noticeably below its potential in 2008. Conditions in financial markets had deteriorated over the intermeeting period and were expected to impose more restraint on residential construction as well as consumer and business spending in 2008 than previously expected. In addition, compared with the previous forecast, higher oil prices and lower real income were expected to weigh on the pace of real activity throughout 2008 and 2009. By 2009, however, the staff projected that the drag from those factors would lessen and that an improvement in mortgage credit availability would lead to a gradual recovery in the housing market. Accordingly, economic activity was expected to increase at its potential rate in 2009. The external sector was projected to continue to support domestic economic activity throughout the forecast period. Reflecting upward revisions to previously published data, the forecast for core PCE price inflation for 2007 was a bit higher than in the preceding forecast; core inflation was projected to hold steady during 2008 as the indirect effects of higher energy prices on prices of core consumer goods and services were offset by the slight easing of resource pressures and the expected deceleration in the prices of nonfuel imported goods. The forecast for headline PCE inflation anticipated that retail energy prices would rise sharply in the first quarter of 2008 and that food price inflation would outpace core price inflation in the beginning of the year. As pressures from these sources lessened over the remainder of 2008 and in 2009, both core and headline price inflation were projected to edge down, and headline inflation was expected to moderate to a pace slightly below core inflation.

In their discussion of the economic situation and outlook, participants generally noted that incoming information pointed to a somewhat weaker outlook for spending than at the time of the October meeting. The decline in housing had steepened, and consumer outlays appeared to be softening more than anticipated, perhaps indicating some spillover from the housing correction to other components of spending. These developments, together with renewed strains in financial markets, suggested that growth in late 2007 and during 2008 was likely to be somewhat more sluggish than participants had indicated in their October projections. Still, looking further ahead, participants continued to expect that, aided by an easing in the stance of monetary policy, economic growth would gradually recover as weakness in the housing sector abated and financial conditions improved, allowing the economy to expand at about its trend rate in 2009. Participants thought that recent increases in energy prices likely would boost headline inflation temporarily, but with futures prices pointing to a gradual decline in oil prices and with pressures on resource utilization seen as likely to ease a bit, most participants continued to anticipate some moderation in core and especially headline inflation over the next few years.

Participants discussed in detail the resurgence of stresses in financial markets in November. The renewed stresses reflected evidence that the performance of mortgage-related assets was deteriorating further, potentially increasing the losses that were being borne in part by a number of major financial firms, including money-center banks, housing-related government-sponsored enterprises, investment banks, and financial guarantors. Moreover, participants recognized that some lenders might be exposed to additional losses: Delinquency rates on credit card loans, auto loans, and other forms of consumer credit, while still moderate, had increased somewhat, particularly in areas hard hit by house price declines and mortgage defaults. Past and prospective losses appeared to be spurring lenders to tighten further the terms on new extensions of credit, not just in the troubled markets for nonconforming mortgages but, in some cases, for other forms of credit as well. In addition, participants noted that some intermediaries were facing balance sheet pressures and could become constrained by concerns about rating-agency or regulatory capital requirements. Among other factors, banks were experiencing unanticipated growth in loans as a result of continuing illiquidity in the market for leveraged loans, persisting problems in the commercial paper market that had sparked draws on back-up lines of credit, and more recently, consolidation of assets of off-balance-sheet affiliates onto banks' balance sheets.

Concerns about credit risk and the pressures on banks' balance sheet capacity appeared to be contributing to diminished liquidity in interbank markets and to a pronounced widening in term spreads for periods extending through year-end. A number of participants noted some potential for the Federal Reserve's new Term Auction Facility and accompanying actions by other central banks to ameliorate pressures in term funding markets. Participants recognized, however, that uncertainties about values of mortgage-related assets and related losses, and consequently strains in financial markets, could persist for quite some time.

Some participants cited more-positive aspects of recent financial developments. A number of large financial intermediaries had been able to raise substantial amounts of new capital. Moreover, credit losses and asset writedowns at regional and community banks had generally been modest; these institutions typically were not facing balance sheet pressures and reportedly had not tightened lending standards appreciably, except for those on real estate loans. And, although spreads on corporate bonds had widened over the intermeeting period, especially for speculativegrade issues, the cost of credit to most nonfinancial firms remained relatively low: nonfinancial firms outside of the real estate and construction sectors generally reported that credit conditions, while somewhat tighter, were not restricting planned investment spending; and consumer credit remained readily available for most households. Nonetheless, participants agreed that heightened financial stress posed increased downside risks to growth and made the outlook for the economy considerably more uncertain.

Participants noted the marked deceleration in consumer spending in the na-

tional data. Real personal consumption expenditures had shown essentially no growth in September and October, suggesting that tighter credit conditions, higher gasoline prices, and the continuing housing correction might be restraining growth in real consumer spending. Retailers reported weaker results in many regions of the country, but in some, retailers saw solid growth. Job growth rebounded somewhat in October and November, and participants expected continuing gains in employment and income to support rising consumer spending, though they anticipated slower growth of jobs, income, and spending than in recent years. However, consumer confidence recently had dropped by a sizable amount, leading some participants to voice concerns that household spending might increase less than currently anticipated.

Recent data and anecdotal information indicated that the housing sector was weaker than participants had expected at the time of the Committee's previous meeting. In light of elevated inventories of unsold homes and the higher cost and reduced availability of nonconforming mortgage loans, participants agreed that the housing correction was likely to be both deeper and more prolonged than they had anticipated in October. Moreover, rising foreclosures and the resulting increase in the supply of homes for sale could put additional downward pressure on prices, leading to a greater decline in household wealth and potentially to further disruptions in the financial markets.

Indicators of capital investment for the nation as a whole suggested solid but appreciably less rapid growth in business fixed investment during the fourth quarter than the third. Participants reported that firms in some regions and industries had indicated they would scale back capital spending, while contacts in other parts of the country or industries reported no such change. Similarly, business sentiment had deteriorated in many parts of the country, but in other areas firms remained cautiously optimistic. Anecdotal evidence generally suggested that inventories were not out of line with desired levels. Even so, participants expected that inventory accumulation would slow from its elevated third-quarter pace. Several participants remarked that, unlike residential real estate, commercial and industrial real estate activity remained solid in their Districts. But participants also noted the deterioration in the secondary market for commercial real estate loans and the possible effects of that development, should it persist, on building activity.

The available data showed strong growth abroad and solid gains in U.S. exports. Participants noted that rising foreign demand was benefiting U.S. producers of manufactured goods and agricultural products, in particular. Exports were unlikely to continue growing at the robust rate reported for the third quarter, but participants anticipated that the combination of the weaker dollar and stillstrong, though perhaps less-rapid, growth abroad would mean continued firm growth in U.S. exports. Several participants observed, however, that strong growth in foreign economies and U.S. exports might not persist if global financial conditions were to deteriorate further.

Recent readings on inflation generally were seen as slightly less favorable than in earlier months, partly due to upward revisions to previously published data. Moreover, earlier increases in energy and food prices likely would imply higher headline inflation in the next few months, and past declines in the dollar would put upward pressure on import prices. Some participants said that higher input costs and rising prices of imports were leading more firms to seek price increases for goods and services. However, few business contacts had reported unusually large wage increases. Downward revisions to earlier compensation data, along with the latest readings on compensation and productivity, indicated only moderate pressure on unit labor costs. With futures prices pointing to a gradual decline in oil prices and with an anticipation of some easing of pressures on resource utilization, participants generally continued to see core PCE inflation as likely to trend down a bit over the next few years, as in their October projections, and headline inflation as likely to slow more substantially from its currently elevated level. Nonetheless, participants remained concerned about upside risks to inflation stemming from elevated prices of energy and nonenergy commodities; some also cited the weaker dollar. Participants agreed that continued stable inflation expectations would be essential to achieving and sustaining a downward trend to inflation, that well-anchored expectations couldn't be taken for granted, and that policymakers would need to continue to watch inflation expectations closely.

In the Committee's discussion of monetary policy for the intermeeting period, members judged that the softening in the outlook for economic growth warranted an easing of the stance of policy at this meeting. In view of the further tightening of credit and deterioration of financial market conditions, the stance of monetary policy now appeared to be somewhat restrictive. Moreover, the downside risks to the expansion, resulting particularly from the weakening of the housing sector and the deterioration in credit market conditions, had risen. In these circumstances, policy easing would help foster maximum sustainable growth and provide some additional insurance against risks. At the same time, members noted that policy had already been eased by 75 basis points and that the effects of those actions on the real economy would be evident only with a lag. And some data, including readings on the labor market, suggested that the economy retained forward momentum. Members generally saw overall inflation as likely to be lower next year, and core inflation as likely to be stable, even if policy were eased somewhat at this meeting; but they judged that some inflation pressures and risks remained, including pressures from elevated commodity and energy prices and the possibility of upward drift in the public's expectations of inflation. Weighing these considerations, nearly all members judged that a 25 basis point reduction in the Committee's target for the federal funds rate would be appropriate at this meeting. Although members agreed that the stance of policy should be eased, they also recognized that the situation was quite fluid and the economic outlook unusually uncertain. Financial stresses could increase further, intensifying the contraction in housing markets and restraining other forms of spending. Some members noted the risk of an unfavorable feedback loop in which credit market conditions restrained economic growth further, leading to additional tightening of credit; such an adverse development could require a substantial further easing of policy. Members also recognized that financial market conditions might improve more rapidly than members expected, in which case a reversal of some of the rate cuts might become appropriate.

The Committee agreed that the statement to be released after this meeting should indicate that economic growth appeared to be slowing, reflecting the intensification of the housing correction and some softening in business and consumer spending, and that strains in financial markets had increased. The characterization of the inflation situation could be largely unchanged from that of the previous meeting. Members agreed that the resurgence of financial stresses in November had increased uncertainty about the outlook. Given the heightened uncertainty, the Committee decided to refrain from providing an explicit assessment of the balance of risks. The Committee agreed on the need to remain exceptionally alert to economic and financial developments and their effects on the outlook, and members would be prepared to adjust the stance of monetary policy if prospects for economic growth or inflation were to worsen.

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 4¹/₄ 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 4¹/₄ percent.

Incoming information suggests that economic growth is slowing, reflecting the intensification of the housing correction and some softening in business and consumer spending. Moreover, strains in financial markets have increased in recent weeks. Today's action, combined with the policy actions taken earlier, should help promote moderate growth over time. Readings on core inflation have improved modestly this year, but elevated energy and commodity prices, among other factors, may put upward pressure on inflation. In this context, the Committee judges that some inflation risks remain, and it will continue to monitor inflation developments carefully.

Recent developments, including the deterioration in financial market conditions, have increased the uncertainty surrounding the outlook for economic growth and inflation. The Committee will continue to assess the effects of financial and other developments on economic prospects and will act as needed to foster price stability and sustainable economic growth.

> Votes for this action: Messrs. Bernanke, Geithner, Evans, Hoenig, Kohn, Kroszner, Mishkin, Poole, and Warsh. Votes against this action: Mr. Rosengren.

Mr. Rosengren dissented because he regarded the weakness in the incoming economic data and in the outlook for the economy as warranting a more aggressive policy response. In his view, the combination of a deteriorating housing sector, slowing consumer and business spending, high energy prices, and illfunctioning financial markets suggested heightened risk of continued economic weakness. In light of that possibility, a more decisive policy response was called for to minimize that risk. In any case, he felt that well-anchored inflation expectations and the Committee's ability to reverse course on policy would limit the inflation risks of a larger easing move, should the economy instead prove significantly stronger than anticipated.

It was agreed that the next meeting of the Committee would be held on Tuesday-Wednesday, January 29–30, 2008.

The meeting adjourned at 1:15 p.m.

Notation Vote

By notation vote completed on November 19, 2007, the Committee unani-

mously approved the minutes of the FOMC meeting held on October 30–31, 2007.

Conference Call

On December 6, 2007, in a joint session of the Federal Open Market Committee and the Board of Governors, Board members and Reserve Bank presidents reviewed conditions in domestic and foreign financial markets and discussed two proposals aimed at improving market functioning. The first proposal was for the establishment of a temporary Term Auction Facility (TAF), which would provide term funding to eligible depository institutions through an auction mechanism beginning in mid-December. Meeting participants recognized that a TAF would not address all of the factors giving rise to stresses in money and credit markets, notably the ongoing concerns about credit quality and balance sheet pressures. Nonetheless, most participants viewed the TAF, which would provide liquidity to more counterparties and against a broader range of collateral than used for open market operations, as a potentially useful tool. Some mentioned that a TAF could help alleviate year-end pressures in money markets. A few participants, however, questioned the need for and the likely efficacy of the proposal, expressed concerns about the longer-run incentive effects of a TAF, and felt that the possible drawbacks could well outweigh any benefits.14 Participants generally regarded the second proposal, to set up a foreign exchange swap arrangement with the European Central Bank, as a positive step in international coop-

^{14.} Secretary's Note: The Board of Governors approved the TAF via notation vote on December 10, 2007 after the staff finalized its proposal for specifications of the TAF.

eration to address elevated pressures in short-term dollar funding markets.

At the conclusion of the discussion, with Mr. Poole dissenting, the Committee voted to direct the Federal Reserve Bank of New York to establish and maintain a reciprocal currency (swap) arrangement for the System Open Market Account with the European Central Bank in an amount not to exceed \$20 billion. Within that aggregate limit, draws of up to \$10 billion were authorized, and the arrangement itself was authorized for a period of up to 180 days, unless extended by the FOMC. Mr. Poole dissented because he viewed the swap agreement as unnecessary in light of the size of the European Central Bank's dollar-denominated foreign exchange reserves.

> Brian F. Madigan Secretary

Litigation

During 2007, the Board of Governors was a party in one lawsuit and one appeal filed that year and in six other cases pending from previous years, for a total of eight cases; in 2006, the Board had been a party in a total of seven cases. As of December 31, 2007, six cases were pending.

Interactive Media Entertainment and Gaming Association, Inc. v. Federal Reserve System, No. 07-2625 (D. New Jersey, filed June 5, 2007), is an action challenging the implementation of the Unlawful Internet Gambling Enforcement Act of 2006.

Smith v. Bernanke, No. 07-1710 (Sixth Circuit, filed June 4, 2007), is an appeal of the dismissal of a district court action (No. 07-10453 (E.D. Michigan)) challenging the Federal Reserve's handling of appellant's consumer complaint.

Chandler v. Bernanke, No. 06-2082 (D. District of Columbia, filed December 6, 2006), is an employment discrimination action.

Price v. Bernanke, No. 06-1569 (D. District of Columbia, filed September 8, 2006), was an employment discrimination action. The action was dismissed voluntarily on November 20, 2007.

Inner City Press/Community on the Move v. Board of Governors, No. 05-6162 (Second Circuit, filed November 21, 2005), was an appeal of the district court's order (No. 04-CV-8337, 380 F. Supp. 2d 211 (S.D.N.Y. 2005)) granting in part and denying in part the Board's motion for summary judgment in a Freedom of Information Act case. On September 11, 2006, the court of appeals affirmed in part and reversed in part the ruling of the district court, and remanded the case. 463 F.3d 239. On March 20, 2007, the case was dismissed by stipulation of the parties.

Barnes v. Greenspan, No. 04-CV-1989 (CKK) (D. District of Columbia, filed November 15, 2004), is a case under the Age Discrimination in Employment Act.

Jones v. Greenspan, No. 04-CV-1696 (RMU) (D. District of Columbia, filed October 4, 2004), is an employment discrimination action. On December 13, 2005, the district court granted in part and denied in part the Board's motion to dismiss and for summary judgment. 402 F. Supp. 2d 294. On June 11, 2007, the court granted the Board's motion for summary judgment as to Counts I and II of the plaintiff's First Amended Complaint. 493 F. Supp. 2d 18.

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, 2007

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Term expires January 31,
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JOHN B. DURHAM, Assistant Director

ROBERTO PEILI, Assistant Director

GRETCHEN C. WEINBACH, Assistant Director

JONATHAN H. WRIGHT, Assistant Director EGON ZAKRAJSEK, Assistant Director

^{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.

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
DAVID S. JONES, Senior Adviser
STEPHEN D. OLINER, Senior Adviser
MICHAEL S. GIBSON, <i>Deputy Associate</i> Director
S. WAYNE PASSMORE, Deputy Associate Director
DANIEL E. SICHEL, <i>Deputy Associate</i> <i>Director</i>
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
DANIEL M. COVITZ, 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

PETER J. PURCELL, Deputy Director

STEVEN M. ROBERTS, Deputy Director

WILLIAM F. TREACY, Adviser SARKIS YOGHOURTDJIAN. Adviser NORAH M. BARGER, Associate Director BETSY CROSS, Associate Director GERALD A. EDWARDS, JR., Associate Director JON D. GREENLEE, Associate Director CHARLES H. HOLM, Associate Director JACK P. JENNINGS II. Associate Director **ROBIN L. LUMSDAINE.** 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 BARBARA J. BOUCHARD, Deputy Associate Director JAMES A. EMBERSIT, Deputy Associate Director ARTHUR W. LINDO, Deputy Associate Director WILLIAM C. SCHNEIDER, JR., Deputy Associate Director **ROBERT T. ASHMAN.** Assistant Director LISA M. DEFERRARI, Assistant Director **ROBERT T. MAAS.** 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 LEONARD CHANIN, Associate Director MARY T. JOHNSEN, Associate Director TONDA E. PRICE, Associate Director MARYANN F. HUNTER, Adviser SHEILA F. MAITH, Adviser TIMOTHY R. BURNISTON, Assistant Director SUZANNE G. KILLIAN, Assistant Director JAMES A. MICHAELS, Assistant Director

Board of Governors—Continued

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 JACK K. WALTON II, Associate Director JEFF J. STEHM, Deputy Associate Director GREGORY L. EVANS, Assistant Director LISA HOSKINS, Assistant Director MICHAEL J. LAMBERT, 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 DARRELL R. PAULEY, Deputy Director TODD A. GLISSMAN. Senior Associate Director MARSHA W. REIDHILL, Senior Associate Director BILLY J. SAULS. Senior Associate Director DONALD A. SPICER. Senior Associate Director CHRISTINE M. FIELDS. Associate Director JAMES R. RIESZ, Deputy Associate Director KEITH F. BATES, Assistant Director ELAINE M. BOUTILIER. Assistant Director CHARLES F. O'MALLEY, Assistant Director TARA C. TINSLEY-PELITERE, Assistant Director

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 PO KYUNG KIM, Assistant Director SUSAN F. MARYCZ, Assistant Director RAYMOND ROMERO, Assistant Director JILL R. ROSEN, 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

WILLIAM L. MITCHELL, Assistant Inspector General

HARVEY WITHERSPOON, Assistant Inspector General
Federal Open Market Committee December 31, 2007

Members

BEN S. BERNANKE, Chairman, Board of Governors TIMOTHY F. GEITHNER, Vice Chairman, President, Federal Reserve Bank of New York CHARLES L. EVANS, President, Federal Reserve Bank of Chicago THOMAS M. HOENIG, President, Federal Reserve Bank of Kansas City DONALD L. KOHN, Board of Governors RANDALL S. KROSZNER, Board of Governors FREDERIC S. MISHKIN, Board of Governors WILLIAM POOLE, President, Federal Reserve Bank of St. Louis ERIC S. ROSENGREN, President, Federal Reserve Bank of Boston KEVIN M. WARSH. Board of Governors

Alternate Members

CHRISTINE M. CUMMING, First Vice President, Federal Reserve Bank of New York

RICHARD W. FISHER, President, Federal Reserve Bank of Dallas

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

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 D. NATHAN SHEETS, Economist DAVID J. STOCKTON, Economist JAMES A. CLOUSE, Associate Economist THOMAS A. CONNORS. Associate Economist JEFFREY C. FUHRER, Associate Economist STEVEN B. KAMIN. Associate Economist. **ROBERT H. RASCHE.** Associate Economist GORDON H. SELLON, JR., Associate Economist LAWRENCE SLIFMAN, Associate Economist DANIEL G. SULLIVAN, 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 2007 the Federal Open Market Committee held eight regularly scheduled meetings and three conference calls (see "Minutes of Federal Open Market Committee Meetings" in this volume).

Federal Advisory Council

December 31, 2007

Members

- District 1—JAMES C. SMITH, *Chairman and Chief Executive Officer*, Webster Bank, N.A. and Webster Financial Corporation, Waterbury, Conn.
- District 2—THOMAS A. RENYI, *Chairman* and *Chief Executive Officer*, The Bank of New York, New York, N.Y.
- District 3—TED T. CECALA, *Chairman and Chief Executive Officer*, Wilmington Trust Company, Wilmington, Del.
- District 4—GEORGE A. SCHAEFER, JR., President and Chief Executive Officer, Fifth Third Bancorp, Cincinnati, Ohio.
- District 5—G. KENNEDY THOMPSON, *Chairman, President, and Chief Executive Officer*, Wachovia Corporation, Charlotte, N.C.
- District 6—FRED L. GREEN III, President and Chief Operating Officer, Synovus Financial Corporation, Columbus, Ga.
- District 7—WILLIAM DOWNE, *Chief Executive Officer*, Bank of Montreal, Chicago, Ill.
- District 8—ROBERT G. JONES, *President and Chief Executive Officer*, Old National Bancorp, Evansville, Ind.
- District 9—LYLE R. KNIGHT, *President and Chief Executive Officer*, First Interstate BancSystem, Inc., Billings, Mont.

- District 10—DAVID C. BOYLES, *Chairman and Director*, Colombine Capital Corp., Denver, Colo.
- District 11—JAMES GOUDGE, *Chairman and Chief Executive Officer*, Broadway Bank, San Antonio, Tex.
- District 12—RICHARD M. KOVACEVICH, *Chairman, President, and Chief Executive Officer*, Wells Fargo and Company, San Francisco, Calif.

Officers

G. KENNEDY THOMPSON, President

JAMES C. SMITH, 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 2007, it met on February 8–9, May 10–11, September 6–7, and December 6–7. The council met with the Board on February 9, May 11, September 7, and December 7, 2007.

Consumer Advisory Council

December 31, 2007

Members

- STELLA ADAMS, *Founder*, S J Adams Consulting, Durham, N.C.
- FAITH L. ANDERSON, *Vice President—Legal Compliance and General Counsel*, American Airlines Federal Credit Union, Fort Worth, Tex.
- DOROTHY BRIDGES, *Chief Executive Officer* and *President*, Franklin National Bank of Minneapolis, Minneapolis, Minn.
- CAROLYN CARTER, *Attorney*, National Consumer Law Center, Boston, Mass.
- MICHAEL COOK, Vice President of Finance and Assistant Treasurer, Wal-Mart Stores, Inc., Bentonville, Ark.
- DONALD S. CURRIE, *Executive Director*, Community Development Corporation of Brownsville, Brownsville, Tex.
- KURT EGGERT, Professor of Law and Director of Clinical Legal Education, Chapman University School of Law, Orange, Calif.
- JASON ENGEL, Vice President and Chief Regulatory Counsel, Experian, Costa Mesa, Calif.
- JOSEPH FALK, Consultant, Akerman Senterfitt, Miami, Fla.
- LOUISE GISSENDANER, Senior Vice President, Director of Community Development, Fifth Third Bank, Cleveland, Ohio
- PATRICIA A. HASSON, *President*, Consumer Credit Counseling Service of Delaware Valley, Inc., Philadelphia, Pa.
- DEBORAH HICKOK, Former Vice President, MoneyGram Payment Systems, Inc., Ooltewah, Tenn.
- THOMAS P. JAMES, Senior Assistant Attorney General—Consumer Counsel, Office of the Illinois Attorney General, Consumer Fraud Bureau, Chicago, Ill.
- 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.
- JOSHUA PEIREZ, Chief Payment System Integrity Officer, MasterCard Worldwide, Purchase, N.Y.

- ANNA MCDONALD RENTSCHLER, BSA Officer, Central Bancompany, Jefferson City, Mo.
- EDNA SAWADY, *Managing Director*, Market Innovations, Inc., Orange, Ohio
- 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.
- H. COOKE SUNOO, *Director*, Asian Pacific Islander Small Business Program, Los Angeles, Calif.
- STERGIOS THEOLOGIDES, *Executive Vice President, General Counsel,* Morgan Stanley Home Loans, Fort Worth, Tex.
- LINDA TINNEY, *Vice President, Community Development,* West Metro Region Manager, US Bank, Denver, Colo.
- LUZ URRUTIA, President and Chief Operating Officer, Banuestra Financial Corporation, Roswell, Ga.
- ANSELMO VILLARREAL, *Executive Director*, LaCasa de Esperanza, Inc., Waukesha, Wis.
- ALAN WHITE, Assistant Professor, Valparaiso University Law School, Valparaiso, Ind.
- MARVA E. WILLIAMS, Senior Program Officer, Chicago LISC, Chicago, Ill.

Officers

- LISA SODEIKA, Chair, Executive Vice President—Corporate Affairs, HSBC North America Holdings, Inc., Prospect Heights, Ill.
- TONY T. BROWN, Vice Chair, President and Chief Executive Officer, Uptown Consortium, Inc., Cincinnati, Ohio

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 2007, the council met with the Board on March 8, June 21, and October 25.

Thrift Institutions Advisory Council December 31, 2007

Members

- FRANK E. BERRISH, *President and Chief Executive Officer*, Visions Federal Credit Union, Endicott, N.Y.
- ROBERT M. CLEMENTS, *Chairman and Chief Executive Officer*, Everbank Financial Corp., Jacksonville, Fla.
- A. THOMAS HOOD, *President and Chief Executive Officer*, First Federal Savings and Loan Association, Charleston, S.C.
- KERRY KILLINGER, Chairman and Chief Executive Officer, Washington Mutual, Inc., Seattle, Wa.
- KENNETH KORANDA, *President*, Mid America Bank, Downers Grove, Ill.
- ARKADI KUHLMANN, Chairman, President, and Chief Executive Officer, ING DIRECT USA, Wilmington, Del.
- HARRIET MAY, *President and Chief Executive Officer*, Government Employees Credit Union, El Paso, Tex.
- THOMAS C. MEUSER, *Chairman and Chief Executive Officer*, El Dorado Savings Bank, Placerville, Calif.
- F. WELLER MEYER, *Chairman, President* and *Chief Executive Officer*, Acacia Federal Savings Bank, Falls Church, Va.

- DAVID E. POULSEN, *President and Chief Executive Officer*, American Express Centurion Bank, Salt Lake City, Utah
- STEVEN J. SWIONTEK, *Chairman, President, and Chief Executive Officer*, Gate City Bank, Fargo, N.D.
- DAVID RUSSELL TAYLOR, *President and Chief Executive Officer*, Rahway Savings Institution, Rahway, N.J.

Officers

DAVID RUSSELL TAYLOR, *President* F. WELLER MEYER, *Vice 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 2007, the council met with the Board on March 16, June 29, and December 14.

Federal Reserve Banks and Branches December 31, 2007

Officers

BANK or Branch	Chairman ¹ Deputy Chairman	President First Vice President	Officer in charge of Branch
		Thist vice Tresident	
BOSTON ²	Lisa M. Lynch Henri A. Termeer	Eric S. Rosengren Paul M. Connolly	
NEW YORK ²	Jerry I. Speyer Denis M. Hughes	Timothy F. Geithner Christine M.	
Buffalo	Alphonso O'Neil- White	Cumming	Kausar Hamdani
PHILADELPHIA	Doris M. Damm William F. Hecht	Charles I. Plosser William H. Stone, Jr.	
CLEVELAND	Tanny B. Crane Alfred M. Rankin, Jr.	Sandra Pianalto R. Chris Moore	
Cincinnati Pittsburgh	James M. Anderson Robert O. Agbede	R. Chills Moole	Barbara B. Henshaw Robert B. Schaub
RICHMOND	Thomas J. Mackell, Jr. Lemuel E. Lewis	Jeffrey M. Lacker Sarah G. Green	
Baltimore Charlotte	Cynthia Collins Allner Jim Lowry		David Beck Jeffrey S. Kane
ATLANTA	V. Larkin Martin D. Scott Davis	Dennis P. Lockhart Patrick K. Barron	
Birmingham Jacksonville Miami Nashville New Orleans	Maryam B. Head H. Britt Landrum, Jr. Gay Rebel Thompson Debra K. London Dave Dennis	rance K. Baron	Lee C. Jones Christopher L. Oakley Juan del Busto Melvyn K. Purcell Robert J. Musso
CHICAGO ²	Miles D. White	Charles L. Evans	Robert 5. Musso
Detroit	John A. Canning, Jr. Timothy M. Manganello	Gordon Werkema	Robert Wiley
ST. LOUIS	Irl F. Engelhardt Cynthia J. Brinkley	William Poole David A. Sapenaro	
Little Rock	C. Sam Walls John L. Huber	Eavia A. Superlaio	Robert A. Hopkins Maria Gerwing Hampton
Memphis	Meredith B. Allen		Martha Perine Beard
MINNEAPOLIS	Frank L. Sims James J. Hynes	Gary H. Stern James M. Lyon	
Helena	Lawrence R. Simkins	· · · · · · · · · · · · · · · · · · ·	R. Paul Drake

BANK or Branch	Chairman ¹ Deputy Chairman	President First Vice President	Officer in charge of Branch
KANSAS CITY	Robert A. Funk	Thomas M. Hoenig	
5	Lu M. Cordova	Richard K. Rasdall, Jr.	
Denver	Kristy A. Schloss		Mark Schweitzer
Oklahoma City	Richard K. Ratcliffe		Chad Wilkerson
Omaha	James A. Timmerman		Jason Henderson
DALLAS	James T. Hackett	Richard W. Fisher	
	Anthony R. Chase	Helen E. Holcomb	
El Paso	Ron C. Helm		Robert W. Gilmer
Houston	Lupe Fraga		Robert Smith III
San Antonio	J. Dan Bates		Blake Hastings
San Antonio	J. Dan Dates		Diake Hastings
SAN FRANCISCO ²	David K.Y. Tang	Janet L. Yellen	
	T. Gary Rogers	John F. Moore	
Los Angeles	James L. Sanford		Mark L. Mullinix
Portland	James H. Rudd		Mary E. Lee
Salt Lake City	Clark D. Ivory		Andrea P. Wolcott
Seattle	Mic R. Dinsmore		Mark A. Gould
Seame	MIC K. DINSMORE		Mark A. Gould

Officers—Continued

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; Utica at Oriskany, New

Conference of Chairmen

The chairmen of the Federal Reserve Banks are organized into the Conference of Chairmen, 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 chairmen, were held in Washington, D.C., on May 30 and 31, and on November 28 and 29, 2007.

The members of the executive committee of the Conference of Chairmen during 2007 were, Robert A. Funk, chair; V. Larkin Martin, vice chair; and Miles D. White, member.

On November 29, the conference elected its executive committee for 2008, naming V. Larkin Martin as chair; Lisa M. Lynch as vice chair; and David K.Y. Tang as the third member. York; East Rutherford, New Jersey; Des Moines, Iowa; Midway at Bedford Park, Illinois; and Phoenix, Arizona.

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 2007, 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.

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.

Helen E. Holcomb, first vice president of the Federal Reserve Bank of Dallas, served as chair of the conference in 2007, and James M. Lyon, first vice president of the Federal Reserve Bank of Minneapolis, served as vice chair. Harvey R. Mitchell, of the Federal Reserve Bank of Dallas, served as secretary, and Sheryl L. Britsch, of the Federal Reserve Bank of Minneapolis, served as assistant secretary.

On October 22, 2007, the conference elected James M. Lyon as chair for 2008-09 and R. Chris Moore, first vice president of the Federal Reserve Bank of Cleveland, as vice chair.

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, 2007

BANK OF BRANCH, <i>Category</i> Name	Title	Term expires Dec. 31
	DISTRICT 1—BOSTON	
Reserve Bank		
Class A Ronald E. Logue	Chairman and Chief Executive Officer, State Street Corporation, Boston, Massachusetts	2007
Kathleen C. Marcum		2008
David A. Lentini	Chairman, President and Chief Executive Officer, The Connecticut Bank and Trust Company, Hartford, Connecticut	2009
Class B		
Robert K. Kraft	Chairman and Chief Executive Officer, The Kraft Group, Foxborough, Massachusetts	2007
Michael T. Wedge	Former President and Chief Executive Officer, BJ's Wholesale Club, Inc., Natick, Massachusetts	2008
Stuart H. Reese	Chairman, President and Chief Executive Officer, MassMutual Financial Group, Springfield, Massachusetts	2009
Class C		
Samuel O. Thier, M.D	Professor of Medicine and Professor of Health Care Policy–Harvard Medical School, Massachusetts General Hospital, Boston, Massachusetts	2007
Henri A. Termeer	Chairman, President and Chief Executive Officer, Genzyme Corporation, Cambridge, Massachusetts	2008
Lisa M. Lynch		2009
	DISTRICT 2—NEW YORK	
Reserve Bank Class A		
Jill M. Considine	Senior Advisor, The Depository Trust Company, New York, New York	2007
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
Class B		
Richard S. Fuld, Jr	Chairman and Chief Executive Officer, Lehman Brothers, New York, New York	2007
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

BANK OF BRANCH, <i>Category</i> Name	Title	Term expires Dec. 31
Class C		
Jerry I. Speyer	President and Chief Executive Officer, Tishman Speyer, New York, New York	2007
Denis M. Hughes		2008
Lee C. Bollinger		2009
BUFFALO BRANCH Appointed by the Federal Reserve Bank		
Michele D. Trolli	Executive Vice President and Chief Information Officer, M&T Bank, Buffalo, New York	2007
Joseph J. Ashton	Regional Director-Region 9, United Auto Workers, Amherst, New York	2008
Kim J. Zuber	Co-Owner, Zuber Farms, LLC, Churchville, New York	2009
Jonathan J. Judge	President and Chief Executive Officer, Paychex, Inc., Rochester, New York	2009
Appointed by the Board of Governors James P. Laurito	President and Chief Executive Officer, Rochester Gas	2007
Junes F. Laurito	and Electric Corporation and New York State Electric and Gas Corporation, Rochester, New York	2007
Vacancy		2008
Alphonso O'Neil-White	President and Chief Executive Officer, HealthNow New York Inc., Buffalo, New York	2009
	DISTRICT 3—PHILADELPHIA	
RESERVE BANK Class A		
Wayne R. Weidner	Chairman, National Penn Bancshares, Inc., Boyertown, Pennsylvania	2007
John G. Gerlach	President and Chief Executive Officer, Pocono Community Bank, Stroudsburg, Pennsylvania	2008
Aaron L. Groff, Jr	Chairman, President and Chief Executive Officer, Ephrata National Bank, Ephrata, Pennsylvania	2009
Class B		2007
P. Coleman Townsend, Jr	Chairman and Chief Executive Officer, Townsends, Inc., Wilmington, Delaware	2007
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
Class C		
Doris M. Damm	President and Chief Executive Officer, ACCU Staffing Services, Cherry Hill, New Jersey	2007
Charles P. Pizzi		2008
William F. Hecht	Retired Chairman, President, and Chief Executive Officer, PPL Corporation, Allentown, Pennsylvania	2009

BANK or BRANCH, <i>Category</i> Name	Title	Term expires Dec. 31
	DISTRICT 4—CLEVELAND	
Reserve Bank Class A		
Henry L. Meyer III	Chairman and Chief Executive Officer, KeyCorp, Cleveland, Ohio	2007
Bick Weissenrieder	Chairman and Chief Executive Officer, Hocking Valley Bank, Athens, Ohio	2008
C. Daniel DeLawder		2009
Class B Les C. Vinney	Retired President and Chief Executive Officer, STERIS Corporation, Mentor, Ohio	2007
Vacancy		2008
V. Ann Hailey	Retired Executive Vice President, Corporate Development, Limited Brands, Columbus, Ohio	2009
Class C Roy W. Haley	Chairman and Chief Executive Officer, WESCO	2007
Alfred M. Rankin, Jr	International, Inc., Pittsburgh, Pennsylvania Chairman, President and Chief Executive Officer, NACCO Industries, Inc., Cleveland, Ohio	2008
Tanny B. Crane		2009
CINCINNATI BRANCH Appointed by the Federal Reserve Bank		
James H. Booth	President, Czar Coal Corporation, Lovely, Kentucky	2007
Janet B. Reid	Principal Partner, Global Lead Management Consulting, Cincinnati, Ohio	2008
Glenn D. Leveridge	NA, Lexington, Kentucky	2008
Charlotte W. Martin	President and Chief Executive Officer, Great Lakes Bankers Bank, Gahanna, Ohio	2009
Appointed by the Board of Governors		
Herbert R. Brown	Senior Vice President, Western and Southern Financial Group, Cincinnati, Ohio	2007
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
PITTSBURGH BRANCH Appointed by the Federal Reserve Bank		
Michael J. Hagan	President and Chief Executive Officer, Iron and Glass Bank, Pittsburgh, Pennsylvania	2007

BANK OF BRANCH, <i>Category</i> Name	Title	Term expires Dec. 31
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
Appointed by the Board of Governors Robert O. Agbede	President and Chief Executive Officer, Chester	2007
Sunil T. Wadhwani		2008
Robert A. Paul	Corporation, Pittsburgh, Pennsylvania Chairman and Chief Executive Officer, Ampco- Pittsburgh Corporation, Pittsburgh, Pennsylvania	2009
	DISTRICT 5—RICHMOND	
RESERVE BANK <i>Class A</i> Kathleen Walsh Carr Hunter R. Hollar Dwight V. Neese	President, Cardinal Bank Washington, Washington, D.C. President and Chief Executive Officer, Sandy Spring Bancorp and Sandy Spring Bank, Olney, Maryland Director, President, and Chief Executive Officer, Provident Community Bank and Provident Community Bancshares, Inc., Rock Hill, South Carolina	2007 2008 2009
Class B		
Harry M. Lightsey, III Dana S. Boole	Senior Vice President–Southern Region Legislative and External Affairs, AT&T, Columbia, South Carolina President and Chief Executive Officer, Community Affordable Housing Equity Corporation, Raleigh,	2007 2008
Kenneth R. Sparks	North Carolina President and Chief Executive Officer, Ken Sparks Associates LLC, White Stone, Virginia	2009
Class C		
Margaret E. McDermid	Senior Vice President and Chief Information Officer, Dominion Resources, Inc., Richmond, Virginia	2007
Thomas J. Mackell, Jr	President, Association of Benefit Administrators, Warrenton, Virginia	2008
Lemuel E. Lewis	Director, Landmark Communications, Inc., Norfolk, Virginia	2009
BALTIMORE BRANCH Appointed by the Federal Reserve Bank	-	
Donald P. Hutchinson	President and Chief Executive Officer, SunTrust Bank, Maryland, Baltimore, Maryland	2007
Biana J. Arentz	President and Chief Executive Officer, Hemingway's	2008
James T. Brady	Inc., Stevensville, Maryland Managing Director–Mid-Atlantic, Ballantrae International, Ltd., Ijamsville, Maryland	2009

BANK OF BRANCH, <i>Category</i> Name	Title	Term expires Dec. 31
Michael L. Middleton	Chairman and President, Community Bank of Tri-County, Waldorf, Maryland	2009
Appointed by the		
Board of Governors William R. Roberts	President – Verizon Maryland/DC, Verizon Maryland Inc., Baltimore, Maryland	2007
Cynthia Collins Allner		2008
Ronald Blackwell	Chief Economist, AFL-CIO, Washington, D.C.	2009
CHARLOTTE BRANCH Appointed by the Federal Reserve Bank	Describert and Chief Exception Officer First South	2007
Barry L. Slider	President and Chief Executive Officer, First South Bancorp, Inc. and First South Bank, Spartanburg, South Carolina	2007
James H. Speed, Jr.	President and Chief Executive Officer, North Carolina Mutual Life Insurance Company, Durham, North Carolina	2008
Michael C. Miller		2009
Donald K. Truslow		2009
Appointed by the		
Board of Governors Claude C. Lilly	Dean, Clemson University, College of Business and Behavioral Science, Clemson, South Carolina	2007
Linda L. Dolny		2008
Jim Lowry		2009
	DISTRICT 6—ATLANTA	
Reserve Bank Class A		
James F. Beall	Chairman, President, and Chief Executive Officer, Farmers & Merchants Bank, Centre, Alabama	2007
L. Phillip Humann	Executive Chairman, SunTrust Banks, Inc., Atlanta, Georgia	2008
Rudy E. Schupp	President and Chief Executive Officer, 1st United Bank, Boca Raton, Florida	2009
Class B Lee M. Thomas	Chairman, President and Chief Executive Officer,	2007
Egbert L.J. Perry	Rayonier, Jacksonville, Florida	2007
Teri G. Fontenot	Group, LLC, Atlanta, Georgia President and Chief Executive Officer, Woman's Hospital, Baton Rouge, Louisiana	2009

BANK OF BRANCH, <i>Category</i> Name	Title	Term expires Dec. 31
Class C		
David M. Ratcliffe	Chairman, President, and Chief Executive Officer, Southern Company, Atlanta, Georgia	2007
V. Larkin Martin		2008
D. Scott Davis	Chief Financial Officer and Vice Chairman, United Parcel Service, Atlanta, Georgia	2009
BIRMINGHAM BRANCH Appointed by the Federal Reserve Bank		
John B. Barnett III	Monroeville President, BankTrust, Monroeville, Alabama	2007
John H. Holcomb III		2008
Samuel F. Dodson		2009
Bobby A. Bradley	Managing Partner, Lewis Properties, LLC and Anderson Investments, LLC, Huntsville, Alabama	2009
Appointed by the Board of Governors		
Maryam B. Head	President, Ram Tool and Supply Company, Inc., Birmingham, Alabama	2007
James H. Sanford		2008
F. Michael Reilly	President and Chief Executive Officer, Randall-Reilly Publishing Co., Tuscaloosa, Alabama	2009
JACKSONVILLE BRANCH Appointed by the		
Federal Reserve Bank		
Jack B. Healan, Jr	President, Amelia Island Plantation Company, Amelia Island, Florida	2007
Alan Rowe	President and Chief Executive Officer, The 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
Appointed by the Board of Governors		
H. Britt Landrum, Jr	President and Chief Executive Officer, Landrum Human Resource Companies, Inc., Pensacola, Florida	2007
Fassil Gabremariam		2008
Linda H. Sherrer	President and Chief Executive Officer, Prudential Network Realty, Jacksonville, Florida	2009

BANK OF BRANCH, <i>Category</i> Name	Title	Term expires Dec. 31
MIAMI BRANCH		
Appointed by the		
Federal Reserve Bank		
Dennis S. Hudson III	Chairman and Chief Executive Officer, Seacoast Banking Corporation of Florida, Stuart, Florida	2007
Thomas H. Shea	Regional Chief Executive Officer, Right Management, Fort Lauderdale, Florida	2008
Walter Banks	Florida	2008
Leonard L. Abess	Chairman, President, and Chief Executive Officer, City National Bank of Florida, Miami, Florida	2009
Appointed by the		
Board of Governors		
Gay Rebel Thompson	President and Chief Executive Officer, Cement Industries, Inc., Fort Myers, Florida	2007
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
NASHVILLE BRANCH		
Appointed by the Federal Reserve Bank		
Paul G. Willson	Chairman and Chief Executive Officer, Citizens National Bank, Athens, Tennessee	2007
Michael B. Swain		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
Appointed by the		
Board of Governors		
Debra K. London	Health System, Knoxville, Tennessee	2007
Richard Q. Ford	Brentwood, Tennessee	2008
David Williams II	Vice Chancellor and General Counsel, Vanderbilt University, Nashville, Tennessee	2009
NEW ORLEANS BRANCH Appointed by the		
Federal Reserve Bank		
David E. Johnson	Chairman and Chief Executive Officer, The First Bancshares, Inc., and The First, A National Banking	2007
R. King Milling	Association, Hattiesburg, Mississippi 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
Christel C. Slaughter	Partner, SSA Consultants, LLC, Baton Rouge, Louisiana	2009

BANK OF BRANCH, <i>Category</i> Name	Title	Term expires Dec. 31
Appointed by the Board of Governors Dave Dennis	President and Chief Executive Officer, Specialty	2007
Dave Dennis	Contractors & Associates, Inc., Gulfport, Mississippi	2007
Earl L. Shipp	President–Basic Chemicals Group, 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
	DISTRICT 7—CHICAGO	
Reserve Bank Class A		
Jeff Plagge	Chairman, Chief Executive Officer, and President, Midwest Heritage Bank, Clive, Iowa	2007
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
Class B		
Ann D. Murtlow	President and Chief Executive Officer, Indianapolis Power & Light Company, Indianapolis, Indiana	2007
Vacancy		2008
Mark T. Gaffney	President, Michigan AFL-CIO, Lansing, Michigan	2009
Class C		
Miles D. White	Chairman and Chief Executive Officer, Abbott, Abbott Park, Illinois	2007
John A. Canning, Jr	Illinois	2008
William C. Foote	Chairman and Chief Executive Officer, USG Corporation, Chicago, Illinois	2009
DETROIT BRANCH		
Appointed by the Federal Reserve Bank		
Michael M. Magee, Jr	President and Chief Executive Officer, Independent Bank Corporation, Ionia, Michigan	2007
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
Ralph W. Babb, Jr	Chairman, President, and Chief Executive Officer, Comerica Inc., Dallas, Texas	2009

BANK OF BRANCH, <i>Category</i> Name	Title	Term expires Dec. 31
Appointed by the Board of Governors Irvin D. Reid Timothy M. Manganello Linda S. Likely	President, Wayne State University, Detroit, Michigan Chairman and Chief Executive Officer, BorgWarner Inc., Auburn Hills, Michigan Director of Housing and Community Development, Kent County Community Development Department and Housing Commission, Grand Rapids, Michigan	2007 2008 2009
	DISTRICT 8—ST. LOUIS	
RESERVE BANK		
Class A Lewis F. Mallory, Jr	Chairman and Chief Executive Officer, Cadence Financial Corporation, Starkville, Mississippi	2007
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
Class B Paul T. Combs	President, Baker Implement Company, Kennett, Missouri	2007
Vacancy		2008
A. Rogers Yarnell, II	President, Yarnell Ice Cream Company, Inc., Searcy, Arkansas	2009
Class C Irl F. Engelhardt Cynthia J. Brinkley	Chairman, Patriot Coal Corporation, St. Louis, Missouri President, AT&T Missouri, St. Louis, Missouri	2007 2008
Steven H. Lipstein	President and Chief Executive Officer, BJC HealthCare, St. Louis, Missouri	2009
LITTLE ROCK BRANCH Appointed by the Federal Reserve Bank		
Sharon Priest	Executive Director, Downtown Little Rock Partnership, Little Rock, Arkansas	2007
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, First Security Bancorp, Searcy, Arkansas	2009
Appointed by the Board of Governors	Chief Evenutive Officer E 7 Mart Stores Inc.	2007
Sonja Yates Hubbard	Chief Executive Officer, E-Z Mart Stores, Inc., Texarkana, Texas	2007

BANK OF BRANCH, <i>Category</i> Name	Title	Term expires Dec. 31
Cal McCastlain	Partner, Pender & McCastlain, P.A., Little Rock, Arkansas	2008
C. Sam Walls		2009
LOUISVILLE BRANCH Appointed by the Federal Reserve Bank Steven E. Trager	Chairman and Chief Executive Officer, Republic Bank	2007
L. Clark Taylor, Jr.	& Trust Company, Louisville, Kentucky	2008
John C. Schroeder Gordon B. Guess		2008 2009
Appointed by the Board of Governors	· · · ·	
Gary A. Ransdell	President, Western Kentucky University, Bowling Green, Kentucky	2007
John L. Huber		2008
Barbara Ann Pop	Chief Executive Officer, Schuler Bauer Real Estate Services, New Albany, Indiana	2009
Memphis Branch Appointed by the Federal Reserve Bank		
Thomas G. Miller	President, Southern Hardware Company, Inc., West Helena, Arkansas	2007
Levon Mathews	Director of Sales, Regions Morgan Keegan Private Banking, 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
Appointed by the Board of Governors		
Charles S. Blatteis	Member (Partner), The Bogatin Law Firm, PLC, Memphis, Tennessee	2007
Meredith B. Allen	Vice President, Marketing, Staple Cotton Cooperative Association, Greenwood, Mississippi	2008
Nick Clark	Partner, Clark & Clark, Memphis, Tennessee	2009
	DISTRICT 9—MINNEAPOLIS	
RESERVE BANK Class A		
John H. Hoeven, Jr.	Dakota	2007
Peter J. Haddeland	Bank, Mahnomen, Minnesota	2008
Thomas W. Scott	Chairman of the Board, First Interstate BancSystem, Inc., Billings, Montana	2009

BANK OF BRANCH, <i>Category</i> Name	Title	Term expires Dec. 31
Class B		
Todd L. Johnson	Chairman and Chief Executive Officer, Reuben Johnson & Son, Inc. and Affiliated Companies, Superior, Wisconsin	2007
Randy Peterson	Facility Director, Lake Superior State University, Sault Ste. Marie, Michigan	2008
William J. Shorma	President, Shur-Co., Yankton, South Dakota	2009
Class C		
Frank L. Sims	Corporate Vice President, Transportation, Cargill, Inc., Wayzata, Minnesota	2007
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
HELENA BRANCH Appointed by the		
Federal Reserve Bank		
Joy N. Ott	Regional President and Chief Executive Officer, Wells Fargo Bank Montana, N.A., Billings, Montana	2007
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
Appointed by the		
Board of Governors		
Dean Folkvord	General Manager and Chief Executive Officer, Wheat	2008
Lawrence R. Simkins	Montana Farms and Bakery, Three Forks, Montana President, Washington Corporations, Missoula, Montana	2009
	DISTRICT 10—KANSAS CITY	
Reserve Bank		
Class A Robert C. Fricke	President and Chief Executive Officer, Farmers &	2007
Rick L. Smalley	Merchants National Bank, Ashland, Nebraska Chief Executive Officer, Dickinson Financial	2008
Mark W. Schifferdecker	Corporation, Kansas City, Missouri President and Chief Executive Officer, Girard National Bank, Girard, Kansas	2009
Class B		2007
Vacancy	Chief Executive Officer Dillingham Insurance Entit	2007
Dan L. Dillingham	Chief Executive Officer, Dillingham Insurance, Enid, Oklahoma	2008
Kevin K. Nunnink	Chairman, Integra Realty Resources, Westwood, Kansas	2009

BANK or BRANCH, <i>Category</i> Name	Title	Term expires Dec. 31
Class C		
Terry L. Moore	President, Omaha Federation of Labor, Omaha, Nebraska	2007
Lu M. Cordova	Chief Executive Officer, Corlund Industries, LLC; President and General Manager, Almacen Storage Group, Boulder, Colorado	2008
Robert A. Funk	1	2009
DENVER BRANCH Appointed by the		
Federal Reserve Bank Michael R. Stanford	President and Chief Executive Officer, First State	2007
	Bancorporation, Albuquerque, New Mexico	
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
Vacancy	wyonning	2009
Appointed by the		
Board of Governors Kristy A. Schloss	President and Chief Executive Officer, Schloss Engineered Equipment, Inc., Aurora, Colorado	2007
Diane Leavesley		2008
Thomas Williams	President and Chief Executive Officer, Williams Group LLC, Golden, Colorado	2009
Oklahoma City Branch Appointed by the		
Federal Reserve Bank Steve Burrage	Chairman of the Board, FirstBank, Antlers, Oklahoma	2007
Terry M. Almon	President, Oklahoma Community Capital Corporation,	2007
Fred M. Ramos	Broken Arrow, Oklahoma President, RGF, Inc., Oklahoma City, Oklahoma	2008
Barry H. Golsen	Board Vice-Chairman, President and Chief Operating Officer, LSB Industries, Inc., Oklahoma City, Oklahoma	2009
Appointed by the		
Board of Governors Steven C. Agee	President, Agee Energy, LLC, Oklahoma City, Oklahoma	2007
Vacancy	Октанонна	2008
Richard K. Ratcliffe	Chairman, Ratcliffe's Inc., Weatherford, Oklahoma	2009

BANK OF BRANCH, <i>Category</i> Name	Title	Term expires Dec. 31		
Омана Branch Appointed by the Federal Reserve Bank				
Cynthia Hardin Milligan	Dean–College of Business Administration, University of Nebraska-Lincoln, Lincoln, Nebraska	2007		
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, L.L.C., Omaha, Nebraska	2009		
Todd S. Adams	Chief Executive Officer and Trust Officer, Adams Bank & Trust, Ogallala, Nebraska	2009		
Appointed by the Board of Governors Lyn Wallin Ziegenbein	Executive Director, Peter Kiewit Foundation, Omaha,	2007		
James A. Timmerman	Nebraska Chief Financial Officer, Timmerman and Sons Feeding	2008		
Charles R. Hermes	Company, Springfield, Nebraska President, Dutton-Lainson Company, Hastings, Nebraska	2009		
	DISTRICT 11—DALLAS			
Reserve Bank Class A				
David S. Barnard	Chairman and Chief Executive Officer, The National Banks of Central Texas, Gatesville, Texas	2007		
Richard W. Evans, Jr		2008		
Pete Cook	President and Chief Executive Officer, First National Bank of Alamogordo, Alamogordo, New Mexico	2009		
Class B Robert A. Estrada	Chairman, Estrada Hinojosa & Company, Inc., Dallas,	2007		
James B. Bexley	Texas Professor, Finance, Sam Houston State University,	2008		
Margaret H. Jordan	Huntsville, Texas President and Chief Executive Officer, Dallas Medical Resource, Dallas, Texas	2009		
Class C Herb Kelleher	Executive Chairman, Southwest Airlines, Dallas, Texas	2007		
James T. Hackett	Chairman, President, and Chief Executive Officer,	2007		
Anthony R. Chase	Anadarko Petroleum Corporation, Houston, Texas Chairman and Chief Executive Officer, ChaseSource, L.P., Houston, Texas	2009		
EL PASO BRANCH Appointed by the				
Federal Reserve Bank F. James Volk	Regional President, State National Bank, El Paso, Texas	2007		

BANK or BRANCH, <i>Category</i> Name	Title	Term expires Dec. 31
D. Kirk Edwards	President, MacLondon Royalty Company, Odessa, Texas	2008
Fred J. Loya Gerald J. Rubin	Chairman, Fred Loya Insurance, El Paso, Texas Chairman, President, and Chief Executive Officer, Helen of Troy Limited, El Paso, Texas	2008 2009
Appointed by the Board of Governors		
Cecilia Ochoa Levine Ron C. Helm	President, MFI International Mfg., LLC, El Paso, Texas Owner, Helm Land and Cattle Company, Van Horn, Texas	2007 2008
William V. Flores	Deputy Secretary, New Mexico Higher Education Department, Santa Fe, New Mexico	2009
HOUSTON BRANCH Appointed by the Federal Reserve Bank		
Jodie L. Jiles	Managing Director, RBC Capital Markets, Houston, Texas	2007
S. Reed Morian	Chairman, President, and Chief Executive Officer, DX Service Company, Inc., Houston, Texas	2008
Peter G. Traber, M.D		2008
Timothy N. Bryan	Chairman and Chief Executive Officer, The First National Bank of Bryan, Bryan, Texas	2009
Appointed by the Board of Governors		
Douglas L. Foshee	President and Chief Executive Officer, El Paso Corporation, Houston, Texas	2007
Lupe Fraga	Chairman and Chief Executive Officer, Tejas Office Products, Inc., Houston, Texas	2008
Nancy T. Chang	President, Apex Enterprises, Inc., Houston, Texas	2009
SAN ANTONIO BRANCH Appointed by the Federal Reserve Bank		
G.P. Singh	Owner, Gur Parsaad Properties, Ltd., San Antonio, Texas	2007
Matt F. Gorges	Chairman and Chief Executive Officer, U.S. Packers & Processors, Harlingen, Texas	2008
Guillermo F. Trevino Steven R. Vandegrift	President, Southern Distributing, Laredo, Texas Founder and President, SRV Holdings, Austin, Texas	2008 2009
Appointed by the Board of Governors	,	
Ricardo Romo	President, The University of Texas at San Antonio, San	2007
Elizabeth Chu Richter		2008
J. Dan Bates	Architects, Corpus Christi, Texas President, Southwest Research Institute, San Antonio, Texas	2009

BANK OF BRANCH, <i>Category</i> Name	Title	Term expires Dec. 31
	DISTRICT 12—SAN FRANCISCO	
Reserve Bank Class A		
Richard W. Decker, Jr	Chairman and Co-Founder, Belvedere Capital Partners LLC, San Francisco, California	2007
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 and Silicon Valley Bank, Santa Clara, California	2009
Class B	Cultoring	
Jack McNally	Principal, JKM Consulting, Sacramento, California	2007
Karla S. Chambers	Vice President and Co-Owner, Stahlbush Island Farms, Inc., Corvallis, Oregon	2008
Blake W. Nordstrom	President, Nordstrom, Inc., Seattle, Washington	2009
Class C		2007
David K.Y. Tang	Managing Partner, Asia, K&L Gates, Seattle, Washington	2007
Douglas W. Shorenstein	Chairman and Chief Executive Officer, Shorenstein Properties LLC, San Francisco, California	2008
T. Gary Rogers	Retired Chairman and Chief Executive Officer, Dreyer's Grand Ice Cream, Inc., Oakland, California	2009
Los Angeles Branch Appointed by the		
Federal Reserve Bank Dominic Ng	Chairman, President, and Chief Executive Officer, East	2007
Peter M. Thomas	West Bank, Pasadena, California Managing Partner, Thomas & Mack Co., Las Vegas, Nevada	2008
Vacancy	nevaua	2009
Andrew J. Sale	Partner, Media and Entertainment Leader – Pacific Southwest Area, Ernst & Young LLP, Los Angeles, California	2009
Appointed by the		
Board of Governors James L. Sanford	Corporate Vice President, Northrop Grumman	2007
Ann E. Sewill	Corporation, Los Angeles, California President, Community Foundation Land Trust, California Community Foundation, Los Angeles, California	2008
Anita Santiago	Chief Executive Officer, Anita Santiago Advertising, Santa Monica, California	2009
PORTLAND BRANCH Appointed by the Federal Reserve Bank		
Alan V. Johnson George J. Puentes	Regional President, Wells Fargo Bank, Portland, Oregon President, Don Pancho Authentic Mexican Foods, Inc., Salem, Oregon	2007 2008

BANK OF BRANCH, <i>Category</i> Name	Title	Term expires Dec. 31
Peggy Y. Fowler	Chief Executive Officer and President, Portland General Electric, Portland, Oregon	2008
Robert D. Sznewajs		2009
Appointed by the		
Board of Governors		
James H. Rudd	Chief Executive Officer and Principal, Ferguson Wellman Capital Management, Inc., Portland, Oregon	2007
William D. Thorndike, Jr		2008
David Y. Chen	Managing Director, Equilibrium Capital Group LLC, Portland, Oregon	2009
SALT LAKE CITY BRANCH		
Appointed by the		
Federal Reserve Bank		
Michael M. Mooney	Idaho	2007
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
Scott L. Hymas	Chief Executive Officer, RC Willey, Salt Lake City, Utah	2009
Appointed by the Board of Governors		
Gary L. Crocker	Chairman of the Board, Merrimack Pharmaceuticals,	2007
	Inc., Salt Lake City, Utah	2007
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
SEATTLE BRANCH		
Appointed by the		
Federal Reserve Bank		2007
Vacancy	President Weshington State U.S. Donk South	2007
×	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
Appointed by the		
Board of Governors		
Mic R. Dinsmore	President, Infrastructure Investment Division, Stark	2007
James R. Gill	Investments, Seattle, Washington President, Pacific Northwest Title Holding Company, Seattle, Washington	2008
Helvi K. Sandvik	President, NANA Development Corporation, Anchorage, Alaska	2009

Members of the Board of Governors, 1913–2007

Appointed Members

Name	Federal Reserve District	Date initially took oath of office	C 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.

Name	Federal Reserve District	Date initially tool oath of office	K 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 Paul A. Volcker	Atlanta Dhilodolphio	July 27, 1979	Served through Feb. 11, 1982.
	Philadelphia Kapaga City	Aug. 6, 1979	Resigned Aug. 11, 1987.
Lyle E. Gramley Preston Martin	Kansas City San Francisco	May 28, 1980 Mar. 31, 1982	Resigned Sept. 1, 1985. 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 Donald L. Kohn	Atlanta Kansas City	Aug. 5, 2002	Resigned June 21, 2005.
Ben. S. Bernanke	Atlanta	Aug. 5, 2002 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	
		· · · · · · · · · · · · · · · · · · ·	

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–	

Appointed Members—Continued

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.

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, 2007

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	0	0
Exchanges	66,169	70,706	88,466	76,560
For new bills	66,169 0	70,706 0	88,466 0	76,560 0
Redemptions	0	0	0	0
Others within 1 year				
Gross purchases	0	817	0	1,394
Gross sales	0	0	0	0
Maturity shifts	0	0	0	0
Exchanges	0	0	0	0
Reachiptions	0	0	0	0
1 to 5 years				
Gross purchases	0	1,061	0	3,742
Gross sales	0	0	0	0
Maturity shifts	0	0	0	0
Exchanges	0	0	0	0
5 to 10 years				
Gross purchases	0	0	0	290
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	640
Gross sales	0	0	0	0
Maturity shifts	0	0	0	0
Exchanges	0	0	0	0
All maturities				
Gross purchases	0	1,878	0	6,066
Gross sales	0	0	0	0
Redemptions	0	0	0	0
Net change in U.S. Treasury securities	0	1,878	0	6,066

For notes see end of table.

1.—Continued

Total	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0 0
839,687	24,580	83,590	62,143	62,083	75,502	72,690	62,340	94,858
839,687	24,580	83,590	62,143	62,083	75,502	72,690	62,340	94,858
49,178	39,178	0	0	0	10,000	0	0	0
0.011	0	0	0	0	0	0	0	0
2,211 0	0	0 0	0 0	0 0	0	0 0	0 0	0 0
0	0	0	0	0	0	0	0	0
ŏ	ŏ	ŏ	ŏ	0	0	0	0	0
1,236	0	0	0	0	1,236	0	0	0
7,539	0	0	0	0	0	0	0	2,736
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
290	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	Ŭ	0	0	0	0	0	0	0
640	0	0	0	0	0	0	0	0
0+0	0	0	Ő	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
10,680	0	0	0	0	0	0	0	2,736
0 50,414	0 39,178	0 0	0	0 0	0 11,236	0 0	0 0	0
50,414	37,178	0	U	0	11,230	0	0	0
-39,734	-39,178	0	0	0	-11,236	0	0	2,736

1. Federal Reserve Open Market Transactions, 2007-Continued

Millions of dollars

Type of security and transaction	Jan.	Feb.	Mar.	Apr.
FEDERAL AGENCY OBLIGATIONS				
Outright transactions ² Gross purchases Gross sales Redemptions Net change in federal agency obligations	0 0 0 0	0 0 0	0 0 0	0 0 0
TEMPORARY TRANSACTIONS				
Repurchase agreements ³ Gross purchases Gross sales	176,000 184,750	193,750 180,500	228,250 240,250	179,500 161,250
Reverse repurchase agreements ⁴ Gross purchases Gross sales	630,544 633,309	696,788 704,054	843,250 840,887	739,145 739,251
Net change in temporary transactions	-11,515	5,984	-9,637	18,143
Total net change in System Open Market Account	-11,515	7,862	-9,637	24,209

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.

 Transactions exclude changes in compensation for the effects of inflation on the principal of inflationindexed securities. Transactions include the rollover of inflation compensation into new securities. Excludes the effect of temporary transactions repurchase agreements, matched sale–purchase agreements (MSPs), 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	0	0	0	0	0	0	0	0
174,250 190,000	177,750 188,250	185,000 180,000	209,000 200,750	236,500 230,250	268,750 265,000	318,750 319,750	249,250 250,250	2,596,750 2,591,000
752,100 749,528	672,056 669,588	673,157 673,778	722,358 725,162	669,935 669,850	786,360 788,726	715,682 713,543	761,133 769,202	8,662,508 8,676,878
-13,178	-8,032	4,379	5,446	6,334	1,385	1,139	-9,070	-8,622
-10,442	-8,032	4,379	-5,791	6,334	1,385	1,139	-48,248	-48,357

Federal Reserve Bank Holdings of U.S. Treasury and Federal Agency Securities, December 31, 2005–2007

Millions of dollars

		December 3	Change		
Description	2007	2006	2005	2006 to 2007	2005 to 2006
U.S. TREASURY SECURITIES					
Held outright ¹	740,611	778,915	744,215	-38,304	34,700
By remaining maturity					
Bills 1–90 days 91 days to 1 year Notes and bonds	153,829 74,012	193,034 83,985	187,370 83,900	-39,205 -9,973	5,664 85
I year or less More than 1 year through 5 years More than 5 years through 10 years More than 10 years	101,447 240,562 81,947 88,814	129,594 224,177 67,645 80,479	128,287 210,745 56,699 77,215	-28,147 16,385 14,302 8,335	1,307 13,432 10,946 3,264
By type Bills Notes Bonds	227,841 401,776 110,995	277,019 402,367 99,528	271,270 380,118 92,827	-49,178 -591 11,467	5,749 22,249 6,701
Federal Agency Securities					
Held outright ¹	0	0	0	0	0
By remaining maturity 1 year or less More than 1 year through 5 years More than 5 years through 10 years More than 10 years	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
By issuer Federal National Mortgage Association	0	0	0	0	0
TEMPORARY TRANSACTIONS					
Repurchase agreements ²	46,500	40,750	46,750	5,750	-6,000
Matched sale-purchase agreements Foreign official and international accounts Dealers	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Reverse repurchase agreements ³ Foreign official and international accounts Dealers	43,985 43,985 0	29,615 29,615 0	30,505 30,505 0	14,370 14,370 0	-890 -890 0

Note: Components may not sum to totals because of rounding.

2. Cash value of agreements, which are collateralized by U.S. government and federal agency securities.

1. Excludes the effect of temporary transactions repurchase agreements, matched sale-purchase agreements (MSPs), and reverse repurchase agreements (RRPs). 3. Cash value of agreements, which are collateralized by U.S. Treasury securities.

3. Federal Reserve Bank Interest Rates on Loans to Depository Institutions, December 31, 2007

Reserve Bank	Primary credit ¹	Secondary credit ²	Seasonal credit ³	
All Federal Reserve Banks	4.75	5.25	4.70	

NOTE: For details on rate changes over the course of 2007, see the section on discount rates in the chapter "Record of Policy Actions of the Board of Governors."

 Primary credit is generally 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.

2. Secondary credit is available in appropriate circumstances to depository institutions that do not qualify for primary credit. 3. 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.

	Requirements			
Type of deposit	Percentage of deposits	Effective date		
Net transaction accounts ¹ \$0 million-\$9.3 million ² More than \$9.3 million-\$43.9 million ³ More than \$43.9 million		12-20-07 12-20-07 12-20-07		
Nonpersonal time deposits	0	12-27-90		
Eurocurrency liabilities	0	12-27-90		

4. Reserve Requirements of Depository Institutions, December 31, 2007

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.

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, 2006 and 2007

		Commercial banks ¹						
Type of office	ce Total	Total	Member			Nonmember	State- chartered savings	
			Total	Total	National	State	Nonmember	banks
	All banking offices							
Banks								
Number, Dec. 31, 2006	7,731	7,367	2,592	1,695	897	4,775	364	
Changes during 2007 New banks Banks converted	181	173	40	27	13	133	8	
into branches Ceased banking	-272	-268	-115	-79	-36	-153	-4	
operation ²	-39	-31	-13	-8	-5	-18	-8	
Other ³ Net change	0 -130	$^{0}_{-126}$	$^{-15}_{-103}$	$-20 \\ -80$	5 -23	15 -23	0 -4	
Number, Dec. 31, 2007	7,601	7,241	2,489	1,615	874	4,752	360	
Branches and Additional Offices								
Number, Dec. 31, 2006	80,872	77,792	55,099	40,760	14,339	22,693	3,080	
Changes during 2007 New branches Branches converted	3,258	3,088	1,966	1,474	492	1,122	170	
from banks	272	258	133	91	42	125	14	
Discontinued ² Other ³	-3,338 0	-3,275 84	-2,662 1,067	-2,152 1,157	$-510 \\ -90$	-613 -983	-63 -84	
Net Change	192	155	504	570	-66	-349	37	
Number, Dec. 31, 2007	81,064	77,947	55,603	41,330	14,273	22,344	3,117	
	Banks affiliated with bank holding companies							
Banks								
Number, Dec. 31, 2006	6,187	6,062	2,274	1,477	797	3,788	125	
Changes during 2007 BHC-affiliated		100		•				
new banks Banks converted	190	180	54	38	16	126	10	
into branches Ceased banking	-224	-220	-96	-65	-31	-124	-4	
operation ²	-35	-29	-13	-8	-5	-16	-6	
Other Net Change	0 -69	0 69	-16 -71	-16 -51	$^{0}_{-20}$	16 2	0 0	
Number, Dec. 31, 2007	6,118	5,993	2,203	1,426	777	3,790	125	

Note: Includes banking offices and BHCs in U.S. territories and possessions.

of making commercial loans or any institution that is defined as an insured bank in section 3(h) of the FDIC Act. Covers entities in the United States and its 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

2. Institutions that no longer meet the Regulation Y definition of bank.

3. Interclass changes and sales of branches.
6A. Reserves of Depository Institutions, Federal Reserve Bank Credit, and Related Items, Year-End 1984–2007 and Month-End 2007

Millions of dollars

				Factors s	supplying reserve	rve funds			
Period		Federal	Reserve Bar	nk credit outs	tanding			Special	Treasury
	Securities held outright ¹	Repurchase agreements ²	Loans	Float	Other Federal Reserve assets	Total	Gold stock	drawing rights certificate account	out- standing ³
1984	167,612	2,015	3,577	833	12,347	186,384	11,096	4,618	16,418
1985 1986 1987 1988 1989	186,025 205,454 226,459 240,628 233,300	5,223 16,005 4,961 6,861 2,117	3,060 1,565 3,815 2,170 481	988 1,261 811 1,286 1,093	15,302 17,475 15,837 18,803 39,631	210,598 241,760 251,883 269,748 276,622	11,090 11,084 11,078 11,060 11,059	4,718 5,018 5,018 5,018 8,518	17,075 17,567 18,177 18,799 19,628
1990 1991 1992 1993 1994	241,431 272,531 300,423 336,654 368,156	18,354 15,898 8,094 13,212 10,590	190 218 675 94 223	2,566 1,026 3,350 963 740	39,880 34,524 30,278 33,394 33,441	302,421 324,197 342,820 384,317 413,150	11,058 11,059 11,056 11,053 11,051	10,018 10,018 8,018 8,018 8,018 8,018	20,402 21,014 21,447 22,095 22,994
1995 1996 1997 1998 1999	380,831 393,132 431,420 452,478 478,144	13,862 21,583 23,840 30,376 140,640	135 85 2,035 17 233	231 5,297 561 1,009 407	33,483 32,222 32,044 37,692 34,799	428,543 452,319 489,901 521,573 654,223	11,050 11,048 11,047 11,046 11,048	10,168 9,718 9,200 9,200 6,200	24,003 24,966 25,543 26,270 28,013
2000 2001 2002 2003 2004	511,833 551,685 629,416 666,665 717,819	43,375 50,250 39,500 43,750 33,000	$110 \\ 34 \\ 40 \\ 62 \\ 43$	795 698 832 211 927	36,896 36,885 38,574 40,214 42,161	593,009 639,552 708,363 750,901 793,950	11,046 11,045 11,043 11,043 11,045	2,200 2,200 2,200 2,200 2,200 2,200	31,643 33,017 34,597 35,468 ^r 36,434
2005 2006 2007	744,215 778,915 740,611	46,750 40,750 46,500	72 67 48,636	891 -326 -8	39,319 39,885 66,308	831,247 859,290 902,048	11,043 11,041 11,041	2,200 2,200 2,200	36,540 38,206 ^r 38,681

For notes see end of table.

6A.—Continued

Currency	Reverse	Treasury		th Federal Reset than reserve ba		Required	Other Federal Reserve	Reserve balances with Federal
in circulation	repurchase agreements ⁴	cash holdings ⁵	Treasury	Foreign	Other	clearing balances	liabilities and capital	Reserve Banks ⁶
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	242	1,960	8,147	36,698
307,756	0	636	17,697	968	1,706	3,946	8,113	25,467
334,701	0	508	7,492	206	372	5,897	7,984	26,182
365,271	0	377	14,809	386	397	6,332	9,292	28,619
403,843	0	335	7,161	250	876	4,196	11,959	26,593
424,244	0	270	5,979	386	932	5,167	12,342	24,444
450,648	0	249	7,742	167	892	6,601	13,829	17,923
482,327	0	225	5,444	457	900	6,679	15,500	24,159
517,484	0	85	6,086	167	1,605	6,781	16,354	19,525
628,359	0	109	28,402	71	1,261	7,482	17,256	16,545
593,694	0	450	5,149	216	1,382	6,332	17,962	12,713
643,301	0	425	6,645	61	820	8,525	17,083	8,953
687,518	21,091	367	4,420	136	1,152	10,534	18,977	12,007
724,187 ^r	25,652	321	5,723	162	717	11,829	19,793	11,229
754,877	30,783	270	5,912	80	1,285	9,963	26,378	14,080
794,014	30,505	202	4,573	83	2,144	8,650 ^r	30,466	10,393
820,176 ^r	29,615	252	4,708	98	958	6,842	36,231	11,857
828,938	43,985	259	16,120	96	1,830	6,615	41,975	14,152

6A. Reserves of Depository Institutions, Federal Reserve Bank Credit, and Related Items, Year-End 1984–2007 and Month-End 2007—Continued

Millions of dollars

				Factors s	supplying rese	rve funds			
Period		Federal	Reserve Ba	nk credit outs	tanding			Special	Treasury
	Securities held outright ¹	Repurchase agreements ²	Loans	Float	Other Federal Reserve assets	Total	Gold stock	drawing rights certificate account	out- standing ³
2007									
Jan	778,863	32,000	1,326	-1,482	40,335	851,042	11,041	2,200	38,254
Feb		45,250	22	-1,012	37,940	862,993	11.041	2,200	38,305
Mar		33,250	27	-869	40,048	853,357	11,041	2,200	38,371
Apr		51,500	70	102	40,986	879,846	11,041	2,200	38,414
May		35,750	115	-622	38,759	864,274	11,041	2,200	38,462
Jun		25,250	204	-1,273	40,610	855,313	11,041	2,200	38,521
Jul		30,250	247	-1,164	41,471	861,604	11,041	2,200	38,541
Aug		38,500	1,342	-714	38,905	857,674	11,041	2,200	38,595
Sep		44,750	202	-729	41,355	865,210	11,041	2,200	38,639
Oct		48,500	92	-745	42,054	869,487	11,041	2,200	38,695
Nov		47,500	33	-814	40,545	866,965	11,041	2,200	38,765
Dec	740,611	46,500	48,636	-8	66,308	902,048	11,041	2,200	38,681

6A.—Continued

Factors absorbing reserve funds								
Currency in	Reverse repurchase	epurchase cash		ith Federal Res than reserve ba		Required	Other Federal Reserve liabilities	Reserve balances with Federal Reserve
circulation	agreements 4	holdings 5	Treasury	Foreign	Other	balances	and capital	Banks ⁶
000 500	22.250	185	6 0 5 0	00	205	6 0 0 6	26 525	17.000
802,599	32,379	175	6,053	90	285	6,836	36,727	17,392
808,078	39,645	204	5,194 4,245	91 91	274 224	6,738	38,147	16,168
805,586 806,998	37,283 37,389	301 299	4,245	91 95	224 316	6,990 6,508	38,912 39,069	11,338 11,322
800,998	34,817	299	5,340	93	256	6.580	39,009	15.322
812,794	32,349	306	4,649	197	230	6.395	39,275	10,898
813,387	32,970	300	5,126	94	305	6,466	39,667	15,071
815,020	35,774	329	4,579	94	330	6.613	40.612	6.158
810,607	35,689	336	5,539	112	245	6,469	41,548	16,545
815,303	38,055	301	4,307	601	287	6,586	41,849	14,134
817,259	35,916	266	4,669	97	285	6,486	42,571	11,421
828,938	43,985	259	16,120	96	1,830	6,615	41,975	14,152

Note: Components may not sum to totals because of rounding.

 Includes U.S. Treasury and federal agency securities. U.S. Treasury securities include securities lent to dealers, which are fully collateralized by other U.S. Treasury 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. 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.*

4. Cash value of agreements, which are collateralized by U.S. Treasury securities.

5. Coin and paper currency held by the Treasury, as well as any gold in excess of the gold certificates issued to the Reserve Bank.

6. Excludes required clearing balances and adjustments to compensate for float.

r Revised.

6B. Reserves of Depository Institutions, Federal Reserve Bank Credit, and Related Items, Year-End 1918–1983

Millions of dollars

				Fac	tors supplyin	ng reserve fu	nds			
		F	ederal Reserv	ve Bank cred	lit outstandir	ıg				
Period	Securities held outright ¹	Repur- chase agree- ments ²	Loans	Float ³	All other ⁴	Other Federal Reserve assets ⁵	Total	Gold stock ⁶	Special drawing rights certificate account	Treasury currency out- standing ⁷
1918 1919	239 300	0 0	1,766 2,215	199 201	294 575	0 0	2,498 3,292	2,873 2,707	 	1,795 1,707
1920 1921 1922 1923 1924	287 234 436 80 536	$ \begin{array}{c} 0 \\ 0 \\ 0 \\ 54 \\ 4 \end{array} $	2,687 1,144 618 723 320	119 40 78 27 52	262 146 273 355 390	0 0 0 0 0	3,355 1,563 1,405 1,238 1,302	2,639 3,373 3,642 3,957 4,212	· · · · · · · · · · ·	1,709 1,842 1,958 2,009 2,025
1925 1926 1927 1928 1929	367 312 560 197 488	8 3 57 31 23	643 637 582 1,056 632	63 45 63 24 34	378 384 393 500 405	0 0 0 0 0	1,459 1,381 1,655 1,809 1,583	4,112 4,205 4,092 3,854 3,997	· · · · · · · · · · ·	1,977 1,991 2,006 2,012 2,022
1930 1931 1932 1933 1934	686 775 1,851 2,435 2,430	43 42 4 2 0	251 638 235 98 7	21 20 14 15 5	372 378 41 137 21	0 0 0 0 0	1,373 1,853 2,145 2,688 2,463	4,306 4,173 4,226 4,036 8,238	· · · · · · · · · · ·	2,027 2,035 2,204 2,303 2,511
1935 1936 1937 1938 1939	2,430 2,430 2,564 2,564 2,484		5 3 10 4 7	12 39 19 17 91	38 28 19 16 11	0 0 0 0 0	2,486 2,500 2,612 2,601 2,593	10,125 11,258 12,760 14,512 17,644	· · · · · · · · · · ·	2,476 2,532 2,637 2,798 2,963
1940 1941 1942 1943 1944	2,184 2,254 6,189 11,543 18,846	0 0 0 0 0	3 3 6 5 80	80 94 471 681 815	8 10 14 10 4	0 0 0 0 0	2,274 2,361 6,679 12,239 19,745	21,995 22,737 22,726 21,938 20,619	· · · · · · · · · · ·	3,087 3,247 3,648 4,094 4,131
1945 1946 1947 1948 1949	24,252 23,350 22,559 23,333 18,885	0 0 0 0 0	249 163 85 223 78	578 580 535 541 534	2 1 1 1 2	0 0 0 0 0	15,091 24,093 23,181 24,097 19,499	20,065 20,529 22,754 24,244 24,427	· · · · · · · · · · ·	4,339 4,562 4,562 4,589 4,598
1950 1951 1952 1953 1954	20,725 23,605 24,034 25,318 24,888	53 196 663 598 44	67 19 156 28 143	1,368 1,184 967 935 808	3 5 4 2 1	0 0 0 0 0	22,216 25,009 25,825 26,880 25,885	22,706 22,695 23,187 22,030 21,713	· · · · · · · · · ·	4,636 4,709 4,812 4,894 4,985
1955 1956 1957 1958 1959	24,391 24,610 23,719 26,252 26,607	394 305 519 95 41	108 50 55 64 458	1,585 1,665 1,424 1,296 1,590	29 70 66 49 75	0 0 0 0 0	26,507 26,699 25,784 27,755 28,771	21,690 21,949 22,781 20,534 19,456	· · · · · · · ·	5,008 5,066 5,146 5,234 5,311

For notes see end of table.

6B.—Continued

		Fact	ors absorbi	ng reserve	funds						
Cur- rency	Treasury	Federa	Deposits wit al Reserve 1 an reserve 1	Banks,	Other	Required	Other Federal		Memberreser	er bank ves ⁹	
in circula- tion	cash holdings ⁸	Treasury	Foreign	Other	Federal Reserve accounts ⁵	clearing balances	Reserve liabilities and capital ⁵	With Federal Reserve Banks	Currency and coin ¹⁰	Re- quired ¹¹	Ex- cess ^{11, 12}
4,951	288	51	96	25	118	0	0	1,636	0	1,585	51
5,091	385	51	73	28	208	0	0	1,890	0	1,822	68
5,325	218	57	5	18	298	0	0	1,781	0	$\begin{array}{c} 0\\ 1,654\\ 0\\ 1,884\\ 2,161 \end{array}$	0
4,403	214	96	12	15	285	0	0	1,753	0		99
4,530	225	11	3	26	276	0	0	1,934	0		0
4,757	213	38	4	19	275	0	0	1,898	0		14
4,760	211	51	19	20	258	0	0	2,220	0		59
4,817	203	16	8	21	272	0	0	2,212	0	2,256	-44
4,808	201	17	46	19	293	0	0	2,194	0	2.250	-56
4,716	208	18	5	21	301	0	0	2,487	0	2,424	63
4,686	202	23	6	21	348	0	0	2,389	0	2,430	-41
4,578	216	29	6	24	393	0	0	2,355	0	2,428	-73
4,603	211	19	6	22	375	0	0	2,471	0	2,375	96
5,360	222	54	79	31	354	0	0	1,961	0	1,994	-33
5,388	272	8	19	24	355	0	0	2,509	0	1,933	576
5,519	284	3	4	128	360	0	0	2,729	0	1,870	859
5,536	3,029	121	20	169	241	0	0	4,096	0	2,282	1,814
5,882	2,566	544	29	226	253	0	0	5,587	0	2,743	2,844
6,543	2,376	244	99	160	261	0	0	6,606	0	4,622	1,984
6,550	3,619	142	172	235	263	0	0	7,027	0	5,815	1,212
6,856	2,706	923	199	242	260	0	0	8,724	0	5,519	3,205
7,598	2,409	634	397	256	251	0	0	11,653	0	6,444	5,209
8,732	2,213	368	1,133	599	284	0	0	4,026	0	7,411	6,615
11,160	2,215	867	774	586	291	0	0	12,450	0	9,365	3,085
15,410	2,193	799	793	485	256	0	0	13,117	0	11,129	1,988
20,499	2,303	579	1,360	356	339	0	0	12,886	0	11,650	1,236
25,307	2,375	440	1,204	394	402	0	0	14,373	0	12,748	1,625
28,515	2,287	977	862	446	495	0	0	15,915	0	14,457	1,458
28,952	2,272	393	508	314	607	0	0	16,139	0	15,577	562
28,868	1,336	870	392	569	563	0	0	17,899	0	16,400	1,499
28,224	1,325	1,123	642	547	590	0	0	20,479	0	19,277	1,202
27,600	1,312	821	767	750	106	0	0	16,568	0	15,550	1,018
27,741	1,293	668	895	565	714	0	0	17,681	0	16,509	1,172
29,206	1,270	247	526	363	746	0	0	20,056	0	19,667	389
30,433	1,270	389	550	455	777	0	0	19,950	0	20,520	-570
30,781	761	346	423	493	839	0	0	20,160	0	19,397	763
30,509	796	563	490	441	907	0	0	18,876	0	18,618	258
31,158 31,790 31,834 32,193 32,591	767 775 761 683 391	394 441 481 358 504	402 322 356 272 345	554 426 246 391 694	925 901 998 1,122 841	0 0 0 0 0	0 0 0 0 0	19,005 19,059 19,034 18,504 18,174	0 0 0 310	18,903 19,089 19,091 18,574 18,619	102 -30 -57 -70 -135

Reserves of Depository Institutions, Federal Reserve Bank Credit, and Related Items, Year-End 1918–1983—Continued

Millions of dollars

				Fac	tors supplyin	ng reserve fu	nds			
		F	ederal Reserv	ve Bank crea	lit outstandir	ıg				
Period	Securities held outright ¹	Repur- chase agree- ments ²	Loans	Float ³	All other ⁴	Other Federal Reserve assets ⁵	Total	Gold stock ⁶	Special drawing rights certificate account	Treasury currency out- standing ⁷
1960 1961 1962 1963 1964	26,984 30,478 28,722 33,582 36,506	400 159 342 11 538	33 130 38 63 186	1,847 2,300 2,903 2,600 2,606	74 51 110 162 94	0 0 0 0 0	29,338 31,362 33,871 36,418 39,930	17,767 16,889 15,978 15,513 15,388	· · · · · · · · · ·	5,398 5,585 5,567 5,578 5,405
1965 1966 1967 1968 1969	40,478 43,655 48,980 52,937 57,154	290 661 170 0 0	137 173 141 186 183	2,248 2,495 2,576 3,443 3,440	187 193 164 58 64	0 0 0 2,743	43,340 47,177 52,031 56,624 64,584	13,733 13,159 11,982 10,367 10,367	· · · · · · · · · · ·	5,575 6,317 6,784 6,795 6,852
1970 1971 1972 1973 1974	62,142 69,481 71,119 80,395 84,760	0 1,323 111 100 954	335 39 1,981 1,258 299	4,261 4,343 3,974 3,099 2,001	57 261 106 68 999	1,123 1,068 1,260 1,152 3,195	67,918 76,515 78,551 86,072 92,208	10,732 10,132 10,410 11,567 11,652	400 400 400 400 400	7,147 7,710 8,313 8,716 9,253
1975 1976 1977 1978 1979	92,789 100,062 108,922 117,374 124,507	1,335 4,031 2,352 1,217 1,660	211 25 265 1,174 1,454	3,688 2,601 3,810 6,432 6,767	1,126 991 954 587 704	3,312 3,182 2,442 4,543 5,613	102,461 110,892 118,745 131,327 140,705	11,599 11,598 11,718 11,671 11,172	500 1,200 1,250 1,300 1,800	10,218 10,810 11,331 11,831 13,083
1980 1981 1982 1983	128,038 136,863 144,544 159,203	2,554 3,485 4,293 1,592	1,809 1,601 717 918	4,467 1,762 2,735 1,605	776 195 1,480 418	8,739 9,230 9,890 8,728	146,383 153,136 63,659 172,464	11,160 11,151 11,148 11,121	2,518 3,318 4,618 4,618	13,427 13,687 13,786 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.

 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.*

6B.—Continued

		Fact	ors absorbir	ng reserve f	unds							
Cur- rency	Treasury	Federa	Deposits wit al Reserve I an reserve b	Banks,	Other	Required	Other Federal			ember bank reserves ⁹		
in cir- cula- tion	cash holdings ⁸	Treasury	Foreign	Other	Federal Reserve accounts 5	clearing balances	Reserve liabilities and capital ⁵	With Federal Reserve Banks	Currency and coin ¹⁰	Re- quired ¹¹	Ex- cess ^{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	2,544	18,988	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 44,663 47,226 50,961 53,950	760 1,176 1,344 695 596	668 416 1,123 703 1,312	150 174 135 216 134	355 588 563 747 807	211 -147 -773 -1,353 0	0 0 0 0 0	0 0 0 1,919	18,447 19,779 21,092 21,818 22,085	4,163 4,310 4,631 4,921 5,187	22,848 24,321 25,905 27,439 28,173	-238 -232 -182 -700 -901	
57,903	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	2,113	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.

 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 foreignowned 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.

7. Principal Assets and Liabilities of Insured Commercial Banks, by Class of Bank, June 30, 2007 and 2006

The set	T- (-1		Member banks	;	Nonmember
Item	Total	Total	National	State	banks
		1	2007		
Assets					
Loans and investments Loans, gross Net Investments U.S. Treasury and federal agency securities Other Cash assets, total	7,204,435 5,604,391 5,601,554 1,600,044 258,968 1,341,075 262,729	5,626,102 4,347,814 4,345,747 1,278,288 142,174 1,136,113 209,416	4,530,594 3,514,026 3,512,167 1,016,568 91,109 925,459 173,718	1,095,508 833,788 833,580 261,720 51,065 210,654 35,698	1,578,333 1,256,577 1,255,807 321,756 116,794 204,962 53,313
Liabilities					
Deposits, total Interbank Other transactions Other nontransactions Equity capital	5,461,849 80,081 636,731 4,745,036 1,041,223	4,080,633 65,636 457,956 3,557,041 831,355	3,266,165 53,471 365,853 2,846,842 675,149	814,468 12,165 92,104 710,199 156,206	1,381,216 14,445 178,775 1,187,995 209,867
Number of banks	7,322	2,553	1,673	880	4,769
			2006		
Assets					
Loans and investments Loans, gross Net Investments U.S. Treasury and federal agency securities Other Cash assets, total	6,782,584 5,177,276 5,175,292 1,605,308 285,687 1,319,621 277,134	5,298,487 4,018,755 4,017,598 1,279,731 162,185 1,117,546 219,429	4,224,793 3,218,246 3,217,313 1,006,547 102,455 904,092 182,292	1,073,694 800,509 800,285 273,184 59,730 213,454 37,137	1,484,097 1,158,520 1,157,693 325,576 123,502 202,075 57,704
LIABILITIES					
Deposits, total Interbank Other transactions Other nontransactions Equity capital	5,255,716 88,201 679,778 4,487,738 949,489	3,987,644 74,038 485,240 3,428,366 760,868	3,185,042 60,177 38,663 2,738,202 624,281	802,603 13,861 98,577 690,164 136,587	1,268,072 14,163 194,538 1,059,372 188,621
Number of banks	7,453	2,672	1,776	896	4,781

Millions of dollars, except as noted

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.

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
945, Feb. 5	50		50
July 5	75		75
946, Jan. 21	100		100
947, Feb. 1	75		75
949, Mar. 3	50		50
951, Jan. 17	75		75
953, Feb. 20	50		50
955, Jan. 4	60		60
Apr. 23	70		70
958, Jan. 16	50		50
Aug. 5	70		70
Oct. 16	90		90
960, July 28	70		70
962, July 10	50		50
963, Nov. 6	70		70
968, Mar. 11	70	50	70
June 8	80	60	80
970, May 6	65	50	65
971, Dec. 6	55	50	55
972, Nov. 24	65	50	65
974, 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.

Statement of Condition of the Federal Reserve Banks, by Bank, December 31, 2007 and 2006

Millions of dollars

Y.	То	tal	Bo	ston
Item	2007	2006	2007	2006
Assets Gold certificate account Special drawing rights certificate account Coin	11,037 2,200 1,179	11,037 2,200 801	449 115 36	486 115 27
Loans Term auction credit ¹ Other loans to depository institutions	40,000 8,636	 67	0 178	10
Securities purchased under agreements to resell (triparty) ² U.S. Treasury securities bought outright ³ Total loans and securities Items in process of collection Bank premises	46,500 740,611 835,748 2,220 2,144	40,750 778,915 819,731 4,276 1,953	2,143 34,132 36,453 82 120	37,169 37,178 97 117
Other assets Denominated in foreign currencies ⁴ Other ⁵	47,295 16,915	20,482 18,015	1,222 822	491 782
Interdistrict settlement account	0	0	-1,356	124
Total assets	918,737	878,494	37,942	39,416
LIABILITIES Federal Reserve notes outstanding (issued to Bank) Less: Notes held by Federal Reserve Bank Federal Reserve notes, net	1,010,262 218,571 791,691	958,680 175,661 783,019	38,832 5,886 32,946	39,020 3,020 36,000
Securities sold under agreements to repurchase	43,985	29,615	2,027	1,413
Deposits Depository institutions U.S. Treasury, general account Foreign, official accounts Other ⁶ Total deposits	20,767 16,120 96 2,020 39,003	18,699 4,708 98 1,496 25,002	531 0 1 31 563	549 0 1 42 592
Deferred credit items Other liabilities and accrued dividends ⁷	2,227 4,930	4,602 5,608	92 215	352 267
Total liabilities	881,837	847,846	35,843	38,624
CAPITAL ACCOUNTS Capital paid in Surplus Total liabilities and capital accounts	18,450 18,450 918,737	15,324 15,324 878,494	1,049 1,049 37,942	396 396 39,416
Federal Reserve Note Statement				
Federal Reserve notes outstanding Less: Held by Banks not subject to collateralization Collateralized Federal Reserve notes	1,010,262 218,571 791,691	958,680 175,661 783,019	· · · · · · ·	· · · · · · ·
Collateral for Federal Reserve notes Gold certificate account Special drawing rights certificate account Other eligible assets U.S. Treasury and federal agency securities Total collateral	11,037 2,200 35,328 743,126 791,691	11,037 2,200 0 769,782 783,019	 	· · · · · · ·

For notes see end of table.

9.—Continued

New	York	Philac	lelphia	Clev	eland	Rich	mond
2007	2006	2007	2006	2007	2006	2007	2006
4,053 874 55	4,139 874 47	455 83 88	463 83 53	428 104 113	446 104 73	869 147 134	853 147 78
33,957 5,888	0	0 0	0	12 841	0	775 130	· · ·
16,838 268,173 324,856 42 216	40,750 288,297 329,047 70 212	2,057 32,765 34,822 317 64	33,817 33,817 649 58	1,903 30,308 33,064 268 153	33,633 33,633 451 158	4,029 64,168 69,102 154 186	64,704 64,704 237 170
11,503 6,700	5,707 7,099	5,587 713	1,152 1,055	3,354 750	1,569 759	12,633 1,446	5,625 1,502
-12,606	-29,471	794	836	-741	-2.264	-1,177	4,858
335,691	317,724	42,924	38,166	37,494	34,929	83,494	78,174
356,941 74,297 282,644	341,947 56,821 285,126	41,729 7,564 34,165	38,658 6,957 31,700	39,353 7,130 32,223	36,516 6,709 29,807	80,552 13,767 66,785	75,090 11,394 63,695
15,927	10,961	1,946	1,286	1,800	1,279	3,811	2,460
9,158 16,120 66 698 26,042	6,609 4,708 69 821 12,207	2,664 0 5 92 2,760	584 0 2 1 587	447 0 3 12 461	954 0 3 32 990	1,780 0 11 503 2,294	2,748 0 11 121 2,880
51 1,790	111 1,864	215 211	718 255	200 228	405 275	112 500	384 569
326,454	310,270	39,297	34,547	34,912	32,756	73,502	69,987
4,619 4,619	3,727 3,727	1,813 1,813	1,810 1,810	1,291 1,291	1,087 1,087	4,996 4,996	4,093 4,093
335,691	317,724	42,924	38,166	37,494	34,929	83,494	78,174
· · · · · · ·							

9. Statement of Condition of the Federal Reserve Banks, by Bank, December 31, 2007 and 2006—Continued

Millions of dollars

Item	Atl	anta	Chicago	
Item	2007	2006	2007	2006
Assers Gold certificate account Special drawing rights certificate account Coin	1,117 166 153	1,023 166 93	903 212 137	947 212 100
Loans Term auction credit ¹ Other loans to depository institutions	25 0		1,080 1,259	24
Securities purchased under agreements to resell (triparty) ² U.S. Treasury securities bought outright ³ Total loans and securities Items in process of collection Bank premises	4,313 68,690 73,028 229 230	65,208 65,211 324 232	3,900 62,120 68,359 155 205	71,520 71,544 241 206
Other assets Denominated in foreign currencies ⁴ Other ⁵	3,939 1,473	1,382 1,430	2,648 1,258	1,357 1,481
Interdistrict settlement account	3,909	12,404	6,133	-3,742
Total assets	84,243	82,264	80,010	72,346
LIABILITIES Federal Reserve notes outstanding (issued to Banks) Less: Notes held by Federal Reserve Banks Federal Reserve notes, net	111,626 36,017 75,609	98,175 23,938 74,237	86,265 13,560 72,705	79,818 14,202 65,616
Securities sold under repurchase agreements	4,080	2,479	3,689	2,719
Deposits Depository institutions U.S. Treasury, general account Foreign, official accounts Other ⁶ Total deposits	975 0 3 166 1,144	1,980 0 3 63 2,046	910 0 2 161 1,073	1,395 0 3 105 1,503
Deferred credit items Other liabilities and accrued dividends ⁷	143 418	473 476	516 396	276 515
Total liabilities	81,393	79,711	78,381	70,630
CAPITAL ACCOUNTS				
Capital paid in	1,425 1,425	1,276 1,276	814 814	858 858
Total liabilities and capital accounts	84,243	82,264	80,010	72,346

NOTE: Components may not sum to totals because of rounding.

 In December 2007, the System established the temporary Term Auction Facility, which provides credit to eligible depository institutions.

2. On February 15, 2007, the System began allocating the activity related to securities purchased under agreements to resell to all Reserve Banks. 3. Includes securities loaned—fully collateralized by U.S. Treasury securities pledged with Federal Reserve Banks—and excludes securities purchased under agreements to resell.

4. Valued daily at market exchange rates. Includes deposits held under foreign currency arrangements with two central banks of \$24 million at December 31, 2007.

9.—Continued

St. I	Louis	Minne	apolis	Kansa	as City	Da	llas	San Fr	ancisco
2007	2006	2007	2006	2007	2006	2007	2006	2007	2006
326	328	203	211	335	324	613	575	1,286	1,242
71	71	30	30	66	66	98	98	234	234
50	39	45	31	72	62	130	81	165	117
1,050 0	0	0 3	22	0 7	 7	1,400 0	0	1,701 330	
1,486 23,671 26,207 13 115	24,747 24,747 196 80	928 14,777 15,708 97 113	15,835 15,857 219 116	1,505 23,974 25,486 214 269	22,808 22,815 560 159	2,043 32,540 35,983 126 257	34,957 34,957 348 260	5,355 85,293 92,680 522 218	86,218 86,219 884 185
513	223	851	380	544	271	653	236	3,848	2,089
515	552	316	348	513	480	690	751	1,720	1,777
3,742	1,807	2,140	-237	5,239	4,734	-2,425	3,537	-3,651	7,414
31,551	28,045	19,503	16,955	32,740	29,469	36,124	40,844	97,021	100,160
32,982	29,169	19,219	17,442	33,316	30,770	57,270	57,150	112,177	114,925
3,770	3,175	2,790	2,549	3,212	3,717	24,860	19,391	25,719	23,787
29,212	25,994	16,429	14,893	30,103	27,053	32,410	37,759	86,459	91,138
1,406	941	878	602	1,424	867	1,933	1,329	5,066	3,278
289 0 55 344 38	434 0 0 24 458 103	1,104 0 1 38 1,143 223	455 0 1 18 474 288	449 0 45 495 157	546 0 1 32 579 435	635 0 1 59 695 129	705 0 37 742 306	1,823 0 3 161 1,987 353	1,741 0 4 200 1,946 749
192	217	122	147	172	183	230	284	456	556
31,192	27,713	18,794	16,404	32,352	29,117	35,397	40,420	94,321	97,667
180	166	355	276	194	176	363	212	1,350	1,247
180	166	355	276	194	176	363	212	1,350	1,247
31,551	28,045	19,503	16,955	32,740	29,469	36,124	40,844	97,021	100,160

 The System total includes depository institution overdrafts of \$6 million for 2007 and \$2 million for 2006.
 Includes international organization deposits of \$144 million for 2007 and 2006. These deposits are primarily held by the Federal Reserve Bank of New York. 7. Includes exchange-translation account reflecting the monthly revaluation of foreign exchange commitments at market exchange rates.

. . . Not applicable.

10. Income and Expenses of the Federal Reserve Banks, by Bank, 2007

Thousands of dollars

Item	Total	Boston	New York	Philadelphia	Cleveland
CURRENT INCOME					
Loans U.S. Treasury securities Foreign currencies Priced services Compensation received for	71,345 40,297,924 574,525 878,405	275 1,868,185 14,775 0	54,696 14,791,753 141,114 65,475	142 1,765,843 65,450 0	940 1,668,195 40,965 0
services provided ¹	634,819 119,007	46,972 2,967	29,040 72,331	38,486 2,663	79,931 2,893
Total	42,576,025	1,933,174	15,154,409	1,872,583	1,792,924
CURRENT EXPENSES					
Salaries and other personnel expenses	1,499,112 505,516 109,849 132,372 71,187 141,444 81,675 43,320 70,668 32,610 92,998 39,285 49,166	82,288 22,023 1,271 4,009 3,337 2,885 1,517 788 5,065 4,976 6,737 4,300 3,183	302,889 92,280 103,149 13,120 9,947 20,876 2,475 3,392 9,140 4,765 16,209 7,833 14,929	$70,493 \\ 25,444 \\ 173 \\ 2,047 \\ 2,469 \\ 8,460 \\ 2,302 \\ 521 \\ 5,321 \\ 1,567 \\ 4,066 \\ 2,739 \\ 326$	93,093 34,555 243 5,913 4,648 21,457 6,214 869 6,733 1,954 8,767 2,771 187
Other Equipment	39,883	1,663	6,822	2,205	3,625
Purchases	28,060 3,592 117,996 78,276	3,142 281 6,444 4,394	3,972 1,434 10,459 7,491	1,155 412 6,066 4,694	1,372 162 7,887 6,390
Earnings credit costs Compensation paid for service	240,354	12,415	65,453	9,140	15,618
costs incurred ¹ Other Recoveries Expenses capitalized ³	634,819 81,956 -104,730 -20,873	$0 \\ 21,453 \\ -15,658 \\ -1,615$	28,955 71,392 –13,831 –9,547	0 11,746 -3,569 -339	0 15,994 -3,755 -516
Total Reimbursements Net expenses	3,968,537 -458,331 3,510,206	174,897 -25,073 149,824	773,605 -109,437 664,168	157,437 -30,812 126,625	234,181 -62,455 171,726

For notes see end of table.

10.—Continued

Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
3,505	137	2,514	2,596	1,515	954	2,199	1,873
3,435,771	3,617,951	3,457,351	1,280,394	805,010	1,263,466	1,773,992	4,570,014
153,751	47,228	32,571	6,233	10,360	6,678	7,849	47,550
0	753,440	59,491	0	0	0	0	0
55,800	459	81,786	26,252	78,665	81,241	47,010	69,178
11,376	5,448	5,299	1,881	1,215	1,847	2,409	8,678
3,660,202	4,424,663	3,639,012	1,317,356	896,765	1,354,187	1,833,458	4,697,294
212,395	135,008	114,948	77,558	79,344	96,941	83,391	150,765
76,590	46,823	46,292	27,363	25,979	27,660	33,613	46,892
774	740	439	449	565	664	164	1,220
62,831	11,761	10,174	7,719	2,631	7,011	1,565	3,592
10,765	7,420	7,452	3,910	3,147	5,242	3,737	9,113
55,807	2,467	4,866	5,256	3,878	4,535	5,300	5,656
3,421	45,885	3,819	2,203	2,480	1,939	4,252	5,168
26,566	1,786	1,429	1,277	1,883	1,277	1,791	1,743
8,125	7,942	5,726	3,059	3,902	4,516	5,304	5,834
2,408	3,293	2,231	637	3,186	201	3,914	3,479
8,990	9,419	11,380	5,247	4,702	982	8,975	7,523
3,740	4,063	2,294	1,634	1,976	677	4,027	3,232
16,146	566	5,933	1,738	253	4,518	199	1,188
3,728	3,975	5,724	1,481	1,731	399	4,945	3,585
4,709	2,471	1,780	1,071	1,460	2,704	1,579	2,644
249	417	295	143	18	28	88	65
37,635	8,597	9,714	5,318	4,603	6,358	5,326	9,590
16,668	9,556	6,544	2,770	2,798	3,470	5,367	8,134
53,827	15,051	22,197	4,612	4,138	6,913	5,616	25,374
0	596,523	9,341	0	0	0	0	0
-282,072	25,921	56,591	79,734	19,214	16,823	30,145	15,016
-28,656	-8,174	-8,038	-2,313	-993	-4,473	-9,366	-5,905
-2,610	-640	-345	-1,158	-611	-863	-488	-2,141
292,034	930,868	320,790	229,709	166,285	187,521	199,444	301,765
-29,720	-12,264	-5,238	-114,707	-29,292	-11,028	-15,021	-13,283
262,314	918,603	315,551	115,003	136,993	176,493	184,423	288,483

Income and Expenses of the Federal Reserve Banks, by Bank, 2007—Continued Thousands of dollars

Item	Total	Boston	New York	Philadelphia	Cleveland
Profit and Loss		I	1	1	
Current net income	39,065,820	1,783,349	14,490,241	1,745,959	1,621,198
Additions to (+) and deductions from (-) current net income ⁴ Profits on foreign exchange transactions	1,885,770 580	49,346 17	447,281 29	242,599 91	131,895 236
Total additions Interest expense on reverse	1,886,350	49,363	447,310	242,690	132,131
repurchase agreements	-1,687,918	-78,664	-615,495	-74,232	-70,285
Other deductions Total deductions Net addition to (+) or deduction from (-)	_9 _1,687,927	0 -78,664	0 -615,495	0 -74,232	
current net income	198,423	-29,301	-168,185	168,458	61,839
Cost of unreimbursed Treasury services	6	0	2	4	0
Assessments by Board Board expenditures ⁵ Cost of currency	296,125 576,306	7,534 30,970	74,183 123,566	34,464 32,084	20,766 26,174
Net income before payment to U.S. Treasury	38,391,806	1,715,543	14,124,306	1,847,864	1,636,096
Change in funded status of benefit plans ⁶ Comprehensive income before	324,481	3,596	228,568	4,924	5,345
payment to U.S. Treasury	38,716,287	1,719,139	14,352,874	1,852,789	1,641,441
Dividends paid Payments to U.S. Treasury (interest on Federal	992,353	34,714	253,678	108,613	65,679
Reserve notes)	34,598,401	1,031,048	13,207,574	1,740,672	1,371,427
Transferred to/from surplus and change in accumulated other comprehensive					
income	3,125,533	653,378	891,622	3,504	204,335
Surplus, January 1 Surplus, December 31	15,324,288 18,449,821	396,093 1,049,471	3,727,084 4,618,706	1,809,826 1,813,329	1,086,735 1,291,070

Note: Components may not sum to totals because of rounding.

1. 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.

2. Reflects the effect of Financial Accounting Standards Board 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, resulting in an increase in expenses of \$97,419 thousand. The expenses related to the Retirement Benefit Equalization Plan and the Supplemental Employee Retirement Plan are recorded by each Federal Reserve Bank.

 Includes expenses for labor and materials capitalized and depreciated or amortized as charges to activities in the periods benefited.

4. Includes reimbursement from the U.S. Treasury for uncut sheets of Federal Reserve notes, gains and losses on the sale of Reserve Bank buildings, counterfeit currency that is not charged back to the depositing institution, and stale Reserve Bank checks that are written off.

5. For additional details, see the chapter "Board of Governors Financial Statements."

 Subsquent to the adoption of SFAS 158 at December 31, 2006, the Reserve Banks recognize the change in funded status of pension and postretirement benefit plans as an element of other comprehensive income.

10.—Continued

Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
							1
3,397,889	3,506,059	3,323,461	1,202,353	759,772	1,177,694	1,649,035	4,408,811
501,282 18	162,120 40	102,302 51	20,439 23	33,756 17	21,153	26,785 16	146,812 37
501,300	162,160	102,354	20,461	33,773	21,158	26,800	146,849
-144,330	-151,710	-145,835	-53,846	-33,880	-52,984	-74,666	-191,992
0 -144,330	$_{-151,710}^{0}$	0 –145,835	0 -53,846	0 -33,880	_52,984	0 –74,666	0 -191,992
356,970	10,450	-43,481	-33,385	-107	-31,825	-47,866	-45,143
0	0	0	0	0	0	0	0
77,265	24,941	16,506	3,198	5,485	3,421	4,380	23,982
51,241	78,926	56,393	19,551	14,880	23,518	30,903	88,099
3,626,352	3,412,643	3,207,080	1,146,219	739,300	1,118,929	1,565,886	4,251,587
22,519	5,717	14,711	3,536	10,627	3,547	13,535	7,854
3,648,871	3,418,359	3,221,792	1,149,756	749,927	1,122,477	1,579,422	4,259,441
263,167	78,220	52,775	10,398	19,522	11,109	17,019	77,460
2,483,025	3,191,589	3,212,649	1,125,614	651,634	1,093,644	1,410,713	4,078,811
902,679	148,551	-43,632	13,743	78,771	17,724	151,689	103,171
4,093,301 4,995,979	1,276,288 1,424,838	858,091 814,459	166,206 179,950	275,762 354,533	176,344 194,068	211,742 363,431	1,246,817 1,349,988

11. Income and Expenses of the Federal Reserve Banks, 1914-2007

Thousands of dollars

Federal Reserve	Current	Net	Net additions		nents by Governors	Change in funded status
Bank and period in	income	expenses	or deductions (-) ¹	Board expenditures	Costs of currency	of benefit plans
All Banks						
1914–15	2,173	2,018	6	302		
1916	5,218	2,082	-193	192		
917	16,128	4,922	-1,387	238		
918	67,584	10,577	-3,909	383		
919	102,381	18,745	-4,673	595		
920	181,297	27,549	-3,744	710		
921	122,866	33,722	-6,315	741		
922	50,499	28,837	-4,442	723		
923	50,709	29,062	-8,233	703		
1924 1925	38,340 41.801	27,768 26,819	-6,191 -4.823	663 709		
1925	41,801 47,600	26,819	-4,825 -3,638	709	1,714	
927	43,024	24,914	-2,457	722	1,845	
928	64,053	25,401	-5,026	698	806	
929	70,955	25,810	-4,862	782	3,099	
930	36,424	25,358	-93	810	2,176	
931	29,701	24,843	311	719	1,479	
932	50,019	24,457	-1,413	729	1,106	
933	49,487	25,918	-12,307	800	2,505	
934	48,903	26,844	-4,430	1,372	1,026	
935	42,752	28,695	-1,737	1,406	1,477	
936	37,901	26,016	486	1,680	2,178	
1937	41,233	25,295	-1,631	1,748	1,757	
938 939	36,261 38,501	25,557 25,669	2,232 2,390	1,725 1,621	1,630 1,356	
	,		2,390	<i>,</i>	·	
1940	43,538	25,951	11,488	1,704	1,511	
941	41,380	28,536	721	1,840	2,588	
942	52,663	32,051	-1,568	1,746	4,826	
943	69,306	35,794 39,659	23,768 3,222	2,416 2,296	5,336 7,220	
945	104,392 142,210	41,666	-830	2,296	4.710	
946	150,385	50,493	-830 -626	2,341	4,710	
947	158,656	58,191	1,973	2,200	4,562	
948	304.161	64.280	-34.318	3,244	5,186	
949	316,537	67,931	-12,122	3,243	6,304	
950	275,839	69,822	36.294	3,434	7,316	
1951	394,656	83,793	-2,128	4,095	7,581	
952	456,060	92,051	1,584	4,122	8,521	
953	513,037	98,493	-1,059	4,100	10,922	
954	438,486	99,068	-134	4,175	6,490	
955	412,488	101,159	-265	4,194	4,707	
956	595,649	110,240	-23	5,340	5,603	
957	763,348	117,932	-7,141	7,508	6,374	
958	742,068	125,831	124	5,917	5,973	
959	886,226	131,848	98,247	6,471	6,384	

For notes see end of table.

11.—Continued

	Payments to	DU.S. Treasury	Transferred	Transferred to/from surplus and change in
Dividends paid	Statutory transfers ²	Interest on Federal Reserve notes	to/from surplus (section 13b)	accumulated othe comprehensive income (section 7)
217				
1,743	:::.			• • • •
6,804	1,134			1,134
5,541	2 704			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, 1914–2007—Continued Thousands of dollars

Federal Reserve	Current	Net	Net additions		nents by Governors	Change in funded status
Bank and period	income	expenses	or deductions (-) ¹	Board expenditures	Costs of currency	of benefit plans
1960	1,103,385	139,894	13,875	6,534	7,455	
1961	941,648	148,254	3,482	6,265	6,756	
1962 1963	1,048,508 1,151,120	161,451 169,638	-56 615	6,655 7,573	8,030 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 6,257,937	476,235 514,359	-78,487 -202,370	41,117 33,577	30,190 37,130	
1975	6,623,220	558,129	-202,370 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	
1090	12,802,319	718,033	-115,386	62,231	73,124	
1980 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 19,526,431	1,146,911 1,205,960	1,796,594 -516,910	81,870 84,411	170,675 164,245	
1988 1989	22,249,276	1,203,960	1,254,613	89,580	175,044	
1000	23,476,604	1,349,726	2,099,328	103,752	193,007	
1990 1991	22,553,002	1,429,322	405,729	109,631	261,316	
1992	20,235,022	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 1999	28,149,477 29,346.836	1,833,436 1,852,162	1,906,037 -533,557	178,009 213,790	408,544 484,959	
2000	22.052.005		1 500 005	100.057	105.000	
2000	33,963,992 31,870,721	1,971,688 2,084,708	-1,500,027 -1,117,435	188,067 295,056	435,838 338,537	
2001	26,760,113	2,084,708	2,149,328	295,056	429,568	
2002	23,792,725	2,462,658	2,481,127	297,020	508,144	
2003	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
Total, 1914-2007	753,465,666	58,857,462	4,240,213	5,000,926	9,408,318	324,481

11.—Continued

	Payments to	U.S. Treasury	Transferred	Transferred to/from surplus and change in
Dividends paid	Statutory transfers ²	Interest on Federal Reserve notes	to/from surplus (section 13b)	accumulated othe comprehensive income (section 7)
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 52,580		4,340,680		51,178
52,580 54,610		5,549,999 5,382,064		51,483 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
195,422 212,090		15,986,765 20,470,011		347,583 282,122
230,527		23,389,367		282,122 283,075
255.884	5,517,716	14,565,624		635,343
299,652	20,658,972	14,505,024		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
9,731,130	44,113,958	608,526,361	-4	24,392,209 ³

11. Income and Expenses of the Federal Reserve Banks, 1914–2007—Continued Thousands of dollars

Federal Reserve	Current	Net	Net additions		nents by Governors	Change in funded status
Bank and period	income	expenses	or deductions (-) ¹	Board expenditures	Costs of currency	of benefit plans
Aggregate for each Bank, 1914–2007						
Boston	39,756,660	3,566,677	-77,524	214,794	549,944	3,596
New York	264,885,985	9,049,0994	665,437	1,242,376	2,904,656	228,568
Philadelphia	28,242,547	2,902,768	281,126	232,919	407,154	4,924
Cleveland	44,376,296	3,441,220	358,964	363,689	538,490	5,345
Richmond	58,583,264	4,847,517	1,048,500	746,343	776,985	22,519
Atlanta	44,873,400	7,446,218	300,910	375,667	738,885	5,717
Chicago	88,896,622	6,781,169	570,303	542,013	1,061,746	14,711
St. Louis	25,558,056	2,712,204	9,337	118,324	341,279	3,536
Minneapolis	13,120,386	2,686,112	129,244	145,784	171,112	10,627
Kansas City	26,840,812	3,577,546	71,878	150,184	345,207	3,547
Dallas	34,245,323	3,632,776	291,082	222,824	468,457	13,535
San Francisco	84,086,318	6,214,156	590,956	646,010	1,104,404	7,854
Total	753,465,666	56,857,462	4,240,213	5,000,926	9,408,318	324,481

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

	Payments to	U.S. Treasury	- Transferred	Transferred to/fr surplus and cha
Dividends paid	Statutory transfers ²	Interest on Federal Reserve notes	to/from surplus (section 13b)	in accumulated of comprehensiv income (section 7) ⁵
445,359	2,579,504	31,082,719	135	1,243,599
2,429,684	17,307,161	225,798,033	-433	7,049,415
516,216	1,312,118	21,177,901	291	1,979,232
715,167	2,827,043	35,255,476	-10	1,599,529
1,667,095	3,083,928	42,455,863	-72	6,076,623
695,724	2,713,230	31,464,800	5	1,745,497
969,454	4,593,811	74,300,302	12	1,233,130
218,704	1,833,837	20,042,912	-27	303,695
276,350	416,227	9,051,982	65	512,625
259,149	1,249,703	21,017,971	-9	316,487
367,830	1,510,802	27,815,769	55	531,427
1,170,398	4,686,594	69,062,633	-17	1,800,950
9,731,130	44,113,958	608,526,361	-4	24,392,209 ³

3. The \$24,392,209 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 \$18,449,821 thousand on December 31, 2007.

4. This amount is reduced by \$2,815,225 thousand for expenses of the System Retirement Plan. See note 2, table 10.

5. 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, 2004-2007

Operation	2007	2006	2005	2004
Millions of pieces				
Currency processed	35,653	37,694	36,463	36,242
Currency destroyed	6,509	6,766	6,551	6,748
Coin received	63,255	59,705	56,080	55,655
Checks handled				
U.S. government checks ¹	214	222	216	234
Postal money orders	164	171	176	187
All other ³	10,001	11,083	12,228	13,904
Securities transfers ²	24	22	22	20
Funds transfers	135	134	132	125
Automated clearinghouse transactions				
Commercial	9,363	8,231	7,339	6,486
Government	1,027	992	964	941
Millions of dollars				
Currency processed	642,168	664,592	639,832	625,127
Currency destroyed	104,082	84,742	83,187	90,943
Coin received	6,124	5,779	5,412	5,403
Checks handled				
U.S. government checks ¹	256,994	269,073	252,192	277,649
Postal money orders	31,626	28,066	28,395	29,045
All other ³	15,897,747	16,442,820	15,684,615	14,287,740
Securities transfers ²	435,577,505	377,258,592	368,896,819	313,425,252
Funds transfers	670,665,569	572,645,790	518,546,733	478,946,947
Automated clearinghouse transactions				
Commercial	14,547,234	13,124,434	12,801,914	12,543,907
Government	3,716,928	3,474,364	3,156,556	2,913,189

 Starting in 2005, this category includes government checks handled electronically (electronic checks); amounts in bold are restatements to reflect the inclusion of electronic checks. previous years, but the composition of the category remained the same. Therefore, the data are comparable with data reported in previous years.

3. Amounts in bold are restatements.

2. In 2006, the title of this category changed from

	President ¹	Othe	er officers	Employees		Total		
Federal Reserve Bank (including Branches)	(including Number		- Salaries	Num-	Salaries			
Branches)	(dollars) ²	ber	(dollars) ²	Full- time	Part- time	(dollars) ²	ber	(dollars) ²
Boston	300,700	66	11,705,861	834	68	60,844,958	969	72,851,519
New York	398,200	289	58,962,284	2.435	51	209,318,220	2,776	268.678.705
Philadelphia	289.000	57	9,156,100	964	32	55,399,380	1.054	64.844.480
Cleveland	294,100	57	9.097.275	1.450	36	74.076.101	1,544	83,467,476
Richmond	323.000	78	12.092.800	1.647	42	97.039.847	1.768	109,455,647
Atlanta	289,000	79	13,820,595	1,822	33	108,183,543	1,935	122,293,138
Chicago	289,000	83	13,151,804	1,292	53	86,678,366	1,429	100,119,170
St. Louis	356,000	79	12,257,140	937	58	55,858,832	1,075	68,471,972
Minneapolis	391,000	43	6,663,760	1,101	87	63,751,595	1,232	70,806,355
Kansas City	356,100	78	13,349,302	1,244	23	71,299,571	1,346	85,004,973
Dallas	289,000	61	9,740,198	1,172	20	66,113,025	1,254	76,142,223
San Francisco	360,300	74	14,269,134	1,652	68	119,451,612	1,795	134,081,046
Federal Reserve								
Information								
Technology		37	5,909,456	770	3	67,164,988	810	73,074,444
Office of								
Employee		0	1 920 000	24	0	2 806 647	42	4 707 547
Benefits		9	1,830,900	34	0	2,896,647	43	4,727,547
Total	3,935,400	1,090	192,006,609	17,354	574	1,138,076,686	19,030	1,334,018,695

13.	Number and Annual Salaries of Officers and Employees of the Federal Reserve Banks,
	December 31, 2007

1. Under current policies, the appointment salaries of 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 comparatio. The Board has discretion to approve a higher starting salary if requested by a Reserve Bank's board of directors.

On January 1 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), 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 2007, New York and San Francisco were in tier 1, which had a midpoint for presidents' salaries of \$379,300. Boston, Philadelphia, Richmond, Atlanta, Chicago, Minneapolis, and Dallas were in tier 2, which had a midpoint for presidents' salaries of \$300,000. Cleveland, St. Louis, and Kansas City were in tier 3, which had a midpoint for presidents' salaries of \$309,600.

2. Annualized salary liability based on salaries in effect on December 31, 2007.

. . . Not applicable.

14. Acquisition Costs and Net Book Value of the Premises of the Federal Reserve Banks and Branches, December 31, 2007

Thousands of dollars

Federal Reserve		Acquisi	Net	Other		
Bank or Branch	Land	Buildings (including vaults) ¹	Building ma- chinery and equipment	Total ²	book value	Other real estate ³
BOSTON	27,293	135,431	28,808	191,532	119,760	
NEW YORK	20,103	267,634	70,071	357,808	215,622	
PHILADELPHIA	7,312	90,205	13,999	111,516	64,495	
CLEVELAND Cincinnati Pittsburgh	4,219 2,737 1,739	123,320 29,516 19,388	27,333 14,351 15,361	154,872 46,604 36,488	109,497 23,489 19,674	· · · · · · ·
RICHMOND Baltimore Charlotte	25,539 6,482 3,130	113,311 32,939 34,985	44,779 5,924 6,961	183,628 45,345 45,076	129,047 26,728 29,804	· · · · · · ·
ATLANTA Birmingham Jacksonville Miami Nashville New Orleans	22,735 5,347 1,779 4,254 603 3,785	149,949 12,749 21,515 24,825 5,690 8,873	16,367 1,525 3,967 4,916 3,542 5,529	189,052 19,621 27,261 33,996 9,835 18,187	163,202 12,962 17,051 22,136 4,529 9,658	· · · · · · · · · ·
CHICAGO Detroit	4,512 9,980	168,948 72,437	20,681 10,690	194,141 93,107	116,158 88,645	
ST. LOUIS Little Rock Memphis	8,428 0 2,472	110,052 0 14,127	14,348 0 5,162	132,828 0 21,761	100,552 0 14,048	4,106
MINNEAPOLIS Helena	15,666 2,890	104,953 9,716	13,834 943	134,453 13,549	103,464 9,276	
KANSAS CITY Denver Oklahoma City Omaha	37,501 3,511 0 3,559	217,038 9,167 0 7,374	$ \begin{array}{c} 0 \\ 4,502 \\ 0 \\ 1,726 \end{array} $	254,539 17,179 0 12,658	254,539 8,039 0 6,207	· · · · · · · · · ·
DALLAS El Paso Houston San Antonio	36,166 262 23,699 826	110,487 3,426 104,631 8,227	24,205 1,698 8,653 2,491	170,858 5,386 136,983 11,544	119,762 1,182 129,728 6,038	 7,204
SAN FRANCISCO Los Angeles Salt Lake City Seattle	20,129 6,306 1,294 8,136	98,264 71,643 4,680 73,234	22,650 14,807 1,467 4,545	141,043 92,755 7,441 85,915	79,893 57,963 2,972 77,486	· · · · · · · 29
Total	322,392	2,258,733	415,838	2,996,963	2,143,606	11,339

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.

 Covers acquisitions for banking-house purposes 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 on and off site 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 for 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 sheet of the Board of Governors of the Federal Reserve System (the "Board") as of December 31, 2007, and the related statements of revenues and expenses and changes in cumulative results of operations, and cash flows for the year 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 audit. The financial statements of the Board for the year ended December 31, 2006 were audited by other auditors whose report, dated April 17, 2007, expressed an unqualified opinion on those statements and included an explanatory paragraph related to adoption of the Financial Accounting Standard Board Statement No. 158, Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans.

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. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the 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 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 audit provides a reasonable basis for our opinion.

In our opinion, such 2007 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, 2007, and the results of its operations and its cash flows for the year 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 19, 2008 on our consideration of the Board's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and 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.

elorthe + Touche LLP

March 19, 2008 Washington, D.C.

	Year ending December 31,	
	2007	2006
Assets		
Current Assets		
Cash	\$ 44,613,728	\$ 60,030,706
Accounts receivable	2,996,318	2,625,907
Prepaid expenses and other assets	4,653,684	3,916,608
Total current assets	52,263,730	66,573,221
Noncurrent Assets		
Property and equipment, net (Note 4)	153,350,880	151,205,386
Other assets	166,119	343,899
Total noncurrent assets	153,516,999	151,549,285
Total assets	\$205,780,729	\$218,122,506
LIABILITIES AND CUMULATIVE RESULTS OF OPERATIONS		
Current Liabilities		
Accounts payable and accrued liabilities	\$ 20,400,282	\$ 10,950,470
Accrued payroll and related taxes	5,647,053	5,421,666
Accrued annual leave	18,429,601	16,334,512
Capital lease payable (current portion) Unearned revenues and other liabilities	108,755 702,122	327,663 366,304
Chearned revenues and other habilities	/02,122	
Total current liabilities	45,287,813	33,400,615
Long-term Liabilities		
Capital lease payable (non-current portion)	0	108,755
Accumulated retirement benefit obligation (Note 5)	2,201,675	1,354,662
Accumulated postretirement benefit obligation (Note 6)	7,972,469	8,111,829
Accumulated postemployment benefit obligation (Note 7)	8,855,613	6,515,301
Total long-term liabilities	19,029,757	16,090,547
Total liabilities	64,317,570	49,491,162
CUMULATIVE RESULTS OF OPERATIONS		
Working capital	7,084,672	33,500,269
Unfunded long-term liabilities	(17,542,943)	(14,325,986)
Net investment in assets	153,408,244	151,112,867
Accumulated other comprehensive income (loss) (Note 8)	(1,486,814)	(1,655,806)
Total cumulative results of operations	141,463,159	168,631,344
Total liabilities and cumulative results of operations	\$205,780,729	\$218,122,506
		#210,122,000

BALANCE SHEETS

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

	Year ending December 31,	
	2007	2006
BOARD OPERATING REVENUES		
Assessments levied on Federal Reserve Banks for Board operating expenses and capital expenditures Other revenues	\$296,124,700 10,365,414	\$301,013,500 <u>8,508,949</u>
Total operating revenues	306,490,114	309,522,449
BOARD OPERATING EXPENSES		
Salaries	197,656,442 39,451,541 36,300,185 13,557,498 8,998,496 8,619,615 6,678,514	182,239,595 35,853,297 23,944,564 13,058,667 9,185,840 8,820,503 6,637,765
Postage and supplies . Repairs and maintenance . Printing and binding . Other expenses .	8,836,143 3,890,191 1,976,765 7,861,901	4,560,368 2,634,459 1,505,470 7,435,067
Total operating expenses	333,827,291	295,875,595
Results of Operations	(27,337,177)	13,646,854
CURRENCY COSTS		
Assessments levied on Federal Reserve Banks for currency costs Expenses for printing, transporting, and	576,306,073	491,962,202
retiring Federal Reserve Notes	576,306,073	491,962,202
CURRENCY ASSESSMENTS OVER (UNDER) EXPENSES	0	0
TOTAL RESULTS OF OPERATIONS	(27,337,177)	13,646,854
CUMULATIVE RESULTS OF OPERATIONS, Beginning of period	168,631,344	156,640,296
Other Comprehensive Income		
Adjustment to initially apply SFAS No. 158 (Note 8) Amortization of prior service cost Amortization of net actuarial loss Net actuarial loss arising during the year	0 (23,831) 113,142 79,681	(1,655,806) 0 0 0
Total Other Compehensive Income	168,992	(1,655,806)
CUMULATIVE RESULTS OF OPERATIONS, End of period	\$141,463,159	\$168,631,344

See accompanying notes to financial statements.

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

STATEMENTS OF CASH FLOWS

	Year ending December 31,	
	2007	2006
CASH FLOWS FROM OPERATING ACTIVITIES		
Results of Operations	\$(27,337,177)	\$13,646,854
Adjustments to reconcile results of operations to net cash provided by (used in) operating activities: Depreciation	13,433,306 124,192	13,047,064 11,603
Increase (decrease) in assets: Accounts receivable, prepaid expenses and other assets	(929,708)	(812,482)
Increase (decrease) in liabilities: Accounts payable and accrued liabilities Accrued payroll and related taxes Accrued annual leave Unearned revenues and other liabilities Accumulated retirement benefit obligation Accumulated postretirement benefit obligation Accumulated postemployment benefit obligation Accumulated other comprehensive income Net cash provided by operating activities	9,449,812 225,387 2,095,089 335,818 847,013 (139,360) 2,340,312 168,992 613,676	$(5,955,880) \\ 561,094 \\ 878,028 \\ (417,407) \\ 541,165 \\ 1,874,539 \\ 1,403,936 \\ (1,655,806) \\ 23,122,708 \\ (1,655,806) \\ 1,12,108 \\ (1,655,806) \\ 23,122,708 \\ (1,655,806) \\ (1,655,80$
Cash Flows from Investing Activities		
Proceeds from disposals Capital expenditures Net cash used in investing activities	65,988 (15,768,979) (15,702,991)	7,212 (8,829,712) (8,822,500)
Cash Flows from Financing Activities		
Capital lease payments	(327,663)	(239,937)
Net cash used in financing activities	(327,663)	(239,937)
NET INCREASE (DECREASE) IN CASH	(15,416,978)	14,060,271
CASH BALANCE, Beginning of period	60,030,706	45,970,435
CASH BALANCE, End of period	\$ 44,613,728	\$60,030,706

See accompanying notes to financial statements.

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

NOTES TO FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDING DECEMBER 31, 2007 AND 2006

(I) 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 1,900, 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 of America.

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 printing, transporting, and retiring Federal Reserve Notes. These expenses and assessments are reported separately from the Board's operating transactions in the Board's Statement of Revenues and Expenses and 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 software. Upon the sale or other disposition of a depreciation 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 of America 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.

Reclassifications—Certain 2006 amounts have been reclassified to conform with 2007 presentation.

SFAS No. 158, Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans—The Board initially applied the provisions of SFAS No. 158, Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans, at December 31, 2006. This accounting standard requires recognition of the overfunded or underfunded status of a defined benefit post-
retirement plan in the Balance Sheets, and recognition of changes in the funded status in the years in which the changes occur through comprehensive income. The transition rules for implementing the standard required applying the provisions as of the end of the year of initial implementation, and the effect as of December 31, 2006 is recorded as "Adjustment to initially apply SFAS No. 158" in the Statements of Revenues and Expenses and Changes in Cumulative Results of Operations.

(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.

	2007	2006
Land	\$ 18,640,314	\$ 18,640,314
Buildings and		
improvements	149,968,504	147,504,169
Furniture and		
equipment	55,625,014	47,271,434
Software in use	14,745,157	13,681,508
Software in process	2,064,438	941,912
Construction in		
process	1,550,565	360,967
	242,593,992	228,400,304
Less accumulated		
depreciation and		
amortization	(89,243,112)	(77,194,918)
Property and equipment,		
net	\$153,350,880	\$151,205,386

Construction in process includes costs incurred in 2007 and 2006 for long-term security projects and building enhancements.

The Board entered into capital leases for printing equipment, which terminate in 2008. Furniture and equipment includes \$1,230,000 in 2007 and 2006 for capitalized leases. Accumulated depreciation includes \$1,123,000 and \$867,000 for capitalized leases as of 2007 and 2006, respectively. The Board paid interest related to these capital leases in the amount of \$31,000 and \$54,000 for 2007 and 2006, 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, 2007, are as follows:

.....

	2008
Total minimum lease	
payments	\$ 138,279
Less: Amount representing	
maintenance	(26,743)
Net minimum lease	
payments	111,536
Less: Amount representing	
interest	(2,781)
Present value of net minimum	
lease payments	108,755
Less: Current maturities of	
capital lease payments	(108,755)
Long-term capital lease	
obligations	\$ 0
-	

(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 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, 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 2007 and 2006, and the Board was not assessed a contribution for these years.

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 2007 and 2006 is summarized in the following tables:

	2007	2006
Change in projected		
benefit obligation		
Benefit obligation,		
beginning of year	\$1,354,662	\$ 536,339
Service cost	329,282	185,483
Interest cost	87,837	45,004
Plan participants'		
contributions	0	0
Plan amendments	0	0
Actuarial (gain)/loss	453,526	596,114
Benefits paid	(23,632)	(8,278)
Benefit obligation,		
end of year	\$2,201,675	\$1,354,662
Accumulated benefit obligation,		
end of year	\$ 685,170	\$ 546,854
Weighted-average		
assumptions used to		
determine benefit		
obligation as of		
December 31		
Discount rate	6.25%	5.75%
Rate of compensation		
increase	5.00%	4.50%
Change in plan assets		
Fair value of plan assets,		
beginning of year	\$ 0	\$ 0
Employer contributions	23,632	8,278
Plan participants'		
contributions	0	0
Benefits paid	(23,632)	(8,278)
Fair value of plan assets,		
end of year	\$ 0	\$ 0

	2007	2006
Reconciliation of funded status, end of year Funded status	$\begin{array}{c} \$(2,201,675)\\ 1,006,257\\ (233,404)\\ \hline \$(1,428,822)\\ \hline \end{array}$	\$(1,354,662) 580,386 (247,417) \$(1,021,693)
Amounts recognized in the financial statements consist of Prepaid benefit liability Accrued benefit liability Intangible asset Accumulated other comprehensive income Net amount recognized		
Components of net periodic benefit cost Service cost—benefits earned during the period	\$ 329,282 87,837 0 (14,013) 27,655 <u>0</u> <u>\$ 430,761</u>	\$ 185,483 45,004 0 (14,013) 0 <u>0</u> <u>\$ 216,474</u>
Weighted-average assumptions used to determine net periodic benefit cost for years ended December 31 Discount rate Rate of compensation increase Expected cash flows Expected employer contributions: 2008 Expected benefit payments: 2008	6.00% 4.50% \$ 82,134 \$ 82,134	5.75% 4.50%
2009 2010 2011 2012 2013–2017	96,170 109,602 120,750 127,690 724,518	

	2007	2006
Estimated amounts that		
will be amortized from		
accumulated other		
comprehensive income		
into net periodic benefit		
cost (credit) in 2008 are		
shown below:		
Net actuarial (gain)/loss	\$ 79,561	
Prior service (credit)/cost	(14,013)	
Total	\$ 65,548	

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 \$316,000 and \$334,000 in 2007 and 2006, 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. Board contributions to members' accounts are based upon a fixed percentage of each member's basic contribution and were \$9,542,000 and \$8,964,000 in 2007 and 2006, respectively.

(6) ACCUMULATED POSTRETIREMENT BENEFITS

The Board provides certain life insurance programs for its active employees and retirees. Activity for 2007 and 2006 is summarized in the following tables:

	2007	2006
Change in benefit		
obligation		
Benefit obligation,		
beginning of year	\$8,111,829	\$8,273,831
Service cost	198,791	230,567
Interest cost	479,903	470,256
Plan participants'		
contributions	0	0
Plan amendments	0	0
Actuarial (gain) loss	(533,208)	(603,500)
Benefits paid	(284,846)	(259,325)
Benefit obligation,		
end of year	\$7,972,469	\$8,111,829
Weighted-average		
assumptions used to		
determine benefit		
obligation as of		
December 31		
Discount rate	6.25%	6.00%
Change in plan assets		
Fair value of plan assets,		
beginning of year	\$ 0	\$ 0
Employer contribution	284,846	259,325
Plan participants'		
contributions	0	0
Benefits paid	(284,846)	(259,325)
Fair value of plan assets,		
end of year	\$	\$ 0

	2007	2006	
Reconciliation of funded status at end of year Benefit obligations Unrecognized net	\$(7,972,469)	\$(8,111,829)	Expected of Expected control 2008
actuarial (gain) loss	0	0	
Unrecognized prior service cost	0	0	Expected b payments:
Amount recognized, end of year	\$(7,972,469)	\$(8,111,829)	2008 2009 2010
Amounts recognized in the financial statements consist of			2011 2012 2013–20
Liability: Accrued benefit cost Accumulated other	\$(7,972,469)	\$(8,111,829)	Estimated will be am accumulat
comprehensive income	0	0	comprehen
Net amount recognized	0	0	into net pe cost (credi
	<u>\$(7,972,469)</u>	\$(8,111,829)	shown belo
Amounts recognized in accumulated other comprehensive income			Net actuari Prior servic Total
consist of: Net actuarial loss (gain)	\$ 803,702	\$ 1,422,398	The abo
Prior service cost (credit) Transition obligation	(89,741)	(99,560)	tion is rela grams. The
(asset)	0	0	employees sponsored
Deferred curtailment (gain) loss	0	0	butions fo
-	\$ 713,961	\$ 1,322,838	sponsored \$9,607,000
Components of net periodic benefit cost Service cost—benefits			(7) Accur
earned during the period Interest cost on projected	\$ 198,791	\$ 230,567	The Bo to eligible dents duri
benefit obligation	479,902	470,256	prior to re
Expected return on plan assets	0	0	ally detern and discou 2007 and
Amortization of prior service (credit) cost Amortization of (gains)	(9,818)	(9,818)	costs recog ber 31, 20
losses Amortization of initial	85,487	120,022	respectivel
(asset) obligation Net periodic benefit cost	0	0	(8) Accur
(credit)	\$ 754,362	\$ 811,027	Followi balances o
Weighted-average assumptions used to determine net periodic benefit cost for years ended December 31			
Discount rate	5.75%	5.50%	

	2007	2006
Expected cash flows		
Expected employer contributions:		
2008	\$ 293,767	
Expected benefit		
payments:		
2008	\$ 293,767	
2009	326,227	
2010	352,683	
2011	368,728	
2012	384,026	
2013–2017	2,300,954	
Estimated amounts that will be amortized from accumulated other		
comprehensive income		
into net periodic benefit cost (credit) in 2008 are		
shown below:	¢ 7.405	
Net actuarial (gain) loss	\$ 7,425	
Prior service (credit) cost	(9,818)	
Total	\$ (2,393)	

The above accumulated postretirement benefit obligation is related to the Board-sponsored life insurance programs. The Board has no liability for future payments to employees who continue coverage under the federally sponsored life and health programs upon retiring. Contributions for active employees participating in federally sponsored health programs totaled \$10,311,000 and \$9,607,000 in 2007 and 2006, respectively.

(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 5.75 percent as of December 31, 2007 and 2006. The accrued postemployment benefit costs recognized by the Board for the years ended December 31, 2007 and 2006, were \$3,055,000 and \$1,963,000, respectively.

(8) ACCUMULATED OTHER COMPREHENSIVE INCOME

Following is a reconciliation of beginning and ending balances of accumulated other comprehensive income.

	to define	it related ed benefit ent plans	Amount to postret benefits than pe	irement other
Balance at				
January 1,			¢.	
2006	\$	0	\$	0
Adjustment to				
initially apply				
SFAS				
No. 158		332,969	1,.	322,837
Balance at				
December 31,				
2006	\$	332,969	\$ 1.	322,837
Change in funded				
status of				
benefit plans:				
Amortization of				
prior service				
costs		14,013		9,818
Amortization of				
net actuarial				
gain (loss)		(27,655)		(85,487)
Net actuarial				
(gain) loss				
arising during				
the year		453,526	(:	533,207)
Change in funded				
status of				
benefit				
plans— other				
comprehensive income				
gain (loss)		439,884	()	508,876)
Balance at		457,004		555,576)
December 31,				
2007	\$	772,853	\$ ´	713,961
2007	Ψ	2,000	Ψ	

	Total accumulated other comprehen- sive income (loss)
Balance at	
January 1,	
2006	. \$ 0
Adjustment to	
initially apply	
SFAS	
No. 158	(1,655,806)
Balance at	
December 31,	
2006	\$ (1,655,806)
Change in funded	\$ (1,055,000)
status of	
benefit plans:	
Amortization of	
prior service	
costs	(23,831)
Amortization of	(20,001)
net actuarial	
gain (loss)	113,142
Net actuarial	
(gain) loss	
arising during	
the year	79,681
-	

	Total accumulated other comprehen- sive income (loss)
Change in funded	
status of	
benefit	
plans—	
other	
comprehensive	
income	
gain (loss)	168,992
Balance at	
December 31,	
2007	\$(1,486,814)

Additional detail regarding the classification of accumulated other comprehensive income is included in notes 5 and 6.

(9) 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, 2007, are as follows:

2008	\$ 1,623,970
2009	1,961,223
2010	2,013,281
2011	1,944,142
After 2011	9,118,887
	\$16,661,503

Rental expenses under the operating leases were \$539,000 and \$193,000 in 2007 and 2006, respectively.

Deferred Leases

The Board's operating leases contain rent abatements and scheduled rent increases. According to accounting principles generally accepted in the United States of America, rent abatements and scheduled rent increases must be considered in determining the annual rent expense to be recognized. The deferred rent represents the difference between the actual lease payments and the rent expense recognized. The current balance of deferred rent is \$318,000 and \$8,000 in 2007 and 2006, 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 2013. The estimated total Board expense to support this effort is \$7.5 million.

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 Board expense to support this effort is \$3.2 million through 2010.

Litigation

The Board is subject to contingent liabilities which include litigation cases. 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. Management believes the Board has substantial defenses and that the likelihood of an adverse judgment is remote.

(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 2007 and 2006 is summarized in the following table:

	2007	2006
Council expenses charged		
to the Board		
Assessments for		
operating expenses .	\$ 108,163	\$ 109,760
Central Data		
Repository	1,167,449	740,003
Uniform Bank		
Performance		
Report	192,026	204,617
Total Council		
expenses		
charged to		
the Board	\$1,467,638	\$1,054,380
Board expenses charged		
to the Council		
Data processing		
related services	\$4,457,647	\$3,429,499
Administrative		
services	190,800	183,000
Total Board		
expenses		
charged to		
the Council	\$4,648,447	\$3,612,499

	2007	2006
Accounts receivable due from the Council Accounts payable due	\$384,142	\$395,551
to the Council	\$ 64,087	\$ 54,870

(11) 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 for 2007 and 2006 is summarized in the following table:

	As of December 31,		
	2007	2006	
Reserve Bank expenses charged to the Board Data processing and			
communication Contingency site Total Reserve Bank	\$ 2,064,110 1,152,166	\$ 2,161,298 1,087,429	
expenses charged to the Board	\$ 3,216,276	\$ 3,248,727	
Board expenses charged to the Reserve Banks Assessments for currency costs Assessments for	\$576,306,073	\$491,962,202	
operating expenses of the Board Data processing Total Board expenses charged to the Reserve Banks	296,124,700 704,840 \$873,135,613	301,013,500 731,999 \$793,707,701	
Accounts receivable due from Federal Reserve Banks Accounts payable due	\$ 1,270,582	<u> </u>	
to the Reserve Banks	\$ 10	\$ 12,417	

(12) 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 \$2,866,676 and \$2,380,474 in 2007 and 2006, respectively.

Deloitte.

INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MAT-TERS BASED UPON THE AUDIT 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, 2007, and have issued our report thereon dated March 19, 2008. 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 as a basis for designing our audit procedures for the purposes of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Board's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Board's internal control over financial reporting.

Our consideration of internal control over financial reporting was for the limited purpose described in the preceding paragraph and would not necessarily identify all deficiencies in internal control over financial reporting that might be significant deficiencies or material weaknesses. However, as discussed below, we identified certain deficiencies in internal control over financial reporting that we consider to be a significant deficiency.

A control deficiency exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. A significant deficiency is a control deficiency, or combination of control deficiencies, that adversely affects the Board's ability to initiate, authorize, record, process, or report financial data reliably in accordance with generally accepted accounting principles such that there is more than a remote likelihood that a misstatement of the Board's financial statements that is more than inconsequential will not be prevented or detected by the Board's internal controls. A material weakness is a significant deficiency, or combination of significant deficiencies, that results in more than a remote likelihood that a material misstatement of the financial statements will not be prevented or detected by the Board's internal control.

During our audit, we noted certain control deficiencies within the general computer control environment within the Board of Governors related to logical access controls, which affect several financial system platforms supporting the Board's financial statements. These deficiencies individually are not considered significant deficiencies, however, when considered collectively, aggregate to a significant deficiency. We have considered these matters in conjunction with our audit of the financial statements and noted no material misstatements or omissions in the Board's financial statements that were caused by these various control deficiencies. Management has taken steps to address these deficiencies by correcting the cause of a deficiency and/or by implementing additional compensating controls and processes. Due to the sensitive nature of these deficiencies, the technical details related to these deficiencies have been provided to Board of Governors' management in a separate, limited distribution communication.

Our consideration of the internal control over financial reporting was for the limited purpose described in the first paragraph of this section and would not necessarily identify all deficiencies in the internal control that might be significant deficiencies and, accordingly, would not necessarily disclose all significant deficiencies that are also considered to be material weak-nesses. However, we do not believe that the significant deficiency described above is a material weakness.

We have communicated to management, in a separate communication dated March 19, 2008, other control deficiencies involving the Board's internal control over financial reporting and other matters that we identified during our audit.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Board's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Distribution

This report is intended solely for the information and use of the Board, management, and others within the organization, the Office of Inspector General, and the United States Congress, and is not intended to be and should not be used by anyone other than these specified parties.

Delatte + Touche LLP

March 19, 2008 Washington, D.C.

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 year ended December 31, 2007, and by PricewaterhouseCoopers LLP, independent auditors, for the year ended December 31, 2006.

Deloitte.

REPORT OF INDEPENDENT AUDITORS

To the Board of Governors of the Federal Reserve System and the Boards of Directors of the Federal Reserve Banks:

We have audited the accompanying combined statement of condition of the Federal Reserve Banks (the "Reserve Banks") as of December 31, 2007 and the related combined statements of income and comprehensive income, and changes in capital for the year 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 audit. The combined financial statements of the Reserve Banks for the year ended December 31, 2006 were audited by other auditors whose report, dated March 30, 2007, expressed an unqualified opinion on those statements.

We conducted our audit 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 examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

As described in Note 3 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 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 3.

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, 2007, and the combined results of their operations for the year then ended, on the basis of accounting described in Note 3.

Delatte + Touche LLP

March 31, 2008 Washington, D.C.



FEDERAL RESERVE BANKS COMBINED STATEMENTS OF CONDITION

(in millions)

	Decen	nber 31,
	2007	2006
Assets		
ASSETS Gold certificates Special drawing rights certificates Coin Items in process of collection Loans to depository institutions Securities purchased under agreements to resell U.S. government securities, net Investments denominated in foreign currencies Accrued interest receivable	\$ 11,037 2,200 1,179 1,804 48,636 46,500 745,629 47,295 6,410	\$ 11,037 2,200 801 3,486 67 40,750 783,619 20,482 6,761
Bank premises and equipment, net	2,539	2,376
Other assets	1,900 \$915,129	1,785 \$873,364
LIABILITIES AND CAPITAL		
LIABILITIES Federal Reserve notes outstanding, net Securities sold under agreements to repurchase Deposits: Depository institutions U.S. Treasury, general account	\$791,691 43,985 20,767 16,120	\$783,019 29,615 18,699 4,708
Other deposits Deferred credit items Interest on Federal Reserve notes due to U.S. Treasury Accrued benefit costs Other liabilities	363 1,811 1,532 1,281 679	349 3,813 908 1,314 291
Total liabilities	878,229	842,716
CAPITAL Capital paid-in Surplus (including accumulated other comprehensive loss of \$1,524 million and \$1,849 million at December 31, 2007 and 2006, respectively)	18,450	15,324
Total capital Total liabilities and capital	36,900 \$915,129	<u>30,648</u> <u>\$873,364</u>

The accompanying notes are an integral part of these combined financial statements.

FEDERAL RESERVE BANKS COMBINED STATEMENTS OF INCOME AND COMPREHENSIVE INCOME

(in millions)

		ear ended iber 31,
	2007	2006
Interest income		
Interest on U.S. government securities	\$40,298	\$36,452
Interest on investments denominated in foreign currencies	575	369
Interest on loans to depository institutions	71	12
Total interest income	40,944	36,833
Interest expense		
Interest expense on securities sold under agreements to repurchase	1,688	1,342
Net interest income	39,256	35,491
Other operating income		
Income from services	878	908
Reimbursable services to government agencies	458	426
Foreign currency gains, net	1,886	1,186
Other income	166	144
Total other operating income	3,388	2,664
Operating expenses		
Salaries and other benefits	2,093	1,880
Occupancy expense	247	240
Equipment expense	203	212
Assessments by the Board of Governors	872	793
Other expenses	838	835
Total operating expenses	4,253	3,960
Net income prior to distribution	38,391	34,195
Change in funded status of benefit plans	325	
Comprehensive income prior to distribution	\$38,716	\$34,195
Distribution of comprehensive income		
Dividends paid to member banks	\$ 992	\$ 871
Transferred to surplus and change in accumulated other comprehensive loss	3,126	4,272
Payments to U.S. Treasury as interest on Federal Reserve notes	34,598	29.052
		. ,
Total distribution	\$38,716	\$34,195

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, 2007 and 2006

(in millions)

		Surplus			
	Capital <u>Paid-In</u>	Net Income <u>Retained</u>	Accumulated Other Comprehensive Loss	Total Surplus	Total Capital
Balance at January 1, 2006					
(270 million shares) Net change in capital stock issued	\$13,536	\$12,901	\$	\$12,901	\$26,437
(36 million shares)	1,788				1,788
Transferred to surplus		4,272		4,272	4,272
Adjustment to initially apply SFAS No. 158	<u></u>		(1,849)	(1,849)	(1,849)
Balance at December 31, 2006					
(306 million shares) Net change in capital stock issued	\$15,324	\$17,173	\$(1,849)	\$15,324	\$30,648
(63 million shares) Transferred to surplus and change	3,126				3,126
in accumulated other comprehensive loss	<u></u>	2,801	325	3,126	3,126
Balance at December 31, 2007 (369 million shares)	\$18,450	\$19,974	<u>\$(1,524)</u>	\$18,450	\$36,900

The accompanying notes are an integral part of these combined financial statements.

NOTES TO THE COMBINED FINANCIAL STATEMENTS OF THE FEDERAL RESERVE BANKS

(I) 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; service to the consumer and the community 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 also 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 for its execution of transactions. The FRBNY is authorized and directed by the FOMC to conduct operations in domestic markets, including the direct purchase and sale of U.S. government securities, the purchase of securities under agreements to resell, the sale of securities under agreements to repurchase, and the lending of U.S. government securities. The FRBNY executes these open market 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 for major currencies 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 ("FX") and securities contracts for, nine foreign currencies and to invest such foreign currency holdings ensuring adequate liquidity is maintained. The FRBNY is authorized and directed by the FOMC to maintain reciprocal currency arrangements ("FX swaps") with four central banks and "warehouse" foreign currencies for the U.S. Treasury and Exchange Stabilization Fund ("ESF") through the Reserve Banks. 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, and performing daily monitoring procedures.

Although the Reserve Banks are separate legal entities, in the interests of greater efficiency and effectiveness they collaborate in the delivery of certain operations and services. The 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 Bank providing the service and the other eleven Reserve Banks. In some cases, costs incurred by a Reserve Bank for services provided to other Reserve Banks are not shared; in other cases, the Reserve Banks are billed for services provided to them by another Reserve Bank.

(3) SIGNIFICANT ACCOUNTING POLICIES

Accounting principles for entities with the unique powers and responsibilities of the nation's central bank have not been formulated by accounting standard-setting bodies. The Board of Governors has developed specialized accounting principles and practices that it considers to be appropriate for the nature and function of a central bank, which differ significantly from those of the private sector. These accounting principles and practices are documented in the *Financial Accounting Manual for Federal Reserve Banks* ("Financial Accounting Manual"), 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 Financial Accounting Manual and the financial statements have been prepared in accordance with the Financial Accounting Manual.

Differences exist between the accounting principles and practices in the Financial Accounting Manual and generally accepted accounting principles in the United States ("GAAP"), primarily due to the unique nature of the Banks' powers and responsibilities as part of the nation's central bank. The primary difference is the presentation of all securities holdings at amortized cost, rather than using the fair value presentation required by GAAP. U.S. government securities and investments denominated in foreign currencies comprising the SOMA are recorded at cost, on a settlement-date basis, and 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. While the application of current market prices 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, market 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 position of the Reserve Banks are not a primary concern given their unique powers and responsibilities. A Statement of Cash Flows, therefore, would not provide additional meaningful information. Other information regarding the Reserve Banks' activities is provided in, or may be derived from, the Statements of Condition, Income and Comprehensive Income, and Changes in Capital. There are no other significant differences between the policies outlined in the Financial Accounting Manual and GAAP.

The preparation of the financial statements in conformity with the Financial Accounting Manual 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 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) 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 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 ("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 United States 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 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 2007 or 2006.

(b) Loans to Depository Institutions

Depository institutions that maintain reservable transaction accounts or nonpersonal time deposits, as defined in regulations issued by the Board of Governors, have borrowing privileges at the discretion of each of the Reserve Banks. Borrowers execute certain lending agreements and deposit sufficient collateral before credit is extended. The Reserve Banks offer three discount window programs to depository institutions: primary credit, secondary credit, and seasonal credit, each with its own interest rate. Interest is accrued using the applicable discount rate established at least every fourteen days by the board of directors of the Reserve Bank, subject to review and determination by the Board of Governors.

In addition, depository institutions that are eligible to borrow under the Reserve Banks' primary credit program are also eligible to participate in the temporary Term Auction Facility ("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. All advances under the TAF must be fully collateralized.

Outstanding loans are evaluated for collectibility, and currently all are considered collectible and fully collateralized. If loans were ever deemed to be uncollectible, an appropriate reserve would be established.

(c) U.S. Government Securities and Investments Denominated in Foreign Currencies

Interest income on U.S. government 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 issues based on average cost. Foreign-currencydenominated 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 Statements of Income and Comprehensive Income.

Activity related to U.S. government securities, including the premiums, discounts, and realized and unrealized gains and losses, is allocated to each of the Reserve Banks on a percentage basis derived from an annual settlement of the interdistrict settlement account that occurs in 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 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.

(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, passthrough mortgage securities of the Government National Mortgage Association, Federal Home Loan Mortgage Corporation, and Federal National Mortgage Association, STRIP securities of the U.S. Government, and "stripped" securities of other government agencies. The tri-party agreements are accounted for as financing transactions, with the associated interest income 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 in the Statements of Condition at their contractual amounts 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 U.S. government securities dealers in order to facilitate the effective functioning of the domestic securities market. Securities-lending transactions are fully collateralized by other U.S. government securities and the collateral taken is in excess of the market value of the securities loaned. The FRBNY charges the dealer a fee for borrowing securities and the fees are reported as a component of "Other income."

Activity related to securities sold under agreements to repurchase and securities lending is allocated to each of the Reserve Banks on a percentage basis derived from an annual settlement of the interdistrict settlement account. On February 15, 2007 the FRBNY began allocating to the other Reserve Banks the activity related to securities purchased under agreements to resell.

(e) FX Swap Arrangements and Warehousing Agreements

FX swap arrangements are contractual agreements between two parties, the FRBNY and an authorized foreign central bank, to exchange specified currencies, at a specified price, on a specified date. The parties agree to exchange their currencies up to a pre-arranged maximum amount and for an agreed-upon period of time (up to twelve months), at an agreed-upon interest rate. These arrangements give the FOMC temporary access to the foreign currencies it may need to support its international operations and give the authorized foreign central bank temporary access to dollars. Drawings under the FX swap arrangements can be initiated by either party and must be agreed to by the other party. The FX swap arrangements are structured so that the party initiating the transaction bears the exchange rate risk upon maturity. Foreign currencies received pursuant to these agreements are reported as a component of "Investments denominated in foreign currencies" in the Statements of Condition.

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.

FX swap arrangements and warehousing agreements are revalued daily at current market exchange rates. Activity related to these agreements, with the exception of the unrealized gains and losses resulting from the daily revaluation, 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. Unrealized gains and losses resulting from the daily revaluation are recorded by FRBNY and not allocated to the other Reserve Banks.

(f) 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, either developed internally or acquired for internal use, are capitalized based on the cost of direct services and materials associated with designing, coding, installing, or testing 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 impaired when events or changes in circumstances indicate that the carrying amount of assets or asset groups is not recoverable and significantly exceeds their fair value.

(g) 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 Federal Reserve notes. To satisfy the obligation to provide sufficient collateral for outstanding Federal Reserve notes, the Reserve Banks have entered into an agreement that provides for certain assets of the Reserve Banks to be jointly pledged as collateral for the Federal Reserve notes issued to all Reserve Banks. In the event that this collateral is insufficient, the Federal Reserve Act provides that Federal Reserve notes become a first and paramount lien on all the assets of the Reserve Banks. Finally, Federal Reserve notes are obligations of the United States government.

"Federal Reserve notes outstanding, net" in the Statements of Condition represents the Federal Reserve notes outstanding, reduced by the Reserve Banks' currency holdings of \$218,571 million and \$175,661 million at December 31, 2007 and 2006, respectively.

At December 31, 2007, all Federal Reserve notes were fully collateralized. All gold certificates, all special drawing right certificates, \$743,126 million of domestic securities and securities purchased under agreements to resell, and \$35,328 million of loans were pledged as collateral. At December 31, 2007, no investments denominated in foreign currencies were pledged as collateral.

(h) Items in Process of Collection and Deferred Credit Items

Items in process of collection in the 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.

(i) Capital Paid-In

The Federal Reserve Act requires that each member bank subscribe to the capital stock of the Reserve Banks 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 are deducted from net earnings, dividends are presented as a distribution of comprehensive income in the Statements of Income and Comprehensive Income.

(j) 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 would be required to call on member banks for additional capital.

Accumulated other comprehensive income is reported as a component of surplus in the Statements of Condition and the Statements of Changes in Capital. The balance of accumulated other comprehensive income is comprised of expenses, gains, and losses related to defined benefit pension plans 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 8, 9, and 10.

The Reserve Banks initially applied the provisions of SFAS No. 158, Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans, at December 31, 2006. This accounting standard requires recognition of the overfunded or underfunded status of a defined benefit postretirement plan in the Statements of Condition, and recognition of changes in the funded status in the years in which the changes occur through comprehensive income. The transition rules for implementing the standard required applying the provisions as of the end of the year of initial implementation, and the effect as of December 31, 2006 is recorded as "Adjustment to initially apply SFAS No. 158" in the Statements of Changes in Capital.

(k) 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 Statements of Income and Comprehensive Income and is reported as a liability, or as an asset if overpaid during the year, in the 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.

(1) Income and Costs Related to U.S. Treasury Services

The Reserve Banks are required by the Federal Reserve Act to serve as fiscal agents and depositories of the United States. By statute, the Department of the Treasury is permitted, but not required, to pay for these services. During the years ended December 31, 2006 and 2007, the Reserve Banks were reimbursed for substantially all services provided to the Department of Treasury.

(m) 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.

(n) Taxes

The Reserve Banks are exempt from federal, state, and local taxes, except for taxes on real property and sales taxes on certain construction projects. Real property taxes were \$33 million for each of the years ended December 31, 2007 and 2006, and are reported as a component of "Occupancy expense."

(o) Restructuring Charges

The Reserve Banks recognize restructuring charges for exit or disposal costs incurred as part of the closure of business activities in a particular location, the relocation of business activities from one location to another, or a fundamental reorganization that affects the nature of operations. Restructuring charges may include costs associated with employee separations, contract terminations, and asset impairments. Expenses are recognized in the period in which the Bank commits to a formalized restructuring plan or executes the specific actions contemplated in the plan and all criteria for financial statement recognition have been met.

Note 11 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 6. 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 as discussed in Note 8. Costs and liabilities associated with enhanced postretirement benefits are discussed in Note 9.

(p) Recently Issued Accounting Standards

In September, 2006, the FASB issued SFAS No. 157, Fair Value Measurements ("SFAS No. 157"). SFAS No. 157 establishes a single authoritative definition of fair value, sets out a framework for measuring fair value, and expands on required disclosures about fair value measurement. SFAS No. 157 is generally effective for the Reserve Banks on January 1, 2008, though the effective date of some provisions is January 1, 2009. The provisions of SFAS No. 157 will be applied prospectively and are not expected to have a material effect on the Reserve Banks' financial statements.

(4) U.S. GOVERNMENT 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):

	2007	2006
Par value		
U.S. government:		
Bills	\$227,840	\$277,019
Notes	401,776	402,367
Bonds	110,995	99,528
Total par value	740,611	778,914
Unamortized premiums	7,988	8,708
Unaccreted discounts	(2,970)	(4,003)
Total	\$745,629	\$783,619

At December 31, 2007 and 2006, the fair value of the U.S. government securities held in the SOMA, excluding accrued interest, was \$777,141 million and \$795,900 million, respectively, as determined by reference to quoted prices for identical securities.

Although the fair value of security holdings can be substantially greater 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 should not be misunderstood as representing 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 year ended December 31, 2007 was as follows (in millions):

	Securities purchased under agreements to resell	Securities sold under agreements to repurchase
Contract amount		
outstanding, end of year	\$46,500	\$43,985
Weighted average	\$10,500	\$15,505
amount outstanding, during the year	35,073	34,846
Maximum month-end balance outstanding,		
during the year Securities pledged,	51,500	43,985
end of year		44,048

At December 31, 2006, the total contract amount of securities sold under agreements to repurchase was \$29,615 million. The total par value of SOMA securities that were pledged for securities sold under agreements to repurchase at December 31, 2006 was \$29,676 million.

The contract amounts for securities purchased under agreements to resell and securities sold under agreements to repurchase approximate fair value. The maturity distribution of U.S. government 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, 2007, was as follows (in millions):

	U.S.	Securities purchased under	Securities sold under
	govern-	agree-	agree-
	ment se-	ments to	ments to
	curities	resell	repurchase
	(par	(contract	(contract
	value)	amount)	amount)
Within 15 days	\$ 27,294	\$46,500	\$43,985
16 days to			
90 days	149,727		
91 days to 1 year	152,267		
Over 1 year to			
5 years	240,562		
Over 5 years to			
10 years	81,947		
Over 10 years	88,814		
Total	\$740,611	\$46,500	\$43,985

At December 31, 2007 and 2006, U.S. government securities with par values of \$16,649 million and \$6,855 million, respectively, were loaned from the SOMA.

(5) 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. Foreign government debt instruments held include both securities bought outright and securities purchased under agreements to resell. 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 foreign currency market exchange rates at December 31, were as follows (in millions):

	2007	2006
Euro:		
Foreign currency		
deposits	\$27,488	\$ 6,242
Securities purchased		
under agreements		
to resell	2,548	2,214
Government debt		
instruments	4,666	4,074
Japanese Yen:		
Foreign currency		
deposits	2,811	2,601
Government debt		
instruments	5,708	5,351
Swiss Franc:		
Foreign currency		
deposits	4,074	<u> </u>
Total	\$47,295	\$20,482

At December 31, 2007, the total amount of foreign currency deposits held under FX contracts was \$24,381 million. At December 31, 2006, there were no open foreign exchange contracts.

At December 31, 2007 and 2006, the fair value of total System investments denominated in foreign currencies, including accrued interest was \$47,274 million and \$20,434 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 securities discussed in Note 4, 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 maturity distribution of investments denominated in foreign currencies at December 31, 2007, was as follows (in millions):

	Euro	Japa- nese Yen	Swiss Franc	Total
Within 15 days	\$ 4,999	\$2,991	\$	\$ 7,990
16 days to				
90 days	23,103	404	4,074	27,581
91 days to 1 year	2,756	2,009		4,765
Over 1 year				
to 5 years	3,844	3,115		6,959
Total	\$34,702	\$8,519	\$4,074	\$47,295

At December 31, 2007 and 2006, the authorized warehousing facility was \$5,000 million, with no balance outstanding.

(6) BANK PREMISES, EQUIPMENT, AND SOFTWARE

Bank premises and equipment at December 31 was as follows (in millions):

	2007	2006
Bank premises and		
equipment:		
Land	\$ 323	\$ 306
Buildings	1,878	1,817
Building machinery		
and equipment	416	393
Construction in progress	380	220
Furniture and equipment	1,118	1,156
Subtotal	4,115	3,892
Accumulated depreciation	(1,576)	(1,516)
Bank premises and		
equipment, net	\$ 2,539	\$ 2,376
Depreciation expense,		
for the year ended		
December 31	\$ 185	\$ 186

The Federal Reserve Bank of Kansas City is constructing a new building to replace its head office. At December 31, 2007 approximately \$38 million of costs associated with the acquisition of land and site preparation for the new building are included in the "Land" account, and approximately \$217 million of costs associated with the construction of the new building are included in the "Construction in progress" account. Bank premises and equipment at December 31 included the following amounts for capitalized leases (in millions):

	2007	2006
Leased premises and equipment under		
capital leases	\$ 21 (11)	\$12 (6)
Leased premises and equipment under		
capital leases, net	\$ 10	\$ 6

Depreciation expense related to leased premises and equipment under capital leases was \$4 million for the year ended December 31, 2007.

Certain of the Reserve Banks lease space to outside tenants with remaining lease terms ranging from one to thirteen years. Rental income from such leases was \$27 million and \$25 million for the years ended December 31, 2007 and 2006, respectively, and is reported as a component of "Other income." Future minimum lease payments that the Bank will receive under noncancelable lease agreements in existence at December 31, 2007, are as follows (in millions):

2008									 															\$2	27	
2009									 															2	26	
2010									 															2	26	
2011																										
2012																										
There	eaf	te	r	•	• •			•				•	•				•			•			•	6	58	
	То	ta	1																	 			\$	19	90	

The Reserve Banks have capitalized software assets, net of amortization, of \$158 million and \$155 million at December 31, 2007 and 2006, respectively. Amortization expense was \$62 million and \$66 million for the years ended December 31, 2007 and 2006, respectively. Capitalized software assets are reported as a component of "Other assets" and the related amortization is reported as a component of "Other expenses."

Several of the Reserve Banks impaired check equipment, leasehold improvements, and furniture assets as a result of the System's restructuring plans, as discussed in Note 11. Asset impairment losses of \$32 million and \$15 million for the periods ending December 31, 2007 and 2006, respectively, were determined using fair values based on quoted market values or other valuation techniques and are reported as a component of "Other expenses."

(7) COMMITMENTS AND CONTINGENCIES

At December 31, 2007, the Reserve Banks were obligated under noncancelable leases for premises and equipment with remaining terms ranging from one to approximately sixteen 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, was \$29 million and \$31 million for the years ended December 31, 2007 and 2006, 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, 2007 are as follows (in millions):

Operating
2008 \$10
2009
2010
2011 7
2012
Thereafter
Future minimum rental payments

Future minimum rental payments under noncancelable capital leases, net of sublease rentals, with remaining terms of one year or more, at December 31, 2007 were not material.

At December 31, 2007, the Reserve Banks had unrecorded unconditional purchase commitments and longterm obligations extending through the year 2017 with a remaining fixed commitment of \$312 million. Purchases of \$59 million and \$92 million were made against these commitments during 2007 and 2006, respectively. These commitments represent goods and services for maintenance of currency processing machines, 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
2008	\$20
2009	
2010	
2011	
2012	

At December 31, 2007, the Reserve Banks had commitments of approximately \$66 million for the construction of additional building space at the Federal Reserve Bank of St. Louis, and security enhancements and an employee parking deck at the Federal Reserve Bank of Richmond. Expected payments related to these commitments are \$57 million and \$9 million for the years ending December 31, 2008 and 2009, respectively.

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.

(8) 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 and costs associated with the System Plan in its financial statements. Costs associated with the System Plan are not redistributed to other participating employers.

Following is a reconciliation of the beginning and ending balances of the System Plan benefit obligation (in millions):

	2007	2006
Estimated actuarial		
present value of		
projected benefit		
obligation at		
January 1	\$5,147	\$4,785
Service cost-benefits		
earned during the		
period	146	134
Interest cost on projected		
benefit obligation	317	278
Actuarial (gain) loss	(46)	132
Contributions by plan		
participants	3	3
Special termination		
benefits loss	22	3
Benefits paid	(264)	(254)
Plan amendments	<u></u>	66
Estimated actuarial		
present value of		
projected benefit		
obligation at		
December 31	\$5,325	\$5,147

Following is a reconciliation showing the beginning and ending balances of the System Plan assets, the funded status, and the prepaid pension benefit costs (in millions):

	2007	2006
Estimated fair value of plan assets at		
January 1 Actual return on plan	\$ 6,330	\$ 5,868
assets	535	713
Contributions by plan participants	3	3
Benefits paid	(264)	(254)
Estimated fair value of plan assets at		
December 31	\$ 6,604	\$ 6,330
Funded status and prepaid pension benefit costs	\$ 1,279	\$ 1,183
Amounts included in accumulated other comprehensive loss are shown below:		
Prior service cost	\$ (163)	\$ (191)
Net actuarial loss	(1,135)	(1,301)
Total accumulated other		
comprehensive loss	<u>\$(1,298</u>)	<u>\$(1,492</u>)

Prepaid pension benefit costs are reported as "Other assets" in the Statements of Condition.

The accumulated benefit obligation for the System Plan, which differs from the estimated actuarial present value of projected benefit obligation because it is based on current rather than future compensation levels, was \$4,621 million and \$4,522 million at December 31, 2007 and 2006, respectively.

The weighted-average assumptions used in developing the pension benefit obligation for the System Plan as of December 31 are as follows:

	2007	2006
Discount rate Rate of compensation	6.25%	6.00%
increase	5.00%	4.50%

Net periodic benefit expenses are 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 at January 1 were as follows:

	2007	2006
Discount rate	6.00%	5.75%
Expected asset return	8.00%	8.00%
Rate of compensation		
increase	4.50%	4.50%

Discount rates reflect yields available on high-quality corporate bonds that would generate the cash flows necessary to pay the 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 what other plans' expected rates of return are; 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):

	2007	2006
Service cost-benefits		
earned during		
the period	\$ 146	\$ 134
Interest cost on		
accumulated benefit	215	250
obligation	317	278
Amortization of prior service cost	29	23
Amortization of net loss	29 79	25 75
Expected return on	1)	15
plan assets	(496)	(460)
Net periodic pension		
benefit expense	75	50
Special termination		
benefits loss	22	3
Total periodic pension		
benefit expense	\$ 97	\$ 53
-		

Estimated amounts that will be amortized from	
accumulated other	
comprehensive loss	
into net periodic	
pension benefit expense	
in 2008 are shown	
below:	
Prior service cost	\$29
Net actuarial loss	50
Total	\$79

The recognition of special termination benefits losses is the result of enhanced retirement benefits provided to employees during the restructuring described in Note 11.

Following is a summary of expected benefit payments excluding enhanced retirement benefits (in millions):

	Expected benefit payments
2008	\$273
2009	284
2010	296
2011	
2012	
2013–2017	1,871
Total	\$3,357

The Federal Reserve System's pension plan weightedaverage asset allocations at December 31, by asset category are as follows:

	2007	2006
Equities	65.7%	64.3%
Fixed income	33.2%	34.4%
Cash	1.1%	1.3%
Total	100.0%	100.0%

The System's Committee on Investment Performance ("CIP") selects investment managers who are responsible for implementing the System Plan's investment policies. The managers' performance is measured against a trailing 36-month benchmark of 60 percent of a market value weighted index of predominantly large capitalization stocks trading on the New York Stock Exchange, the American Stock Exchange, and the National Association of Securities Dealers Automated Quotation National Market System and 40 percent of a broadly diversified investment-grade fixed income index (rebalanced monthly). The managers invest plan funds within CIPestablished guidelines for investment in equities and fixed income instruments. Equity investments can range between 40 percent and 80 percent of the portfolio. Investments, however, cannot be concentrated in particular industries and equity securities holdings of any one company are limited. Fixed income securities must be investment grade and the effective duration of the fixed income portfolio must remain within a range of 67 percent and 150 percent of a broadly diversified investmentgrade fixed income index. CIP guidelines prohibit margin, short sale, foreign exchange, and commodities trading as well as investment in bank, bank holding company, savings and loan, and government securities dealers stocks. In addition, investments in non-dollar denominated securities are prohibited; however, a small portion of the portfolio can be invested in American Depositary Receipts/Shares and foreign-issued dollar-denominated fixed income securities.

Contributions to the System Plan may be determined using different assumptions than those required for financial reporting. The System does not expect to make a cash contribution during 2008.

The Reserve Banks' projected benefit obligation, funded status, and net pension expenses for the BEP and the SERP at December 31, 2007 and 2006, 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' Thrift Plan contributions totaled \$69 million and \$66 million for the years ended December 31, 2007 and 2006, respectively, and are reported as a component of "Salaries and other benefits" in the Statements of Income and Comprehensive Income. The Reserve Banks match employee contributions based on a specified formula. For the years ended December 31, 2007 and 2006, the 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.

(9) 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 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):

	2007	2006
Accumulated post- retirement benefit		
obligation at		
January 1	\$1,164	\$947
Service cost-benefits		
earned during the		
period	41	27
Interest cost on		
accumulated benefit		
obligation	69	54
Net actuarial (gain) loss	(93)	188
Curtailment gain	(10)	
Special termination		
benefits loss	3	
Contributions by plan		
participants	13	13
Benefits paid	(69)	(64)
Medicare Part D		
subsidies	4	4

Plan amendments	$\frac{2007}{(1)}$	$\frac{2006}{(5)}$
Accumulated post- retirement benefit obligation at		
December 31	\$1,121	\$1,164

At December 31, 2007 and 2006, the weighted-average discount rate assumptions used in developing the postretirement benefit obligation were 6.25 percent and 5.75 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 balances of the plan assets, the unfunded postretirement benefit obligation, and the accrued postretirement benefit costs (in millions):

	2007	2006
Fair value of plan assets		
at January 1	\$	\$
Contributions by the	52	47
employer Contributions by plan	32	47
participants	13	13
Benefits paid, net of		
Medicare Part D		(
subsidies	(65)	(60)
Fair value of plan assets at December 31	¢	¢
at December 31	<u> </u>	<u> </u>
Unfunded obligation and		
accrued postretirement benefit cost	\$1.121	\$1.164
	\$1,121	\$1,164
Amounts included in		
accumulated other comprehensive loss		
are shown below:		
Prior service cost	\$ 60	\$ 85
Net actuarial loss	(292)	(443)
Deferred curtailment	E	1
gain	6	
Total accumulated other comprehensive loss	\$ (226)	\$ (357)
comprehensive loss	φ (220)	\$ (337)

Accrued postretirement benefit costs are reported as a component of "Accrued benefit costs" in the Statements of Condition.

For measurement purposes, the assumed health care cost trend rates at December 31 are as follows:

	2007	2006
Health care cost trend rate assumed for next year	8.00%	9.00%
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	2013	2012

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, 2007 (in millions):

	One Percentage Point <u>Increase</u>	One Percentage Point Decrease
Effect on aggregate of service and interest cost components of net periodic post- retirement benefit		
costs Effect on accumulated postretirement benefit	\$ 15	\$ (13)
obligation	123	(107)

The following is a summary of the components of net periodic postretirement benefit expense for the years ended December 31 (in millions):

	2007	2006
Service cost-benefits		
earned during		
the period	\$ 41	\$ 27
Interest cost on		
accumulated benefit	69	54
obligation Amortization of prior	09	54
service cost	(22)	(23)
Amortization of net	(22)	(23)
actuarial loss	48	22
Total periodic expense	136	80
Special termination		
benefits loss	3	
Net periodic post-		
retirement benefit		
expense	\$139	\$ 80
Estimated amounts that		
will be amortized from		
accumulated other		
comprehensive loss		
into net periodic		
postretirement benefit		
expense in 2008 are shown below:		
Prior service cost	\$(20)	
Net actuarial loss	25	
Total	\$ 5	
10tai	φ <u></u>	

Net postretirement benefit costs are actuarially determined using a January 1 measurement date. At January 1, 2007 and 2006, the weighted-average discount rate assumptions used to determine net periodic postretirement benefit costs were 5.75 percent and 5.50 percent, respectively.

Net periodic postretirement benefit expense is reported as a component of "Salaries and other benefits" in the Statements of Income and Comprehensive Income.

The recognition of special termination benefits losses is primarily the result of enhanced retirement benefits provided to employees during the restructuring described in Note 11. Deferred curtailment gains were recorded in 2007 and 2006 as a component of accumulated other comprehensive loss; the gains will be recognized in net income in future years when the related employees terminate employment. The Medicare Prescription Drug, Improvement and Modernization Act of 2003 established a prescription drug benefit under Medicare ("Medicare Part D") and a federal subsidy to sponsors of retiree health care benefit plans that provide benefits that are at least actuarially equivalent to Medicare Part D. The benefits provided under the Reserve Banks' plans to certain participants are at least actuarially equivalent to the Medicare Part D prescription drug benefit. The estimated effects of the subsidy, retroactive to January 1, 2004, are reflected in actuarial loss in the accumulated postretirement benefit expense.

There were no receipts of federal Medicare Part D subsidies in the year ended December 31, 2006. Receipts in the year ending December 31, 2007, related to benefits paid in the years ended December 31, 2006 and 2007 were \$3 million for each of the years. Expected receipts in 2008, related to benefits paid in the years ended December 31, 2006 and 2007 are \$1 million, respectively.

Following is a summary of expected postretirement benefit payments (in millions):

	Without Subsidy	With Subsidy
2008	\$ 66	\$ 61
2009	72	66
2010	77	72
2011	83	76
2012	87	80
2013–2017	496	446
Total	\$881	\$801

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, 2007 and 2006 were \$124 million and \$126 million, respectively. This cost is included as a component of "Accrued benefit costs" in the Statements of Condition. Net periodic postemployment benefit expense included in 2007 and 2006 operating expenses were \$15 million and \$20 million, respectively, and is recorded as a component of "Salaries and other benefits" in the Statements of Income and Comprehensive Income.

(10) ACCUMULATED OTHER COMPREHENSIVE INCOME AND OTHER COMPREHENSIVE INCOME

Following is a reconciliation of beginning and ending balances of accumulated other comprehensive loss (in millions):

	Amount related to defined benefit retirement plan	Amount related to postretire- ment ben- efits other than pensions	Total accumu- lated other comprehen- sive loss
Balance at January 1, 2006			

	Amount related to	Amount related to postretire-	Total	announcements in 2007 included restructuring ciated with the U.S. Treasury's Collections Management Modernization initiative.	
	defined benefit	ment ben- efits other	accumu- lated other	2006 Restructuring Plans	
	retirement plan	than pensions	comprehen- sive loss	In 2006, the Reserve Banks announced restruc related to check and cash operations.	turin
Adjustment				2005 and Prior Restructuring Costs	
to initially apply SFAS No. 158	<u>\$(1,492)</u>	<u>\$(357</u>)	<u>\$(1,849</u>)	The Reserve Banks incurred various restructur prior to 2006 related to the restructuring of c	· ·
Balance at December 31, 2006	<u>\$(1,492)</u>	<u>\$(357</u>)	<u>\$(1,849</u>)	purchasing, and Treasury operations. Following is a summary of financial info lated to the restructuring plans (in millions):	ormati
Change in funded status of benefit plans: Prior service costs arising				2005 and prior 2006 2007 restruc- restruc- restruc- turing turing turing <u>plans</u> <u>plans</u> <u>plans</u>	
during the year Net actuarial gain arising during		(3)	(3)	related to restructuring plans as of December 31, 2007: Total expected	
the year Deferred curtailment	86	103	189	costs related to restructuring	
gain Amortization of prior		5	5	activity \$ 32 \$ 8 \$ 45 Estimated future costs related to restructuring	
service cost Amortization of net	29	(22)	7	activity \$ \$ \$ 6 Expected completion date 2008 2008 2011	
actuarial loss Change in	79	48	127	Reconciliation of liability	
funded status of benefit plans— other com- prehensive income Balance at	194	131	325	balances: Balance at January 1, 2006 \$ 17 \$ \$ Employee separation costs and adjust-	
December 31, 2007	\$(1,298)	\$(226)	\$(1,524)	ments 2 7	
A 44141 1 4-4			´	Payments (12) Balance at	

Additional detail regarding the classification of accumulated other comprehensive loss is included in Notes 8 and 9.

(11) BUSINESS RESTRUCTURING CHARGES

2007 Restructuring Plans

In 2007, the Reserve Banks announced a restructuring initiative to align the check processing infrastructure and operations with declining check processing volumes. The new infrastructure will involve consolidation of operations into four regional Reserve Bank processing sites in Philadelphia, Cleveland, Atlanta, and Dallas. Additional ns assond Cash

ng plans

charges k, cash,

ation re-

	and prior restruc- turing plans	2006 restruc- turing plans	2007 restruc- turing plans	Total
Information related to restructuring plans as of December 31, 2007: Total expected				
costs related to restructuring activity Estimated future costs related to restructuring	\$ 32	\$8	\$ 45	\$ 85
activity Expected completion date	\$ 2008	\$ 2008	\$ 6 2011	\$6
Reconciliation of liability balances: Balance at January 1, 2006 Employee separation costs and editort	\$ 17	\$	\$	\$ 17
adjust- ments Payments Balance at	(12)	7	····	9 (12)
December 31, 2006 Employee separation	\$7	\$7	\$	\$ 14
costs Adjustments . Payments Balance at	(4) (3)	$\begin{array}{c}1\\(1)\\(3)\end{array}$	40 (1)	41 (5) (7)
December 31, 2007	<u>\$</u>	<u>\$4</u>	\$ 39	\$ 43

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 Statements of Income and Comprehensive Income.

Adjustments to the accrued liability are primarily due to changes in the estimated restructuring costs and are shown as a component of the appropriate expense category in the Statements of Income and Comprehensive Income.

Restructuring costs associated with the impairment of certain of the Reserve Banks' assets, including software, buildings, leasehold improvements, furniture, and equipment, are discussed in Note 6. Costs associated with enhanced pension benefits for all Reserve Banks are recorded on the books of the FRBNY as discussed in Note 8. Costs associated with enhanced postretirement benefits are disclosed in Note 9.

(12) SUBSEQUENT EVENTS

In March 2008, the Board of Governors announced several initiatives to address liquidity pressures in funding markets and promote financial stability, including increasing the Term Auction Facility (see Note 3b) to \$100 billion and initiating a series of term repurchase transactions (see Notes 3d and 4) that may cumulate to \$100 billion. In addition, the Reserve Banks' securities lending program (see Notes 3d and 4) was expanded to lend up to \$200 billion of Treasury securities to primary dealers for a term of 28 days, secured by federal agency debt, federal agency residential mortgage-backed securities, agency collateralized mortgage obligations, non-agency AAA/ Aaa-rated private-label residential mortgage-backed securities, and AAA/Aaa-rated commercial mortgage-backed securities. The FRBNY was also authorized to establish a primary dealer credit facility (PDCF) to provide secured overnight funding to primary dealers. The primary dealers may pledge U.S. government securities, federal agency securities and agency mortgage-backed securities, and investment-grade corporate, municipal, mortgagebacked and asset-backed securities for which a price is available, as collateral under the PDCF. In connection with the announced purchase of The Bear Stearns Companies Inc. by JPMorgan Chase & Co. (JPMorgan Chase), the Board also authorized the FRBNY to enter into a financing arrangement with JPMorgan Chase for up to \$30 billion. The FOMC also authorized increases in its existing temporary reciprocal currency arrangements (see Notes 3e and 5) with specific foreign central banks. These initiatives will affect 2008 activity related to loans, securities purchased under agreements to resell, U.S. government securities, net, and investments denominated in foreign currencies, as well as income and expenses. The effects of the initiatives do not require adjustment to the amounts recorded as of December 31, 2007.

In March 2008, the FRBNY announced it will close the Buffalo Branch, effective October 31, 2008. Restructuring charges associated with this closure are not expected to be material. The Federal Reserve Bank of St. Louis sold the facility in Little Rock for \$4 million on March 11, 2008, which included the sale of associated furnishings. In February 2008, the Federal Reserve Bank of San Francisco's Seattle Branch office was relocated to a new facility in the Seattle area. The former facility was vacated and the property, including related furnishings, will be available for sale in 2008.

Office of Inspector General Activities

The Board of Governors' Office of Inspector General (OIG) functions 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 also 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 keeps the Congress and the Chairman of the Board of Governors fully informed about serious abuses and deficiencies and about the status of any corrective actions.

During 2007, the OIG completed twelve audits, attestations, inspections, evaluations, and other assessments and conducted a number of follow-up reviews to evaluate action taken on prior recommendations. The OIG also closed six investigations and performed numerous legislative and regulatory reviews.

OIG Audits, Attestations, Inspections, and Evaluations Completed during 2007

Report title	Month issued
Security Control Review of the Internet Electronic Submission System	
(Internal Report)	February
Agreed-Upon Procedures Attestation—Bank Plan Service Credit Data	February
Agreed-Upon Procedures Attestation—Statement of Financial Accounting	
Standards No. 87	February
Agreed-Upon Procedures Attestation—Statement of Financial Accounting Standards No. 106	Eshmorr
	February
Audit of Configuration Settings (Internal Report)	March
Audit of the Board's Compliance with Overtime Requirements of the Fair Labor	March
Standards Act	Warch
Agreed-Upon Procedures Attestation—Statement of Financial Accounting Standards No. 112	March
Audit of the Federal Financial Institutions Examination Council Financial Statements	march
(Year Ended December 31, 2006)	March
Audit of the Board's Financial Statements (Year Ended December 31, 2006)	April
Audit of the Board's Information Security Program	September
nspection of the Board's Protective Services Unit (Internal Report)	September
nspection of Federal Reserve Examination Practices for Assessing Financial	1
Institutions' Office of Foreign Asset Control Compliance Programs	September

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 2007, the GAO completed eight reports on selected aspects of Federal Reserve operations (table). In addition, nine 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 six other ongoing reviews.

The reports are available directly from the GAO.

Report title	Report number	Month issued (2007)
Risk-Based Capital: Bank Regulators Need to Improve Transparency and Overcome Impediments to Finalizing the Proposed Basel II Framework	GAO-07-253	February
Deposit Insurance: Assessment of Regulators' Use of Prompt Corrective Action Provisions and FDIC's New Deposit Insurance System	GAO-07-242	February
Financial Market Regulation: Agencies Engaged in Consolidated Supervision Can Strengthen Performance Measurement and Collaboration	GAO-07-154	March
Financial Market Preparedness: Significant Progress Has Been Made, but Pandemic Planning and Other Challenges Remain	GAO-07-399	March
Comparability of Compensation among the FRB and Other Federal Financial Regulatory Agencies	Internal report	April
Credit Derivatives: Confirmation Backlogs Increased Dealers' Operational Risks, but Were Successfully Addressed after Joint Regulatory Action	GAO-07-716	June
Financial Regulators: Agencies Have Implemented Key Performance Management Practices, but Opportunities for Improvement Exist	GAO-07-678	June
Financial Regulation: Industry Trends Continue to Challenge the Federal Regulatory Structure	GAO-08-32	October

Reports Completed during 2007

Projects Active at Year-End 2007

Subject of project	Month initiated
Hedge funds and federal regulatory oversight	January 2007 April 2007 July 2007 September 2007 September 2007 September 2007 September 2007

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.

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

Facing page

- Federal Reserve Branch city
- Branch boundary

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 2007.





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