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*Records*



## *Record of Policy Actions of the Board of Governors*

This report provides a summary account of actions taken by the Board on questions of policy in 2009 as implemented through (1) rules and regulations, (2) policy statements and other actions, (3) special liquidity facilities and other initiatives, and (4) discount rates for depository institutions. All actions were approved by a unanimous vote of the Board members, unless indicated otherwise. More information on the actions with italicized dates is 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.

### ***Rules and Regulations***

#### **Regulation A**

Extensions of Credit by  
Federal Reserve Banks

[Docket No. R-1371]

On *December 4, 2009*, the Board approved a final rule establishing a process by which the Federal Reserve Bank of New York may determine the eligibility of credit rating agencies for the Term Asset-Backed Securities Loan Facility (TALF), a special liquidity facility. (See “Special Liquidity Facilities and Other Initiatives” for further discussion of the TALF.) The rule establishes criteria for determining the eligibility of agencies to issue credit ratings for asset-backed securities,

other than those backed by commercial real estate, to be accepted as collateral for the TALF. The final rule is effective January 8, 2010.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Duke, and Tarullo.

#### **Regulation D**

Reserve Requirements of  
Depository Institutions

#### **Regulation I**

Issue and Cancellation of  
Federal Reserve Bank  
Capital Stock

[Docket Nos. R-1334, R-1350, and  
R-1307]

On *May 18, 2009*, the Board approved final rules (1) to direct Federal Reserve Banks to pay interest on certain balances held at Reserve Banks by or on behalf of certain depository institutions, (2) to authorize the establishment of “excess balance accounts” at Reserve Banks for the maintenance of excess balances of eligible institutions, (3) to increase from three to six the permissible number of transfers or withdrawals from savings deposits by check, debit card, or similar order payable to third parties, and (4) to authorize member banks to enter into pass-through arrangements. One of the final rules revises provisions of the interim final rule issued in October 2008 amending Regulation D. Those revisions relate to the payment of interest on respondent

balances maintained in the accounts of “ineligible” pass-through correspondents (correspondent institutions ineligible to receive interest on balances maintained on their own behalf at the Federal Reserve), and the final rules implement other conforming amendments to Regulation D and Regulation I. The final rules are effective July 2, 2009.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Duke, and Tarullo.

### **Regulation E** Electronic Fund Transfers

[Docket No. R-1343]

On *November 5, 2009*, the Board approved a final rule that prohibits financial institutions from paying overdrafts on ATM (automated teller machine) and one-time debit card transactions, unless the consumer affirmatively consents, or opts in, to the overdraft service for those types of transactions. Before opting in, a consumer must be provided with a notice that explains the financial institution’s overdraft services, including any associated fees, and the consumer’s choices. The amendments prohibit financial institutions from discriminating against consumers who do not opt in, and institutions must provide consumers who do not opt in with the same terms, conditions, and features (including pricing) that they provide to consumers who do opt in. The final rule, which includes a model opt-in notice, is effective January 19, 2010, and compliance is mandatory July 1, 2010.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Duke, and Tarullo.

### **Regulation H** Membership of State Banking Institutions in the Federal Reserve System

### **Regulation Y** Bank Holding Companies and Change in Bank Control

[Docket R-1332]

On *January 27, 2009*, the Board approved a final rule to provide a temporary exemption for state member banks and bank holding companies participating in the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF), a special liquidity facility. Under the exemption, which was approved as an interim measure in September 2008, asset-backed commercial paper held by these institutions as a result of their participation in the AMLF is exempt from the Board’s leverage risk-based capital guidelines. The final rule is effective January 30, 2009. (The Board subsequently announced that the AMLF would expire on February 1, 2010.)

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh and Duke.

[Docket No. R-1361]

On *June 23, 2009*, the Board, acting with the Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, and Office of Thrift Supervision, approved a joint interim final rule with request for comment to provide that mortgage loans modified under the Department of the Treasury’s Home Affordable Mortgage Program (HAMP, formerly Making Home Affordable Program) will retain the risk weight assigned to the loan before the

modification. The modified loans must continue to meet other applicable prudential criteria. On *November 2, 2009*, the Board and the other banking agencies approved the interim final rule as a final rule with a clarification that mortgage loans whose HAMP modifications are in the trial period, and not yet permanent, qualify for the rule's risk-based capital treatment. The final rule is effective December 21, 2009.

Votes for these actions: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Duke, and Tarullo.

**Regulation P**  
Privacy of Consumer  
Financial Information

[Docket No. R-1280]

On *October 26, 2009*, the Board, acting with the Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, Office of Thrift Supervision, National Credit Union Administration, Federal Trade Commission, Commodity Futures Trading Commission, and Securities and Exchange Commission, approved a final rule to implement the privacy-notice and opt-out provisions of the Gramm-Leach-Bliley Act. Under the act, institutions must notify consumers of their information-sharing practices and inform consumers of their right to opt out of certain sharing practices. The rule includes a model privacy form that will make it easier for consumers to understand how financial institutions collect and share information about them. Financial institutions may rely on the model form as a safe harbor when providing privacy notices. The rule, which also removes sample clauses now included in an appendix to the regulation, is effective December 31,

2009 (except for the amendment removing the sample clauses, which is effective January 1, 2012).

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Duke, and Tarullo.

**Regulation S**  
Reimbursement for  
Providing Financial Records;  
Recordkeeping Requirements  
for Certain Financial Records

[Docket No. R-1325]

On *September 2, 2009*, the Board approved a revision to Regulation S to change the rates and conditions under which a government agency must reimburse a financial institution for costs incurred in producing customer financial records under the Right to Financial Privacy Act. The final rule is effective January 1, 2010.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Duke, and Tarullo.

**Regulation V**  
Fair Credit Reporting

[Docket Nos. R-1203 and R-1255]

On *January 26, 2009*, the Board, acting with the Federal Deposit Insurance Corporation (FDIC), Office of the Comptroller of the Currency (OCC), Office of Thrift Supervision (OTS), National Credit Union Administration (NCUA), and Federal Trade Commission (FTC), approved technical corrections to the rules regarding affiliate marketing, identity-theft red flags, and address discrepancies. The amendments are effective May 14, 2009, except for the instructions to appendix C, which are effective January 1, 2010.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh and Duke.

[Docket No. R-1300]

On *May 29, 2009*, the Board, acting with the FDIC, OCC, OTS, NCUA, and FTC, approved final rules to implement certain provisions of the Fair and Accurate Credit Transactions Act regarding entities that furnish information about consumers (furnishers) to consumer reporting agencies. Under the rules, furnishers must establish reasonable policies and procedures to ensure the accuracy and integrity of the information they provide. The rules also identify the circumstances under which a furnisher must investigate a consumer's direct dispute about the accuracy of information in his or her credit report. The rules are effective July 1, 2010.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Duke, and Tarullo.

[Docket No. R-1316]

On *December 17, 2009*, the Board, acting with the FTC, approved final rules to implement the risk-based-pricing provisions of the Fair and Accurate Credit Transactions Act. Under the final rules, a creditor must generally provide a consumer with a risk-based-pricing notice when the creditor, on the basis of the consumer's credit report, provides credit to the consumer on less favorable terms than it provides to other consumers. The rules provide creditors with several methods for determining which consumers must receive notices and include exceptions to the notice requirement, such as when a creditor provides consumers who apply for credit with a free credit score

and information about their score. The final rules are effective January 1, 2011.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Duke, and Tarullo.

### **Regulation W** Transactions Between Member Banks and Their Affiliates

[Docket No. R-1330]

On *January 27, 2009*, the Board approved a final rule to extend to October 30, 2009, a temporary exemption for member banks from certain provisions of section 23A of the Federal Reserve Act and the Board's Regulation W. The exemption, which was approved as an interim measure in September 2008, increases the capacity of member banks to enter into securities-financing transactions with their affiliates. The final rule is effective January 30, 2009. The Board allowed the rule to expire on October 30, 2009.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh and Duke.

[Docket No. R-1331]

On *January 27, 2009*, the Board approved a final rule to provide a temporary exemption for member banks participating in the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF), a special liquidity facility. The exemption from certain provisions of section 23A of the Federal Reserve Act and the Board's Regulation W was approved as an interim measure in September 2008 and increases the capacity of participating institutions to purchase asset-

backed commercial paper from affiliated money market mutual funds. The final rule is effective January 30, 2009. (The Board subsequently announced that the AMLF would expire on February 1, 2010.)

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh and Duke.

### **Regulation Y** Bank Holding Companies and Change in Bank Control

[Docket No. R-1193]

On *March 16, 2009*, the Board approved a final rule to delay until March 31, 2011, the effective date of new limits on the inclusion of trust preferred securities and other restricted core capital elements in tier 1 capital under the Board's capital adequacy guidelines for bank holding companies. The new limits were scheduled to take effect on March 31, 2009, but were delayed in view of financial market conditions and in order to promote stability in the financial markets and the banking industry as a whole.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Duke, and Tarullo.

[Docket Nos. R-1336 and R-1356]

On *May 20, 2009*, the Board approved a final rule to allow bank holding companies to include in tier 1 capital without restriction senior perpetual preferred stock issued to the Department of the Treasury (Treasury) under the Troubled Asset Relief Program (TARP). This rule makes final the rule approved as an interim measure in October 2008. The Board also approved an interim final rule with re-

quest for comment to allow bank holding companies that are either S-Corps or mutual bank holding companies to include in tier 1 capital all subordinated debt issued to Treasury under TARP, provided that the subordinated debt will count toward the limit on the amount of other restricted core capital includable in tier 1 capital. In addition, the interim final rule will allow small bank holding companies that are S-Corps or mutual bank holding companies to exclude such debt from treatment as "debt" for purposes of the debt-to-equity standard under the Board's Small Bank Holding Company Policy Statement. The final rule is effective July 1, 2009, and the interim final rule is effective June 1, 2009.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Duke, and Tarullo.

### **Regulation Z** Truth in Lending

[Docket No. R-1340]

On *May 7, 2009*, the Board approved amendments to implement the Mortgage Disclosure Improvement Act (MDIA) that are intended to provide consumers with disclosures earlier in the mortgage process. In July 2008, the Board issued final rules requiring creditors to provide consumers with transaction-specific cost disclosures shortly after receiving an application for a closed-end loan secured by a consumer's principal dwelling. The MDIA expedites the effective date of these disclosure requirements by about two months, to July 30, 2009, as well as broadens and adds to the requirements. Under the Board's amendments to implement these requirements, creditors must (1) provide early cost disclosures

for loans secured by dwellings other than a consumer's principal dwelling (such as a second home); (2) wait seven days after providing the early disclosures before closing the loan; and (3) provide new disclosures that include a revised annual percentage rate (APR), and wait an additional three days before closing the loan, if a change occurs that makes the APR in the early disclosures inaccurate beyond a specified tolerance. The amendments allow a consumer to expedite a loan closing in order to address a personal financial emergency, such as foreclosure. The amendments are effective July 30, 2009.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Duke, and Tarullo.

[Docket No. R-1364]

On *July 15, 2009*, the Board approved an interim final rule with request for comment to implement certain provisions of the Credit Card Accountability Responsibility and Disclosure Act. The interim final rule requires creditors to provide written notice to consumers 45 days before increasing an APR on a credit card account or making a significant change to the terms of an account. Creditors must also inform consumers, in the same notice, of their right to cancel the account before the increase or change goes into effect. If a consumer does so, the creditor is generally prohibited from applying the increase or change to the account. In addition, creditors must generally mail or deliver periodic statements for credit cards and other open-end consumer credit accounts at least 21 days before payment is due. The interim final rule is effective August 20, 2009.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Duke, and Tarullo.

[Docket No. R-1353]

On *July 27, 2009*, the Board approved final amendments to revise the disclosure requirements for private education loans, consistent with the requirements of the Higher Education Opportunity Act. Under the amendments, creditors that extend loans expressly for postsecondary educational expenses must provide disclosures about a loan's terms and features on or with the loan application and must disclose information about federal student loan programs that may offer less costly alternatives. Creditors must also provide additional disclosures when a loan is approved and when it is consummated. The new disclosure requirements do not apply to education loans made, insured, or guaranteed by the federal government, or in certain other situations (such as a credit card advance used to fund educational expenses). The amendments also include restrictions on using the name, emblem, or mascot of an educational institution in a way that implies the institution endorses a creditor's loans. The amendments, which include model disclosure forms, are effective September 14, 2009, and compliance is mandatory February 14, 2010.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Duke, and Tarullo.

[Docket R-1378]

On *November 10, 2009*, the Board approved an interim final rule with request for comment to implement a requirement in the Helping Families Save Their Homes Act that consumers receive written notice after their mort-

gage loan has been sold or transferred. Under the act, a purchaser or assignee that acquires a mortgage loan must provide the required disclosures in writing within 30 days. The interim final rule is effective November 20, 2009, and compliance is mandatory January 19, 2010.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Duke, and Tarullo.

### **Regulation GG** Prohibition on Funding of Unlawful Internet Gambling

[Docket No. R-1298]

On *November 25, 2009*, the Board, acting jointly with the Department of the Treasury, approved a final rule to extend the compliance date for the joint regulation implementing certain provisions of the Unlawful Internet Gambling Enforcement Act by six months, to June 1, 2010.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Duke, and Tarullo.

### ***Policy Statements and Other Actions***

#### **Homeownership Preservation Policy for Residential Mortgage Assets**

On *January 23, 2009*, the Board approved a policy, developed pursuant to section 110 of the Emergency Economic Stabilization Act, to help prevent avoidable foreclosures on residential mortgage assets that are subject to section 110 and that are owned or con-

trolled by a Reserve Bank. The Board also voted to voluntarily apply the policy to the residential mortgage assets held by the Maiden Lane limited liability companies, which were formed by the Federal Reserve Bank of New York to facilitate the acquisition of The Bear Stearns Companies, Inc. by JPMorgan Chase & Co. and to help stabilize the American International Group, Inc.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh and Duke.

### **Interagency Questions and Answers Regarding Flood Insurance**

[Docket No. R-1311]

On *July 14, 2009*, the Board, acting with the Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, Office of Thrift Supervision, National Credit Union Administration, and Farm Credit Administration, approved final revised Interagency Questions and Answers Regarding Flood Insurance. The questions and answers are intended to help financial institutions meet their responsibilities under federal flood insurance legislation and to increase public understanding of flood insurance regulation. The revised questions and answers, which supplement other guidance or interpretations issued by the agencies and the Federal Emergency Management Agency, are effective September 21, 2009, and supersede the agencies' questions and answers issued in 1997. (The Board also approved the issuance of five proposed new questions and answers for public comment.)

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Duke, and Tarullo.

### **Maximum Maturity of Primary Credit Loans**

On *November 12, 2009*, the Board approved a reduction in the maximum maturity of primary credit loans at the discount window for depository institutions from 90 days to 28 days, effective January 14, 2010. Before August 2007, the maximum available term of primary credit was generally overnight. The Federal Reserve lengthened the maximum maturity to 30 days (on August 17, 2007) and then to 90 days (on March 16, 2008) in order to enhance banks' access to term funds and thus support their ability to lend to households and businesses.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Duke, and Tarullo.

### **Policy Governing Eligibility, Qualifications, and Rotation for Directors of Federal Reserve Banks and Their Branches**

On *November 17, 2009*, the Board approved revisions to its eligibility, qualifications, and rotation policy for Federal Reserve Bank and Branch directors. The revisions address situations in which previously permissible affiliations or stockholdings may become impermissible for Class B and Class C directors, as a result of a company's change in character. (Class B and Class C directors represent the public and may not be an officer, a director, or an employee of a bank; in addition, Class C directors may not own stock in a bank.) If a Class B or Class C director is affiliated with a company (an officer, a director, or an employee of a company) that becomes a bank holding company or that otherwise becomes an impermissible affiliation, the director must either resign

from the affiliation or resign from the Reserve Bank's board within 60 days of the earlier of the date that (1) the director becomes aware of the impermissible affiliation or (2) the Board informs the Reserve Bank of the change in character of the company. A Class C director who holds stock in a company that becomes a bank holding company or who holds stock that otherwise becomes an impermissible holding must either divest the stock or resign from the Reserve Bank's board within 60 days of the earlier of the date that (1) the director becomes aware of the impermissible stockholding or (2) the Board informs the Reserve Bank of the change in character of the company. The revisions also clarify the rules regarding a Class C director's indirect ownership in a financial stock issuer.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Duke and Tarullo. Absent and not voting: Governor Warsh.

### ***Special Liquidity Facilities and Other Initiatives***

The Board modified certain aspects of the special liquidity facilities and other initiatives that were previously implemented to promote financial stability and support critical institutions. For more information on the establishment and purposes of the facilities and initiatives discussed in this section, see the Board's *2008 Annual Report*.

#### **Special Liquidity Facilities**

On *January 27, 2009*, the Board extended its authorizations for the following facilities until October 30, 2009: Primary Dealer Credit Facility (PDCF), Asset-Backed Commercial Paper Money Market Mutual Fund Li-

quidity Facility (AMLF), Commercial Paper Funding Facility (CPFF), and Money Market Investor Funding Facility (MMIFF). (On *January 7, 2009*, the Board had announced changes to the MMIFF, including its economic parameters and the set of eligible investors for the facility.) The Board and the Federal Open Market Committee (FOMC) approved extending their authorizations for the Term Securities Lending Facility (TSLF) until October 30, 2009. All of the extensions were subject to the same collateral, interest rate, and other conditions previously established. The facilities had been scheduled to expire on April 30, 2009. (Further extensions are discussed in this section.)

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh and Duke.

On *June 23, 2009*, the Board extended its authorizations for the following facilities until February 1, 2010: AMLF, CPFF, and PDCF. The Board and the FOMC approved extending their authorizations for the TSLF until February 1, 2010. All of the extensions were subject to the same collateral, interest rate, and other conditions previously established. The Board reaffirmed that its authorization for the MMIFF would expire on October 30, 2009. The Board also trimmed the size and changed the terms of some facilities, in light of improving financial conditions and reduced usage of the facilities. Specifically, the Board reduced the amounts auctioned at biweekly Term Auction Facility (TAF) auctions from \$150 billion to \$125 billion, effective July 13, 2009, and stated that TAF funding may be reduced further, if warranted by market conditions. (See “Discount Rates for Depository Institutions in 2009” for further discussion of the

TAF.) The Board and the FOMC suspended TSLF auctions backed by schedule 1 collateral (Treasury, agency-debt, and agency-guaranteed mortgage-backed securities), effective July 1, 2009, and the TSLF Options Program (TOP), effective with the maturity of outstanding June TOP options. The Board and the FOMC also reduced the frequency and size of TSLF auctions backed by schedule 2 collateral (schedule 1 collateral and investment-grade corporate, municipal, mortgage-backed, and asset-backed securities) from every two weeks to every four weeks, in amounts of \$75 billion, and stated that amounts auctioned under the TSLF may be reduced further, if warranted by market conditions.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Duke, and Tarullo.

NOTE: On *September 24, 2009*, the Board announced reductions in the amounts of 84-day TAF auctions, as well as reductions in the maturities of those auctions. The Board and the FOMC also announced reductions in the amounts of schedule 2 TSLF auctions. On *December 16, 2009*, the Board and the FOMC announced that they anticipated the following facilities would expire on February 1, 2010: AMLF, CPFF, PDCF, and TSLF. The Board and the FOMC also announced that they expected the amounts provided under the TAF would continue to be scaled back in early 2010.

#### Term Asset-Backed Securities Loan Facility

The Board authorized the Term Asset-Backed Securities Loan Facility (TALF) in November 2008 in order to increase credit availability and support economic activity by facilitating the

issuance of asset-backed securities (ABS) collateralized by consumer and small business loans. On *February 6* and *February 23, 2009*, the Board approved revisions to the TALF's terms and conditions, including interest rates on loans, collateral haircuts, a revised definition of eligible borrowers, and additional specifications for ABS collateral. (Unless otherwise indicated, Board actions on the TALF in 2009 were approved by the unanimous vote of Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Duke, and Tarullo.) On *March 3, 2009*, the Board and the Department of the Treasury (Treasury) announced the launch of the TALF for eligible holders of ABS backed by newly and recently originated auto, credit card, and student loans and by small business loans guaranteed by the Small Business Administration.

On *March 19, 2009*, the Board approved an expansion of the eligible collateral for loans extended under the TALF to include ABS backed by mortgage-servicing advances, loans or leases relating to business equipment, leases of vehicle fleets, and non-auto floorplan loans. In addition, the Board expanded the list of eligible auto-related receivables. ABS backed by mortgage-servicing advances were added to improve servicers' ability to work with homeowners to prevent avoidable foreclosures. The other new ABS categories complement the consumer and small business loan categories that were already eligible.

On *April 21, 2009*, the Board approved the establishment of two new interest rates for certain fixed-rate loans extended under the TALF that are collateralized by ABS with weighted average lives to maturity of less than two years and that do not benefit from a government guarantee. These new rates

are based on one- and two-year London interbank offered (Libor) swap rates and are more closely matched to the duration of the underlying ABS collateral. The Board also announced other technical clarifications to the program.

On *April 30, 2009*, the Board approved an expansion of the eligible collateral for TALF loans to include newly issued commercial mortgage-backed securities (CMBS) and newly issued securities backed by insurance-premium-finance loans. The inclusion of newly issued CMBS as eligible collateral for TALF loans helps prevent defaults on economically viable commercial properties, increases the capacity of current holders of maturing mortgages to make additional loans, and facilitates the sale of distressed properties. The inclusion of insurance-premium ABS facilitates the flow of credit to small businesses. The Board also authorized TALF loans with maturities of five years to finance purchases of newly issued CMBS, ABS backed by student loans, and ABS backed by loans guaranteed by the Small Business Administration. In addition, some of the interest on collateral financed with a five-year loan may be diverted toward an accelerated repayment of the loan, especially in the fourth and fifth years.

On *May 18, 2009*, the Board approved an expansion of the eligible collateral for TALF loans to include certain high-quality CMBS issued before January 1, 2009 (legacy CMBS), in order to improve legacy CMBS markets and thereby facilitate the issuance of new CMBS, which in turn helps borrowers finance new purchases of commercial properties or refinance existing commercial mortgages on better terms.

On June 22, 2009, the Board approved (1) an alternate lending rate for

TALF-eligible collateral consisting of ABS that are collateralized by private student loans and have a prime-based coupon and (2) other clarifying and technical changes to the TALF's terms and conditions. The alternate lending rate was established to help make private student loans more affordable and more readily available.

Votes for this action: Chairman Bernanke and Governors Warsh, Duke, and Tarullo. Absent and not voting: Vice Chairman Kohn.

On June 30, 2009, the Board approved an increase in the administrative fee charged to TALF borrowers from 5 basis points to (1) 10 basis points for loans collateralized by ABS and (2) 20 basis points for loans collateralized by CMBS (newly issued and legacy).

On July 6, 2009, the Board approved an adjustment to the haircuts applied to any loans extended under TALF to Treasury-sponsored Public-Private Investment Funds (PPIFs). The haircuts were increased so that, if a PPIF borrowed from the TALF, the combined Treasury-supplied and TALF-supplied debt would be no greater than the total amount of TALF debt that would be available, leveraging the PPIF equity alone.

On August 13, 2009, the Board, acting with Treasury, approved an extension of the TALF through March 31, 2010, for TALF loans against newly issued ABS and eligible legacy CMBS. Because new CMBS transactions can take more time to arrange, TALF loans against newly issued CMBS were extended through June 30, 2010. TALF loans had been previously authorized through December 31, 2009.

On September 29, 2009, the Board approved an enhanced credit review process for TALF-eligible ABS to help

ensure that TALF collateral complies with the Federal Reserve's high standards for credit quality, transparency, and simplicity of structure.

NOTE: On December 16, 2009, the Board and the FOMC announced that the anticipated expiration dates for the TALF remained set at June 30, 2010, for loans backed by newly issued CMBS, and March 31, 2010, for loans backed by all other types of collateral.

## Other Initiatives

### Bank of America Corporation

On January 15, 2009, the Board, as part of a package of coordinated actions with the Department of the Treasury (Treasury) and the Federal Deposit Insurance Corporation (FDIC), authorized the Federal Reserve Bank of Richmond to enter into an agreement with Bank of America Corporation under which the Reserve Bank would make certain residual financing available to Bank of America in connection with a designated pool of approximately \$118 billion in assets. (The Board also approved the issuance of a letter to the Secretary of the Treasury recommending that the Secretary invoke the systemic-risk exception to the least-cost-resolution requirements in the Federal Deposit Insurance Act to permit the FDIC to participate in the proposed agreement with Bank of America.) In September 2009, Bank of America paid an exit fee to terminate the term sheet with the Federal Reserve, Treasury, and the FDIC related to the residual financing arrangement and related guarantee protections.

Votes for these actions: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Duke.

**American International Group, Inc.**

On *March 1, 2009*, the Board approved a restructuring of the government's assistance to American International Group, Inc. (AIG) that, together with new capital to be provided by Treasury, would help stabilize the company, enhance the company's capital and liquidity, and facilitate the orderly completion of AIG's global divestiture program. As part of the restructuring, the Board authorized the Federal Reserve Bank of New York to (1) exchange a portion of AIG's existing outstanding debt under the revolving credit facility for preferred equity interests in special-purpose vehicles (SPVs) that would hold all of the equity interest in two AIG insurance subsidiaries, (2) provide up to approximately \$8.5 billion in new loans to SPVs established by domestic life insurance subsidiaries of AIG to facilitate the securitization of designated blocks of existing life insurance policies held by the parent insurance companies, and (3) modify the interest rate payable under the revolving credit facility. Upon completion of these transactions, the maximum amount available under the revolving credit facility would be reduced.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Duke, and Tarullo.

**Treasury Legacy Loans Program**

On September 9, 2009, the Board approved the issuance of a letter to the Secretary of the Treasury recommending that the Secretary invoke the systemic-risk exception in the Federal Deposit Insurance Act to allow the FDIC and Treasury to implement the Legacy Loans Program under which

the FDIC would guarantee debt issued by certain special-purpose entities, including Public-Private Investment Funds, established to acquire legacy assets from banking organizations.

Votes for this action: Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Duke, and Tarullo.

***Discount Rates for Depository Institutions in 2009***

Under the Federal Reserve Act, the boards of directors of the Federal Reserve Banks must establish rates on discount window loans to depository institutions at least every 14 days, subject to review and determination by the Board of Governors.

**Primary Credit**

Primary credit, the Federal Reserve's main lending program for depository institutions, is extended at a rate above the federal funds rate target set by the Federal Open Market Committee (FOMC). It is typically made available, with minimal administration and for very short terms, as a backup source of liquidity to depository institutions that, in the judgment of the lending Federal Reserve Bank, are in generally sound financial condition. On March 16, 2008, the Board announced a temporary change to the Reserve Banks' discount window lending practices to allow the provision of term financing for as long as 90 days. On November 17, 2009, the Board announced a reduction in the maximum maturity of such financing to 28 days effective January 14, 2010.

Throughout 2009, the primary credit rate was  $\frac{1}{2}$  percent.<sup>1</sup>

### 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 2009, the spread was set at 50 basis points.

Seasonal credit is available to smaller depository institutions to meet liquidity needs that arise from regular swings in their loans and deposits. The rate on seasonal credit is calculated every two weeks as an average of selected money-market yields, typically resulting in a rate close to the federal funds rate target.

At year-end, the secondary and seasonal credit rates were 1 percent and 0.15 percent, respectively.<sup>2</sup>

### Term Auction Facility Credit

In December 2007, the Federal Reserve established a temporary Term Auction Facility (TAF). Under the TAF, the Federal Reserve auctions term funds to depository institutions that are in generally sound financial condition and are eligible to borrow under the primary credit program. The amount of each auction is determined in advance by the Federal Reserve, and the interest rate on TAF credit is determined by the

bidding process as the rate at which all bids can be fulfilled, up to the maximum auction amount and subject to a minimum bid rate. Starting on January 12, 2009, the minimum bid rate was set at a level equal to the rate of interest that banks earn on excess reserve balances. Previously, the minimum bid rate for TAF auctions was determined based on a measure of the average expected overnight federal funds rate over the term of the credit being auctioned. At every TAF auction in 2009, the resulting interest rate on TAF credit was equal to the minimum bid rate, which remained at  $\frac{1}{4}$  percent throughout the year.

The Federal Reserve conducted regular \$150 billion auctions of 28- and 84-day TAF credit throughout the first half of 2009.<sup>3</sup> On June 25, 2009, in view of the improvement in financial market conditions and the associated decline in the demand for TAF funds, the Board announced a reduction in the amount auctioned to \$125 billion and noted that TAF funding would be reduced gradually further if market conditions continued to improve. The amounts auctioned in August and September were reduced to \$100 billion and \$75 billion, respectively. On September 24, 2009, the Board announced that the amounts offered at auctions of 28-day credit would be maintained at \$75 billion per auction to ensure that an adequate volume of funding was available in the period leading up to year-end and over year-end. The amounts offered at 84-day auctions were reduced to \$50 billion effective in October and to \$25 billion in November and December, and the maturities of those

1. The spread of the primary credit rate over the FOMC's target rate was ordinarily 100 basis points. In 2007, the Board approved a narrowing of this spread to 50 basis points and in 2008, approved a further narrowing to 25 basis points. Throughout 2009, the FOMC maintained a target range for the federal funds rate of 0 to  $\frac{1}{4}$  percent.

2. For current and historical discount rates, see [www.frbdiscountwindow.org/](http://www.frbdiscountwindow.org/).

3. For more information on TAF auctions, including minimum bid rates and the auction-determined rates on TAF credit, see [federalreserve.gov/monetarypolicy/taf.htm](http://federalreserve.gov/monetarypolicy/taf.htm).

operations were aligned with the maturity dates in the cycle for 28-day funds. With the completion of that transition, the auction schedule for 2010 was converted to a single cycle of 28-day funds offered every 28 days. On December 16, 2009, the Federal Reserve indicated that it expected that amounts provided under the Term Auction Facility would continue to be scaled back in early 2010.

### **Votes on Changes to Discount Rates for Depository Institutions**

About every two weeks during 2009, the Board approved proposals by the 12 Reserve Banks to maintain the formulas for computing the secondary and seasonal credit rates as well as the auction method by which the TAF credit rate is set. In 2009, the Board did not approve any changes in the primary credit rate. ■

## *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 deci-

sion, they are identified in the minutes and a summary of the reasons for their dissent is provided.

Policy directives of the Federal Open Market Committee are issued to the Federal Reserve Bank of New York as the Bank selected by the Committee to execute transactions for the System Open Market Account. In the area of domestic open market operations, the Federal Reserve Bank of New York operates under instructions from the Federal Open Market Committee that take the form of an Authorization for Domestic Open Market Operations and a Domestic Policy Directive. (A new Domestic Policy Directive is adopted at each regularly scheduled meeting.) In the foreign currency area, the Federal Reserve Bank of New York operates under an Authorization for Foreign Currency Operations, a Foreign Currency Directive, and Procedural Instructions with Respect to Foreign Currency Operations. Changes in the instruments during the year are reported in the minutes for the individual meetings.<sup>1</sup>

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1. As of January 1, 2009, the Federal Reserve Bank of New York was operating under the Domestic Policy Directive approved at the December 15–16, 2008, Committee meeting and the Authorization for Foreign Currency Operations approved by notation vote on September 21, 2008. The other policy instruments (the Authorization for Domestic Open Market Operations, the Foreign Currency Directive, and Procedural Instructions with Respect to Foreign Currency Operations) in effect as of January 1, 2009, were approved at the January 29–30, 2008, meeting.

### Meeting Held on January 27–28, 2009

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 27, 2009, at 1:30 p.m. and continued on Wednesday, January 28, 2009, at 9:00 a.m.

*Present:*

Mr. Bernanke, Chairman  
 Mr. Dudley, Vice Chairman  
 Ms. Duke  
 Mr. Evans  
 Mr. Kohn  
 Mr. Lacker  
 Mr. Lockhart  
 Mr. Warsh  
 Ms. Yellen

Mr. Bullard, Ms. Cumming, Mr. Hoenig, Ms. Pianalto, and Mr. Rosengren, Alternate Members of the Federal Open Market Committee

Messrs. Fisher, Plosser, and Stern, Presidents of the Federal Reserve Banks of Dallas, Philadelphia, and Minneapolis, respectively

Mr. Madigan, Secretary and Economist  
 Ms. Danker, Deputy Secretary  
 Mr. Luecke, Assistant Secretary  
 Mr. Skidmore, Assistant Secretary  
 Ms. Smith, Assistant Secretary  
 Mr. Alvarez, General Counsel  
 Mr. Ashton,<sup>2</sup> Assistant General Counsel  
 Mr. Sheets, Economist  
 Mr. Stockton, Economist

Messrs. Altig, Clouse, Connors, Kamin, Slifman, Tracy, and Wilcox, Associate Economists

Ms. Mosser, Temporary Manager, System Open Market Account

Ms. Johnson,<sup>3</sup> Secretary of the Board, Office of the Secretary, Board of Governors

Mr. Frierson,<sup>3</sup> Deputy Secretary, Office of the Secretary, Board of Governors

Mr. Struckmeyer, Deputy Staff Director, Office of Staff Director for Management, Board of Governors

Ms. Bailey, Deputy Director, Division of Banking Supervision and Regulation, Board of Governors

Mr. English, Deputy Director, Division of Monetary Affairs, Board of Governors

Mr. Blanchard, Assistant to the Board, Office of Board Members, Board of Governors

Messrs. Reifschneider and Wascher, Associate Directors, Division of Research and Statistics, Board of Governors

Mr. Levin, Associate Director, Division of Monetary Affairs, Board of Governors

Ms. Shanks,<sup>4</sup> Associate Secretary, Office of the Secretary, Board of Governors

Mr. Reeve, Deputy Associate Director, Division of International Finance, Board of Governors

Mr. Sichel, Deputy Associate Director, Division of Research and Statistics, Board of Governors

Mr. Meyer, Senior Adviser, Division of Monetary Affairs, Board of Governors

Mr. Oliner, Senior Adviser, Division of Research and Statistics, Board of Governors

Ms. Dynan, Assistant Director, Division of Research and Statistics, Board of Governors

Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors

2. Attended Wednesday's session only.

3. Attended portion of the meeting that was a joint session of the Board and the FOMC.

4. Attended portion of the meeting on Tuesday that was a joint session of the Board and the FOMC.

- Ms. Kusko, Senior Economist, Division of Research and Statistics, Board of Governors
- Mr. Gust, Senior Economist, Division of International Finance, Board of Governors
- Messrs. Driscoll and King, Economists, Division of Monetary Affairs, Board of Governors
- Ms. Beattie,<sup>3</sup> 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. Green, First Vice President, Federal Reserve Bank of Richmond
- Messrs. Fuhrer, Rosenblum, and Sniderman, Executive Vice Presidents, Federal Reserve Banks of Boston, Dallas, and Cleveland, respectively
- Messrs. Hilton and Krane, Mses. Mester and Perelmuter, Messrs. Rasche, Rudebusch, and Sellon, Senior Vice Presidents, Federal Reserve Banks of New York, Chicago, Philadelphia, New York, St. Louis, San Francisco, and Kansas City, respectively
- Mr. Weber, Senior Research Officer, Federal Reserve Bank of Minneapolis
- Mr. Hetzel, Senior Economist, Federal Reserve Bank of Richmond

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 27, 2009, had been received and that these individuals had executed their oaths of office.

The elected members and alternate members were as follows:

- William C. Dudley, President of the Federal Reserve Bank of New York, with Christine M. Cumming, First Vice President of the Federal Reserve Bank of New York, as alternate.
- Jeffrey M. Lacker, President of the Federal Reserve Bank of Richmond, with Eric C. Rosengren, President of the Federal Reserve Bank of Boston, as alternate.
- Charles L. Evans, President of the Federal Reserve Bank of Chicago, with Sandra Pianalto, President of the Federal Reserve Bank of Cleveland, as alternate.
- Dennis P. Lockhart, President of the Federal Reserve Bank of Atlanta, with James B. Bullard, President of the Federal Reserve Bank of St. Louis, as alternate.
- Janet L. Yellen, President of the Federal Reserve Bank of San Francisco, with Thomas M. Hoenig, President of the Federal Reserve Bank of Kansas City, as alternate.

#### Annual Organizational Matters

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 2010:

- |   |                           |
|---|---------------------------|
| Ben S. Bernanke   | Chairman                  |
| William C. Dudley   | Vice Chairman             |
| Brian F. Madigan  | Secretary and Economist   |
| Deborah J. Danker   | Deputy Secretary          |
| Matthew M. Luecke   | Assistant Secretary       |
| David W. Skidmore   | Assistant Secretary       |
| Michelle A. Smith   | Assistant Secretary       |
| Scott G. Alvarez  | General Counsel           |
| Thomas C. Baxter, Jr.   | Deputy General Counsel    |
| Richard M. Ashton   | Assistant General Counsel |
| D. Nathan Sheets  | Economist                 |
| David J. Stockton   | Economist                 |
| David E. Altig, James A. Clouse, Thomas A. Connors, Steven B. Kamin, Lawrence Slifman, Daniel G. Sullivan, Joseph S. Tracy, John A. Weinberg, David W. Wilcox, and John C. Williams, Associate Economists |                           |

By unanimous vote, the Committee adopted several minor amendments 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.

Secretary's note: The Chairman reported that prior to the meeting he had used his authority under the Committee's Rules of Organization to appoint Ms. Mosser as Manager of the System Open Market Account until the Committee selects a replacement manager.

By unanimous vote, the Committee approved the Authorization for Foreign Currency Operations (shown below) with a clerical amendment that combined the list of currencies in 1.A approved at the January 2008 meeting with the five additional currencies that were approved by the Committee in September and October 2008 in connection with temporary reciprocal currency arrangements:

#### Authorization for Foreign Currency Operations (Amended January 27, 2009)

1. The Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York, for System Open Market Account, to the extent necessary to carry out the Committee's foreign currency directive and express authorizations by the Committee pursuant thereto, and in conformity with such procedural instructions as the Committee may issue from time to time:

A. To purchase and sell the following foreign currencies in the form of cable transfers through spot or forward transactions on the open market at home and abroad, including transactions with the U.S. Treasury, with the U.S. Exchange Stabilization Fund established by Section 10 of the Gold Reserve Act of 1934, with foreign monetary authorities, with the Bank for International Settlements, and with other international financial institutions:

Australian dollars	Mexican pesos
Brazilian reais	New Zealand dollars
Canadian dollars	Norwegian kroner
Danish kroner	Pounds sterling
Euro	Singapore dollars
Japanese yen	Swedish kronor
Korean won	Swiss francs

B. To hold balances of, and to have outstanding forward contracts to receive or to deliver, the foreign currencies listed in paragraph A above.

C. To draw foreign currencies and to permit foreign banks to draw dollars under the reciprocal currency arrangements listed in paragraph 2 below, provided that drawings by either party to any such arrangement shall be fully liquidated within 12 months after any amount outstanding at that time was first drawn, unless the Committee, because of exceptional circumstances, specifically authorizes a delay.

D. To maintain an overall open position in all foreign currencies not exceeding \$25.0 billion. For this purpose, the overall open position in all foreign currencies is defined as the sum (disregarding signs) of net positions in individual currencies, excluding changes in dollar value due to foreign exchange rate movements and interest accruals. The net position in a single foreign currency is defined as holdings of balances in that currency, plus outstanding contracts for future receipt, minus outstanding contracts for future delivery of that currency, i.e., as the sum of these elements with due regard to sign.

2. The Federal Open Market Committee directs the Federal Reserve Bank of New York to maintain reciprocal currency arrangements ("swap" arrangements) for the System Open Market Account for periods up to a maximum of 12 months with the following foreign banks, which are among those designated by the Board of Governors of the Federal Reserve System under Section 214.5 of Regulation N, Relations with Foreign Banks and Bankers, and with the approval of the Committee to renew such arrangements on maturity:

Foreign bank	Amount of arrangement (millions of dollars equivalent)
Bank of Canada	2,000
Bank of Mexico	3,000

Any changes in the terms of existing swap arrangements, and the proposed terms of any new arrangements that may be authorized, shall be referred for review and approval to the Committee.

3. All transactions in foreign currencies undertaken under paragraph 1.A. above shall, unless otherwise expressly authorized by the Committee, be at prevailing market rates. For the purpose of providing an investment return on System holdings of foreign currencies or for the purpose of adjusting interest rates paid or received in connection with swap drawings, transactions with foreign central banks may be undertaken at non-market exchange rates.

4. It shall be the normal practice to arrange with foreign central banks for the coordination of foreign currency transactions. In making operating arrangements with foreign central banks on System holdings of foreign currencies, the Federal Reserve Bank of New York shall not commit itself to maintain any specific balance, unless authorized by the Federal Open Market Committee. Any agreements or understandings concerning the administration of the accounts maintained by the Federal Reserve Bank of New York with the foreign banks designated by the Board of Governors under Section 214.5 of Regulation N shall be referred for review and approval to the Committee.

5. Foreign currency holdings shall be invested to ensure that adequate liquidity is maintained to meet anticipated needs and so that each currency portfolio shall generally have an average duration of no more than 18 months (calculated as Macaulay duration). Such investments may include buying or selling outright obligations of, or fully guaranteed as to principal and interest by, a foreign government or agency thereof; buying such securities under agreements for repurchase of such securities; selling such securities under agreements for the resale of such securities; and holding various time and other deposit accounts at foreign institutions. In addition, when appropriate in connection with arrangements to provide investment facilities for foreign currency holdings, U.S. Government securities may be purchased from foreign central banks under agreements for repurchase of such securities within 30 calendar days.

6. All operations undertaken pursuant to the preceding paragraphs shall be reported promptly to the Foreign Currency Subcommittee and the Committee. The Foreign Currency Subcommittee consists of the Chairman and Vice Chairman of the Committee, the Vice Chairman of the Board of Governors, and such other member of the Board as the Chairman may designate (or in the absence of members of the Board serving on the Subcommittee, other Board members designated by the Chairman as alternates, and in the absence of the Vice Chairman of the Committee, the Vice Chairman's alternate). Meetings of the Subcommittee shall be called at the request of any member, or at the request of the Manager, System Open Market Account ("Manager"), for the purposes of reviewing recent or contemplated operations and of consulting with the Manager on other matters relating to the Manager's responsibilities. At the request of any member of the Subcommittee, questions arising from such reviews and consultations shall be referred for determination to the Federal Open Market Committee.

7. The Chairman is authorized:

A. With the approval of the Committee, to enter into any needed agreement or understanding with the Secretary of the Treasury about the division of responsibility for foreign currency operations between the System and the Treasury;

B. To keep the Secretary of the Treasury fully advised concerning System foreign currency operations, and to consult with the Secretary on policy matters relating to foreign currency operations;

C. From time to time, to transmit appropriate reports and information to the National Advisory Council on International Monetary and Financial Policies.

8. 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 27, 2009)

1. System operations in foreign currencies shall generally be directed at countering disorderly market conditions, provided that market exchange rates for the U.S. dollar reflect actions and behavior consistent with IMF Article IV, Section 1.

2. To achieve this end the System shall:

A. Undertake spot and forward purchases and sales of foreign exchange.

B. Maintain reciprocal currency (“swap”) arrangements with selected foreign central banks.

C. Cooperate in other respects with central banks of other countries and with international monetary institutions.

3. Transactions may also be undertaken:

A. To adjust System balances in light of probable future needs for currencies.

B. To provide means for meeting System and Treasury commitments in particular currencies, and to facilitate operations of the Exchange Stabilization Fund.

C. For such other purposes as may be expressly authorized by the Committee.

4. System foreign currency operations shall be conducted:

A. In close and continuous consultation and cooperation with the United States Treasury;

B. In cooperation, as appropriate, with foreign monetary authorities; and

C. In a manner consistent with the obligations of the United States in the International Monetary Fund regarding exchange arrangements under IMF Article IV.

By unanimous vote, the Committee approved the Procedural Instructions with Respect to Foreign Currency Operations, with the addition of the clarifying phrase “unless otherwise directed by the Committee” in the first sentence:

#### Procedural Instructions with respect to Foreign Currency Operations (Amended January 27, 2009)

In conducting operations pursuant to the authorization and direction of the Federal Open Market Committee as set forth in the Authorization for Foreign Currency Operations and the Foreign Currency Directive, the Federal Reserve Bank of New York, through the Manager, System Open Market Account (“Manager”), shall be guided by the following procedural understandings with respect to consultations and clearances with the Committee, the Foreign Currency Subcommittee, and the Chairman of the Committee, unless otherwise directed by the Committee. All operations undertaken pursuant to such clearances shall be reported promptly to the Committee.

1. The Manager shall clear with the Subcommittee (or with the Chairman, if the Chairman believes that consultation with the Subcommittee is not feasible in the time available):

A. Any operation that would result in a change in the System’s overall open position in foreign currencies exceeding \$300 million on any day or \$600 million since the most recent regular meeting of the Committee.

B. Any operation that would result in a change on any day in the System’s net position in a single foreign currency exceeding \$150 million, or \$300 million when the operation is associated with repayment of swap drawings.

C. Any operation that might generate a substantial volume of trading in a particular currency by the System, even though the change in the System’s net position in that currency might be less than the limits specified in 1.B.

D. Any swap drawing proposed by a foreign bank not exceeding the larger of (i) \$200 million or (ii) 15 percent of the size of the swap arrangement.

2. The Manager shall clear with the Committee (or with the Subcommittee, if the Subcommittee believes that consultation with the full Committee is not feasible in the time available, or with the Chairman, if the Chairman believes that consultation with the Subcommittee is not feasible in the time available):

A. Any operation that would result in a change in the System's overall open position in foreign currencies exceeding \$1.5 billion since the most recent regular meeting of the Committee.

B. Any swap drawing proposed by a foreign bank exceeding the larger of (i) \$200 million or (ii) 15 percent of the size of the swap arrangement.

3. The Manager shall also consult with the Subcommittee or the Chairman about proposed swap drawings by the System and about any operations that are not of a routine character.

By unanimous vote, the Committee approved several amendments to the Authorization for Domestic Open Market Operations (shown below). The amendments consolidate language authorizing repurchase agreements and reverse repurchase agreements into one paragraph, add a paragraph authorizing the use of agents to execute transactions in certain mortgage-backed securities (MBS), and add language to the final paragraph that reflects the Committee's current focus on using the composition and size of the Federal Reserve's balance sheet as instruments of monetary policy. The final paragraph now specifies that decisions to make material changes in the composition and size of the portfolio of assets held in the System Open Market Account during the period between meetings of the Federal Open Market Committee will be made in the same manner as decisions to change the intended level of the federal funds rate during the intermeeting period:

**Authorization for Domestic Open Market Operations**  
(Amended January 27, 2009)

1. The Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York, to the extent necessary to carry out the most recent domestic policy directive adopted at a meeting of the Committee:

A. To buy or sell U.S. Government securities, including securities of the Federal Financing Bank, and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States in the open market, from or to securities dealers and foreign and international accounts maintained at the Federal Reserve Bank of New York, on a cash, regular, or deferred delivery basis, for the System Open Market Account at market prices, and, for such Account, to exchange maturing U.S. Government and Federal agency securities with the Treasury or the individual agencies or to allow them to mature without replacement;

B. To buy or sell in the open market U.S. Government securities, and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States, for the System Open Market Account under agreements to resell or repurchase such securities or obligations (including such transactions as are commonly referred to as repo and reverse repo transactions) in 65 business days or less, at rates that, unless otherwise expressly authorized by the Committee, shall be determined by competitive bidding, after applying reasonable limitations on the volume of agreements with individual counterparties.

2. In order to ensure the effective conduct of open market operations, the Federal Open Market Committee authorizes the Federal Reserve Bank of New York to use agents in agency MBS-related transactions.

3. In order to ensure the effective conduct of open market operations, the Federal Open Market Committee authorizes the Federal Reserve Bank of New York to lend on an overnight basis U.S. Government securities 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.

4. In order to ensure the effective conduct of open market operations, while assisting in the provision of short-term investments for foreign and international accounts maintained at the Federal Reserve Bank of New York and accounts maintained at the Federal Reserve Bank of New York as fiscal agent of the United States pursuant to Section 15 of the Federal Reserve Act, the Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York (a) for System Open Market Account, to sell U.S. Government securities to such accounts on the bases set forth in paragraph 1.A under agreements providing for the resale by such accounts of those securities in 65 business days or less on terms comparable to those available on such transactions in the market; and (b) for New York Bank account, when appropriate, to undertake with dealers, subject to the conditions imposed on purchases and sales of securities in paragraph 1.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.

5. In the execution of the Committee's decision regarding policy during any intermeeting period, the Committee authorizes and directs the Federal Reserve Bank of New York, upon the instruction of the Chairman of the Committee, to adjust somewhat in exceptional circumstances the degree of pressure on reserve positions and hence the intended federal funds rate and to take actions that result in material changes in the composition and size of the assets in the System Open Market Account other than those anticipated by the Committee at its most recent meeting. Any such adjustment shall be made in the context of the Committee's discussion and decision at its most recent meeting and the Committee's long-run objectives for price stability and sustainable economic growth, and shall be based on economic, financial, and monetary developments during the intermeeting period. Consistent with Committee practice, the Chairman, if feasible, will consult with the Committee before making any adjustment.

In light of its program to purchase large quantities of agency debt and mortgage-backed securities, the Committee voted to suspend temporarily the Guidelines for the Conduct of System Operations in Federal Agency Issues (last amended January 28, 2003). Mr. Lacker dissented, stating that he views targeted purchases of agency debt and mortgage-backed securities as distorting credit markets and would prefer that the Desk instead purchase Treasury securities.

The remainder of the Committee's meeting was conducted as a joint meeting with the Board of Governors in order to facilitate policy discussion of developments with regard to the System's liquidity facilities and balance sheet during the intermeeting period and to consider the need for changes in the System's approach to using those tools.

#### Market Developments and Open Market Operations

The Manager of the System Open Market Account reported on recent developments in domestic and foreign financial markets. The Manager also reported on System open market operations in Treasury securities and in agency debt and mortgage-backed securities during the period since the Committee's December 15–16 meeting. By unanimous vote, the Committee ratified these transactions. There were no open market operations in foreign currencies for the System's account during the period since the Committee's December 15–16 meeting.

Meeting participants discussed the potential benefits of conducting open market purchases of a substantial quantity of longer-term Treasury securities for the System Open Market Account. Participants generally agreed that pur-

chasing such securities could be a useful adjunct to other monetary policy tools in some circumstances. One participant preferred to begin purchasing Treasury securities immediately, as a way to increase the monetary base, in lieu of expanding programs that aim to support particular segments of the credit markets. Other participants were prepared to purchase longer-term Treasury securities if evolving circumstances were to indicate that such transactions would be particularly effective in improving conditions in private credit markets. However, they judged that purchases of longer-term Treasury securities would only modestly improve conditions in private credit markets at present, and that completing already-announced plans to purchase large quantities of agency debt and mortgage-backed securities and to support certain asset-backed securities markets was, in current circumstances, likely to be a more effective way to employ the Federal Reserve balance sheet to support credit flows to, and spending by, households and businesses.

#### System Liquidity Programs and Balance Sheet

Staff reported on developments in System liquidity programs and on changes in the System's balance sheet since the Committee's December 15–16 meeting. As of January 26, the System's total assets and liabilities stood at just under \$2 trillion, about \$300 billion less than on December 17, 2008. The drop, which resulted primarily from a decline in foreign central bank drawings on reciprocal currency arrangements and a reduction in issuers' sales of commercial paper to the Commercial Paper Funding Facility (CPFF), seemed to reflect some improvement in the func-

tioning of global interbank markets and the commercial paper market after the year-end.

Most participants interpreted the evidence as indicating that credit markets still were not working well, and that the Federal Reserve's lending programs, asset purchases, and currency swaps were providing much-needed support to economic activity by reducing dislocations in financial markets, lowering the cost of credit, and facilitating the flow of credit to businesses and households. Several indicated that they expected the soon-to-be-implemented Term Asset-Backed Securities Loan Facility (TALF) to improve liquidity and reduce disruptions in the markets for securities backed by student loans, credit card receivables, auto loans, and small business loans guaranteed by the Small Business Administration; they also noted that it might become necessary to enhance or expand the TALF or other programs. However, in the view of one participant, financial markets—including those for asset-backed securities—were working reasonably well, given the current high level of pessimism and uncertainty about economic prospects and asset values, and the System's lending and asset-purchase programs were resulting in undesirable distortions in the allocation of credit. Others noted that such programs could have undesirable consequences if expanded too far or continued too long. Many participants agreed that it would be desirable for the System to develop additional measures of the effects of its programs, and they encouraged additional research on analytical frameworks that could inform Federal Reserve policy actions with respect to the size and composition of its balance sheet.

Several meeting participants noted that the expansion of the Federal Re-

serve's balance sheet along with continued growth of the money supply could help stabilize longer-run inflation expectations in the face of increasing economic slack and very low inflation in coming quarters. Over a longer horizon, however, the Federal Reserve will need to scale back its liquidity programs and the size of its balance sheet as the economy recovers, to avoid the risk of an unwanted increase in expected inflation and a buildup of inflation pressures. Participants observed that many of the Federal Reserve's liquidity programs are priced so that they will become unattractive to borrowers as conditions in financial markets improve; these programs will shrink automatically. In other cases, the Federal Reserve eventually may have to take a more active role in scaling back programs by adjusting their terms and conditions. More generally, the Federal Reserve may need to develop additional tools to manage the size of its balance sheet and the level of the federal funds rate as the economy recovers. As of late January, however, with financial conditions strained and the economic outlook weak, most participants agreed that the Committee should continue to focus on supporting the functioning of financial markets and stimulating the economy through purchases of agency debt and mortgage-backed securities and other measures—including the implementation of the TALF—that will keep the size of the Federal Reserve's balance sheet at a high level for some time.

Participants also discussed the advisability of extending the termination dates of a number of temporary liquidity facilities and reciprocal currency arrangements from April 30 to October 30, 2009. Participants generally were of the view that, despite modest improvements in some sectors, conditions in

credit markets overall remained severely disrupted. Most expressed support for extending the termination dates in order to reassure market participants that the facilities would remain in place as a backstop to private-sector credit arrangements while financial conditions remained strained; they were prepared to extend the facilities beyond year-end if conditions warrant. Participants also noted that extending the termination date of these liquidity facilities to October 30 would not rule out the possibility of closing particular facilities sooner if improvements in financial conditions were to indicate they were no longer needed to support credit markets and economic activity and to help preserve price stability.

Following the discussion, the Committee voted unanimously to extend the termination dates of existing reciprocal currency arrangements and the Term Securities Lending Facility (TSLF) to October 30, 2009. The Board of Governors then voted unanimously to extend the termination dates of the TSLF, the Primary Dealer Credit Facility (PDCF), the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF), the CPFF, and the Money Market Investor Funding Facility (MMIFF) to October 30, 2009.

#### Staff Review of the Economic and Financial Situation

The information reviewed at the meeting indicated a continued sharp contraction in real economic activity. Sales and starts of new homes remained on a steep downward trend, consumer spending continued its significant decline, the deterioration in business equipment investment intensified, and foreign demand weakened. Conditions in the labor market continued to dete-

riorate rapidly in December: Private payroll employment fell sharply, and the unemployment rate rose. Industrial production dropped more severely than in earlier months. Headline consumer prices fell in November and December, reflecting declines in consumer energy prices; core consumer prices were about flat in those months. While conditions in some financial markets showed limited improvement, extraordinary financial stresses remained apparent and credit conditions became still tighter for households and businesses.

Employment continued to contract. Private nonfarm payrolls fell sharply in December, with substantial losses over a wide range of industries. Indicators of job vacancies and hiring declined further, and layoffs continued to mount. The unemployment rate increased to 7.2 percent in December, the share of individuals working part time for economic reasons surged, and the labor force participation rate edged down for a second consecutive month.

In December, industrial production posted a sharp decline after falling substantially in November; the contraction was broad-based. The decrease in production of consumer goods reflected cutbacks in motor vehicle assemblies as well as in the output of consumer durable goods such as appliances, furniture, and carpeting. Output in high-tech sectors contracted in the fourth quarter, reflecting reduced production of semiconductors, communications equipment, and computers. The production of aircraft and parts recorded an increase in December after being held down in the autumn by a strike and by problems with some outsourced components. Available forward-looking indicators pointed to a further contraction in manufacturing output in coming months.

Real consumer spending appeared to decline sharply again in the fourth quarter, likely reflecting the combined effects of decreases in house and equity prices, a weakening labor market, and tight credit conditions. Real spending on goods excluding motor vehicles was estimated to have fallen noticeably in December, more than reversing an increase in November. Outlays on motor vehicles edged down in November and December following a sharper decline in October. Early indicators of spending in January pointed to continued soft demand. Readings on consumer sentiment remained at very low levels by historical standards through the end of 2008 and showed little improvement in early January.

Real residential construction contracted in November and December. Single-family housing starts dropped at a much faster rate in those months than they had in the first 10 months of the year. Multifamily starts also fell in those months, as did permit issuance for both categories. Housing demand remained very weak and, although the stock of unsold new single-family homes continued to move down in November, inventories of unsold homes remained elevated relative to the pace of sales. Sales of existing single-family homes dropped less than sales of new homes in November and turned up in December, but the relative strength in sales of existing homes appeared to be at least partly attributable to increases in foreclosure-related and other distressed sales. Although the interest rate on conforming 30-year fixed-rate mortgages declined markedly over the intermeeting period, the Senior Loan Officer Opinion Survey on Bank Lending Practices that was conducted in January indicated that banks had tightened lending standards on prime mortgage loans over the preceding three months.

The market for nonconforming loans remained severely impaired. Several indexes indicated that house prices continued to decline rapidly.

In the business sector, investment in equipment and software appeared to contract noticeably in the fourth quarter, with decreases registered in all major spending categories. In December, business purchases of autos and trucks moved down. Spending on high-tech capital goods appeared to decline in the fourth quarter. Orders and shipments for many types of equipment declined in October and November, and imports of capital goods dropped back in those months. Forward-looking indicators of investment in equipment and software pointed to likely further declines. Construction spending related to petroleum refining and power generation and distribution continued to increase briskly in the second half of 2008, responding to the surge in energy prices in the first half of that year, but real investment for many types of buildings stagnated or declined. Vacancy rates for office, retail, and industrial properties continued to move up in the fourth quarter, and the results of the January Senior Loan Officer Opinion Survey indicated that financing for new projects had become even more difficult to acquire.

Real nonfarm inventories (excluding motor vehicles) appeared to have fallen in the last few months of 2008. However, with sales declining even more sharply, the ratio of book-value inventories to sales increased in October and November.

The U.S. international trade deficit narrowed sharply in November, as a steep decline in imports outweighed a sizable drop in exports. Much of the fall in exports was attributable to a decline in exports of fuels, chemicals, and other industrial supplies, which in part reflected lower prices for these

goods. All other major categories of exports moved down as well. More than half of the decline in imports was due to a decrease in imports of oil that mostly reflected a dramatic decrease in prices but also some reduction in volume. All other major categories of imports also recorded sizable decreases.

Economic activity in the advanced foreign economies appeared to contract sharply in the fourth quarter, as the pace of job losses rose and measures of consumer spending on durable goods and business spending on investment goods showed declines. In Japan and Europe, trade and industrial production dropped steeply, and measures of consumer and business sentiment declined. In Canada, employment fell markedly in November and December after edging up in October. Incoming data suggested that economic activity in the emerging market economies slowed significantly in the fourth quarter, with real gross domestic product (GDP) plunging in several Asian economies and appearing little changed in China. Industrial production, trade, and measures of consumer sentiment registered declines across many other countries in both emerging Asia and Latin America.

In the United States, overall personal consumption expenditure (PCE) prices were estimated to have fallen in December, largely reflecting significant reductions in energy prices. Increases in consumer food prices began to moderate toward the end of 2008. Excluding food and energy prices, PCE prices appeared to have decelerated over the final three months of the year. The moderation in core PCE prices was widespread across categories of goods and services. After rising rapidly during the first nine months of the year, producer prices excluding food and energy fell sharply in the last three months of 2008. Measures of longer-

term inflation expectations edged up in early January, but remained lower than they had been in all but the last few weeks of 2008. In December, average hourly earnings moved up moderately.

The decisions of the Federal Open Market Committee (FOMC) at its December 15–16 meeting reportedly were more aggressive than investors had been expecting. Market participants reportedly were somewhat surprised both by the size of the reduction in the target federal funds rate, to a range of 0 to  $\frac{1}{4}$  percent, and by the statements that policy rates would likely remain low for some time and that the FOMC might engage in additional nontraditional policy actions such as the purchase of longer-term Treasury securities. Over the intermeeting period, investors marked down their expectations for the path of the federal funds rate, as measured by money market futures rates. The path first moved down immediately after the December FOMC meeting. Later in the period, the policy path tilted lower in response to weaker-than-expected economic data releases and increased concerns about the health of some financial institutions. In contrast, yields on medium- and longer-term nominal Treasury coupon securities increased, on net, over the period. Yields dropped sharply following the release of the FOMC statement, reportedly in part because investors interpreted it as suggesting that the Federal Reserve might increase its holdings of longer-term Treasury securities. Those price movements were more than reversed after the turn of the year, despite the worsening economic outlook, apparently reflecting a waning of year-end safe-haven demands and an anticipation of substantially increased Treasury debt issuance to finance larger-than-expected deficits associated with the new Administration's economic

stimulus plans. Although implied inflation compensation derived from Treasury Inflation-Protected Securities (TIPS) increased over the period, this increase reportedly was largely attributable to improved trading conditions in the TIPS market rather than upward revisions to inflation expectations.

Conditions in short-term funding markets showed some signs of easing, although significant stresses remained. The spreads of London interbank offered rates, or Libor, over comparable-maturity overnight index swap rates declined across most maturities over the period: The one-month spread fell to its lowest level since August 2007; the three-month spread also declined but remained elevated. Though depository institutions continued to make substantial use of the discount window, the amount of primary credit outstanding declined. Recent auctions of term funds under the Federal Reserve's Term Auction Facility were undersubscribed, although one auction following the year-end did see a relatively large number of bidders. The TSLF auctions were also undersubscribed. Use of the PDCF continued to fall significantly over the period.

Conditions in markets for repurchase agreements, or repos, also showed some signs of improvement. With the overnight Treasury general collateral repo rate near zero for much of the period, market participants reportedly were reluctant to lend Treasury collateral out of concern that counterparties might fail to return borrowed securities. However, the pace of delivery fails continued to run well below the high rates of September and October, reflecting in part reductions in transaction volumes as well as industry efforts to mitigate fails, including the January 5 recommendation of the Treasury Market Practices Group to implement a

financial charge on settlement fails. Conditions in the market for repo transactions backed by agency debt and mortgage-backed securities also improved somewhat, with average bid-asked spreads declining from high levels.

The market for Treasury coupon securities showed signs of increased impairment late in 2008, followed by some improvement early in 2009. Trading volumes fell to very low levels at the end of 2008, although they recovered a bit after the end of the year. Bid-asked spreads in the on-the-run market declined sharply at the beginning of 2009 after having increased at the end of 2008. The on-the-run premium for the 10-year nominal Treasury note was little changed at very elevated levels over the intermeeting period. On balance, the Treasury market remained much less liquid than normal.

Treasury- and government-only money market mutual funds (MMMFs) faced pressures stemming from very low short-term interest rates, and many such funds reportedly had waived management fees in an effort to retain investors. By contrast, prime MMMFs had net inflows over the intermeeting period. The MMIFF continued to register no activity despite changes that eased some of the terms of the program. Market participants nonetheless pointed to the MMIFF as a potentially important backup facility.

Conditions in the commercial paper (CP) market improved over the intermeeting period, likely reflecting recent measures taken in support of this market, greater demand from institutional investors, and the passing of year-end. Yields and spreads on 30-day A1/P1 nonfinancial and financial CP as well as on asset-backed commercial paper (ABCP) declined modestly and remained low. Yields and spreads on

30-day A2/P2 CP, which is not eligible for purchase under the CPFF, dropped sharply after the beginning of the year as some institutional investors reportedly reentered the market. The dollar amounts of outstanding unsecured financial and nonfinancial CP and ABCP rose slightly, on net, over the intermeeting period. This small change was more than accounted for by the increase in CP held by the CPFF. In contrast, credit extended under the AMLF declined over the intermeeting period.

Liquidity in the corporate bond market improved over the intermeeting period, with increases in trading volume for both investment- and speculative-grade bonds and declines in bid-asked spreads for speculative-grade bonds. Yields and spreads on corporate bonds decreased noticeably, particularly for speculative-grade firms, but spreads remained high by historical standards. Gross issuance of bonds by nonfinancial investment-grade companies remained solid, but issuance of speculative-grade bonds was limited. Conditions in the leveraged loan market remained very poor and issuance of leveraged syndicated loans was also very weak. Secondary market prices for leveraged loans stayed near record lows and the average bid-asked spread in that market continued to be very wide. The market for commercial mortgage-backed securities (CMBS) continued to show signs of strain, with the CMBX index—an index based on credit default swap (CDS) spreads on AAA-rated CMBS—widening during the intermeeting period from already very elevated levels.

Broad equity market indexes fell over the intermeeting period. After improving during the early part of the intermeeting period, market sentiment toward financial firms appeared to

worsen later in the period. Those firms substantially underperformed the broader market as a number of large and regional banks reported sizable losses stemming from weak trading results, asset write-downs, and additional increases in loan-loss provisions in anticipation of a further deterioration in credit quality. CDS spreads for U.S. bank holding companies rose sharply in mid-January to near their historical highs, and equity prices for such companies fell on net, ending the period below their November lows. A number of banking organizations issued debt through the FDIC's Temporary Liquidity Guarantee Program; spreads on such debt declined to levels close to those on agency debt. The Treasury's Troubled Asset Relief Program provided additional support to several banking institutions. In particular, to support financial market stability, the Treasury, the FDIC, and the Federal Reserve announced on January 16 that they had entered into an agreement with Bank of America to provide a package of guarantees, liquidity access, and capital. Developments at nonbank financial institutions were mixed. Equity prices of insurance companies edged down over the period, while their CDS spreads declined from extremely high levels. Hedge funds posted negative average returns in December.

Debt of the domestic nonfinancial sectors expanded at a somewhat faster pace in the fourth quarter of 2008 than in the first three quarters of the year. Borrowing by the federal government continued to surge, boosted by programs aimed at reducing financial market strains. Borrowing by state and local governments picked up as the conditions in municipal bond market improved somewhat. Household debt appeared to have contracted in the

fourth quarter, with both mortgage and consumer credit sharply curtailed due to weak household spending and tight credit conditions. Business debt expanded only modestly, given the high cost of borrowing, tighter lending terms, and the deterioration in the macroeconomic environment.

Commercial bank credit fell for the second consecutive month in December. Commercial and industrial loans declined in November and December, likely reflecting a combination of tighter credit supply and reduced loan demand as well as some unwinding of the surge during September and October. The Senior Loan Officer Opinion Survey conducted in January indicated that banks had continued to tighten credit standards and terms on all major loan categories over the past three months. Survey respondents also indicated that they had reduced the size of credit lines for a wide range of existing business and household customers.

M2 expanded at a considerably more rapid pace in December than in previous months. Flows into both demand deposits and savings deposits surged, possibly reflecting a reallocation of wealth towards assets that had government insurance or guarantees. Small time deposits also increased strongly, as banks continued to bid aggressively for these deposits. Currency continued to grow briskly, apparently boosted by solid foreign demand for U.S. banknotes. In December, retail MMMF balances increased modestly after a decline in November.

Conditions in foreign financial markets were relatively calm over the intermeeting period, although concerns about bank earnings and the stability of the global banking system led to widespread declines in equity prices later in the period. Governments in major foreign economies initiated several actions

aimed at strengthening the banking sector and easing credit market strains. Sovereign bond yields in the advanced foreign economies fell early in the period, likely reflecting declining inflation and expectations of lower policy rates, but moved up subsequently, perhaps in response to concerns about fiscal deficits. The dollar increased on balance against the currencies of major U.S. trading partners.

### Staff Economic Outlook

In the forecast prepared for the meeting, the staff revised down its outlook for economic activity in the first half of 2009, as the implications of weaker-than-anticipated economic data releases more than offset an upward revision to the staff's assumption of the amount of forthcoming fiscal stimulus. Conditions in the labor market deteriorated sharply over the intermeeting period. Industrial production declined steeply, and household and business spending fell more than anticipated. Sales and starts of new homes remained on a steep downtrend. Foreign demand also was weaker than expected. Financial markets continued to be strained overall, credit remained unusually tight for both households and businesses, and equity prices had fallen further. The staff's projections of real GDP growth in the second half of 2009 and in 2010 were revised upward slightly, reflecting greater monetary and fiscal stimulus as well as the effects of more moderate oil prices and long-term interest rates, but they continued to show no more than a gradual economic recovery. The staff again expected that unemployment would rise substantially through the beginning of 2010 before edging down over the remainder of that year. Forecasts for core and overall PCE inflation in 2009 and 2010 were little changed,

with growth in both core and overall PCE prices expected to be unusually low over the next few years in response to slack in resource utilization and relatively flat prices anticipated for many commodities and for imports.

### Meeting Participants' Views and Committee Policy Action

In conjunction with this FOMC meeting, all meeting participants—the four members of the Board of Governors and the presidents of the twelve Federal Reserve Banks—provided projections for economic growth, the unemployment rate, and consumer price inflation for each year from 2009 through 2011. To provide the public with information about their views of likely longer-term economic trends, and as additional context for the Committee's monetary policy discussions, participants agreed to collect and publish, on a quarterly basis, projections of the longer-run values to which they expect these three variables to converge. Participants' projections through 2011, and for the longer-run, are described in the Summary of Economic Projections that is attached as an addendum to these minutes.

In their discussion of the economic and financial situation and the outlook for the economy, participants agreed that the economy had weakened further going into 2009. The incoming data, as well as information received from contacts in the business and banking communities, indicated a sharp and widespread economic contraction both domestically and abroad, reflecting in large part the adverse effects of the intensification of the financial crisis and the interaction between deteriorating economic and financial conditions. Participants generally saw credit condi-

tions as extremely tight, with financial markets fragile and some parts of the banking sector under substantial stress. However, modest signs of improvement were evident in some financial markets—particularly those that were receiving support from Federal Reserve liquidity facilities and other government actions. Participants anticipated that a gradual recovery in U.S. economic activity would begin during the third or fourth quarter of this year as the economy begins to respond to fiscal stimulus, relatively low energy prices, and continuing efforts to stabilize the financial sector and increase the availability of credit. Several participants noted that firms' efforts to control inventories as sales declined had contributed to the rapid downturn in production and employment in recent quarters, but expected that the resulting absence of widespread inventory overhangs might spur a prompt pickup in production in many sectors later this year once sales begin to level out or turn up. Headline inflation would pick up some as the effects of previous declines in oil and other commodity prices wore off. But in an environment of considerable economic slack, little if any inflation pressure from energy or other import prices, and possible declines in inflation expectations, headline and core inflation were expected to be quite low for several years. Participants were, however, quite uncertain about the outlook. All but a few saw the risks to growth as tilted to the downside; in light of financial stresses and tight credit conditions, they saw a significant risk that the economic recovery would be both delayed and initially quite weak. In particular, most participants saw the renewed deterioration in the banking sector's financial condition as posing a significant downside risk to the economic outlook

absent additional initiatives to stabilize the banking system.

Participants noted that consumers were continuing to cut back expenditures in response to sharply declining employment, further declines in wealth, and tighter credit conditions. Some participants mentioned that business contacts had indicated that firms were reducing payrolls aggressively and also freezing wages and salaries, further restricting growth in personal income and thus probably damping consumer spending. Looking ahead, participants anticipated that tax cuts and some other elements of the proposed fiscal stimulus package would add to after-tax incomes and thus boost consumer spending, though the magnitude of the impetus was far from clear. For example, unless the cuts were clearly perceived to be permanent, the boost to consumer spending might prove short-lived, as was the case with the tax rebates distributed in the spring of 2008.

Participants saw no indication that the housing sector was beginning to stabilize. Though sales of existing homes appeared to have flattened out, a large fraction of those transactions seemed to have resulted from foreclosures or other forced sales; moreover, new home sales, housing starts, and permits all continued to decline steeply. Lower house prices and mortgage rates had increased housing affordability, but concerns that house prices may fall further appeared to be holding back potential buyers.

The pace of commercial construction also had slowed. A number of participants expressed concern that the commercial real estate sector could deteriorate sharply in the months ahead. They noted that a large number of commercial real estate mortgages will come due at a time when banks likely will still be facing balance-sheet constraints,

the ability to securitize commercial real estate mortgages may remain severely restricted, and vacancy rates in commercial properties could well be climbing. Some participants worried that the outcome could be an increase in defaults on commercial real estate mortgages and forced sales of commercial properties, which could push prices down further and generate additional losses on banks' commercial real estate loan portfolios. However, the commercial real estate sector had expanded more moderately during the recent expansion than during the expansion of the late 1980s, suggesting that the downturn in the current cycle could be milder than that seen in the early 1990s.

Participants also noted that other categories of business investment were contracting; they expected the rapid contraction to continue in coming quarters. Equipment investment had declined particularly sharply, reflecting weak sales, tighter credit, and substantial uncertainty about future economic conditions and government policies. Lower energy and commodity prices, while supporting consumer spending, had reduced investment in oil, gas, and mineral extraction. Outside of the agricultural sector, business contacts had reported sizable cutbacks in their planned capital expenditures for 2009.

State and local government budgets had come under significant pressure as the slowing economy led to declining revenues. Several participants noted that governments in their regions were responding by cutting spending rather than supplementing revenues. The fiscal stimulus bill, which was being considered by the Congress as the Committee met, would support state and local government spending as well as boost federal spending, helping to buoy demands for goods and services. Par-

ticipants generally thought that fiscal stimulus was a necessary and important complement to the steps the Federal Reserve and other agencies were taking, and that it would help foster economic recovery, but had questions about the details of the proposed legislation and the extent to which it would boost demands for and production of goods and services.

Participants indicated they had been surprised by the speed and magnitude of the slowdown in economic growth abroad and the resulting drop in demand for U.S. exports. It was noted that the surprisingly sharp decline in both U.S. exports and imports might also reflect tight credit conditions, including the reduced availability of trade credit. Moreover, participants did not expect foreign economies to rebound quickly, suggesting that net exports would not provide much support for U.S. economic activity in coming quarters.

Participants agreed that inflation pressures had diminished appreciably in recent quarters, and they expected significantly lower headline and core inflation during the next few years than during recent years. Indeed, most anticipated that inflation will slow for a time to rates somewhat lower than those they judge consistent with the dual goals of price stability and maximum employment, initially reflecting the recent declines in the prices of energy and other commodities and later responding to several years of substantial economic slack. Many participants noted some risk of a protracted period of excessively low inflation, especially if inflation expectations were to move down in response to lower actual inflation and increasing economic slack, and a few even saw some risk of deflation. Several others, however, anticipated that longer-run inflation expecta-

tions would remain well anchored, supported in part by the Federal Reserve's aggressive expansion of its balance sheet and the resulting growth of the monetary base, and therefore thought it unlikely that inflation would decline below levels they saw as consistent with the dual goals of price stability and maximum employment. Moreover, some noted a risk that expected inflation might actually increase to an undesirably high level if the public does not understand that the Federal Reserve's liquidity facilities will be wound down and its balance sheet will shrink as economic and financial conditions improve.

Several participants indicated that they thought the FOMC should explore establishing quantitative guidelines or targets for a monetary aggregate, perhaps the growth rate of the monetary base or M2; in their view such guidelines would provide useful information to the public and help anchor inflation expectations. Others were skeptical that a single quantitative measure could adequately convey the Federal Reserve's current approach to monetary policy because the stimulative effect of the Federal Reserve's liquidity-providing and asset-purchase programs depends not only on the scale but also on the mix of lending programs and securities purchases. In addition, a few participants noted that the sizes of some Federal Reserve liquidity programs are determined by banks' and market participants' need to use those programs and thus will tend to increase when financial conditions worsen and shrink when financial conditions improve; the size and composition of the Federal Reserve's balance sheet needs to be able to adjust in response.

In their discussion of monetary policy for the intermeeting period, Committee members agreed that keeping

the target range for the federal funds rate at 0 to ¼ percent would be appropriate. They also agreed to continue using liquidity and asset-purchase programs to support the functioning of financial markets and stimulate the economy. Members further agreed that these programs were likely to maintain the size of the Federal Reserve's balance sheet at a high level. Members noted that it may be necessary to expand these programs, but had somewhat different views about the best way of doing so. One member expressed the view that it would be best to expand holdings of U.S. Treasury securities rather than to expand targeted liquidity programs. All other members indicated that they thought it appropriate to continue the program of purchasing agency debt and mortgage-backed securities. Several expressed a willingness to expand the size and duration of those purchases in the near future; others stood ready to expand the program if conditions warrant but noted that the program had only recently been implemented and preferred to wait for more information about economic and financial developments and the program's effects before considering an expansion.

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

"The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ¼ percent. The Committee directs the Desk to purchase GSE debt and agency-

guaranteed MBS during the intermeeting period with the aim of providing support to the mortgage and housing markets. The timing and pace of these purchases should depend on conditions in the markets for such securities and on a broader assessment of conditions in primary mortgage markets and the housing sector. By the end of the second quarter of this year, the Desk is expected to purchase up to \$100 billion in housing-related GSE debt and up to \$500 billion in agency-guaranteed MBS. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability."

The vote encompassed approval of the following statement to be released at 2:15 p.m.:

"The Federal Open Market Committee decided today to keep its target range for the federal funds rate at 0 to ¼ percent. The Committee continues to anticipate that economic conditions are likely to warrant exceptionally low levels of the federal funds rate for some time.

Information received since the Committee met in December suggests that the economy has weakened further. Industrial production, housing starts, and employment have continued to decline steeply, as consumers and businesses have cut back spending. Furthermore, global demand appears to be slowing significantly. Conditions in some financial markets have improved, in part reflecting government efforts to provide liquidity and strengthen financial institutions; nevertheless, credit conditions for households and firms remain extremely tight. The Committee anticipates that a gradual recovery in economic activity will begin later this year, but the downside risks to that outlook are significant.

In light of the declines in the prices of energy and other commodities in recent months and the prospects for considerable economic slack, the Committee expects that inflation pressures will remain subdued in coming quarters. Moreover, the Committee sees some risk that inflation could persist for a time below rates that best foster eco-

nomie growth and price stability in the longer term.

The Federal Reserve will employ all available tools to promote the resumption of sustainable economic growth and to preserve price stability. The focus of the Committee's policy is to support the functioning of financial markets and stimulate the economy through open market operations and other measures that are likely to keep the size of the Federal Reserve's balance sheet at a high level. The Federal Reserve continues to purchase large quantities of agency debt and mortgage-backed securities to provide support to the mortgage and housing markets, and it stands ready to expand the quantity of such purchases and the duration of the purchase program as conditions warrant. The Committee also is prepared to purchase longer-term Treasury securities if evolving circumstances indicate that such transactions would be particularly effective in improving conditions in private credit markets. The Federal Reserve will be implementing the Term Asset-Backed Securities Loan Facility to facilitate the extension of credit to households and small businesses. The Committee will continue to monitor carefully the size and composition of the Federal Reserve's balance sheet in light of evolving financial market developments and to assess whether expansions of or modifications to lending facilities would serve to further support credit markets and economic activity and help to preserve price stability."

Voting for this action: Messrs. Bernanke and Dudley, Ms. Duke, Messrs. Evans, Kohn, Lockhart, and Warsh, and Ms. Yellen.

Voting against this action: Mr. Lacker.

Mr. Lacker dissented because he preferred to expand the monetary base by purchasing U.S. Treasury securities rather than through targeted credit programs. Mr. Lacker was fully supportive of the significant expansion of the Federal Reserve's balance sheet and the intention to maintain the size of the balance sheet at a high level. However, while he recognized that spreads were elevated and volumes low in many

credit markets, he saw no evidence of market failures that made targeted credit programs, including the forthcoming TALF, necessary. Moreover, he was concerned that such programs channel credit away from other worthy borrowers, amount to fiscal policy, would exacerbate moral hazard, and might be hard to unwind. He supported, instead, maintaining the size of the balance sheet at a high level through purchases of U.S. Treasury securities. In his view, such purchases would limit distortions to private credit flows, minimize adverse incentive effects, and maintain a clear distinction between monetary and fiscal policies.

It was agreed that the next meeting of the Committee would be held on Tuesday, March 17, 2009. The meeting adjourned at 1:05 p.m. on January 28, 2009.

#### Notation Vote

By notation vote completed on January 5, 2009, the Committee unanimously approved the minutes of the FOMC meeting held on December 15–16, 2008.

#### Conference Call

On January 16, 2009, the Committee met by conference call to discuss issues associated with establishing an explicit numerical objective for inflation. The Committee made no decisions on whether to establish such an objective. Most meeting participants expressed the view that an explicit numerical objective for longer-run inflation would be fully consistent with the Federal Reserve's dual mandate of promoting maximum employment and price stability and would not impede fostering the stability of the financial system. A number of participants emphasized that

additional clarity on the longer-run inflation goal would further enhance Federal Reserve communications but would not involve any substantive change in monetary policy strategy. Many participants agreed that establishing and maintaining a transparent numerical inflation objective would be helpful—at least to some degree—in anchoring inflation expectations and thereby improve the overall effectiveness of monetary policy; others judged that the potential benefits of an explicit numerical inflation objective might be largely attained by extending the horizon of their regular projections for economic activity and inflation. Some indicated that the establishment of a numerical inflation objective could be particularly helpful under present circumstances in forestalling an unwelcome decline in longer-run inflation expectations—and hence in contributing to economic recovery—while also assuring the public that actions taken to counter economic weakness will not lead to high inflation over the longer-run. However, several participants expressed concern that an initiative to clarify the Committee's longer-run inflation objective could be confusing to the public in the current context of economic weakness and financial market strains. Participants also discussed several technical issues related to the implementation and communication of an explicit numerical inflation objective. They expressed a range of views about whether such an objective should be expressed in terms of the consumer price index or the PCE price deflator, the merits of a point value versus a range, the length of time over which policy would aim to achieve any such objective, and the frequency with which the Committee would reevaluate this framework. At this meeting, the staff also briefed the Committee on the

coordinated set of measures for supporting Bank of America that had been taken by the Treasury, the FDIC, and the Federal Reserve earlier that day.

Brian F. Madigan  
Secretary

#### Addendum: Summary of Economic Projections

In conjunction with the January 27–28, 2009 FOMC meeting, the members of the Board of Governors and the presidents of the Federal Reserve Banks, all of whom participate in deliberations of the FOMC, provided projections for economic growth, unemployment, and inflation in 2009, 2010, 2011, and over the longer run. Projections were based on information available through the conclusion of the meeting, on each participant’s assumptions regarding a range of factors likely to affect economic outcomes, and on his or her assessment of appropriate monetary pol-

icy. “Appropriate monetary policy” is defined as the future policy that, based on current information, is deemed most likely to foster outcomes for economic activity and inflation that best satisfy the participant’s interpretation of the Federal Reserve’s dual objectives of maximum employment and price stability. Longer-run projections represent each participant’s assessment of the rate to which each variable would be expected to converge over time under appropriate monetary policy and in the absence of further shocks.

FOMC participants viewed the outlook for economic activity and inflation as having weakened significantly since last October, when their last projections were made. As indicated in Table 1 and depicted in Figure 1, participants projected that real GDP would contract this year, that the unemployment rate would increase substantially, and that consumer price inflation would be significantly lower than in recent years.

Table 1. Economic projections of Federal Reserve Governors and Reserve Bank presidents, January 2009

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

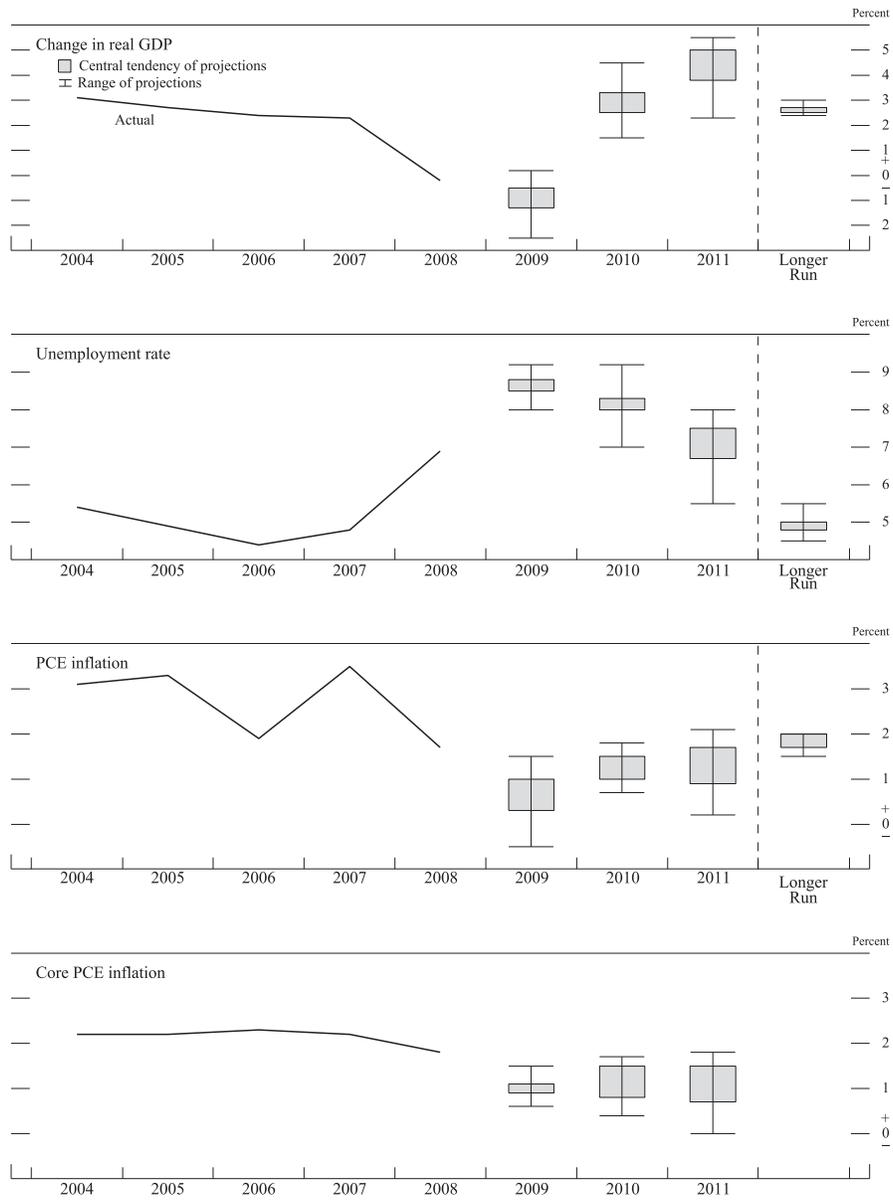
NOTE: Projections of change in real gross domestic product (GDP) and of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption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

1. The central tendency excludes the three highest and three lowest projections for each variable in each year.

2. The range for a variable in a given year includes all participants’ projections, from lowest to highest, for that variable in that year.

3. Longer-run projections for core PCE inflation are not collected.

Figure 1. Central tendencies and ranges of economic projections, 2009–11 and over the longer run



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

Given the strength of the forces currently weighing on the economy, participants generally expected that the recovery would be unusually gradual and prolonged: All participants anticipated that unemployment would remain substantially above its longer-run sustainable rate at the end of 2011, even absent further economic shocks; a few indicated that more than five to six years would be needed for the economy to converge to a longer-run path characterized by sustainable rates of output growth and unemployment and by an appropriate rate of inflation. Participants generally judged that their projections for both economic activity and inflation were subject to a degree of uncertainty exceeding historical norms. Nearly all participants viewed the risks to the growth outlook as skewed to the downside, and all participants saw the risks to the inflation outlook as either balanced or tilted to the downside.

#### *The Outlook*

Participants' projections for the change in real GDP in 2009 had a central tendency of -1.3 to -0.5 percent, compared with the central tendency of -0.2 to 1.1 percent for their projections last October. In explaining these downward revisions, participants referred to the further intensification of the financial crisis and its effect on credit and wealth, the waning of consumer and business confidence, the marked deceleration in global economic activity, and the weakness of incoming data on spending and employment. Participants anticipated a broad-based decline in aggregate output during the first half of this year; they noted that consumer spending would likely be damped by the deterioration in labor markets, the tightness of credit conditions, the con-

tinuing decline in house prices, and the recent sharp reduction in stock market wealth, and they saw reductions in consumer demand contributing to further weakness in business investment. However, participants expected that the economy would begin to recover—albeit gradually—during the second half of the year, mainly reflecting the effects of fiscal stimulus and of Federal Reserve measures providing support to credit markets.

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

Participants anticipated that labor market conditions would deteriorate substantially further over the course of this year, and nearly all expected that unemployment would still be well above its longer-run sustainable rate at the end of 2011. Participants' projections for the average unemployment rate during the fourth quarter of 2009 had a central tendency of 8.5 to 8.8 percent, markedly higher than last December's actual unemployment rate of 7.2 percent the latest available figure at the time of the January FOMC meet-

ing. Nearly all participants' projections were more than a percentage point higher than their previous forecasts made last October, reflecting the sharp rise in actual unemployment that occurred during the final months of 2008 as well as participants' weaker outlook for economic activity this year. Most participants anticipated that output growth in 2010 would not be substantially above its longer-run trend rate and hence that unemployment would decline only modestly next year. With economic activity and job creation generally projected to accelerate in 2011, participants anticipated that joblessness would decline more appreciably that year, as is evident from the central tendency of 6.7 to 7.5 percent for their unemployment rate projections. Participants expected that the unemployment rate would decline further after 2011, and most saw it settling in at a rate of 4.8 to 5.0 percent over time.

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

Looking beyond this year, participants' projections for total PCE inflation had a central tendency of 1.0 to 1.5 percent for 2010, 0.9 to 1.7 percent for 2011, and 1.7 to 2.0 percent over the longer run. Participants' longer-run

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

#### *Risks to the Outlook*

Participants continued to view uncertainty about the outlook for economic activity as higher than normal.<sup>5</sup> The risks to their projections for real GDP growth were judged as being skewed to the downside and the associated risks to their projections for the unemployment rate were tilted to the upside. Par-

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

Table 2. Average historical projection error ranges  
Percentage points

Variable	2009	2010	2011
Change in real GDP <sup>1</sup> ...	±1.2	±1.4	±1.4
Unemployment rate <sup>1</sup> ...	±0.5	±0.8	±1.0
Total consumer prices <sup>2</sup> ..	±0.9	±1.0	±0.9

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

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

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

Participants highlighted the considerable degree of uncertainty about the future course of the financial crisis and its impact on the real economy; for example, rising unemployment and weaker growth could exacerbate delinquencies on household and business loans, leading to higher losses for financial firms and so to a further tightening of credit conditions that would in turn put further downward pressure on spending to a greater degree than currently foreseen. In addition, some participants noted that a substantial degree of uncertainty was associated with gauging the stimulative effects of nontraditional monetary policy tools that are now being employed given that conventional policy easing was limited by the zero lower bound on nominal interest rates. Others referred to uncertainties regard-

ing the size, composition, and effectiveness of the fiscal stimulus package—which was still under consideration at the time of the FOMC meeting—and of further measures to stabilize the banking system.

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

#### *Diversity of Views*

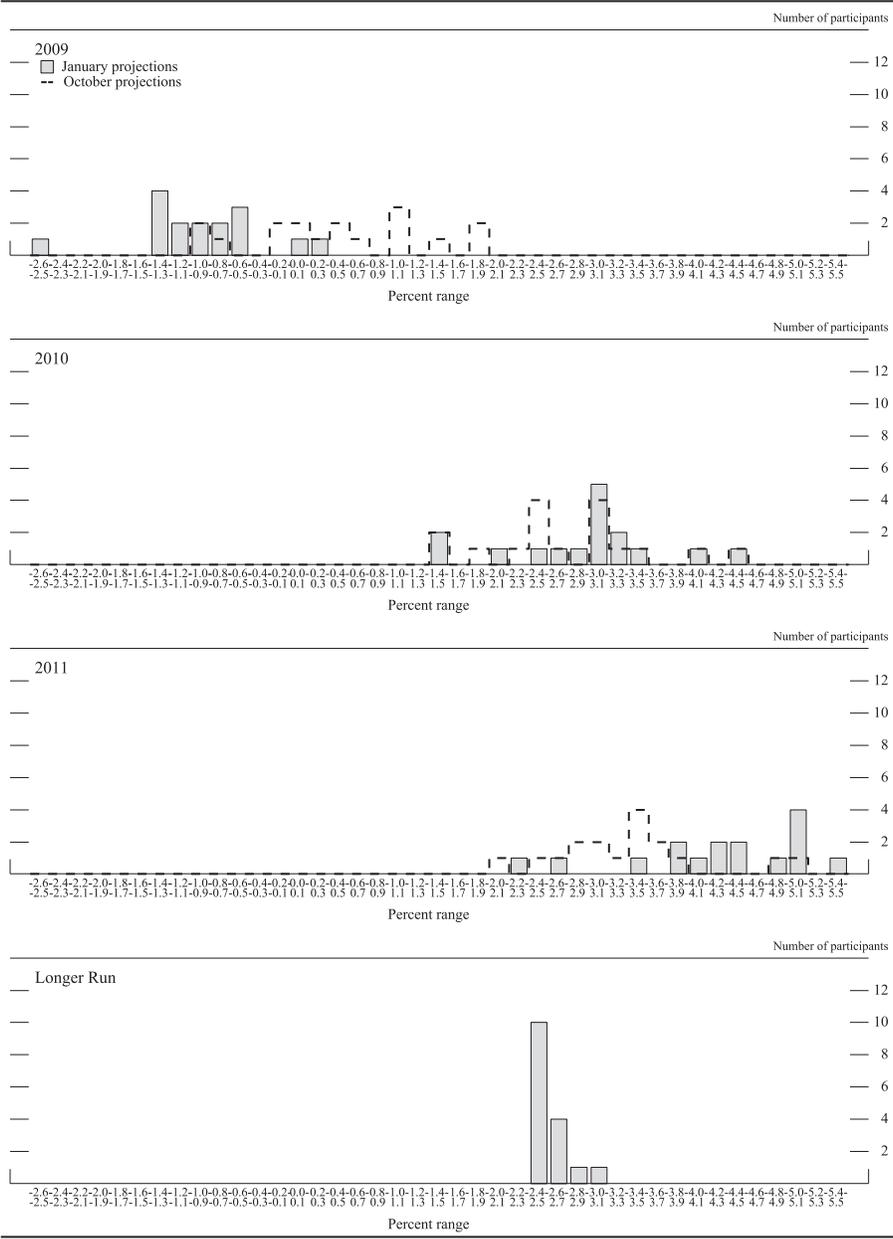
Figures 2.A and 2.B provide further details on the diversity of participants’ views regarding likely outcomes for real GDP growth and the unemployment rate, respectively. For 2009 to 2011, the dispersion in participants’ projections for each variable was roughly the same as for their projections last October. This dispersion

mainly indicated the diversity of participants' assessments regarding the stimulative effects of fiscal policy, the pace of recovery in financial markets, and the evolution of households' desired saving rates. The dispersion in participants' longer-run projections reflected differences in their estimates regarding the sustainable rates of output growth and unemployment to which the economy would converge under appropriate policy and in the absence of any further shocks.

Figures 2.C and 2.D provide corresponding information regarding the diversity of participants' views regarding the inflation outlook. The dispersion in participants' projections for total PCE inflation in 2009 was substantially greater than for their projections made last October, due to increased diversity of participants' views regarding the near-term evolution of prices of energy and raw materials and the extent to which changes in those prices would be likely to pass through into overall

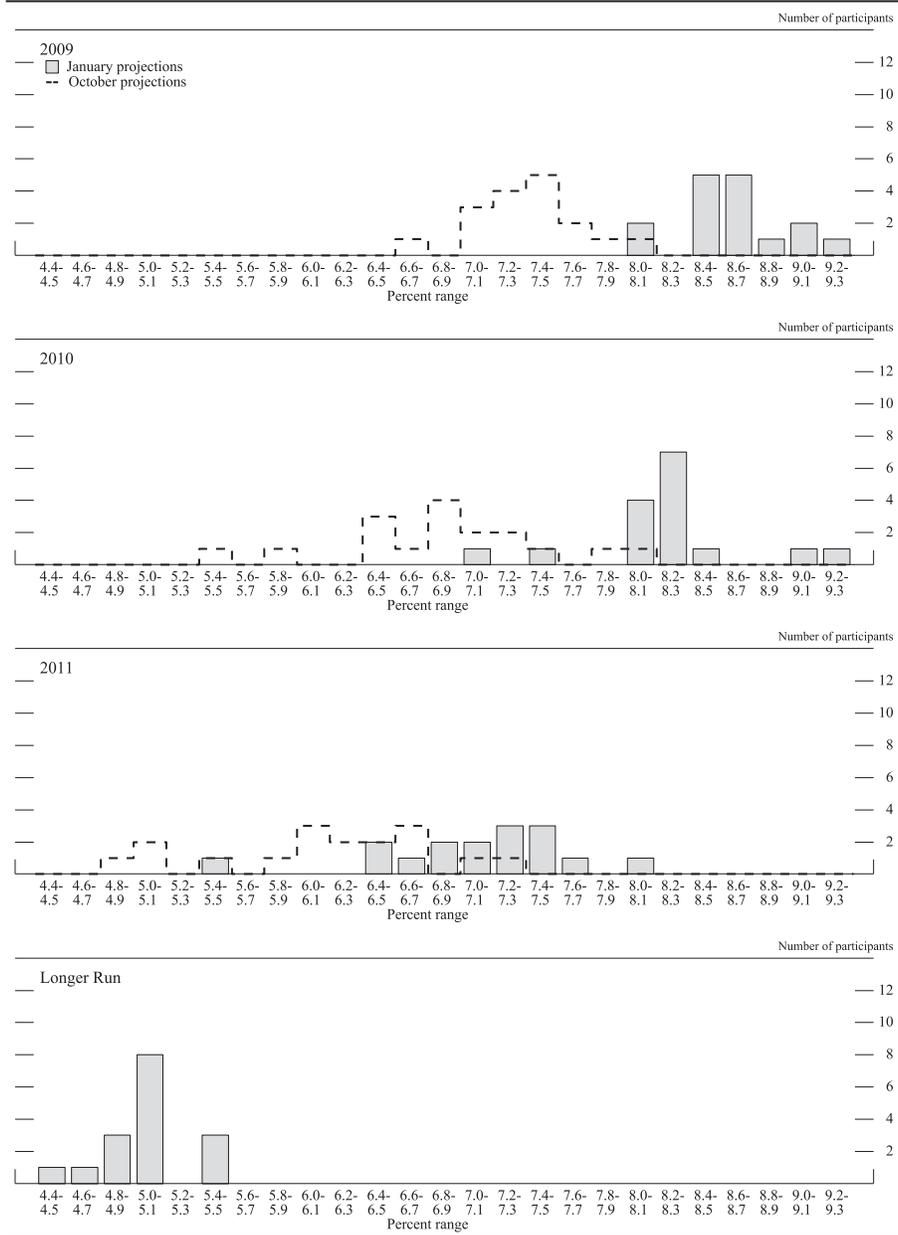
inflation. The dispersion in participants' projections for core PCE inflation in 2009 was noticeably lower than last October, but the dispersion in their projections for core inflation in 2010 and 2011 was markedly wider, reflecting varying assessments about the timing and pace of economic recovery, the sensitivity of inflation to slack in resource utilization, the prevalence of downward nominal wage rigidity, and the likelihood that inflation expectations will remain firmly anchored. A few participants anticipated that inflation in 2011 would be close to their longer-run projections. However, most participants' projections for total PCE inflation in 2011 were below their longer-run projections, primarily reflecting the anticipated effects of substantial slack over the next three years; this inflation gap was about  $\frac{1}{4}$  to  $\frac{1}{2}$  percentage point for some participants but exceeded a full percentage point for others.

Figure 2.A. Distribution of participants' projections for the change in real GDP, 2009–11 and over the longer run



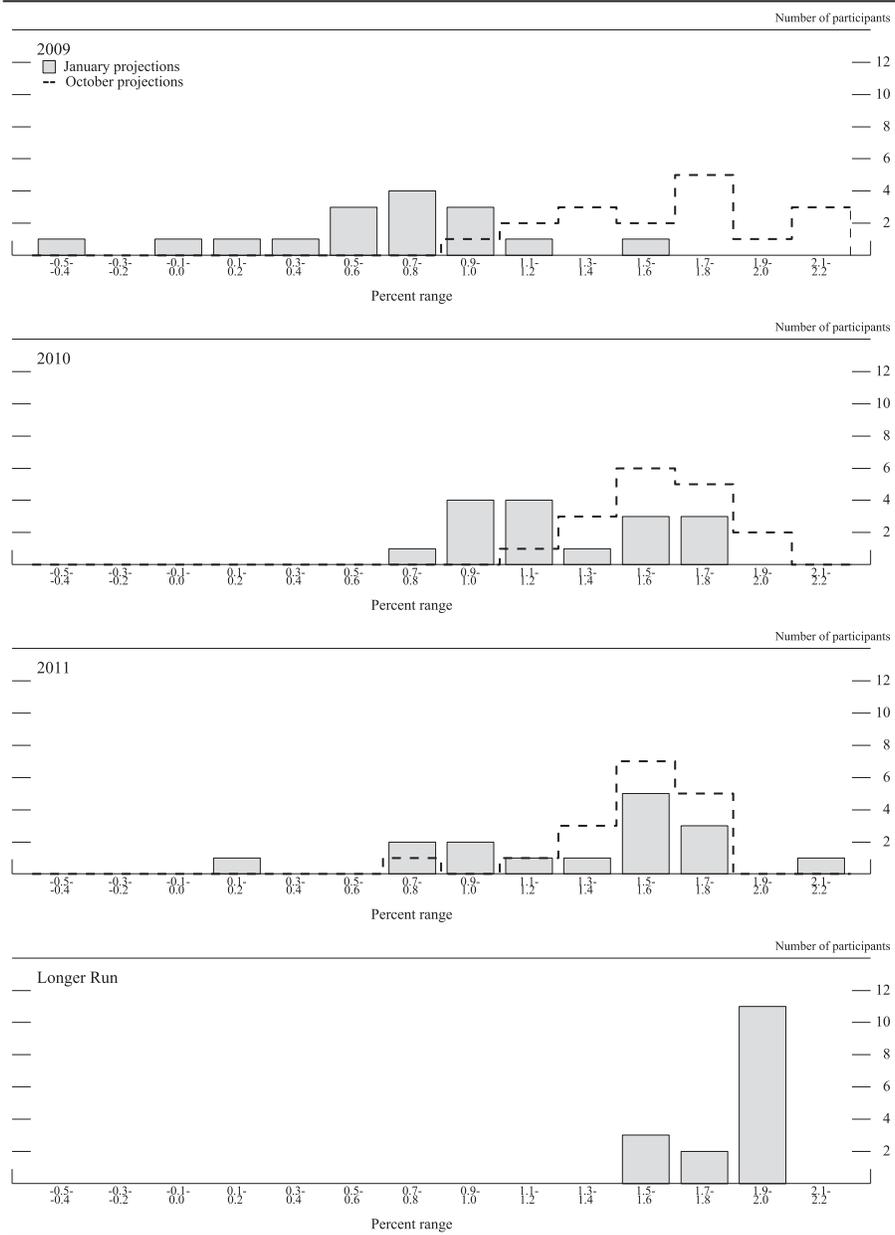
NOTE: Definitions of variables are in the general note to table 1.

Figure 2.B. Distribution of participants' projections for the unemployment rate, 2009–11 and over the longer run



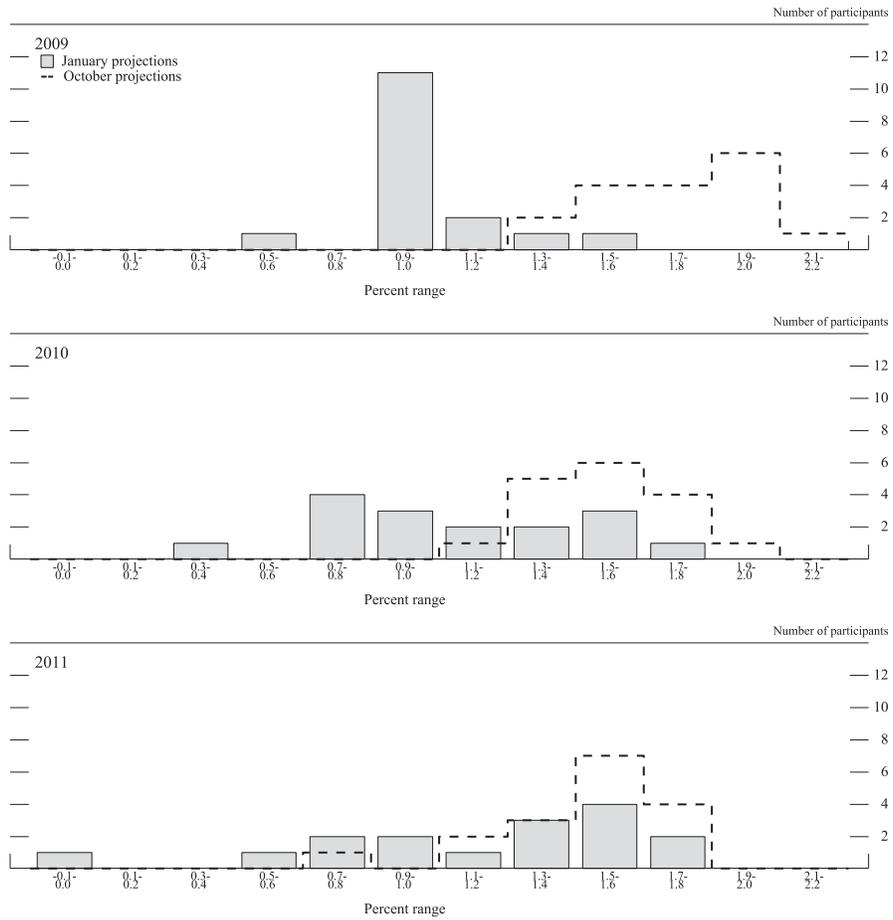
NOTE: Definitions of variables are in the general note to table 1.

Figure 2.C. Distribution of participants' projections for PCE inflation, 2009–11 and over the longer run



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

Figure 2.D. Distribution of participants' projections for core PCE inflation, 2009–11



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

## Forecast Uncertainty

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

Table 2 summarizes the average historical accuracy of a range of forecasts, including those reported in past Monetary Policy Reports and those prepared by Federal Reserve Board staff in advance of meetings of the Federal Open Market Committee. The projection error ranges shown in the table illustrate the considerable uncertainty associated with economic forecasts. For example, suppose a participant projects that real GDP and total consumer prices will rise steadily at annual rates of, respectively, 3 percent and 2 percent. If the uncertainty attending those projections is

similar to that experienced in the past and the risks around the projections are broadly balanced, the numbers reported in table 2 would imply a probability of about 70 percent that actual GDP would expand between 1.8 percent to 4.2 percent in the current year and 1.6 percent to 4.4 percent in the second and third years. The corresponding 70 percent confidence intervals for overall inflation would be 1.1 percent to 2.9 percent in the current year, 1.0 percent to 3.0 percent in the second year, and 1.1 percent to 2.9 percent in the third year.

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

**Meeting Held on  
March 17–18, 2009**

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 17, 2009, at 2:00 p.m. and continued on Wednesday, March 18, 2009, at 9:00 a.m.

*Present:*

Mr. Bernanke, Chairman  
Mr. Dudley, Vice Chairman  
Ms. Duke  
Mr. Evans  
Mr. Kohn  
Mr. Lacker  
Mr. Lockhart  
Mr. Tarullo  
Mr. Warsh  
Ms. Yellen

Mr. Bullard, Ms. Cumming, Mr. Hoenig, Ms. Pianalto, and Mr. Rosengren, Alternate Members of the Federal Open Market Committee

Messrs. Fisher, Plosser, and Stern, Presidents of the Federal Reserve Banks of Dallas, Philadelphia, and Minneapolis, respectively

Mr. Madigan, Secretary and Economist  
Ms. Danker, Deputy Secretary  
Mr. Luecke, Assistant Secretary  
Mr. Skidmore, Assistant Secretary  
Ms. Smith, Assistant Secretary  
Mr. Alvarez, General Counsel  
Mr. Baxter, Deputy General Counsel  
Mr. Sheets, Economist  
Mr. Stockton, Economist

Messrs. Altig, Clouse, Connors, Kamin, Slifman, Sullivan, Weinberg, Wilcox, and Williams, Associate Economists

Ms. Mosser, Temporary Manager, System Open Market Account

Ms. Johnson, Secretary of the Board, Office of the Secretary, Board of Governors

Mr. Frierson, Deputy Secretary, Office of the Secretary, Board of Governors

Mr. Struckmeyer, Deputy Staff Director, Office of the Staff Director for Management, Board of Governors

Ms. Bailey and Mr. English, Deputy Directors, Divisions of Banking Supervision and Regulation and Monetary Affairs, respectively, Board of Governors

Mr. Blanchard, Assistant to the Board, Office of Board Members, Board of Governors

Messrs. Leahy, Nelson, Reifschneider, and Wascher,<sup>6</sup> Associate Directors, Divisions of International Finance, Monetary Affairs, Research and Statistics, and Research and Statistics, respectively, Board of Governors

Mr. Gagnon, Visiting Associate Director, Division of Monetary Affairs, Board of Governors

Mr. Oliner, Senior Adviser, Division of Research and Statistics, Board of Governors

Mr. Lewis, Economist, Division of Monetary Affairs, Board of Governors

Ms. Beattie,<sup>6</sup> Assistant to the Secretary, Office of the Secretary, Board of Governors

Ms. Low, Open Market Secretariat Specialist, Division of Monetary Affairs, Board of Governors

Mr. Williams, Records Management Analyst, Division of Monetary Affairs, Board of Governors

Mr. Sapenaro, First Vice President, Federal Reserve Bank of St. Louis

Messrs. Fuhrer and Rosenblum, Executive Vice Presidents, Federal Reserve Banks of Boston and Dallas, respectively

<sup>6</sup> Attended Tuesday's session only.

Messrs. Hilton and Schweitzer, Senior Vice Presidents, Federal Reserve Banks of New York and Cleveland, respectively

Messrs. Clark, Gavin, Klitgaard, and Yi, Vice Presidents, Federal Reserve Banks of Kansas City, St. Louis, New York, and Philadelphia, respectively

Mr. Weber, Senior Research Officer, Federal Reserve Bank of Minneapolis

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

The Manager of the System Open Market Account reported on recent developments in domestic and foreign financial markets. The Manager also reported on System open market operations in Treasury securities and in agency debt and agency mortgage-backed securities (MBS) during the period since the Committee's January 27–28 meeting. By unanimous vote, the Committee ratified those transactions. There were no open market operations in foreign currencies for the System's account during the period since the Committee's January 27–28 meeting.

Staff reported on recent developments in System liquidity programs and on changes in the System's balance sheet. As of March 12, the System's total assets and liabilities were about \$2 trillion, close to the level of that just before the January 27–28 meeting. Holdings of agency debt and agency MBS had increased, while foreign central bank drawings on reciprocal currency arrangements had declined. Credit extended by the Commercial Paper Funding Facility also had declined, as 90-day paper pur-

chased in the early weeks of the program matured and a large portion was not renewed through the facility. Primary credit extended by the Federal Reserve was about unchanged, and credit outstanding under the Term Auction Facility increased somewhat over the period as the February auctions experienced higher demand than previous auctions. In contrast, credit extended under the Primary Dealer Credit Facility declined somewhat over the intermeeting period, and credit extended under the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility edged down.

Most meeting participants interpreted the evidence as indicating that credit markets still were not working well, and that the Federal Reserve's lending programs, asset purchases, and currency swaps were providing much-needed support to economic activity by reducing dislocations in financial markets, lowering the cost of credit, and facilitating the flow of credit to businesses and households. Participants discussed the prospective further increase in the Federal Reserve's balance sheet, with a focus on the Term Asset-Backed Securities Loan Facility (TALF) and open market purchases of longer-term assets.

The launch of the TALF was announced on March 3. In the initial phase of the program, the Federal Reserve offered to provide up to \$200 billion of three-year loans, on a nonrecourse basis, against AAA-rated asset-backed securities (ABS) backed by newly and recently originated auto loans, credit card loans, student loans, loans guaranteed by the Small Business Administration, and, potentially, certain other closely related types of ABS. The Federal Reserve and the Treasury had previously announced their expectation that the program would be expanded to

accept other types of ABS. The demand for TALF funding appeared likely to be modest initially, and some participants saw a risk that private firms might be reluctant to borrow from the TALF out of concern about potential future changes in government policies that could affect TALF borrowers. However, other participants anticipated that TALF loans would increase over time as financial market institutions became more familiar with the program. Most participants supported the expansion of the lending capacity of the TALF, subject to receiving additional capital from the Treasury, and the inclusion of additional categories of recently issued, highly rated ABS as acceptable collateral. However, some participants expressed concern about the risks that might arise from the possible extension of the TALF to include older and lower-quality assets, noting, in particular, the greater uncertainty over the value of such assets.

The Federal Reserve's programs to buy direct debt obligations of the federal housing agencies and agency-guaranteed MBS were on track to reach their initial targets of \$100 billion and \$500 billion, respectively, by the end of June. Participants agreed that the asset purchase programs were helping to reduce mortgage interest rates and improve market functioning, thereby providing support to economic activity. Some participants stated a preference for communicating the Committee's intention regarding such purchases in terms of the growth rate of Federal Reserve holdings rather than a dollar target for total purchases. However, others noted that the pace of MBS issuance was likely to be especially brisk over the next few months, in part because of the Administration's new Making Home Affordable program, and observed that it could be ad-

vantageous to be able to front-load purchases to accommodate the pattern of mortgage refinancing. Participants also discussed the relative merits of increasing the Federal Reserve's purchases of agency MBS versus initiating purchases of longer-term Treasury securities. Some participants remarked that experience suggested that purchases of Treasury securities would have effects across a variety of long-term debt markets and should ease financial conditions generally while minimizing the Federal Reserve's influence on the allocation of credit. However, purchases of agency securities could have a more direct effect on mortgage rates, thus providing greater benefits to the housing sector, and on private borrowing rates more generally. Also, some participants were concerned that Federal Reserve purchases of longer-term Treasury securities might be seen as an indication that the Federal Reserve was responding to a fiscal objective rather than its statutory mandate, thus reducing the Federal Reserve's credibility regarding long-run price stability. Most participants, however, saw this risk as low so long as the Federal Reserve was clear about the importance of its long-term price stability objective and demonstrated a commitment to take the necessary steps in the future to achieve its objectives.

In light of the economic and financial conditions, meeting participants viewed the expansion of the Federal Reserve's balance sheet that might be associated with these and other programs as appropriate in order to foster the dual objectives of maximum employment and price stability. It was noted that the Treasury and the Federal Reserve will seek legislation to give the Federal Reserve tools in addition to interest on reserves to manage the federal funds rate while providing the

funding necessary for the TALF and other key credit-easing programs.

The Committee also took up a proposal to augment the existing network of central bank liquidity swap lines by adding several temporary swap lines that could provide foreign currency liquidity to U.S. institutions, analogous to the arrangements that currently provide U.S. dollar liquidity abroad. There was no evidence that these institutions were encountering difficulty in meeting foreign currency obligations at this time, but these facilities would be available should pressures develop in the future. The Committee unanimously approved the following resolution:

“The Federal Open Market Committee authorizes the Federal Reserve Bank of New York to enter into additional temporary reciprocal currency arrangements (swap lines) with the Bank of England, the European Central Bank (ECB), the Bank of Japan, and the Swiss National Bank to support the provision of liquidity in British pounds, euros, Japanese yen, and Swiss francs. The swap arrangements with each foreign central bank shall be subject to the following limits: an aggregate amount of up to £30 billion with the Bank of England; an aggregate amount of up to €80 billion with the ECB; an aggregate amount of up to ¥10 trillion with the Bank of Japan; and an aggregate amount of up to SwF 40 billion with the Swiss National Bank. These arrangements shall terminate no later than October 30, 2009, unless extended by mutual agreement of the Committee and the respective foreign central banks. The Committee also authorizes the Federal Reserve Bank of New York to provide the foreign currencies obtained under the arrangements to U.S. financial institutions by means of swap transactions to assist such institutions in meeting short-term liquidity needs in their foreign operations. Requests for drawings on the central bank swap lines and distribution of the foreign currency proceeds to U.S. financial institutions shall be initiated by the appropriate Reserve Bank and approved by the Foreign Currency Subcommittee.”

### Staff Review of the Economic and Financial Situation

The information reviewed at the March 17–18 meeting indicated that economic activity had fallen sharply in recent months. The contraction was reflected in widespread declines in payroll employment and industrial production. Consumer spending appeared to remain at a low level after changing little, on balance, in recent months. The housing market weakened further, and nonresidential construction fell. Business spending on equipment and software continued to fall across a broad range of categories. Despite the cutbacks in production, inventory overhangs appeared to worsen in a number of areas. Both headline and core consumer prices edged up in January and February.

Labor market conditions continued to deteriorate. Private payroll employment dropped considerably over the three months ending in February. Employment losses remained widespread across industries, with the notable exception of health care. Meanwhile, the average workweek of production and nonsupervisory workers on private payrolls continued to be low in February, and the number of aggregate hours worked for this group was markedly below the fourth-quarter average. The civilian unemployment rate climbed  $\frac{1}{2}$  percentage point in February, to 8.1 percent. The labor force participation rate declined in January and February, on balance, likely in response to weakened labor demand. The four-week moving average of initial claims for unemployment insurance continued to move up through early March, and the level of insured unemployed rose further.

Industrial production fell in January and February, with cutbacks again

widespread, and capacity utilization in manufacturing declined to a very low level. Although production of light motor vehicles turned up in February, it remained well below the pace of the fourth quarter as manufacturers responded to the significant deterioration in demand over the past few months. The output of high-tech products declined as production of computers and semiconductors extended the sharp declines that began in the fourth quarter of 2008. The production of other consumer durables and business equipment weakened further, and broad indicators of near-term manufacturing activity suggested that factory output would continue to contract over the next few months.

The available data suggested that real consumer spending held steady, on balance, in the first two months of this year after having fallen sharply over the second half of last year. Real spending on goods excluding motor vehicles was estimated to have edged up, on balance, in January and February. In contrast, real outlays on motor vehicles contracted further in February after a decline in January. The financial strain on households intensified over the previous several months; by the end of the fourth quarter, household net worth for the first time since 1995 had fallen to less than five times disposable income, and substantial declines in equity and house prices continued early this year. Consumer sentiment declined further in February as households voiced greater concerns about income and job prospects. The Reuters/University of Michigan index in early March stood only slightly above its 29-year low reached in November, and the Conference Board index, which includes questions about employment conditions, fell in February to a new low.

Housing activity continued to be subdued. Single-family starts ticked up in February, and adjusted permit issuance in this sector moved up to a level slightly above starts. Multifamily starts jumped in February from the very low level in January, and the level of multifamily starts was close to where it had been at the end of the third quarter of 2008. Housing demand remained very weak, however. Although the stock of unsold new single-family homes fell in January to its lowest level since 2003, inventories continued to move up relative to the slow pace of sales. Sales of existing single-family homes fell in January, reversing the uptick seen in December. Over the previous 12 months, the pace of existing home sales declined much less than that of new home sales, reflecting in part increases in foreclosure-related and other distressed sales. The weakness in home sales persisted despite historically low mortgage rates for borrowers eligible for conforming loans. After having fallen significantly late last year, rates for conforming 30-year fixed-rate mortgages fluctuated in a relatively narrow range during the intermeeting period. In contrast, the market for nonconforming loans remained severely impaired. House prices continued to decline.

Business spending on transportation equipment continued to fall from already low levels, and demand both for high-tech equipment and software and for equipment other than high-tech and transportation dropped sharply in the fourth quarter. In January, nominal shipments of nondefense capital goods excluding aircraft declined, and new orders fell significantly further. The fundamental determinants of equipment and software spending worsened appreciably: Business output dropped, and rising corporate bond yields boosted

the user cost of capital in the fourth quarter. After holding up surprisingly well through most of last year, outlays on nonresidential structures began to show declines consistent with the weak fundamentals for this sector. In real terms, investment declined for most types of buildings over the previous few months. Census data on book-value inventory investment for January suggested that firms had further pared their stocks; however, sales continued to fall more quickly than inventories, apparently exacerbating the overhangs that developed in the second half of 2008.

The U.S. international trade deficit narrowed in December and January, as a steep fall in imports more than offset a decline in exports. All major categories of exports decreased, especially sales of industrial supplies, machinery, and automotive products. All major categories of imports decreased as well, with large declines in imports of oil, automotive products, and industrial supplies. The drop in the value of oil imports reflected a lower price. Imports of automotive products declined as automakers made significant production cutbacks throughout North America.

Output in the advanced foreign economies contracted in the fourth quarter, with large reductions in real gross domestic product (GDP) in all the major economies and a double-digit rate of decline in Japan. Trade and investment in those countries were particularly weak. Indicators of economic activity, especially industrial production, suggested that the pace of contraction accelerated late in the fourth quarter and into the first quarter. Economic activity in emerging market economies also weakened significantly in the fourth quarter. Exports, industrial production, and confidence indicators dropped notably in both Latin America

and emerging Asia. Incoming data for January and February suggested a further significant decline in the first quarter.

In the United States, overall consumer prices increased in January and February, led by an increase in energy prices, after posting sizable declines late last year. Excluding the categories of food and energy, consumer prices edged higher in January and February after three months of no change. The producer price index for core intermediate materials dropped for a fifth month in February, reflecting, in part, weaker global demand and steep declines in the prices of a wide variety of energy-intensive goods, such as chemicals and plastics. Low readings on overall and core consumer price inflation in recent months, as well as the weakened economic outlook, kept near-term inflation expectations reported in surveys well below their high levels in mid-2008. In contrast, measures of longer-term expectations remained close to their averages over the past couple of years. Hourly earnings continued to increase at a moderate rate in February.

The Federal Open Market Committee's decision at the January meeting to leave the target range for the federal funds rate unchanged was widely anticipated by investors and had little impact on short-term money markets. Over the intermeeting period, the path for the federal funds rate implied by futures rates shifted down somewhat, on net, mostly on incoming news about the financial sector and the economic outlook. Yields on nominal Treasury coupon securities increased over the period, reportedly because market participants had assigned some probability to the possibility that the Federal Reserve would establish a purchase program for longer-term Treasury secu-

rities that was not, in fact, forthcoming; yields were also reported to have responded to concerns over the federal deficit and the growing supply of Treasury securities. Yields on longer-term inflation-indexed Treasury securities increased more than those on their nominal counterparts, leaving longer-term inflation compensation lower over the period, and inflation compensation at shorter horizons was little changed. Poor liquidity in the market for Treasury inflation-protected securities continued to make these readings difficult to interpret.

Conditions in short-term funding markets were mixed over the intermeeting period. In unsecured interbank funding markets, spreads of dollar London interbank offered rates (Libor) over comparable-maturity overnight index swap rates trended higher, on net, especially at longer maturities, and forward spreads increased, evidently on renewed concerns about the financial condition of some large banks. Conditions in the commercial paper (CP) market continued to improve, on balance, over the intermeeting period. Spreads on 30-day A2/P2-rated CP trended down further, and those on AA-rated asset-backed commercial paper remained at the lower end of the range recorded over the past year. Conditions in repurchase agreement markets for most collateral types improved over the period, but volumes remained low.

Trading conditions in the secondary market for nominal Treasury coupon securities showed some limited signs of improvement. Average bid-asked spreads for on-the-run nominal Treasury notes were relatively stable near their pre-crisis levels. Daily trading volumes for on-the-run securities, however, inched lower, and spreads between the yields of on- and off-the-run

10-year Treasury notes remained very high.

Broad equity price indexes dropped significantly, on balance, over the intermeeting period amid continued concerns about the health of the financial sector, uncertainty regarding the efficacy of government support to the sector, and a further weakening of the economic outlook. Bank stock prices were particularly hard hit, and the credit default swap (CDS) spreads of many banks rose above the peaks recorded last fall on anxieties about the financial conditions of the largest banking firms. Stock prices of insurance companies dropped sharply over the period, reflecting concerns about the adequacy of their capital positions. On March 2, American International Group, Inc. (AIG), reported losses of more than \$60 billion for the fourth quarter of last year, and the Treasury and the Federal Reserve announced a restructuring of the government assistance to AIG to enhance the company's capital and liquidity to facilitate the orderly completion of its global divestiture program.

Measures of liquidity in the secondary market for speculative-grade corporate bonds worsened somewhat over the period but remained significantly better than in the fall of 2008. Spreads of yields on both BBB-rated and speculative-grade bonds relative to those on comparable-maturity Treasury securities were little changed on net. The investment- and speculative-grade CDS indexes widened significantly, on net, over the intermeeting period. Gross bond issuance by nonfinancial firms was very strong in January and February, as investment-grade issuance more than doubled from its already solid pace in the fourth quarter; speculative-grade issuance, however, remained sluggish. Trading conditions in the leveraged syndicated loan market im-

proved slightly, but issuance continued to be very weak. The market for commercial mortgage-backed securities (CMBS) also remained under heavy stress. Indexes of CDS spreads on AAA-rated CMBS widened to record levels, as Moody's downgraded a large portion of the 2006 and 2007 vintages after a reevaluation of its rating criteria.

The debt of the domestic private nonfinancial sector, which was about unchanged in the fourth quarter of last year, was estimated to have remained about flat in the first quarter. Household debt appeared to have contracted in the first quarter for the second quarter in a row, primarily as a result of declines in both consumer and home mortgage debt. Declines in consumer and mortgage debt stemmed, in turn, from very weak household spending, the continued drop in house prices, and tighter terms and standards for loans. Business debt was projected to expand at a moderate pace in the first quarter, largely because of a burst of corporate bond issuance. Reflecting heavy borrowing by the Treasury, total debt of the domestic nonfinancial sector was projected to have continued to expand in the first quarter, but at a pace below that recorded in the fourth quarter of last year.

The rise in M2 slowed in February from the rapid pace recorded over the previous few months. Liquid deposits, while decelerating, continued to expand briskly. Savings deposits increased while demand deposits decreased. Retail money funds fell in February, reflecting sizable outflows from Treasury-only funds, which generally provided low yields. Small time deposits also contracted, as the institutions that had been bidding aggressively for these retail funds stopped doing so. The expansion in currency remained robust.

Bank credit continued to decline in January and February, and commercial and industrial (C&I) loans decreased over these months. The February Survey of Terms of Business Lending indicated that C&I loan rate spreads over comparable-maturity market instruments rose modestly overall from the November survey. Commercial real estate loans outstanding also declined over the first part of 2009. In contrast, consumer loans on banks' books jumped over the first two months of the year because of sizable increases at a few banks that purchased loans from their affiliated finance companies. In addition, some banks brought consumer loans that had previously been securitized back onto their books. After 12 consecutive months of contraction, residential mortgage loans on banks' books increased in February, likely a result of the pickup in refinancing activity. In contrast, the rise in home equity loans slowed noticeably in January and February.

Among the advanced foreign economies, headline equity price indexes generally fell significantly over the period, with the sharpest drops in the banking sector. In particular, European bank shares fell steeply as earnings reports for the fourth quarter came in weaker than expected and fears about the exposure of many western European banks to emerging Europe increased. The major currencies index of the dollar rose, on net, over the intermeeting period; foremost among the contributors to the rise was a significant appreciation of the dollar against the yen. Financial conditions in emerging markets also worsened, with their exchange rates and equity prices generally falling and CDS premiums rising a bit on balance.

Several foreign governments and central banks took further steps to sup-

port their financial markets and economies. The Bank of England announced its intention to purchase substantial quantities of government and corporate bonds through its Asset Purchase Facility, after which yields on long-term British gilts fell significantly. In addition, the British government launched its Asset Protection Scheme, which insured assets placed in the scheme by the Royal Bank of Scotland and Lloyds Bank. The Bank of Japan stated that it would resume purchases of equities held on banks' balance sheets, announced plans to purchase corporate bonds, and began its previously announced purchases of commercial paper. The Swiss National Bank announced that it would purchase both domestic corporate debt and foreign currency to increase liquidity.

#### Staff Economic Outlook

In the forecast prepared for the meeting, the staff revised down its outlook for economic activity. The deterioration in labor market conditions was rapid in recent months, with steep job losses across nearly all sectors. Industrial production continued to contract rapidly as firms responded to the falloff in demand and the buildup of some inventory overhangs. The incoming data on business spending suggested that business investment in equipment and structures continued to decline. Single-family housing starts had fallen to a post-World War II low in January, and demand for new homes remained weak. Both exports and imports retreated significantly in the fourth quarter of last year and appeared headed for comparable declines this quarter. Consumer outlays showed some signs of stabilizing at a low level, with real outlays for goods outside of motor vehicles recording gains in January and February.

Financial conditions overall were even less supportive of economic activity, with broad equity indexes down significantly amid continued concerns about the health of the financial sector, the dollar stronger, and long-term interest rates higher. The staff's projections for real GDP in the second half of 2009 and in 2010 were revised down, with real GDP expected to flatten out gradually over the second half of this year and then to expand slowly next year as the stresses in financial markets ease, the effects of fiscal stimulus take hold, inventory adjustments are worked through, and the correction in housing activity comes to an end. The weaker trajectory of real output resulted in the projected path of the unemployment rate rising more steeply into early next year before flattening out at a high level over the rest of the year. The staff forecast for overall and core personal consumption expenditures (PCE) inflation over the next two years was revised down slightly. Both core and overall PCE price inflation were expected to be damped by low rates of resource utilization, falling import prices, and easing cost pressures as a result of the sharp net declines in oil and other raw materials prices since last summer.

#### Meeting Participants' Views and Committee Policy Action

In the discussion of the economic situation and outlook, nearly all meeting participants said that conditions had deteriorated relative to their expectations at the time of the January meeting. The slowdown was widespread across sectors. Large declines in equity prices, a further drop in house prices, and mounting job losses threatened to further depress consumer spending, despite some firming in the recent retail

sales data and forthcoming tax reductions. Business capital spending was weakening in an environment of uncertainty and low business confidence. Of particular note was the apparent sharp fall in foreign economic activity, which was having a negative effect on U.S. exports. Credit conditions remained very tight, and financial markets remained fragile and unsettled, with pressures on financial institutions generally intensifying this year. Overall, participants expressed concern about downside risks to an outlook for activity that was already weak. With regard to the outlook for inflation, all participants agreed that inflation pressures were likely to remain subdued, and several expressed the view that inflation was likely to persist below desirable levels.

District business contacts indicated that production and sales were declining steeply. Some industries that previously were less affected, such as agriculture and energy, had begun to suffer the effects of the slowdown. Businesses reported that bank financing was becoming more expensive and more difficult to obtain. Expenditures were being cut substantially for a wide range of capital equipment, and spending on nonresidential structures had recently turned down. Inventory liquidation was continuing, but inventory-sales ratios remained elevated as sales slowed. Against this backdrop, participants anticipated further employment cutbacks over coming months, though perhaps at a gradually diminishing rate.

Several participants said that the degree and pervasiveness of the decline in foreign economic activity was one of the most notable developments since the January meeting. In light of this development, it was widely agreed that exports were not likely to be a source of support for U.S. economic activity in the near term.

Participants did not interpret the uptick in housing starts in February as the beginning of a new trend, but some noted that there was only limited scope for housing activity to fall further. Nonetheless, large inventories of unsold homes relative to sales and the prospect of a continued high level of distressed sales would continue to hold down residential investment in the near term. Several participants noted the tentative signs of stabilization in consumer spending in January and February. However, others suggested that strains on household balance sheets from falling equity and house prices, reduced credit availability, and the fear of unemployment could well lead to further increases in the saving rate that would damp consumption growth in the near term.

Overall, most participants viewed downside risks as predominating in the near term, mainly owing to potential adverse feedback effects as reduced employment and production weighed on consumer spending and investment, and as the weakening economy boosted the prospective losses of financial institutions, leading to a further tightening of credit conditions.

Looking beyond the very near term, a number of market forces and policies now in place were seen as eventually leading to economic recovery. Notably, the low level of mortgage interest rates, reduced house prices, and the Administration's new programs to encourage mortgage refinancing and mitigate foreclosures ultimately could bring about a lower cost of homeownership, a sustained increase in home sales, and a stabilization of house prices. The household saving rate, which had already risen considerably, would eventually level out and cease to hold back consumption growth. Business inventories would come into line with even a

low level of sales, and the pressure on production from inventory drawdowns would diminish. Fiscal and monetary policies were likely to contribute significantly to aggregate demand in coming quarters. Participants expressed a variety of views about the strength and timing of the recovery, however. Some believed that the natural resilience of market forces would become evident later this year. Others, who saw recovery as delayed and potentially weak, were concerned about a possible further rise in the saving rate and a very slow improvement in financial conditions. Some participants also cautioned that, because of the poor functioning of the financial system, capital and labor were not being allocated to their most productive uses, and this failure threatened to damp the recovery and reduce the potential growth of the economy over the medium term.

Participants saw little chance of a pickup in inflation over the near term, as rising unemployment and falling capacity utilization were holding down wages and prices and inflation expectations appeared subdued. Several expressed concern that inflation was likely to persist below desired levels, with a few pointing to the risk of deflation. Even without a continuation of outright price declines, falling expectations of inflation would raise the real rate of interest and thus increase the burden of debt and further restrain the economy.

Some indicators, including share prices and CDS spreads of financial institutions, suggested a worsening of financial market strains since January. However, for the most part, participants viewed conditions in financial markets as little changed but remaining extraordinarily stressed. The large volume of issuance of investment-grade corporate bonds in recent weeks was a notable bright spot. Participants shared com-

ments received from financial industry contacts on their experiences with and concerns about recent government programs to stabilize the financial system. These contacts feared that uncertainties about future actions the government might take and future regulations it might impose were making it more difficult to plan and were discouraging participation in government efforts to stabilize the financial system. Participants agreed that a credible and widely understood program to deal with the troubles of the banking system could help restore business and consumer confidence. Many viewed the strengthening of the banking system as essential for a sustained and robust recovery.

In the discussion of monetary policy for the intermeeting period, Committee members agreed that substantial additional purchases of longer-term assets eligible for open market operations would be appropriate. Such purchases would provide further monetary stimulus to help address the very weak economic outlook and reduce the risk that inflation could persist for a time below rates that best foster longer-term economic growth and price stability. One member preferred to focus additional purchases on longer-term Treasury securities, whereas another member preferred to focus on agency MBS. However, both could support expanded purchases across a range of assets, and several members noted that working across a range of assets and instruments was appropriate when the effects of any one tactic were uncertain. Members agreed that the monetary base was likely to grow significantly as a consequence of additional asset purchases; one, in particular, stressed that sustained increases in the monetary base were important to ensure that policy was consistently expansionary. Members expressed a range of views as to

the preferred size of the increase in purchases. Several members felt that the significant deterioration in the economic outlook merited a very substantial increase in purchases of longer-term assets. In contrast, the potential for a large increase over time in the size of the balance sheet from the TALF program was seen as supporting a more modest, though still substantial, increase in asset purchases. Ultimately, members agreed to undertake additional purchases of agency MBS of up to \$750 billion and of agency debt of up to \$100 billion, and they also agreed to purchase up to \$300 billion of longer-term Treasury securities. The Committee believed that purchases of these amounts would help to promote a return to economic growth and price stability. The period for conducting the agency debt and MBS purchases was extended from the next three months to the next nine months; members agreed to allow the Desk flexibility within this horizon to respond to market conditions. Treasury purchases were to be conducted over the next six months. Members also noted the recent launch of the TALF, and they agreed to include in the Committee's statement an indication that the range of assets accepted as eligible collateral for the TALF was likely to be expanded. Committee members decided to keep the target range for the federal funds rate at 0 to ¼ percent and to communicate to the public the Committee's view that the federal funds rate was likely to remain exceptionally low for an extended period.

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

"The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ¼ percent. The Committee directs the Desk to purchase GSE debt, GSE-guaranteed MBS, and longer-term Treasury securities during the intermeeting period with the aim of providing support to private credit markets and economic activity. The timing and pace of these purchases should depend on conditions in the markets for such securities and on a broader assessment of private credit market conditions. The Committee anticipates that the combination of outright purchases and various liquidity facilities outstanding will cause the size of the Federal Reserve's balance sheet to expand significantly in coming months. The Desk is expected to purchase up to \$200 billion in housing-related GSE debt by the end of this year. The Desk is expected to purchase at least \$500 billion in GSE-guaranteed MBS by the end of the second quarter of this year and is expected to purchase up to \$1.25 trillion of these securities by the end of this year. The Committee also directs the Desk to purchase longer-term Treasury securities during the intermeeting period. Over the next six months, the Desk is expected to purchase up to \$300 billion of longer-term Treasury securities. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability."

The vote encompassed approval of the statement below to be released at 2:15 p.m.:

"Information received since the Federal Open Market Committee met in January indicates that the economy continues to contract. Job losses, declining equity and housing wealth, and tight credit conditions have weighed on consumer sentiment and spending. Weaker sales prospects and difficulties in obtaining credit have led businesses to cut back on inventories and fixed investment. U.S. exports have slumped as a

number of major trading partners have also fallen into recession. Although the near-term economic outlook is weak, the Committee anticipates that policy actions to stabilize financial markets and institutions, together with fiscal and monetary stimulus, will contribute to a gradual resumption of sustainable economic growth.

In light of increasing economic slack here and abroad, the Committee expects that inflation will remain subdued. Moreover, the Committee sees some risk that inflation could persist for a time below rates that best foster economic growth and price stability in the longer term.

In these circumstances, the Federal Reserve will employ all available tools to promote economic recovery and to preserve price stability. The Committee will maintain the target range for the federal funds rate at 0 to  $\frac{1}{4}$  percent and anticipates that economic conditions are likely to warrant exceptionally low levels of the federal funds rate for an extended period. To provide greater support to mortgage lending and housing markets, the Committee decided today to increase the size of the Federal Reserve's balance sheet further by purchasing up to an additional \$750 billion of agency mortgage-backed securities, bringing its total purchases of these securities to up to \$1.25 trillion this year, and to increase its purchases of agency debt this year by up to \$100 billion to a total of up to \$200 billion. Moreover, to help improve conditions in private credit markets, the Committee decided to purchase up to \$300 billion of longer-term Treasury securities over the next six months. The Federal Reserve has launched the Term Asset-Backed Securities Loan Facility to facilitate the extension of credit to households and small businesses and anticipates that the range of eligible collateral for this facility is likely to be expanded to include other financial assets. The Committee will continue to carefully monitor the size and composition of the Federal Reserve's balance sheet in light of evolving financial and economic developments."

Voting for this action: Messrs. Bernanke and Dudley, Ms. Duke, Messrs. Evans, Kohn, Lacker, Lockhart, Tarullo, and Warsh, and Ms. Yellen.

Voting against this action: None.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, April 28–29, 2009. The meeting adjourned at 1:35 p.m. on March 18, 2009.

### Conference Call

On February 7, 2009, the Committee met by conference call in a joint session with the Board of Governors to discuss the potential role of the Federal Reserve in the Treasury's forthcoming financial stabilization plan. After hearing an overview of the version of the plan envisioned at the time of the meeting, meeting participants discussed its principal elements and shared a range of perspectives on its implications for financial markets and institutions. The Federal Reserve's primary direct role in the plan would be through an expansion of the previously announced TALF, which would be supported by additional funds from the Troubled Asset Relief Program (TARP). In the current environment, it was anticipated that such an expansion would provide additional assistance to financial markets and institutions in meeting the credit needs of households and businesses and thus would support overall economic activity. While several participants expressed some concern that the expansion of the TALF program could increase the Federal Reserve's exposure to credit risk, the program's requirements for highly rated collateral that would exceed the value of the related loans, in combination with the added TARP funds as a backstop against losses, were generally seen as providing the Federal Reserve with adequate protection. Participants also discussed the implications of the expanded TALF program for the Federal Reserve's balance sheet over time. Participants agreed it would be impor-

tant to work with the Treasury to obtain tools to ensure that any reserves added to the banking system through this program could be removed at the appropriate time.

#### Notation Vote

By notation vote completed on February 17, 2009, the Committee unanimously approved the minutes of the FOMC meeting held on January 27–28, 2009.

Brian F. Madigan  
Secretary

#### Meeting Held on April 28–29, 2009

A joint meeting of the Federal Open Market Committee and the Board of Governors of the Federal Reserve System was held in the offices of the Board of Governors in Washington, D.C., on Tuesday, April 28, 2009, at 2:00 p.m. and continued on Wednesday, April 29, 2009, at 9:00 a.m.

#### *Present:*

Mr. Bernanke, Chairman  
Mr. Dudley, Vice Chairman  
Ms. Duke  
Mr. Evans  
Mr. Kohn  
Mr. Lacker  
Mr. Lockhart  
Mr. Tarullo  
Mr. Warsh  
Ms. Yellen

Mr. Bullard, Ms. Cumming, Mr. Hoenig, Ms. Pianalto, and Mr. Rosengren, Alternate Members of the Federal Open Market Committee

Messrs. Fisher, Plosser, and Stern, Presidents of the Federal Reserve Banks of Dallas, Philadelphia, and Minneapolis, respectively

Mr. Madigan, Secretary and Economist  
Ms. Danker, Deputy Secretary  
Mr. Luecke, Assistant Secretary

Mr. Skidmore, Assistant Secretary  
Ms. Smith, Assistant Secretary  
Mr. Alvarez, General Counsel  
Mr. Sheets, Economist  
Mr. Stockton, Economist

Messrs. Altig, Clouse, Connors, Kamin, Slifman, Sullivan, Wilcox, and Williams, Associate Economists

Ms. Mosser, Temporary Manager, System Open Market Account

Ms. Johnson, Secretary of the Board, Office of the Secretary, Board of Governors

Mr. Frierson,<sup>7</sup> Deputy Secretary, Office of the Secretary, Board of Governors

Mr. Struckmeyer, Deputy Staff Director, Office of the Staff Director for Management, Board of Governors

Ms. Barger and Mr. English, Deputy Directors, Divisions of Banking Supervision and Regulation and Monetary Affairs, respectively, Board of Governors

Mr. Blanchard, Assistant to the Board, Office of Board Members, Board of Governors

Messrs. Levin, Nelson, Reifschneider, and Wascher, Associate Directors, Divisions of Monetary Affairs, Monetary Affairs, Research and Statistics, and Research and Statistics, respectively, Board of Governors

Mr. Meyer, Senior Adviser, Division of Monetary Affairs, Board of Governors

Mr. Carpenter, Deputy Associate Director, Division of Monetary Affairs, Board of Governors

Mr. Palumbo, Assistant Director, Division of Research and Statistics, Board of Governors

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<sup>7</sup>. Attended Wednesday's session only.

Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors

Ms. Judson and Mr. Nichols,<sup>8</sup> Economists, Divisions of Monetary Affairs and Research and Statistics, respectively, Board of Governors

Ms. Beattie, Assistant to the Secretary, Office of the Secretary, Board of Governors

Ms. Low, Open Market Secretariat Specialist, Division of Monetary Affairs, Board of Governors

Mr. Barron, First Vice President, Federal Reserve Bank of Atlanta

Messrs. Rosenblum and Sniderman, Executive Vice Presidents, Federal Reserve Banks of Dallas and Cleveland, respectively

Mr. Hakkio, Ms. Mester, and Messrs. Rasche and Rolnick, Senior Vice Presidents, Federal Reserve Banks of Kansas City, Philadelphia, St. Louis, and Minneapolis, respectively

Messrs. Burke, Hornstein, and Olivei, Vice Presidents, Federal Reserve Banks of New York, Richmond, and Boston, respectively

Mr. Rich, Assistant Vice President, Federal Reserve Bank of New York

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

The Manager of the System Open Market Account reported on recent developments in domestic and foreign financial markets. The Manager also reported on System open market operations in Treasury securities and in agency debt and agency mortgage-backed securities (MBS) during the

period since the Committee's March 17–18 meeting. By unanimous vote, the Committee ratified those transactions. There were no open market operations in foreign currencies for the System's account over the intermeeting period.

The staff reported on recent developments in System liquidity programs and on changes in the System's balance sheet. As of April 22, the System's total assets and liabilities were close to \$2.2 trillion, about \$130 billion higher than just before the March meeting. System holdings of agency debt and agency MBS expanded by \$215 billion over the same period. Credit extended through the Federal Reserve's liquidity facilities decreased, owing, at least in part, to the recent improvement in short-term funding markets.

The staff also provided the Committee with projections that were intended to illustrate the potential evolution of the Federal Reserve's balance sheet over coming years under a variety of assumptions about the economic and financial outlook and the associated path of monetary policy. The general contours of the projections—a rapid near-term increase in Federal Reserve assets and the monetary base, followed by a decline for a time—were the same in each case, but the timing and magnitude varied significantly depending upon the underlying assumptions. Moreover, many aspects of the economic and financial outlook were subject to substantial risks, implying considerable uncertainty regarding those assumptions and the resulting projections of the balance sheet and the monetary base.

The staff briefed the Committee on recent developments related to the Term Asset-Backed Securities Loan Facility (TALF), which was authorized by

8. Attended Tuesday's session only.

the Board of Governors last November under section 13(3) of the Federal Reserve Act. Under the TALF, the Federal Reserve Bank of New York extended three-year loans secured by AAA-rated asset-backed securities (ABS); these securities were backed by new and recently originated loans made by financial institutions. The first two monthly subscriptions of the TALF settled during the intermeeting period. At this meeting, the Committee discussed the potential benefits of accepting newly issued, AAA-rated commercial mortgage-backed securities and insurance premium finance ABS as eligible collateral for TALF loans. Meeting participants also discussed the possibility that some new TALF loans would have a longer maturity of five years.

Secretary's note: The Board of Governors subsequently approved the broadening of the list of TALF-eligible collateral and the addition of five-year loans to the facility, as announced on May 1, 2009.

By unanimous vote, the Committee decided to extend the reciprocal currency ("swap") arrangements with the Bank of Canada and the Banco de Mexico for an additional year, beginning in mid-December 2009; these arrangements are associated with the Federal Reserve's participation in the North American Framework Agreement of 1994. The arrangement with the Bank of Canada is in the amount of \$2 billion equivalent, and that with the Banco de Mexico is in the amount of \$3 billion equivalent. The vote to renew the System's participation in these swap arrangements was taken at this meeting because of the provision in the arrangements that requires each party to provide six months' prior notice of an intention to terminate its participation.

## Staff Review of the Economic Situation

The information reviewed at the April 28–29 meeting indicated that the pace of decline in some components of final demand appeared to have slowed recently. Consumer spending firmed in the first quarter after dropping markedly during the second half of 2008. Housing activity remained depressed but seemed to have leveled off in February and March. In contrast, businesses cut production and employment substantially in recent months—likely reflecting, in part, inventory overhangs that persisted into the early part of the year—and fixed investment continued to contract. Headline and core consumer prices rose at a moderate pace over the first three months of the year.

Labor market conditions deteriorated further in March. Private nonfarm payroll employment registered its fifth consecutive large monthly decrease, with losses widespread across industries. Moreover, the average workweek of production and nonsupervisory workers on private payrolls ticked down in March from the low level recorded in January and February, and total hours worked for this group stayed below the fourth-quarter average. The civilian unemployment rate climbed to 8.5 percent, and the labor force participation rate edged down from its February level. The four-week moving average of initial claims for unemployment insurance remained elevated in April, and the number of individuals receiving unemployment benefits relative to the size of the labor force reached its highest level since 1982.

Industrial production fell substantially in March and for the first quarter as a whole, with cutbacks widespread across sectors, and manufacturing ca-

capacity utilization decreased to a very low level. First-quarter domestic production of light motor vehicles reached the lowest level in more than three decades as inventories of such vehicles, while low, remained high relative to sales. The output of high-technology products decreased in March and in the first quarter overall, with production of computers and semiconductors extending the downward trend that had begun in the second half of 2008. In contrast, the production of communications equipment edged up in the first quarter. The output of other consumer durables and business equipment stayed low, and broad indicators of near-term manufacturing activity suggested that factory output would contract over the next few months.

The available data suggested that real consumer spending rose moderately in the first quarter after having fallen in the second half of last year. Real spending on goods and services excluding motor vehicles fell in March but was up, on balance, for the first quarter as a whole. Real outlays on new and used motor vehicles expanded in the first quarter following six consecutive quarterly declines. Despite the upturn in consumer spending, the fundamentals for this sector remained weak: Wages and salaries dropped, house prices were markedly lower than a year ago, and, despite recent increases, equity prices were down substantially from their levels of 12 months earlier. As measured by the Reuters/University of Michigan survey, consumer sentiment strengthened a bit in early April, as households expressed somewhat more optimism about long-term economic conditions; however, even with this improvement, the measure was only slightly above the historical low for the series recorded last November.

The latest readings from the housing market suggested that the contraction in housing activity might have moderated over the first quarter. Single-family housing starts flattened out in February and March, and, after adjusting for activity outside of permitting areas, the level of permits in March remained above the level of starts. The contraction in the multifamily sector also showed signs of slowing, as the drop in starts in the first quarter was well below the pace experienced during the fourth quarter of 2008. Recent data also indicated that housing demand might have stabilized. Sales of new single-family homes held steady in March after edging up in February, but the level of such sales remained low, leaving the supply of new homes relative to the pace of sales very high by historical standards. Existing home sales in March were slightly below the average pace for January and February. Most national indexes of house prices stayed on a downward trajectory. Lower mortgage rates and house prices contributed to an increase in housing affordability. Rates for conforming 30-year fixed-rate mortgages extended the significant decline that began late last year. Rates on jumbo loans came down as well, although the spread between the rates on jumbo and conforming loans was still wide and the market for private-label nonprime MBS remained impaired.

Real spending on equipment and software dropped markedly in the first quarter, with declines about as steep and widespread as in the fourth quarter of 2008. Orders and shipments of non-defense capital goods excluding aircraft fell in March, turning negative again after having been flat in February. The fundamental determinants of equipment and software investment stayed weak in the first quarter: Business output

continued to drop sharply, and credit availability was still tight. In the April Senior Loan Officer Opinion Survey on Bank Lending Practices, the net percentages of respondents that reported they tightened their business lending policies over the previous three months, although continuing to be very elevated, edged down for the second consecutive survey. Real spending on nonresidential structures contracted in the first quarter. Despite the significant cuts in production in recent quarters, inventories remained sizable early in the year, although the overhang appeared to be less severe than in late 2008. Given the elevated level of inventories, firms continued their efforts to reduce their stocks.

The U.S. international trade deficit diminished in February to its lowest level since November 1999, as imports fell and exports rose a bit. Most major categories of exports increased, especially sales of consumer goods, and within that category, pharmaceuticals. Exports of capital goods rose despite a modest decrease in exports of aircraft, and exports of automotive products increased following a marked drop in January; in contrast, exports of services declined in February. All major categories of imports decreased. The fall in oil imports was driven by lower volumes as prices moved up slightly; prices of non-oil imports moved down, but falling volumes accounted for most of the decline in this category.

Economic conditions again worsened in the advanced foreign economies in the first quarter. Industrial production continued to drop through February, employment declined substantially, and retail sales were weak. However, indicators of developments late in the first quarter, particularly the purchasing managers indexes for all of the major advanced economies, increased, sug-

gesting some moderation in the pace of contraction of economic activity going forward. The first-quarter data also offered a few tentative signs that the deceleration of economic activity in emerging markets might have started to abate. In particular, the growth of real gross domestic product (GDP) in China appeared to pick up on a quarterly basis following fiscal stimulus measures and steps to foster credit expansion.

In the United States, overall consumer prices increased over the first three months of 2009 after falling in the fourth quarter of 2008: Energy prices rebounded somewhat after their substantial late-year drop, and core prices picked up. In contrast, the producer price index for core intermediate materials fell, though at a noticeably slower pace than in late 2008. Indexes of commodity prices rose in March but stayed far below their year-earlier values. Near-term inflation expectations increased in early April but did not appear to influence longer-term expectations, whose levels in April were still at the low end of the range seen over the past few years. Hourly earnings of production and nonsupervisory workers edged up in March.

#### Staff Review of the Financial Situation

The decision by the Federal Open Market Committee (FOMC) at the March meeting to leave the target range for the federal funds rate unchanged was widely anticipated and had little effect on short-term money markets. However, investors were apparently surprised by the Committee's announcement that it would increase significantly further the size of the Federal Reserve's balance sheet by purchasing

up to \$300 billion in Treasury securities and expanding purchases of agency MBS and agency debt. In addition, market participants reportedly interpreted the statement that the federal funds rate was likely to remain exceptionally low “for an extended period” as stronger than the phrase “for some time” in the previous statement. Rates on Eurodollar futures contracts and yields on Treasury and agency securities fell considerably in response to the statement. The initial drop in the expected path for the federal funds rate was reversed over subsequent weeks, however, likely in response to the somewhat better economic outlook. Similarly, a portion of the substantial declines in yields on nominal Treasury coupon securities that followed the FOMC announcement was subsequently unwound amid the improved economic outlook, an easing of concern about financial institutions, and perhaps some reversal of flight-to-quality flows. Yields on inflation-indexed Treasury securities fell a bit more than those on their nominal counterparts, which decreased modestly, on net, over the period. As a result, inflation compensation rose at shorter horizons but changed little at longer horizons. Poor liquidity in the market for Treasury inflation-protected securities continued to make these readings difficult to interpret.

Conditions in short-term funding markets improved somewhat over the intermeeting period. In unsecured bank funding markets, spreads of dollar London interbank offered rates (Libor) over comparable-maturity overnight index swap (OIS) rates edged down, although Libor fixings beyond the one-month maturity stayed elevated. Spreads on A2/P2-rated commercial paper and AA-rated asset-backed commercial paper narrowed a bit, on net, staying at

the low end of their respective ranges over the past year. Functioning in the repurchase agreement (repo) market showed additional improvement, as bid-asked spreads and “haircuts” on most collateral either narrowed or held steady, although repo volumes were still low. Consistent with modestly better conditions in the term repo market, all seven auctions under the Term Securities Lending Facility were undersubscribed over the intermeeting period, including two auctions that garnered no bids.

Trading conditions in the secondary market for nominal Treasury securities also showed some signs of improvement. Premiums paid for on-the-run Treasury securities fell, and average bid asked spreads for Treasury notes were relatively stable near their pre-crisis levels. Still, daily trading volumes for Treasury securities remained low.

Broad stock price indexes rose significantly, reportedly buoyed by announcements of policy measures to enhance credit markets and clean up banks’ balance sheets and perhaps by some reduction in concerns about the economic outlook. Financial stocks outperformed broader markets, boosted by relatively favorable first-quarter earnings reports from a few major firms. The spread between the forward trend earnings-price ratio for S&P 500 firms and an estimate of the real long-run Treasury yield—a rough gauge of the equity risk premium—narrowed during the intermeeting period but was still very high by historical standards. Option-implied volatility on the S&P 500 index decreased but stayed well above historical norms.

On net, yields on lower-rated investment-grade and speculative-grade corporate bonds dropped, resulting in a narrowing of spreads in yields on such

bonds over those on comparable-maturity Treasury securities. Even so, corporate bond spreads remained extremely high by historical standards.

Indicators of functioning in the corporate bond market—such as bid-asked spreads estimated by the staff—suggested that conditions in the speculative-grade segment of the market had become less strained since last autumn. Corresponding measures for investment-grade bonds hovered at moderately elevated levels. The leveraged loan market showed some improvement over the past few months, with the average bid-asked spread narrowing and the average bid price moving up from a very depressed level. The basis between an index of credit default swap spreads and measures of investment-grade corporate spreads—a rough proxy for unexploited arbitrage opportunities in the corporate credit market—stayed at high levels, reportedly reflecting an ongoing lack of financing capacity at major financial institutions. No issuance of commercial MBS occurred over the intermeeting period.

The debt of the domestic private nonfinancial sector appeared to have contracted in the first quarter at about the same pace as in the fourth quarter of 2008. Activity in the mortgage market reflected mainly refinancing, and staff estimates indicated that residential mortgage debt contracted again in the first quarter, depressed by the very low pace of home sales, falling house prices, and write-downs of nonperforming loans. Consumer credit was essentially flat in January and February. Expansion of nonfinancial business debt was tepid, as robust bond issuance was partly offset by declines in commercial paper and bank loans. Federal debt rose briskly in the first quarter.

M2 expanded rapidly in March. A strong increase in liquid deposits, the largest component of M2, likely reflected further reallocations by households toward safer assets. Retail money market mutual funds and small time deposits contracted modestly. Currency growth was apparently bolstered by elevated foreign demand.

Commercial bank credit contracted in March and was estimated to have dropped again in April. The decline in bank credit in March was due importantly to a decrease in loans to businesses that reflected, in part, paydowns with the proceeds of bond issuance. Commercial real estate loans also fell. Bank lending to households was weak, although credit extended under revolving home equity lines of credit again expanded robustly. Residential mortgage loans on banks' books fell, on balance, in March and the first part of April; banks reportedly sold a considerable amount of single-family mortgages to the government-sponsored enterprises. Consumer loans held by banks also shrank, amid heavy securitization. The Senior Loan Officer Opinion Survey conducted in April indicated that banks continued to tighten their credit standards and terms on all major loan categories over the previous three months.

Stock markets around the world rose substantially over the intermeeting period amid somewhat better sentiment regarding economic prospects, reports of better-than-expected performance from some financial firms in the United States and Europe, and continued support from monetary policies. Pressures in bank funding markets seemed to ease over the period: Spreads between both euro and sterling Libor and their respective OIS rates narrowed significantly, and financial conditions in most emerging market economies improved.

The dollar depreciated against the other major currencies in an environment of seemingly increased investor appetite for risk.

During the intermeeting period, foreign authorities took additional steps to address the weaknesses in their economies and financial systems. The European Central Bank and the Bank of Canada, along with several other central banks in both the advanced and emerging market economies, cut policy rates, while the Bank of England and the Bank of Japan continued their asset purchases to provide further monetary stimulus. Several governments, including Japan and Taiwan, announced new fiscal stimulus packages, and a number of European countries took additional measures to support their banking sectors.

#### Staff Economic Outlook

In the forecast for the meeting, which was prepared prior to the release of the advance estimates of the first-quarter national income and product accounts, the staff revised up its outlook for economic activity in response to recent favorable financial developments as well as better-than-expected readings on final sales. Consumer purchases appeared to have stabilized after falling in the second half of 2008, and the steep decline in the housing sector seemed to be abating. However, the contraction in the labor market persisted into March, industrial production again fell rapidly, and the broad-based decline in equipment and software investment continued. Conditions in financial markets improved more than had been expected: Private borrowing rates moved lower, stock prices rose substantially, and some measures of financial stress eased. The staff's projections for economic activity in the

second half of 2009 and in 2010 were revised up, with real GDP expected to edge higher in the second half and then increase moderately next year. The key factors expected to drive the acceleration in activity were the boost to spending from fiscal stimulus, the bottoming out of the housing market, a turn in the inventory cycle from liquidation to modest accumulation, and ongoing gradual recovery of financial markets. The staff again expected that the unemployment rate would rise through the beginning of 2010 before edging down over the rest of that year. The staff forecast for overall and core personal consumption expenditures (PCE) inflation over the next two years was revised up slightly. The staff raised its near-term estimate of core PCE inflation because recent data on core and overall PCE price inflation came in a bit higher than anticipated. Beyond the near term, however, the staff anticipated that the low level of resource utilization and a gradual decline in inflation expectations would lead to a deceleration in core PCE prices. Looking out to 2011, the staff anticipated that financial markets and institutions would continue to recuperate, monetary policy would remain stimulative, fiscal stimulus would be fading, and inflation expectations would be relatively well anchored. Under such conditions, the staff projected that real GDP would expand at a rate well above that of its potential, that the unemployment rate would decline significantly, and that overall and core PCE inflation would stay in a low range.

#### Participants' Views and Committee Policy Action

In conjunction with this FOMC meeting, all meeting participants—the five members of the Board of Governors

and the presidents of the 12 Federal Reserve Banks—provided projections for economic growth, the unemployment rate, and consumer price inflation for each year from 2009 through 2011 and over a longer horizon. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge over time under appropriate monetary policy and in the absence of further shocks. Participants' forecasts through 2011 and over the longer run are described in the Summary of Economic Projections, which is attached as an addendum to these minutes.

In their discussion of the economic situation and outlook, participants agreed that the information received since the March meeting provided some tentative evidence that the pace of contraction in real economic activity was starting to diminish. Participants noted that financial market conditions had generally strengthened, and surveys and anecdotal reports pointed to a pickup in household and business confidence, which nonetheless remained at very low levels. Some signs pointing toward economic stabilization were seen in data on consumer spending, housing, and factory orders. Although economic activity was being damped by the efforts of businesses to pare excess inventories, the substantial drawdown in inventories over recent months was viewed as raising the prospects for a gradual expansion in industrial production later this year. Participants anticipated that the acceleration in final demand and economic activity over the next few quarters would be modest. Growth of consumption expenditures was likely to be restrained by the weakness in labor markets and the lagged effects of past reductions in household wealth. Business investment spending would probably shrink fur-

ther. Adverse global economic and financial conditions would continue to weigh on the demand for U.S. exports.

Financial market developments over the intermeeting period were mainly seen as positive. Equity prices increased, money markets were functioning better, and corporate issuance of bonds and convertible securities was relatively brisk. Measures of volatility and financial stress moved down and risk spreads narrowed in many markets, perhaps partly because of investors' perceptions of diminished downside tail risks. Even so, risk spreads remained unusually wide and markets continued to be fragile. Despite the improvement in financial markets, credit conditions stayed quite restrictive for many households and businesses. The April Senior Loan Officer Opinion Survey showed that a large net fraction of banks had tightened their terms and standards for credit during the previous three months, albeit a modestly smaller fraction than indicated by the January survey. Moreover, meeting participants noted that the volume of credit extended to households and businesses was still contracting as a result of shrinking demand, declining credit quality, capital constraints on financial institutions, and the limited availability of financing through securitization markets.

Consumer spending firmed somewhat during the first quarter despite the rising unemployment rate and significant financial strains. Participants generally expected that household demand would gradually strengthen over coming quarters in response to the rise in household wealth from the substantial increase in equity prices that had occurred over the intermeeting period as well as the support for income provided by fiscal policy. Nevertheless,

participants judged that the recovery in consumer demand over the next few quarters would be slow, reflecting adverse labor market conditions and continuing adjustments to earlier reductions in household wealth.

Some participants referred to the possibility that activity in the housing market might finally be approaching a trough. Indicators of new home sales appeared to be stabilizing, and inventories of unsold homes diminished somewhat. Participants also reported some signs that the decline in home prices might be slowing.

Labor market conditions were still deteriorating. Unemployment claims were exceptionally elevated, and the ratio of permanent job cuts to temporary layoffs was substantially higher than in previous economic downturns. Staff reductions were under way even at traditionally stable employers such as hospitals and nonprofit institutions. An unusually large proportion of employed persons indicated that they were engaged in part-time work because they could not obtain full-time jobs.

Participants cited the magnitude of the retrenchment in production and capital spending, but they also noted that manufacturing surveys and informal contacts suggested a noticeable upturn in business sentiment: A number of participants highlighted regional surveys reporting that greater numbers of industrial firms anticipated that their orders and shipments would start expanding over the next six months. Some participants expected that a gradual strengthening of retail sales would lead to an abatement of the decline in capital investment and would tend to induce manufacturers to begin rebuilding depleted stocks of inventories later this year, thereby reinforcing the pickup in industrial production. The outlook in some other sectors

seemed less propitious; for example, one participant described survey data indicating that firms in the service sector were expecting sales to decrease further in coming months, and others referred to cutbacks in drilling and mining.

The economies of many key trading partners were seen as experiencing quite severe contractions. Participants noted that banking institutions in a number of countries remained exposed to substantial further losses, and the process of repairing the balance sheets of such institutions would likely continue to restrain growth in those economies over coming quarters and hence damp the outlook for U.S. export demand. A few countries did show some signs that weakness was abating, perhaps reflecting, in part, rapid implementation of fiscal stimulus; furthermore, the recent firming of commodity prices gave an indication that global weakness might be starting to subside.

Although the near-term economic outlook had improved modestly since March, participants emphasized the tentative nature of the incoming data, which are volatile and subject to revision. The experience of previous recessions underscored the challenges of identifying the onset of economic recovery using real-time indicators. Also, empirical analysis of past episodes in the United States and abroad in which economic downturns had been triggered by financial crises generally concluded that such contractions tended to be more severe and protracted than other recessions. Moreover, participants continued to see significant downside risks to the economic outlook. In particular, while financial strains and risk spreads had lessened somewhat over the intermeeting period, participants agreed that the global financial system remained vulnerable to further shocks.

In discussing the Supervisory Capital Assessment Program, which was being conducted jointly by the Federal Reserve and other bank supervisory authorities, a number of participants noted that investors were concerned that the upcoming publication of stress test results might trigger volatility in financial markets. Some participants also referred to mounting losses in commercial real estate, which could have substantial adverse consequences for regional banks and other financial institutions with significant concentrations of such assets.

Looking further ahead, participants considered a number of factors that would be likely to restrain the pace of economic recovery over the medium term. Strains in credit markets were expected to recede only gradually as financial institutions continued to rebuild their capital and remained cautious in their approach to asset-liability management, especially given that the outlook for credit performance was likely to improve slowly. Some sectors—such as financial services and residential construction—might well account for a smaller share of the economy in coming years, and the resulting reallocation of labor across sectors could weigh on labor markets for some time. Households would likely remain cautious, and their desired saving rates would be relatively high over the extended period that would be required to bring their stock of wealth back up to more normal levels relative to income. The stimulus from fiscal policy was expected to diminish over time as the government budget moved to a sustainable path. Demand for U.S. exports would also take time to revive, reflecting the gradual recovery of major trading partners.

Most participants expected inflation to remain subdued over the next few

years, and they saw some risk that elevated unemployment and low capacity utilization could cause inflation to remain persistently below the rates that they judged as most consistent with sustainable economic growth and price stability. Nonetheless, recent monthly readings on consumer price inflation had been above the low rates observed late last year, and survey measures of longer-run inflation expectations had remained reasonably stable, leading many participants to judge that the risk of a protracted period of deflation had diminished. Some participants highlighted the potential pitfalls of making inflation projections based on contemporaneously available measures of resource slack, especially during periods when the economy was facing large supply shocks and significant sectoral reallocation. Several participants referred to contacts who had expressed concerns that the expansion of the Federal Reserve's balance sheet might not be reversed in a sufficiently timely manner and hence that inflation could rise above rates consistent with price stability.

In their discussion of monetary policy for the intermeeting period, Committee members agreed that the Federal Reserve's large-scale securities purchases were providing financial stimulus that would contribute to the gradual resumption of sustainable economic growth in a context of price stability. Members also agreed that it would be appropriate to continue making purchases in accordance with the amounts that had previously been announced—that is, up to \$1.25 trillion of agency MBS and up to \$200 billion of agency debt by the end of this year, and up to \$300 billion of Treasury securities by autumn. Some members noted that a further increase in the total amount of purchases might well be warranted at

some point to spur a more rapid pace of recovery; all members concurred with waiting to see how the economy and financial conditions respond to the policy actions already in train before deciding whether to adjust the size or timing of asset purchases. The Committee reaffirmed the need to monitor carefully the size and composition of the Federal Reserve's balance sheet in light of economic and financial developments. The Committee also discussed its strategy for communicating the anticipated path of its asset purchases and the circumstances under which adjustments to that path would be appropriate. All members agreed that the statement should note that the timing and overall amounts of the Committee's asset purchases would continue to be evaluated in light of the evolving economic outlook and conditions in financial markets.

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

"The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ¼ percent. The Committee directs the Desk to purchase agency debt, agency MBS, and longer-term Treasury securities during the intermeeting period with the aim of providing support to private credit markets and economic activity. The timing and pace of these purchases should depend on conditions in the markets for such securities and on a broader assessment of private credit market conditions. The Committee anticipates that the combination of outright purchases and various liquidity facilities outstanding will cause the size of the Fed-

eral Reserve's balance sheet to expand significantly in coming months. The Desk is expected to purchase up to \$200 billion in housing-related agency debt by the end of this year. The Desk is expected to purchase at least \$500 billion in agency MBS by the end of the second quarter of this year and is expected to purchase up to \$1.25 trillion of these securities by the end of this year. The Desk is expected to purchase up to \$300 billion of longer-term Treasury securities by the end of the third quarter. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability."

The vote encompassed approval of the statement below to be released at 2:15 p.m.:

"Information received since the Federal Open Market Committee met in March indicates that the economy has continued to contract, though the pace of contraction appears to be somewhat slower. Household spending has shown signs of stabilizing but remains constrained by ongoing job losses, lower housing wealth, and tight credit. Weak sales prospects and difficulties in obtaining credit have led businesses to cut back on inventories, fixed investment, and staffing. Although the economic outlook has improved modestly since the March meeting, partly reflecting some easing of financial market conditions, economic activity is likely to remain weak for a time. Nonetheless, the Committee continues to anticipate that policy actions to stabilize financial markets and institutions, fiscal and monetary stimulus, and market forces will contribute to a gradual resumption of sustainable economic growth in a context of price stability.

In light of increasing economic slack here and abroad, the Committee expects that inflation will remain subdued. Moreover, the Committee sees some risk that inflation could persist for a time below rates that best foster economic growth and price stability in the longer term.

In these circumstances, the Federal Reserve will employ all available tools to promote economic recovery and to preserve

price stability. The Committee will maintain the target range for the federal funds rate at 0 to  $\frac{1}{4}$  percent and anticipates that economic conditions are likely to warrant exceptionally low levels of the federal funds rate for an extended period. As previously announced, to provide support to mortgage lending and housing markets and to improve overall conditions in private credit markets, the Federal Reserve will purchase a total of up to \$1.25 trillion of agency mortgage-backed securities and up to \$200 billion of agency debt by the end of the year. In addition, the Federal Reserve will buy up to \$300 billion of Treasury securities by autumn. The Committee will continue to evaluate the timing and overall amounts of its purchases of securities in light of the evolving economic outlook and conditions in financial markets. The Federal Reserve is facilitating the extension of credit to households and businesses and supporting the functioning of financial markets through a range of liquidity programs. The Committee will continue to carefully monitor the size and composition of the Federal Reserve's balance sheet in light of financial and economic developments."

Voting for this action: Messrs. Bernanke and Dudley, Ms. Duke, Messrs. Evans, Kohn, Lacker, Lockhart, Tarullo, and Warsh, and Ms. Yellen.

Voting against this action: None.

Governor Kohn reported to the Committee on the progress of a Federal Reserve workgroup in its review of the information provided to the public regarding Federal Reserve programs and activities. That review was being conducted to identify opportunities for providing additional information to the public without compromising the Federal Reserve's mandated policy objectives. The workgroup had been devoting particular attention to approaches to enhancing the transparency of the Federal Reserve's liquidity and credit facilities, including regular reporting on the number, types, and concentration of borrowers from each program; the amount and nature of collateral ac-

cepted; detailed background information on special purpose vehicles; and contracts with private-sector firms that had been engaged to help carry out some of these programs. In the Committee's discussion of these issues, it was noted that disclosing the identities of individual borrowers would very likely discourage use of the Federal Reserve's liquidity and credit facilities because prospective borrowers would be concerned that their creditors and counterparties would see borrowing from the Federal Reserve as a sign of financial weakness. The resulting stigma would undermine the effectiveness of those programs in promoting financial stability and economic recovery.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, June 23–24, 2009. The meeting adjourned at 11:50 a.m. on April 29, 2009.

#### Notation Vote

By notation vote completed on April 7, 2009, the Committee unanimously approved the minutes of the FOMC meeting held on March 17–18, 2009.

Brian F. Madigan  
Secretary

#### Addendum: Summary of Economic Projections

In conjunction with the April 28–29, 2009, FOMC meeting, the members of the Board of Governors and the presidents of the Federal Reserve Banks, all of whom participate in deliberations of the FOMC, submitted projections for output growth, unemployment, and inflation in 2009, 2010, 2011, and over the longer run. Projections were based on information available through the end of the meeting and on each partici-

participant's assumptions about factors likely to affect economic outcomes, including his or her assessment of appropriate monetary policy. "Appropriate monetary policy" is defined as the future path of policy that the participant deems most likely to foster outcomes for economic activity and inflation that best satisfy his or her interpretation of the Federal Reserve's dual objectives of maximum employment and stable prices. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge over time under appropriate monetary policy and in the absence of further shocks.

As indicated in table 1 and depicted in figure 1, all FOMC participants projected that real GDP would contract this year, that the unemployment rate would increase in coming quarters, and that inflation would be slower this year than in recent years. Almost all participants viewed the near-term outlook for economic activity as having weakened

relative to the projections they made at the time of the January FOMC meeting, but they continued to expect a recovery in sales and production to begin during the second half of 2009. With the strong adverse forces that have been acting on the economy likely to abate only slowly, participants generally expected a gradual recovery: All anticipated that unemployment, though declining in coming years, would remain well above its longer-run sustainable rate at the end of 2011; most indicated they expected the economy to take five or six years to converge to a longer-run path characterized by a sustainable rate of output growth and by rates of unemployment and inflation consistent with the Federal Reserve's dual objectives, but several said full convergence would take longer. Participants projected very low inflation this year; most expected inflation to edge up over the next few years toward the rate they consider consistent with the dual objectives. Most par-

Table 1. Economic projections of Federal Reserve Governors and Reserve Bank presidents, April 2009  
Percent

Variable	Central tendency <sup>1</sup>				Range <sup>2</sup>			
	2009	2010	2011	Longer Run	2009	2010	2011	Longer Run
Change in real GDP ..	-2.0 to -1.3	2.0 to 3.0	3.5 to 4.8	2.5 to 2.7	-2.5 to -0.5	1.5 to 4.0	2.3 to 5.0	2.4 to 3.0
January projection ..	-1.3 to -0.5	2.5 to 3.3	3.8 to 5.0	2.5 to 2.7	-2.5 to 0.2	1.5 to 4.5	2.3 to 5.5	2.4 to 3.0
Unemployment rate ...	9.2 to 9.6	9.0 to 9.5	7.7 to 8.5	4.8 to 5.0	9.1 to 10.0	8.0 to 9.6	6.5 to 9.0	4.5 to 5.3
January projection ..	8.5 to 8.8	8.0 to 8.3	6.7 to 7.5	4.8 to 5.0	8.0 to 9.2	7.0 to 9.2	5.5 to 8.0	4.5 to 5.5
PCE inflation .....	0.6 to 0.9	1.0 to 1.6	1.0 to 1.9	1.7 to 2.0	-0.5 to 1.2	0.7 to 2.0	0.5 to 2.5	1.5 to 2.0
January projection ..	0.3 to 1.0	1.0 to 1.5	0.9 to 1.7	1.7 to 2.0	-0.5 to 1.5	0.7 to 1.8	0.2 to 2.1	1.5 to 2.0
Core PCE inflation <sup>3</sup> ..	1.0 to 1.5	0.7 to 1.3	0.8 to 1.6		0.7 to 1.6	0.5 to 2.0	0.2 to 2.5	
January projection ..	0.9 to 1.1	0.8 to 1.5	0.7 to 1.5		0.6 to 1.5	0.4 to 1.7	0.0 to 1.8	

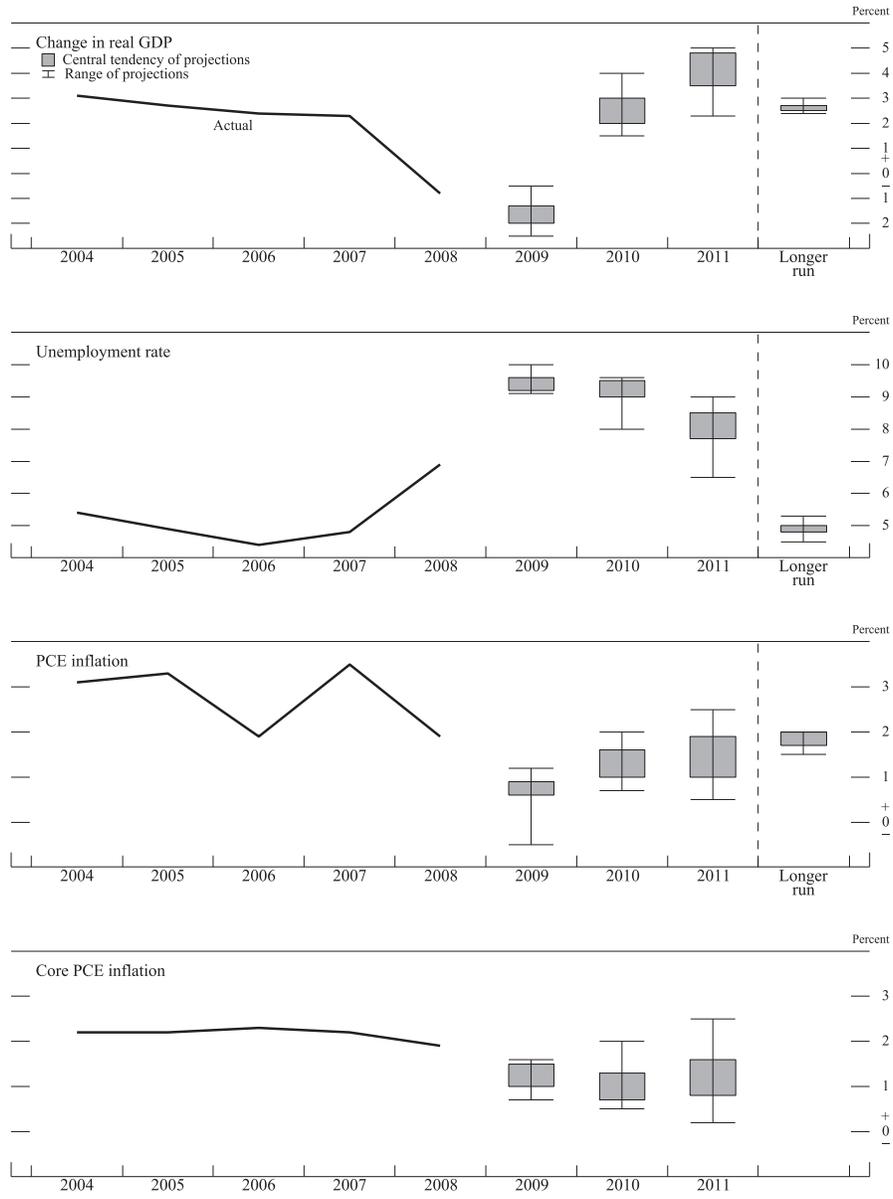
NOTE: Projections of change in real gross domestic product (GDP) and of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The January projections were made in conjunction with the FOMC meeting on January 27–28, 2009.

1. The central tendency excludes the three highest and three lowest projections for each variable in each year.

2. The range for a variable in a given year includes all participants' projections, from lowest to highest, for that variable in that year.

3. Longer-run projections for core PCE inflation are not collected.

Figure 1. Central tendencies and ranges of economic projections, 2009–11 and over the longer run



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

ticipants—though fewer than in January—viewed the risks to the growth outlook as skewed to the downside. Most participants saw the risks to the inflation outlook as balanced; fewer than in January viewed those risks as tilted to the downside. With few exceptions, participants judged that their projections for economic activity and inflation remained subject to a degree of uncertainty exceeding historical norms.

#### *The Outlook*

Participants' projections for 2009 real GDP growth had a central tendency of negative 2.0 percent to negative 1.3 percent, somewhat below the central tendency of negative 1.3 percent to negative 0.5 percent for their January projections. Participants noted that the data received between the January and April FOMC meetings pointed to a larger decline in output and employment during the first quarter than they had anticipated at the time of the January meeting. However, participants also saw recent indications that the economic downturn was slowing in the second quarter, and they continued to expect that sales and production would begin to recover—albeit gradually—during the second half of the year, reflecting the effects of monetary and fiscal stimulus and of measures to support credit markets and stabilize the financial system along with market forces. In particular, participants noted some improvement in financial conditions in recent months, signs that consumer spending was leveling out, and tentative indications that activity in the housing sector might be nearing its bottom. In addition, they observed that the large reduction in stocks of unsold goods that resulted from firms' aggressive inventory cutting during the first

quarter would make firms more likely to increase production as their sales stabilize and then begin to turn up later this year. Participants expected, however, that recoveries in consumer spending and residential investment initially would be damped by further deterioration in labor markets, still-tight credit conditions, and a continuing, if less pronounced, decline in house prices. Moreover, they anticipated that very low capacity utilization, sluggish growth in sales, and the high cost and limited availability of financing would contribute to further weakness in business fixed investment this year.

Looking further ahead, participants' projections for real GDP growth in 2010 had a central tendency of 2.0 to 3.0 percent, and those for 2011 had a central tendency of 3.5 to 4.8 percent. Participants generally expected that strains in credit markets and in the banking system would ebb slowly, and hence that the pace of recovery would continue to be damped in 2010. But they anticipated that the upturn would strengthen in 2011 to a pace exceeding the growth rate of potential GDP as financial conditions continue to improve, and that it would remain above that rate long enough to eliminate slack in resource utilization over time. Several participants anticipated that rapid growth in the monetary base in 2009—a result of the Federal Reserve's sizable purchases of longer-term assets—would result in a more pronounced pickup in output and employment growth in 2010 and a somewhat quicker convergence to longer-run equilibrium. Most participants expected that, absent further shocks, real GDP growth eventually would converge to a rate of 2.5 to 2.7 percent per year, reflecting longer-term trends in the growth of productivity and the labor force.

In light of their expectation that the recovery will begin gradually, with output initially rising at a below-potential rate, participants anticipated that labor market conditions would continue to deteriorate over the remainder of this year. Their projections for the average unemployment rate during the fourth quarter of 2009 had a central tendency of 9.2 to 9.6 percent, noticeably higher than the actual unemployment rate of 8.5 percent in March—the latest reading available at the time of the April FOMC meeting. All participants revised up their forecasts of the unemployment rate at the end of this year relative to their January projections, reflecting the sharper-than-expected rise in actual unemployment that occurred during the first quarter as well as the downward revisions in their forecasts of output growth in 2009. Most participants anticipated that growth next year would not substantially exceed its longer-run sustainable rate and hence that the unemployment rate would decline only modestly in 2010; some also pointed to the friction of a reallocation of resources away from shrinking economic sectors as likely to restrain progress in reducing unemployment. With output growth and job creation generally projected to pick up appreciably in 2011, participants anticipated that joblessness would decline more noticeably, as evident from the central tendency of 7.7 to 8.5 percent for their projections of the unemployment rate in late 2011. Even so, they expected that the unemployment rate at the end of 2011 would still be declining toward its longer-run sustainable level. Participants projected that unemployment would decline further after 2011; most saw the unemployment rate eventually converging to 4.8 to 5.0 percent.

The central tendency of participants' projections for 2009 PCE inflation was 0.6 to 0.9 percent, an interval that is somewhat narrower but neither higher nor lower than the central tendency of their January projections. Looking beyond this year, participants' projections for total PCE inflation had central tendencies of 1.0 to 1.6 percent for 2010 and 1.0 to 1.9 percent for 2011. The central tendency of projections for core inflation in 2009 was 1.0 to 1.5 percent; those for 2010 and 2011 were 0.7 to 1.3 percent and 0.8 to 1.6 percent, respectively. Most participants expected that economic slack, though diminishing, would continue to damp inflation pressures for the next few years and hence that total PCE inflation in 2011 would still be below their assessments of its appropriate longer-run level. Some thought that persistent economic slack would be accompanied by declining inflation over the next few years. Most, however, projected that, as the economy recovers, inflation would increase gradually and move toward their individual assessments of the measured rate of inflation consistent with the Federal Reserve's dual mandate for maximum employment and price stability. Several participants, noting that the public's longer-run inflation expectations have not changed appreciably, anticipated that inflation would return more promptly to levels consistent with their judgments about appropriate longer-run inflation.

In April as in January, the central tendency of projections of the longer-run inflation rate was 1.7 to 2.0 percent. Most participants judged that a longer-run PCE inflation rate of 2 percent would be consistent with the Federal Reserve's dual mandate; others indicated that inflation of 1½ or 1¾ percent would be appropriate. Modestly

positive longer-run inflation would allow the Committee to stimulate economic activity and support employment by setting the federal funds rate temporarily below the inflation rate when the economy suffers a large negative shock to demands for goods and services.

### *Uncertainty and Risks*

A majority of participants continued to view the risks to their projections for real GDP growth as skewed to the downside and saw the associated risks to their projections for the unemployment rate as tilted to the upside, but a larger number than in January now saw the risks as broadly balanced. Participants shared the judgment that their projections of future economic activity and unemployment continued to be subject to greater-than-average uncertainty.<sup>9</sup> Some participants highlighted the still-considerable uncertainty about the future course of the financial crisis and the risk that a resurgence of financial turmoil could adversely impact the real economy. In addition, some noted the difficulty in gauging the macroeconomic effects of the credit-easing policies that are now being employed by the Federal Reserve and other central banks, given limited experience with such tools.

Most participants judged the risks to the inflation outlook as roughly balanced; some continued to view these risks as skewed to the downside, while one saw inflation risks as tilted to the

9. Table 2 provides estimates of forecast uncertainty for the change in real GDP, the unemployment rate, and total consumer price inflation over the period from 1989 to 2008. At the end of this summary, the box "Forecast Uncertainty" discusses the sources and interpretation of uncertainty in economic forecasts and explains the approach used to assess the uncertainty and risks attending participants' projections.

Table 2. Average historical projection error ranges  
Percentage points

Variable	2009	2010	2011
Change in real GDP <sup>1</sup> ...	±1.0	±1.5	±1.6
Unemployment rate <sup>1</sup> ...	±0.5	±0.8	±1.0
Total consumer prices <sup>2</sup> ..	±0.8	±1.0	±1.0

NOTE: Error ranges shown are measured as plus or minus the root mean squared error of projections for 1989 through 2008 that were released in the spring by various private and government forecasters. As described in the box "Forecast Uncertainty," under certain assumptions, there is about a 70 percent probability that actual outcomes for real GDP, unemployment, and consumer prices will be in ranges implied by the average size of projection errors made in the past. Further information is in David Reifschneider and Peter Tulip (2007), "Gauging the Uncertainty of the Economic Outlook from Historical Forecasting Errors," Finance and Economics Discussion Series 2007-60 (Washington: Board of Governors of the Federal Reserve System, November).

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

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

upside. Some participants noted the risk that inflation expectations might become unanchored and drift downward in response to persistently low inflation outcomes; several pointed to the possibility of an upward shift in expected and actual inflation if investors become concerned that stimulative monetary policy measures and the attendant expansion of the Federal Reserve's balance sheet might not be unwound in a timely fashion as the economy recovers. Most participants again saw the uncertainty surrounding their inflation projections as exceeding historical norms.

### *Diversity of Views*

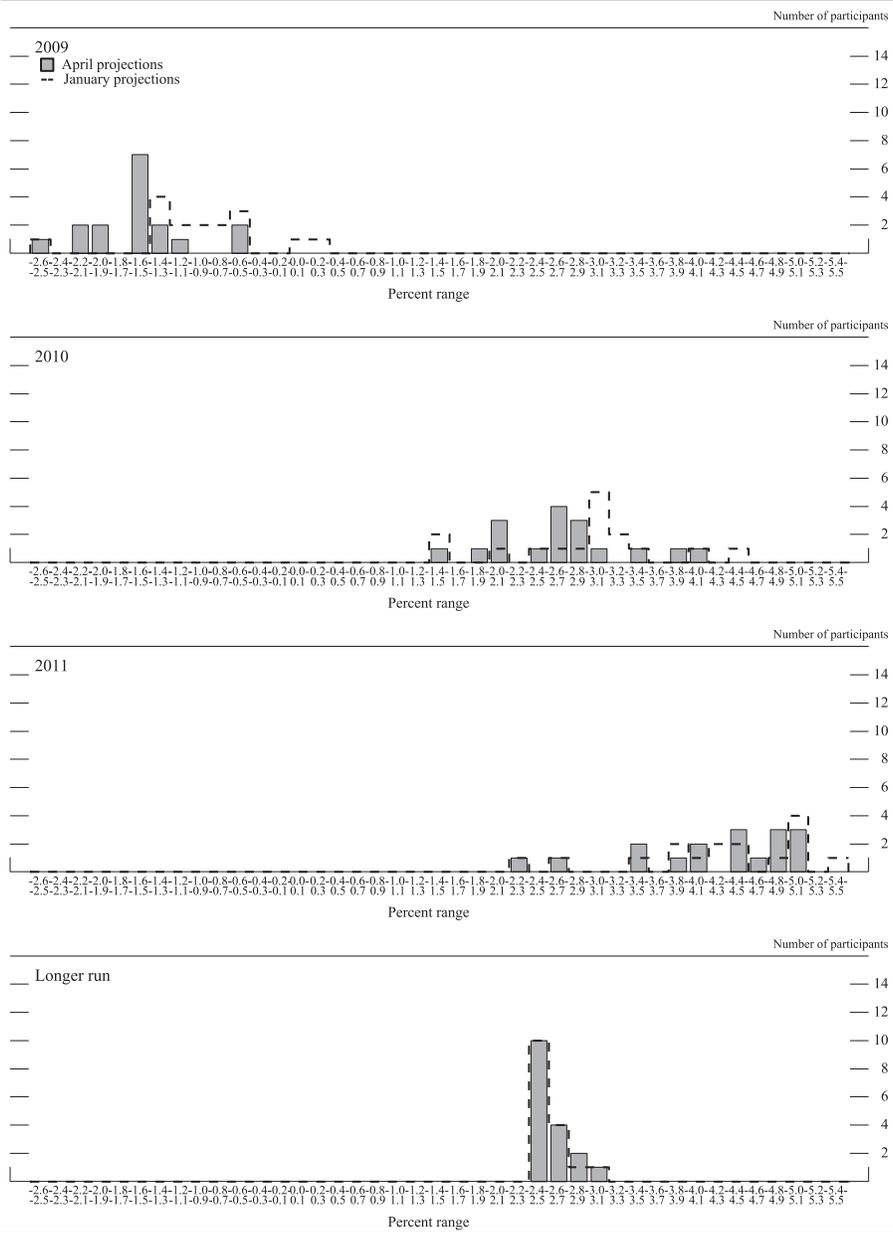
Figures 2.A and 2.B provide further details on the diversity of participants' views regarding likely outcomes for real GDP growth and the unemploy-

ment rate in 2009, 2010, and 2011. The dispersion in participants' April projections reflects, among other factors, the diversity of their assessments regarding the effects of fiscal stimulus and the likely pace of recovery in the financial sector. Though the dispersion in projections for each variable was roughly the same in April as in January, the downward shift in the distribution of participants' projections of real GDP growth in 2009, coupled with essentially unchanged distributions of projections for growth in 2010 and 2011, resulted in an upward shift from January to April in the distribution of projections for the unemployment rate in all three years. The dispersion in participants' longer-run projections reflected differences in their estimates regarding the sustainable rates of output growth and unemployment to which the economy would converge under appropriate policy and in the absence of any further shocks;

these distributions did not change appreciably from January to April.

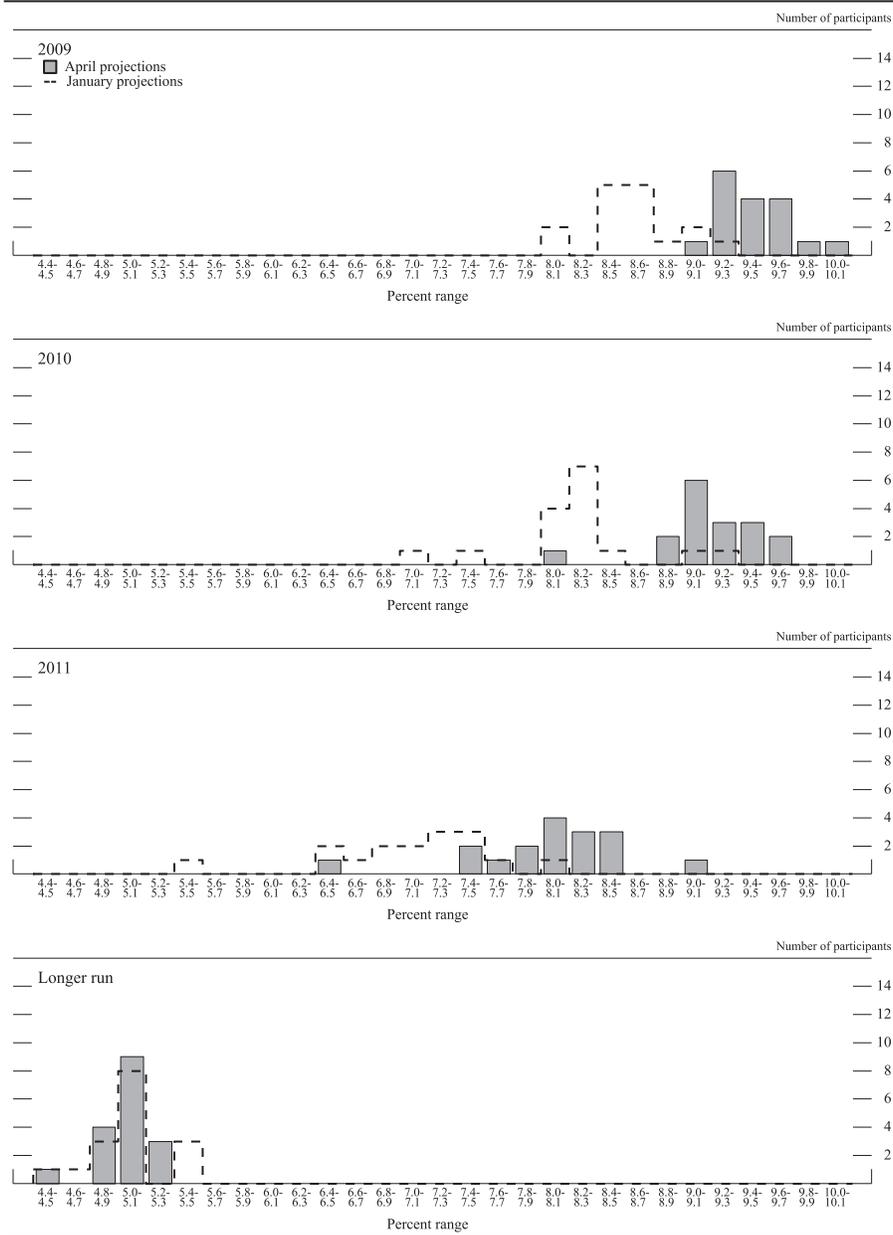
Figures 2.C and 2.D provide corresponding information about the diversity of participants' views regarding the inflation outlook. The dispersion in participants' projections for total and core PCE inflation during 2009 and the following two years illustrates their varying assessments of the inflation outcomes that will result from persistent economic slack, from expansion and subsequent contraction of the Federal Reserve's balance sheet, and perhaps also from changes in the public's expectations of future inflation. In contrast, the tight distribution of participants' projections for longer-run inflation illustrates their substantial agreement about the measured rate of inflation that is most consistent with the Federal Reserve's dual objectives of maximum employment and stable prices.

Figure 2.A. Distribution of participants' projections for the change in real GDP, 2009–11 and over the longer run



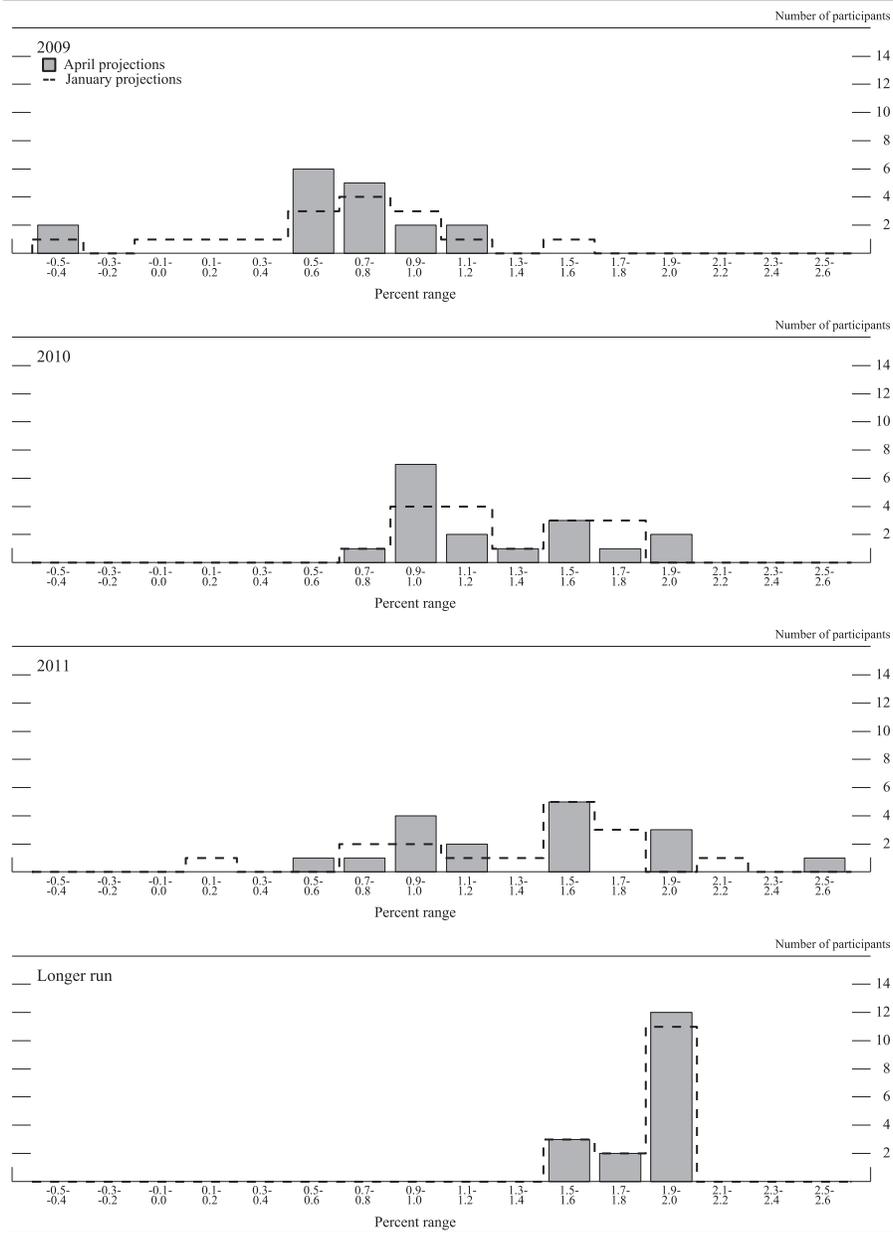
NOTE: Definitions of variables are in the general note to table 1.

Figure 2.B. Distribution of participants' projections for the unemployment rate, 2009–11 and over the longer run



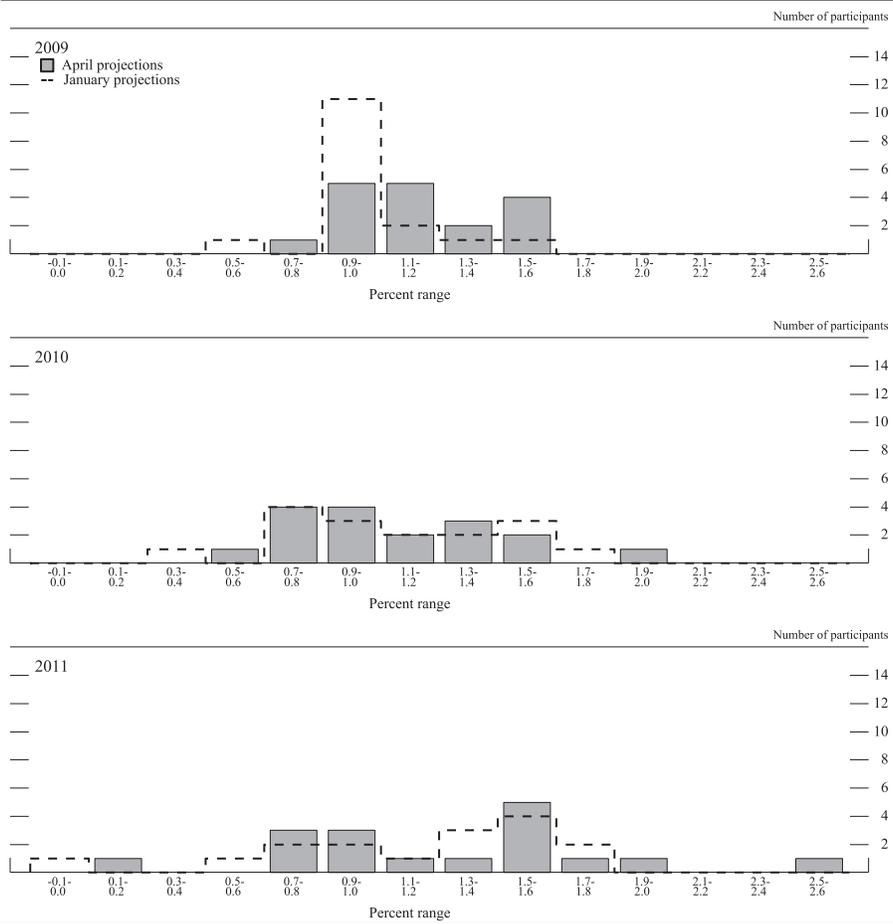
NOTE: Definitions of variables are in the general note to table 1.

Figure 2.C. Distribution of participants' projections for PCE inflation, 2009–11 and over the longer run



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

Figure 2.D. Distribution of participants' projections for core PCE inflation, 2009–11



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

## Forecast Uncertainty

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

Table 2 summarizes the average historical accuracy of a range of forecasts, including those reported in past *Monetary Policy Reports* and those prepared by Federal Reserve Board staff in advance of meetings of the Federal Open Market Committee. The projection error ranges shown in the table illustrate the considerable uncertainty associated with economic forecasts. For example, suppose a participant projects that real gross domestic product (GDP) and total consumer prices will rise steadily at annual rates of, respectively, 3 percent and 2 percent. If the uncertainty attending those projections is similar to that

experienced in the past and the risks around the projections are broadly balanced, the numbers reported in table 2 would imply a probability of about 70 percent that actual GDP would expand between 2 percent to 4 percent in the current year, 1.5 percent to 4.5 percent in the second year, and 1.4 percent to 4.6 percent in the third year. The corresponding 70 percent confidence intervals for overall inflation would be 1.2 percent to 2.8 percent in the current year and 1.0 percent to 3.0 percent in the second and third years.

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

### **Meeting Held on June 23–24, 2009**

A joint meeting of the Federal Open Market Committee and the Board of Governors of the Federal Reserve System was held in the offices of the Board of Governors in Washington, D.C., on Tuesday, June 23, 2009, at 1:00 p.m. and continued on Wednesday, June 24, 2009, at 9:00 a.m.

*Present:*

Mr. Bernanke, Chairman  
Mr. Dudley, Vice Chairman  
Ms. Duke  
Mr. Evans  
Mr. Kohn  
Mr. Lacker  
Mr. Lockhart  
Mr. Tarullo  
Mr. Warsh  
Ms. Yellen

Messrs. Bullard and Hoenig, Ms. Pinalto, and Mr. Rosengren, Alternate Members of the Federal Open Market Committee

Messrs. Fisher, Plosser, and Stern, Presidents of the Federal Reserve Banks of Dallas, Philadelphia, and Minneapolis, respectively

Mr. Madigan, Secretary and Economist  
Ms. Danker, Deputy Secretary  
Mr. Luecke, Assistant Secretary  
Mr. Skidmore, Assistant Secretary  
Ms. Smith, Assistant Secretary  
Mr. Alvarez,<sup>10</sup> General Counsel  
Mr. Baxter, Deputy General Counsel  
Mr. Sheets, Economist  
Mr. Stockton, Economist

Messrs. Altig, Clouse, Connors, Kamin, Slifman, Weinberg, and Wilcox, Associate Economists

Mr. Sack, Manager, System Open Market Account

Ms. Johnson, Secretary of the Board, Office of the Secretary, Board of Governors

Mr. Frierson,<sup>10</sup> Deputy Secretary, Office of the Secretary, Board of Governors

Mr. Struckmeyer, Deputy Staff Director, Office of the Staff Director for Management, Board of Governors

Mr. English, Deputy Director, Division of Monetary Affairs, Board of Governors

Mr. Blanchard, Assistant to the Board, Office of Board Members, Board of Governors

Messrs. Greenlee, Nelson, Reifschneider, and Wascher, Associate Directors, Divisions of Banking Supervision and Regulation, Monetary Affairs, Research and Statistics, and Research and Statistics, respectively, Board of Governors

Mr. Gagnon, Visiting Associate Director, Division of Monetary Affairs, Board of Governors

Mr. Oliner, Senior Adviser, Division of Research and Statistics, Board of Governors

Messrs. Carpenter and Perli, Deputy Associate Directors, Division of Monetary Affairs, Board of Governors

Mr. Kiley, Assistant Director, Division of Research and Statistics, Board of Governors

Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors

Ms. Lindner, Group Manager, Division of Research and Statistics, Board of Governors

Mr. Wood, Senior Economist, Division of International Finance, Board of Governors

Messrs. Driscoll, King,<sup>10</sup> and McCarthy, Economists, Division of Monetary Affairs, Board of Governors

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10. Attended Tuesday's session only.

Ms. Beattie, Assistant to the Secretary, Office of the Secretary, Board of Governors

Ms. Low, Open Market Secretariat Specialist, Division of Monetary Affairs, Board of Governors

Messrs. Fuhrer and Rosenblum, Executive Vice Presidents, Federal Reserve Banks of Boston and Dallas, respectively

Mr. Judd, Advisor to the President, Federal Reserve Bank of San Francisco

Messrs. Feldman, Hilton, Krane, McAndrews, Mses. Mester and Mosser, and Messrs. Schweitzer, Sellon, and Waller, Senior Vice Presidents, Federal Reserve Banks of Minneapolis, New York, Chicago, New York, Philadelphia, New York, Cleveland, Kansas City, and St. Louis, respectively

Ms. Logan, Vice President, Federal Reserve Bank of New York

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

The Manager of the System Open Market Account (SOMA) reported on recent developments in domestic and foreign financial markets. The Manager also reported on System open market operations in Treasury securities and in agency debt and agency mortgage-backed securities (MBS) during the period since the Committee's April 28–29 meeting. By unanimous vote, the Committee ratified those transactions. There were no open market operations in foreign currencies for the System's account over the intermeeting period.

The Committee reviewed a staff proposal that would authorize the Desk to lend, as part of the Federal Reserve's

regular overnight securities lending operations, securities held in the SOMA portfolio that are direct obligations of federal agencies. Lending agency securities was viewed as a technical modification to the existing overnight securities lending program that would support functioning of agency debt markets. The Committee voted unanimously to amend paragraph 3 of the Authorization for Domestic Open Market Operations with the text underlined below.

“3. In order to ensure the effective conduct of open market operations, the Federal Open Market Committee authorizes the Federal Reserve Bank of New York to lend on an overnight basis U.S. Government securities and securities that are direct obligations of any agency of the United States, held in the System Open Market Account, to dealers at rates that shall be determined by competitive bidding. The Federal Reserve Bank of New York shall set a minimum lending fee consistent with the objectives of the program and apply reasonable limitations on the total amount of a specific issue that may be auctioned and on the amount of securities that each dealer may borrow. The Federal Reserve Bank of New York may reject bids which could facilitate a dealer's ability to control a single issue as determined solely by the Federal Reserve Bank of New York.”

The staff reported on projections of the Federal Reserve's balance sheet under various assumptions about economic and financial conditions and the associated path of monetary policy. Staff projections suggested that the size of the Federal Reserve's balance sheet might peak late this year and decline gradually thereafter. The staff also presented information on the possible implications of substantial changes in the size and composition of the Federal Reserve's balance sheet for the System's net income. The analysis indicated that the Federal Reserve was likely to earn substantial net interest

income over the next few years under most interest rate scenarios. The staff presented one scenario, however, in which aggressive increases in short-term interest rates significantly reduced System net income relative to a baseline scenario. The analysis also suggested that the market value of the Federal Reserve's securities holdings could decline appreciably under some scenarios. However, while the Federal Reserve would retain the option of selling securities before they mature or are prepaid as a means of tightening policy when appropriate, it was not expected to have to do so. Changes in market valuations were thus seen as unlikely to have significant implications for the System's net income.

In a related discussion, the staff briefed the Committee on a number of possible tools that the Federal Reserve might employ to foster effective control of the federal funds rate in the context of a much expanded balance sheet. Some of those tools were focused primarily on shaping or strengthening the demand for reserves, while others were designed to provide greater control over the supply of reserves. In discussing the staff presentation, meeting participants generally agreed that the Federal Reserve either already had or could develop tools to remove policy accommodation when appropriate. Ensuring that policy accommodation can ultimately be withdrawn smoothly and at the appropriate time would remain a top priority of the Federal Reserve.

The staff also provided the Committee with an analysis of the potential adverse effects of very high reserve balances on bank capital ratios. An important issue was whether the further increase in reserve balances that is likely to result from the Federal Reserve's already-announced program of asset purchases could lead banks to

limit their lending and acquisition of securities in order to prevent an excessive decline in their capital ratios. The analysis concluded that, with few exceptions, banks' regulatory leverage ratios (defined as tier 1 capital divided by total average assets) were likely to remain comfortably above regulatory minimums, even with the substantial growth in reserve balances projected to occur in coming months and even if there were some erosion in bank capital. In part, that result reflected the fact that many institutions had raised capital lately; in addition, the leverage ratios for most institutions were well above the regulatory minimums at the end of the first quarter.

The staff also reviewed the experience to date with the Federal Reserve's purchases of Treasury securities, agency debt securities, and agency MBS. A number of potential modifications to those programs were presented for the Committee's consideration, including possible expansions in their size, extensions of the duration of securities purchased, steps to increase the flexibility of those purchases both within each program and across programs in response to short-term market developments, and possible approaches to winding down purchases as the programs near completion. The Federal Reserve was already purchasing a very large fraction of new current-coupon agency MBS and agency debt, and further increasing the scale of those programs could compromise market functioning. Some participants thought that increases in purchases of Treasury securities might have little or no effect on long-term interest rates unless the increases were very sizable, given the large amount of current and projected supply of Treasury securities. Others were concerned that announcements of substantial additional purchases could

add to perceptions that the federal debt was being monetized. While most members did not see large-scale purchases of Treasury securities as likely to be a source of inflation pressures given the weak economic outlook, public concern about monetization could have adverse implications for inflation expectations. The asset purchase programs were intended to support economic activity by improving market functioning and reducing interest rates on mortgage loans and other long-term credit to households and businesses relative to what they otherwise would have been. But the Committee had not set specific objectives for longer-term interest rates, and participants did not consider it appropriate to allow the Desk discretion to adjust the size and composition of the Federal Reserve's asset purchases in response to short-run fluctuations in market interest rates. Some participants noted that, in principle, the Committee could formulate a plan for asset purchases that would respond to economic and financial developments in a way that might better promote monetary policy objectives. Most, however, thought that formulating and communicating such a plan would be very difficult, potentially leading to an increase in market uncertainty regarding Federal Reserve actions and intentions. Many participants agreed, however, that it was appropriate for the Desk to make small adjustments to the size and timing of purchases aimed at fostering market liquidity and improving market functioning. Participants discussed the merits of including securities backed by adjustable-rate mortgages in MBS purchases and of tapering off purchases of securities as the asset purchase programs were being completed, but the Committee did not reach a decision on those issues at the meeting.

The staff presented policymakers with proposals for extensions, modifications, and terminations of various liquidity programs. A number of the credit and liquidity facilities that the Federal Reserve had established in the course of the financial crisis were scheduled to expire on October 30. Use of most of the liquidity facilities had declined in recent months as market conditions had improved. Still, meeting participants judged that market conditions remained fragile, and that concerns about counterparty credit risk and access to liquidity, both of which had ebbed notably in recent months, could increase again. Moreover, participants viewed the availability of the liquidity facilities as a factor that had contributed to the reduction in financial strains. If the Federal Reserve's backup liquidity facilities were terminated prematurely, such developments might put renewed pressure on some financial institutions and markets and tighten credit conditions for businesses and households. The period over year-end was seen as posing heightened risks given the usual pressures in financial markets at that time. In these circumstances, participants agreed that most facilities should be extended into early next year. However, participants also judged that improved market conditions and declining use of the facilities warranted scaling back, suspending, or tightening access to several programs, including the Term Auction Facility (TAF), the Term Securities Lending Facility (TSLF), and the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF).

Following the presentation and discussion of the staff proposal, the Board voted unanimously to extend the AMLF, the Commercial Paper Funding Facility (CPFF), the Primary Dealer

Credit Facility (PDCF), and the TSLF through February 1, 2010. The Board did not extend the Money Market Investor Funding Facility (MMIFF) beyond October 30. The extension of the TSLF required the approval of the Federal Open Market Committee (FOMC), as that facility was established under the joint authority of the Board and the FOMC. The Board and the FOMC jointly decided to suspend some TSLF auctions and to reduce the size and frequency of others. In addition, the FOMC extended the temporary reciprocal currency arrangements (swap lines) between the Federal Reserve and other central banks to February 1, 2010. The FOMC unanimously passed the following resolution to extend the temporary swap arrangements and the TSLF:

“The Federal Open Market Committee extends until February 1, 2010, its authorizations for the Federal Reserve Bank of New York to engage in temporary reciprocal currency arrangements (“swap arrangements”) with foreign central banks under the conditions previously established by the Committee.

The Federal Open Market Committee extends until February 1, 2010, its authorizations for the Federal Reserve Bank of New York to provide a Term Securities Lending Facility, subject to the same collateral, interest rate, and other conditions previously established by the Committee. However, the Federal Reserve Bank of New York is directed to suspend Schedule 1 TSLF auctions, effective immediately. The Federal Reserve Bank of New York is directed to conduct Schedule 2 TSLF auctions initially on a monthly basis in amounts of \$75 billion; the Reserve Bank is directed to reduce over time the amounts provided through the TSLF as market conditions warrant. The Federal Reserve Bank of New York is directed to suspend operations of the Term Securities Lending Facility Options Program (TOP), effective immediately. Should market conditions appear to warrant the resumption of Schedule 1 TSLF or TOP auctions, the Account Manager is

to consult with the Chairman and, if possible, the Board and the Federal Open Market Committee.”

Board members and FOMC participants noted their expectation that a number of these facilities may not need to be extended beyond February 1, 2010, if the recent improvements in market conditions continue. However, if financial stresses do not moderate as expected, the Board and the FOMC were prepared to extend the terms of some or all of the facilities as needed to promote financial stability and economic growth.

#### Staff Review of the Economic Situation

The information reviewed at the June 23–24 meeting suggested that the economy remained very weak, though declines in activity seemed to be lessening. Employment was still falling, and manufacturers had cut production further in response to excess inventories and soft demand. But the reductions in employment and industrial production had slowed somewhat, consumer spending appeared to be holding reasonably steady after shrinking in the second half of 2008, and sales and construction of single-family homes had apparently flattened out. In addition, the recent declines in capital spending were smaller than those recorded earlier in the year. Consumer price inflation was fairly quiescent in recent months, although the upturn in energy prices appeared likely to boost headline inflation in June.

The demand for labor weakened further in May, albeit less rapidly than in earlier months. Nonfarm payrolls continued to shrink, but the decline was the smallest since September. In addition, average weekly hours of production and nonsupervisory workers on

private payrolls, which had dropped substantially from September to March, were essentially unchanged in April and May. Thus aggregate hours worked by this group fell at a slower pace in April and May than on average over the previous seven months. The unemployment rate, however, rose further in May, to 9.4 percent. Despite the high level of joblessness, the labor force participation rate moved up for a second consecutive month to a level close to where it was at the beginning of the recession. The four-week moving average of initial claims for unemployment insurance fell back a little, but the number of individuals receiving unemployment insurance benefits continued to increase.

Industrial production decreased in April and May but at a slower pace than in the first quarter. Manufacturing output also fell in those months, and the factory operating rate dipped further in May. In the high-tech sector, computer output fell at a pace similar to that in the first quarter, but near-term indicators of production turned somewhat less negative and global semiconductor sales climbed in April for the second consecutive month. The production of motor vehicles and parts dropped sharply in May, principally because of extended plant shutdowns at General Motors and Chrysler. The production of commercial aircraft moved up. Outside the transportation and high-tech sectors, most industries continued to cut production in both April and May, though at a slower pace than over the preceding five months.

Real personal consumption expenditures rose somewhat in the first quarter after falling in the second half of 2008, and available data suggested that spending was holding reasonably steady in the second quarter. On the basis of the latest retail sales data, real

expenditures on goods other than motor vehicles appeared to have risen slightly in May and to have changed little, on net, since the turn of the year. Sales of light motor vehicles in April and May were slightly higher than the first-quarter average. Real outlays on services were reported to have picked up some in April from the average monthly gain seen over the first three months of the year. The fundamental determinants of consumer demand appeared to have improved a bit: Despite the ongoing decline in employment, real disposable personal income rose in the first quarter and posted another sizable gain in April as various provisions of the American Recovery and Reinvestment Act of 2009 boosted transfer payments and reduced personal taxes. In addition, equity prices recorded substantial gains in April and May, reversing a small portion of the prior wealth declines. Measures of consumer sentiment, while remaining at levels typically seen during recessions, improved markedly from the historical lows recorded around the turn of the year.

Single-family housing starts edged up in May, and adjusted permit issuance for single-family houses was a little above the level of starts, as it had been since January. In contrast, activity in the much smaller multifamily sector fell significantly further, reflecting a sharp deterioration in the fundamentals in that sector. The steep decline in the demand for new single-family houses seemed to have abated. However, the pace of new home sales was still very low in April, and the months' supply of new homes remained quite elevated relative to sales despite a decrease in the stock of unsold new single-family homes to a level roughly one-half of its mid-2006 peak. Sales of existing single-family homes had been fairly steady from late 2008 through May.

The relative stability of the resale market over this period coincided with a heightened proportion of transactions involving bank-owned and other distressed properties. The apparent stabilization in housing demand was likely due, in part, to the improvement in housing affordability that resulted from low mortgage rates and declining house prices. Rates for conforming 30-year fixed-rate mortgages rose on net between late April and late June but remained below the levels seen over most of 2008. Although the market for private-label nonprime mortgages remained closed, spreads between rates for jumbo and standard conforming loans narrowed substantially since March. Meanwhile, national house prices continued to decline.

Real investment in equipment and software (E&S) continued to contract; however, the decline in the second quarter appeared likely to be smaller than in either of the two preceding quarters. Outlays on transportation equipment seemed to be firming after shrinking for an extended period, and the incoming data on shipments and orders of nondefense capital goods pointed to a moderation in the rate of decrease in other major components of E&S. The contraction in spending on computing equipment appeared to be leveling off, although businesses continued to cut their real outlays on software. Real spending on equipment outside of high-tech and transportation seemed to have dropped less rapidly in the second quarter than in the first quarter. Data suggested a substantial increase in outlays for nonresidential construction in March and April, concentrated in energy-related sectors. Outside of the energy-related sectors, demand for nonresidential building remained extremely weak and financing difficult to obtain. Although the

months' supply of nonfarm business inventories remained elevated, large production cutbacks in recent quarters allowed producers to stem the rise in stocks relative to sales. The principal determinants of investment were still weak: Business output dropped further in the first quarter, the user cost of capital was higher than it was a year earlier, and credit remained tight. However, corporate bond yields eased considerably in the weeks leading to the June meeting, and monthly surveys of business conditions and sentiment were generally less downbeat than earlier in the year.

The U.S. international trade deficit widened slightly in April, as a decrease in imports was more than offset by a drop in exports. Most major categories of exports fell, with exports of machinery, industrial supplies, and consumer goods exhibiting significant declines. The value of imports of goods and services also edged down after remaining about unchanged in March. Imports of machinery and industrial supplies displayed significant decreases, and imports of services fell moderately. Imports of consumer goods increased. The value of oil imports also rose, as higher prices outweighed lower volumes.

The decline in output in the advanced foreign economies deepened in the first quarter. Domestic demand fell in all major economies, led by double-digit declines in fixed investment and sizable negative contributions of inventories to growth. Recent indicators, however, suggested that the pace of contraction likely moderated in the second quarter. Purchasing managers indexes rebounded from the exceptionally low levels reached in the first quarter, and industrial production stabilized somewhat. In emerging market economies, incoming data showed that first-quarter real gross domestic prod-

uct (GDP) contracted sharply in Mexico, Hong Kong, Malaysia, and Singapore, edged up in Korea, and expanded considerably in India and Indonesia. For the second quarter, indicators suggested a broader stabilization of activity in emerging market economies. In China, retail sales and fixed-asset investment rose strongly. Financial conditions continued to improve in most emerging market economies.

In the United States, headline consumer prices were little changed between March and May, held down by declines in the prices of food and energy over that period. Core inflation was slightly higher from March to May than during the preceding three months, although core prices posted fairly small increases apart from a tax-induced jump in tobacco prices. Near-term inflation expectations in the Reuters/University of Michigan Surveys of Consumers remained steady in May and then rose somewhat in the preliminary June survey. Survey measures of long-term inflation expectations showed no signs of moving lower despite the considerable margin of labor- and product-market slack present in the economy. At earlier stages of processing, the producer price index for core intermediate materials continued to decline through May, albeit at a slower pace than that seen at the end of 2008. Spot commodity prices, which had moved higher over the first four months of 2009, rose more rapidly since the end of April. Nevertheless, these prices remained well below their year-earlier levels. The incoming data on labor costs were mixed. Although the rise in hourly compensation in the nonfarm business sector picked up slightly in the first quarter, the employment cost index decelerated further. Increases in average hourly earnings also slowed further in April and May.

#### Staff Review of the Financial Situation

The decision by the FOMC at its April 28–29 meeting to leave the target range for the federal funds rate unchanged and the accompanying statement indicating that the FOMC would maintain the size of the large-scale asset purchase program were largely anticipated, but yields on Treasury securities rose slightly, as a few investors apparently had seen some chance that the Committee would expand the purchase program. The release of the April FOMC minutes three weeks later prompted a reversal of this move, as market participants reportedly focused on the suggestion that the total size of the purchase program might need to be increased at some point to spur a more rapid pace of recovery. The expected path of the federal funds rate implied by futures prices was largely unchanged by the release of the Committee's statement and minutes. However, in the days following the release of the May employment report, which was read as being significantly less negative than anticipated, market participants marked up their expected path for the federal funds rate. Yields on nominal Treasury coupon securities increased, on net, over the intermeeting period. These moves likely reflected a number of factors, including investors' perceptions of an improvement in the economic outlook, decreased concerns about the risk of deflation, a reversal of flight-to-quality flows, and selling of long-duration assets as exposure to mortgage prepayment risk dropped with a rise in mortgage rates. In addition, inflation compensation rose over the intermeeting period as yields on inflation-indexed Treasury securities increased much less than those on their nominal counterparts. Some of the rise

in inflation compensation may have reflected an increase in inflation expectations, but an improvement in liquidity in the market for Treasury inflation-protected securities and mortgage-related hedging flows may have boosted inflation compensation as well.

Pressures in short-term bank funding markets eased further, as evidenced by declines in London interbank offered rate (Libor) fixings and in spreads between one- and three-month Libor and comparable-maturity overnight index swap (OIS) rates. These spreads narrowed to levels not seen since early 2008, transaction volume rose modestly, and tentative signs of increased liquidity reportedly emerged. The market for repurchase agreements saw slight improvement, with bid-asked spreads for most types of transactions narrowing a bit and haircuts roughly unchanged. Spreads on A2/P2-rated commercial paper and AA-rated asset-backed commercial paper were little changed, on net, since late April, remaining at the low end of their ranges over the previous 18 months.

Over the intermeeting period, functioning in the market for Treasury securities generally improved and trading picked up, but some strains remained. The on-the-run/off-the-run premium narrowed considerably at the short end of the yield curve. Such spreads, however, remained somewhat wide for longer-dated issues, apparently reflecting concerns about volatility linked to mortgage-related hedging flows. Some strains, perhaps associated with these flows, emerged at times in the MBS market; market participants reacted to the large and rapid changes in MBS yields by widening bid-asked spreads on these securities.

Broad stock price indexes rose, on net, over the intermeeting period, reflecting generally better-than-expected

economic news and further declines in risk premiums. The spread between an estimate of the expected real equity return over the next 10 years for S&P 500 firms and an estimate of the real 10-year Treasury yield—a rough gauge of the equity risk premium—narrowed noticeably but remained high by historical standards. Option-implied volatility on the S&P 500 index declined but remained elevated.

Yields on speculative-grade and investment-grade corporate bonds dropped, and spreads over yields on comparable-maturity Treasury securities narrowed considerably. Estimates of bid-asked spreads in the secondary market for speculative-grade corporate bonds fell significantly to about their average levels in the few years before the summer of 2007, while estimates of such spreads for investment-grade corporate bonds remained somewhat elevated. Market sentiment toward the syndicated leveraged loan market also improved, with the average bid price increasing noticeably and bid-asked spreads narrowing a bit further. The inclusion of commercial mortgage-backed securities (CMBS) in the Term Asset-Backed Securities Loan Facility (TALF) program resulted initially in a narrowing of commercial mortgage credit default swap (CDS) spreads; however, spreads later widened as rating agencies issued conflicting opinions regarding the credit quality of senior CMBS tranches.

Market sentiment toward the financial sector improved over the intermeeting period, reflecting, in part, the release of the Supervisory Capital Assessment Program (SCAP) results for the nation's 19 largest bank holding companies (BHCs) on May 7. Nearly all the BHCs evaluated had enough Tier 1 capital to absorb the higher losses envisioned under the hypotheti-

cal more adverse scenario; however, 10 institutions were required to enhance their capital structure to put greater emphasis on common equity. Following the announcement of the SCAP results, the 19 evaluated institutions raised, or announced plans to raise, around \$70 billion in common equity through public offerings, conversion of preferred stock, and asset sales. These offerings accounted for most of the record-high total financial equity issuance in May. The evaluated BHCs have also issued additional debt under the Federal Deposit Insurance Corporation's Temporary Liquidity Guarantee Program (TLGP), as well as nonguaranteed debt. On June 9, the Treasury announced that 10 large financial institutions were eligible to repay the \$68 billion in capital that they had received through the Troubled Asset Relief Program (TARP). CDS spreads for banking organizations declined considerably over the intermeeting period, although they remained well above historical norms. Stock price indexes for the banking sector and the broader financial sectors rose significantly.

The level of private-sector debt was estimated to have remained about unchanged in the second quarter, as a further modest decline in household debt about offset a slight increase in nonfinancial business debt. Gross bond issuance by nonfinancial corporations was robust in May. Investment-grade issuance rebounded after a lull in April. Speculative-grade issuance was the highest since June 2007, but issuance of lower-rated speculative-grade bonds remained minimal. Meanwhile, the federal government issued large amounts of debt, and state and local government debt was estimated to have expanded moderately.

The expansion of M2 slowed significantly in April and May, as the reallo-

cation of household wealth toward the safety and liquidity of M2 assets evidently moderated. Retail money market mutual funds and small time deposits contracted in both months, probably in response to declining interest rates on these assets. The rise in currency diminished, likely reflecting primarily a waning in foreign demand.

Commercial bank credit increased slightly in May following six consecutive monthly declines, but the turnaround reflected a rise in securities holdings and in the volatile "other" loans category—that is, loans other than commercial and industrial (C&I), real estate, and consumer loans. C&I loans dropped in May, amid subdued origination activity and broad-based paydowns of outstanding loans. Home equity loans edged down—the first monthly decline in this category since October 2006—partly because of banks' reductions in existing lines of credit. Closed-end residential mortgages decreased; originations were reportedly strong but were more than offset by loan sales to the government-sponsored enterprises. The amount of outstanding consumer loans originated by banks shrank during April and May; the quantity of consumer loans on banks' balance sheets decreased even more because of a number of large credit card securitizations.

The dollar depreciated substantially during the intermeeting period against all other major currencies. This decline appeared to be driven by a renewed sense of optimism about global growth prospects, leading investors to shift away from safe-haven assets in the United States to riskier assets elsewhere. Libor-to-OIS spreads in euros and sterling decreased, and several foreign banks took advantage of improved financial conditions to raise capital and increase issuance of debt outside of

government guarantee programs. The improved access to capital markets and better economic outlook buoyed bank stocks, which helped headline equity indexes move higher. Most stock markets in emerging market economies rose considerably, and mutual fund flows into those markets strengthened.

The European Central Bank lowered its main policy rate 25 basis points to 1 percent and announced that it would purchase up to €60 billion in covered bonds. The Bank of England, the Bank of Canada, and the Bank of Japan kept their policy rates constant over the intermeeting period, but the Bank of England increased the size of its planned asset purchases from £75 billion to £125 billion. The Bank of Japan continued purchasing commercial paper, corporate bonds, equities, and government bonds. Chinese authorities held the renminbi nearly unchanged against the dollar, and several central banks intervened to purchase dollars, attempting to slow the dollar's depreciation against their currencies.

### Staff Economic Outlook

In the forecast prepared for the June meeting, the staff revised upward its outlook for economic activity during the remainder of 2009 and for 2010. Consumer spending appeared to have stabilized since the start of the year, sales and starts of new homes were flattening out, and the recent declines in capital spending did not look as severe as those that had occurred around the turn of the year. Recent declines in payroll employment and industrial production, while still sizable, were smaller than those registered earlier in 2009. Household wealth was higher, corporate bond rates had fallen, the value of the dollar was lower, the out-

look for foreign activity was better, and financial stress appeared to have eased somewhat more than had been anticipated in the staff forecast prepared for the prior FOMC meeting. The projected boost to aggregate demand from these factors more than offset the negative effects of higher oil prices and mortgage rates. The staff projected that real GDP would decline at a substantially slower rate in the second quarter than it had in the first quarter and then increase in the second half of 2009, though less rapidly than potential output. The staff also revised up its projection for the increase in real GDP in 2010, to a pace above the growth rate of potential GDP. As a consequence, the staff projected that the unemployment rate would rise further in 2009 but would edge down in 2010. Meanwhile, the staff forecast for inflation was marked up. Recent readings on core consumer prices had come in a bit higher than expected; in addition, the rise in energy prices, less-favorable import prices, and the absence of any downward movement in inflation expectations led the staff to raise its medium-term inflation outlook. Nonetheless, the low level of resource utilization was projected to result in an appreciable deceleration in core consumer prices through 2010.

Looking ahead to 2011 and 2012, the staff anticipated that financial markets and institutions would continue to recuperate, monetary policy would remain stimulative, fiscal stimulus would be fading, and inflation expectations would be relatively well anchored. Under such conditions, the staff projected that real GDP would expand at a rate well above that of its potential, that the unemployment rate would decline significantly, and that overall and core personal consumption expenditures inflation would stay low.

### Participants' Views and Committee Policy Action

In conjunction with this FOMC meeting, all meeting participants—the five members of the Board of Governors and the presidents of the 12 Federal Reserve Banks—provided projections for economic growth, the unemployment rate, and consumer price inflation for each year from 2009 through 2011 and over a longer horizon. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge over time under appropriate monetary policy and in the absence of further shocks. Participants' forecasts through 2011 and over the longer run are described in the Summary of Economic Projections, which is attached as an addendum to these minutes.

In their discussion of the economic situation and outlook, participants generally agreed that the information received since the April meeting indicated that the economic contraction was slowing and that the decline in activity could cease before long. Business and household confidence had picked up some, and survey data and anecdotal reports showed improved expectations for the future. The inventory adjustment process was continuing, housing and consumption demand apparently had leveled off, and financial market strains had eased further. Nonetheless, most participants saw the economy as still quite weak and vulnerable to further adverse shocks. Conditions in the labor market remained poor, and the unemployment rate continued to rise. These factors, along with past declines in wealth, would weigh on consumer spending. Although financial market conditions had improved, credit was still quite tight in many sectors. Economic activity in foreign economies

was unlikely to be sufficiently strong to provide a substantial boost to U.S. exports. Against this backdrop, participants generally judged that, while U.S. output would probably begin to grow again in the second half of the year, the rate of increase was likely to be relatively slow. Most believed that downside risks to economic growth had diminished somewhat since the April meeting, but were still significant.

Developments in financial markets over the intermeeting period were seen as broadly positive, reflecting, at least in part, a reduction in the perceived risk of further severely adverse outcomes. In particular, many participants noted that the results of the SCAP helped bolster confidence in banks and led to large infusions of private capital in that sector. Corporate credit markets continued to improve, and markets for asset-backed securities also showed an increasing amount of activity, supported in part by the TALF. Increases in equity prices had favorable effects on household wealth and overall sentiment. Still, participants generally noted that the improvement in market conditions was in part due to ongoing support from various government programs and that underlying financial conditions remained fragile. Credit was tight, with some banks quite reluctant to lend. Worsening credit quality, especially for consumer and commercial real estate loans, was seen as an important reason for reduced lending and tighter terms, and banks could face substantial losses in their loan portfolios in coming quarters. Many participants noted that obtaining financing for commercial real estate projects remained extremely difficult amid worsening fundamentals in the sector.

Consumer spending appeared no longer to be declining but nonetheless remained weak. The continued slug-

gishness in consumer expenditures mainly reflected falling employment, sharply lower wealth as a result of earlier steep declines in asset prices, and tight credit conditions. Because these factors were not seen as likely to dissipate quickly, most participants judged that consumer spending would continue to be subdued for some time. Given the significant uncertainties in the economic outlook, a sizable reduction in the saving rate seemed unlikely in the near term; some saw the possibility of further increases in the household saving rate. Participants also observed that, while personal income had expanded briskly of late, those increases had been boosted by special one-time factors such as fiscal stimulus and large cost-of-living adjustments for Social Security recipients. Personal income was likely to contract for a time going forward as the effects of these factors waned, and there was some risk that consumer spending might also decline as a consequence.

Indicators of single-family starts and sales suggested that housing activity may be leveling out, but most participants viewed the sector as still vulnerable to further weakness. Some expressed concern that the increases in mortgage rates seen over the intermeeting period had the potential to further depress the demand for housing and thus impede an economic recovery. Others noted that foreclosures were continuing at a very high rate and could push house prices down further and add to inventories of unsold homes, holding back housing activity and weighing on household wealth.

Labor market conditions were of particular concern to meeting participants. Although some improvements were evident in new and continuing unemployment insurance claims and the May payroll report was less weak

than expected, job losses remained substantial over the intermeeting period and the unemployment rate continued to rise rapidly. Rising labor force participation contributed to the increase in the unemployment rate. Some participants pointed out that households' financial strains may be encouraging many individuals to enter the labor market despite difficult labor market conditions. Reports from district contacts suggested that workweeks were being trimmed and that total hours worked were falling significantly. The large number of people working part time for economic reasons and the prevalence of permanent job reductions rather than temporary layoffs suggested that labor market conditions were even more difficult than indicated by the unemployment rate. With the recovery projected to be rather sluggish, most participants anticipated that the employment situation was likely to be downbeat for some time.

Anecdotal reports suggested that the weakness in activity was widespread across many industries and extended to the service sector. However, some meeting participants highlighted evidence from regional surveys that pointed to a stabilization or even a slight pickup in manufacturing in some areas, and positive signs were apparent in the energy and agriculture sectors. Participants noted an improvement in business sentiment in many districts, but contacts remained quite uncertain about the timing and extent of the recovery; elevated uncertainty was said to be inhibiting capital spending in many cases. Many businesses had been successful in working down inventories of unsold goods. Some participants noted that, as this process continues, increases in sales will have to be met by increases in production, which would, in turn, support growth in hours

worked and eventually in investment outlays.

Many participants noted that the global nature of this recession meant that growth abroad was not likely to bolster U.S. exports and so contribute to a recovery in the United States. In Europe, for example, unemployment was also rising sharply and financial strains remained significant. Some participants thought that recovery there was likely to lag behind that of the United States. In Asia, the outlook appeared more promising, with some evidence that the rate of decline in activity was diminishing. Recent information from China suggested that economic growth may be picking up there. Still, some participants mentioned that growth in that region was likely to remain importantly dependent on exports to major industrial economies that were likely to recover slowly.

Although recent increases in oil and other commodity prices were likely to raise headline inflation over the near term, most participants expected core inflation to remain subdued for some time. Several measures of labor compensation had slowed in recent quarters as unemployment mounted and wages were not likely to exert any significant upward pressures on prices, given the expectation that labor market conditions were likely to deteriorate further in coming months and probably would not improve quickly thereafter. In addition, many participants noted that productivity growth had been surprisingly strong in recent quarters. Although the measured increase in productivity might reflect cyclical factors rather than changes in the underlying trend and was subject to data revisions, growth in unit labor costs was expected to continue to be restrained in coming quarters. Substantial resource slack was also likely to keep price inflation low

in the future. Participants noted the considerable uncertainty surrounding estimates of the output and unemployment gaps and the extent of their effects on prices. However, most agreed that, even taking account of such uncertainty, the economy was almost certainly operating well below its potential and that significant price pressures were unlikely to materialize in the near and medium terms. Still, in light of the signs that economic activity was stabilizing, most participants saw less downside risk to their expectations for inflation. Moreover, participants pointed out that some measures of inflation expectations had edged up recently from very low readings, perhaps reflecting in part reduced concerns about deflation, and were now at levels close to those prevailing prior to the onset of the crisis. A few participants were concerned that inflation expectations could continue to rise, especially in light of the Federal Reserve's greatly expanded balance sheet and the associated large volume of reserves in the banking system, and that as a result inflation could temporarily rise above levels consistent with the Committee's dual objectives of maximum employment and stable prices. Most participants, however, expected that inflation would remain subdued for some time.

In their discussion of monetary policy for the period ahead, Committee members agreed that the stance of monetary policy should not be changed at this meeting. Given the prospects for weak economic activity, substantial resource slack, and subdued inflation, the Committee agreed that it should maintain its target range for the federal funds rate at 0 to ¼ percent. The future path of the federal funds rate would depend on the Committee's evolving expectations for the economy, but for now, members thought it most likely

that the federal funds rate would need to be maintained at an exceptionally low level for an extended period, given their forecasts for only a gradual upturn in activity and the lack of inflation pressures. The Committee also agreed that changes to its program of asset purchases were not warranted at this time. Although an expansion of such purchases might provide additional support to the economy, the effects of further asset purchases, especially purchases of Treasury securities, on the economy and on inflation expectations were uncertain. Moreover, it seemed likely that economic activity was in the process of leveling out, and the considerable improvements in financial markets over recent months were likely to lend further support to aggregate demand. Accordingly, the Committee agreed that the asset purchase programs should proceed for now on the schedule announced at previous meetings.

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

“The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to  $\frac{1}{4}$  percent. The Committee directs the Desk to purchase agency debt, agency MBS, and longer-term Treasury securities during the intermeeting period with the aim of providing support to private credit markets and economic activity. The timing and pace of these purchases should depend on conditions in the markets for such securities and on a broader assessment of private credit market conditions. The Committee anticipates that the combination of outright

purchases and various liquidity facilities outstanding will cause the size of the Federal Reserve’s balance sheet to expand significantly in coming months. The Desk is expected to purchase up to \$200 billion in housing-related agency debt by the end of this year. The Desk is expected to purchase up to \$1.25 trillion of agency MBS by the end of the year. The Desk is expected to purchase up to \$300 billion of longer-term Treasury securities by the end of the third quarter. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System’s balance sheet that could affect the attainment over time of the Committee’s objectives of maximum employment and price stability.”

The vote encompassed approval of the statement below to be released at 2:15 p.m.:

“Information received since the Federal Open Market Committee met in April suggests that the pace of economic contraction is slowing. Conditions in financial markets have generally improved in recent months. Household spending has shown further signs of stabilizing but remains constrained by ongoing job losses, lower housing wealth, and tight credit. Businesses are cutting back on fixed investment and staffing but appear to be making progress in bringing inventory stocks into better alignment with sales. Although economic activity is likely to remain weak for a time, the Committee continues to anticipate that policy actions to stabilize financial markets and institutions, fiscal and monetary stimulus, and market forces will contribute to a gradual resumption of sustainable economic growth in a context of price stability.

The prices of energy and other commodities have risen of late. However, substantial resource slack is likely to dampen cost pressures, and the Committee expects that inflation will remain subdued for some time.

In these circumstances, the Federal Reserve will employ all available tools to promote economic recovery and to preserve price stability. The Committee will maintain the target range for the federal funds rate at 0 to  $\frac{1}{4}$  percent and continues to anticipate that economic conditions are likely to warrant exceptionally low levels of the federal

funds rate for an extended period. As previously announced, to provide support to mortgage lending and housing markets and to improve overall conditions in private credit markets, the Federal Reserve will purchase a total of up to \$1.25 trillion of agency mortgage-backed securities and up to \$200 billion of agency debt by the end of the year. In addition, the Federal Reserve will buy up to \$300 billion of Treasury securities by autumn. The Committee will continue to evaluate the timing and overall amounts of its purchases of securities in light of the evolving economic outlook and conditions in financial markets. The Federal Reserve is monitoring the size and composition of its balance sheet and will make adjustments to its credit and liquidity programs as warranted.”

Voting for this action: Messrs. Bernanke and Dudley, Ms. Duke, Messrs. Evans, Kohn, Lacker, Lockhart, Tarullo, and Warsh, and Ms. Yellen.

Voting against this action: None.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, August 11–12, 2009. The meeting adjourned at 12:40 p.m. on June 24, 2009.

#### Notation Vote

By notation vote completed on May 19, 2009, the Committee unanimously approved the minutes of the FOMC meeting held on April 28–29, 2009.

#### Conference Call

On June 3, 2009, the Committee met by conference call in a joint session with the Board of Governors to review recent economic and financial developments, including changes in the Federal Reserve’s balance sheet. In addition, by unanimous vote, Brian Sack was selected to serve as Manager, System Open Market Account, on the understanding that his selection was subject to being satisfactory to the Federal Reserve Bank of New York.

Secretary’s note: Advice subsequently was received that the selection of Mr. Sack as Manager was satisfactory to the Board of Directors of the Federal Reserve Bank of New York.

Brian F. Madigan  
Secretary

#### Addendum: Summary of Economic Projections

In conjunction with the June 23–24, 2009, FOMC meeting, the members of the Board of Governors and the presidents of the Federal Reserve Banks, all of whom participate in deliberations of the FOMC, submitted projections for output growth, unemployment, and inflation in 2009, 2010, 2011, and over the longer run. Projections were based on information available through the end of the meeting and on each participant’s assumptions about factors likely to affect economic outcomes, including his or her assessment of appropriate monetary policy. “Appropriate monetary policy” is defined as the future path of policy that the participant deems most likely to foster outcomes for economic activity and inflation that best satisfy his or her interpretation of the Federal Reserve’s dual objectives of maximum employment and stable prices. Longer-run projections represent each participant’s assessment of the rate to which each variable would be expected to converge over time under appropriate monetary policy and in the absence of further shocks.

FOMC participants generally expected that, after declining over the first half of this year, output would expand sluggishly over the remainder of the year. Consequently, as indicated in table 1 and depicted in figure 1, all FOMC participants projected that real gross domestic product (GDP) would

Table 1. Economic projections of Federal Reserve Governors and Reserve Bank presidents, June 2009  
Percent

Variable	Central tendency <sup>1</sup>				Range <sup>2</sup>			
	2009	2010	2011	Longer Run	2009	2010	2011	Longer Run
Change in real GDP...	-1.5 to -1.0	2.1 to 3.3	3.8 to 4.6	2.5 to 2.7	-1.6 to -0.6	0.8 to 4.0	2.3 to 5.0	2.4 to 2.8
April projection ...	-2.0 to -1.3	2.0 to 3.0	3.5 to 4.8	2.5 to 2.7	-2.5 to -0.5	1.5 to 4.0	2.3 to 5.0	2.4 to 3.0
Unemployment rate ...	9.8 to 10.1	9.5 to 9.8	8.4 to 8.8	4.8 to 5.0	9.7 to 10.5	8.5 to 10.6	6.8 to 9.2	4.5 to 6.0
April projection ...	9.2 to 9.6	9.0 to 9.5	7.7 to 8.5	4.8 to 5.0	9.1 to 10.0	8.0 to 9.6	6.5 to 9.0	4.5 to 5.3
PCE inflation .....	1.0 to 1.4	1.2 to 1.8	1.1 to 2.0	1.7 to 2.0	1.0 to 1.8	0.9 to 2.0	0.5 to 2.5	1.5 to 2.1
April projection ...	0.6 to 0.9	1.0 to 1.6	1.0 to 1.9	1.7 to 2.0	-0.5 to 1.2	0.7 to 2.0	0.5 to 2.5	1.5 to 2.0
Core PCE inflation <sup>3</sup> ...	1.3 to 1.6	1.0 to 1.5	0.9 to 1.7		1.2 to 2.0	0.5 to 2.0	0.2 to 2.5	
April projection ...	1.0 to 1.5	0.7 to 1.3	0.8 to 1.6		0.7 to 1.6	0.5 to 2.0	0.2 to 2.5	

NOTE: Projections of change in real gross domestic product (GDP) and in inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The April projections were made in conjunction with the meeting of the Federal Open Market Committee on April 28–29, 2009.

1. The central tendency excludes the three highest and three lowest projections for each variable in each year.

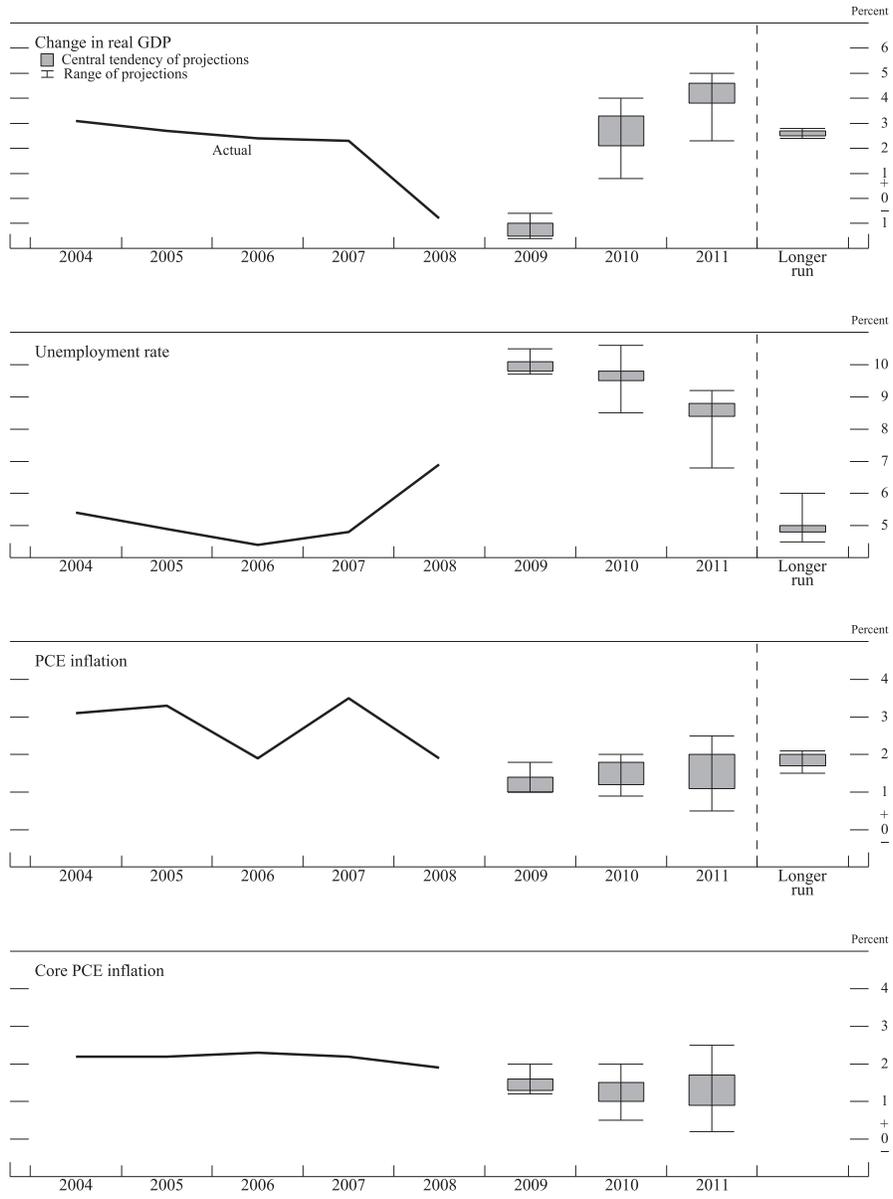
2. The range for a variable in a given year includes all participants' projections, from lowest to highest, for that variable in that year.

3. Longer-run projections for core PCE inflation are not collected.

contract over the entirety of this year and that the unemployment rate would increase in coming quarters. All participants also expected that overall inflation would be somewhat slower this year than in recent years, and most projected that core inflation would edge down this year. Almost all participants viewed the near-term outlook for domestic output as having improved modestly relative to the projections they made at the time of the April FOMC meeting, reflecting both a slightly less severe contraction in the first half of 2009 and a moderately stronger, but still sluggish, recovery in the second half. With the strong adverse forces that have been acting on the economy likely to abate only slowly, participants generally expected the recovery to be gradual in 2010. Even though all participants had raised their near-term outlook for real GDP, in light of incoming data on labor markets, they increased their projections

for the path of the unemployment rate from those published in April. Participants foresaw only a gradual improvement in labor market conditions in 2010 and 2011, leaving the unemployment rate at the end of 2011 well above the level they viewed as its longer-run sustainable rate. Participants projected low inflation this year. For 2010 and 2011, the central tendencies of the participants' inflation forecasts pointed to fairly stable inflation that would be modestly below most participants' estimates of the rate consistent with the dual objectives; however, the divergence of participants' views about the inflation outlook remained wide. Most participants indicated that they expected the economy to take five or six years to converge to a longer-run path characterized by a sustainable rate of output growth and by rates of unemployment and inflation consistent with the Federal Reserve's dual objectives, but several said full convergence would

Figure 1. Central tendencies and ranges of economic projections, 2009–11 and over the longer run



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

take longer. In contrast to recent projections, a majority of participants perceived the risks to growth as roughly balanced, although several still viewed those risks as tilted to the downside. Most participants saw the risks surrounding their inflation outlook as roughly balanced, and fewer participants than in April characterized those risks as skewed to the downside. With few exceptions, participants judged that the projections for economic activity and inflation remained subject to a degree of uncertainty exceeding historical norms.

#### *The Outlook*

Participants' projections for the change in real GDP in 2009 had a central tendency of negative 1.5 percent to negative 1.0 percent, somewhat above the central tendency of negative 2.0 percent to negative 1.3 percent for their April projections. Participants noted that the data received between the April and June FOMC meetings pointed to a somewhat smaller decline in output during the first half of the year than they had anticipated at the time of the April meeting. Moreover, participants saw additional indications that the economic downturn in the United States and worldwide was moderating in the second quarter, and they continued to expect that sales and production would begin to recover gradually during the second half of the year, reflecting the effects of monetary and fiscal stimulus, measures to support credit markets, and diminishing financial stresses. As reasons for marking up their projections for near-term economic activity, participants pointed to a further improvement in financial conditions during the intermeeting period, signs of stabilization in consumer spending, and tentative indications of a

leveling out of activity in the housing sector. In addition, they observed that aggressive inventory reductions during the first half of this year appeared to have left firms' stocks in better balance with sales, suggesting that production is likely to increase as sales stabilize and then start to turn up later this year. Participants expected, however, that recoveries in consumer spending and residential investment initially would be damped by further deterioration in labor markets, the continued repair of household balance sheets, persistently tight credit conditions, and still-weak housing demand. They also anticipated that very low capacity utilization, sluggish growth in sales, uncertainty about the economic environment, and a continued elevated cost and limited availability of financing would contribute to continued weakness in business fixed investment this year. Some participants noted that weak economic conditions in other countries probably would hold down growth in U.S. exports. A number of participants also saw recent increases in some long-term interest rates and in oil prices as factors that could damp a near-term economic recovery.

Looking further ahead, participants' projections for real GDP growth in 2010 and 2011 were not materially different from those provided in April. The projections for growth in 2010 had a central tendency of 2.1 to 3.3 percent, and those for 2011 had a central tendency of 3.8 to 4.6 percent. Participants generally expected that household financial positions would improve only gradually and that strains in credit markets and in the banking system would ebb slowly; hence, the pace of recovery would continue to be damped in 2010. But they anticipated that the upturn would strengthen in late 2010 and in 2011 to a pace exceeding the growth

rate of potential GDP. Participants noted several factors contributing to this pickup, including accommodative monetary policy, fiscal stimulus, and continued improvement in financial conditions and household balance sheets. Beyond 2011, they expected that output growth would remain above that of potential GDP for a time, leading to a gradual elimination of slack in resource utilization. Over the longer run, most participants expected that, without further shocks, real GDP growth eventually would converge to a rate of 2.5 to 2.7 percent per year, reflecting longer-term trends in the growth of productivity and the labor force.

Even though participants raised their output growth forecasts, they also moved up their unemployment rate projections and continued to anticipate that labor market conditions would deteriorate further over the remainder of the year. Their projections for the average unemployment rate during the fourth quarter of 2009 had a central tendency of 9.8 to 10.1 percent, about  $\frac{1}{2}$  percentage point above the central tendency of their April projections and noticeably higher than the actual unemployment rate of 9.4 percent in May—the latest reading available at the time of the June FOMC meeting. All participants raised their forecasts of the unemployment rate at the end of this year, reflecting the sharper-than-expected rise in unemployment that occurred over the intermeeting period. With little material change in projected output growth in 2010 and 2011, participants still expected unemployment to decline in those years, but the projected unemployment rate in each year was about  $\frac{1}{2}$  percentage point above the April forecasts, reflecting the higher starting point of the projections. Most participants anticipated that out-

put growth next year would not substantially exceed its longer-run sustainable rate and hence that the unemployment rate would decline only modestly in 2010; some also pointed to frictions associated with the reallocation of labor from shrinking economic sectors to expanding sectors as likely to restrain progress in reducing unemployment. The central tendency of the unemployment rate at the end of 2010 was 9.5 to 9.8 percent. With output growth and job creation generally projected to pick up appreciably in 2011, participants anticipated that joblessness would decline more noticeably, as evident from the central tendency of 8.4 to 8.8 percent for their projections of the unemployment rate in the fourth quarter of 2011. They expected that the unemployment rate would decline considerably further in subsequent years as it moved back toward its longer-run sustainable level, which most participants still saw as between 4.8 and 5.0 percent; however, a few participants raised their estimates of the longer-run unemployment rate.

The central tendency of participants' projections for personal consumption expenditures (PCE) inflation in 2009 was 1.0 to 1.4 percent, about  $\frac{1}{2}$  percentage point above the central tendency of their April projections. Participants noted that higher-than-expected inflation data over the intermeeting period and the anticipated influence of higher oil and commodity prices on consumer prices were factors contributing to the increase in their inflation forecasts. Looking beyond this year, participants' projections for total PCE inflation had central tendencies of 1.2 to 1.8 percent for 2010 and 1.1 to 2.0 percent for 2011, modestly higher than the central tendencies from the April projections. Reflecting the large increases in energy prices over the in-

termeeting period, the forecasts for core PCE inflation (which excludes the direct effects of movements in food and energy prices) in 2009 were raised by less than the projections for total PCE inflation, while the forecasts for core and total PCE inflation in 2010 and 2011 increased by similar amounts. The central tendency of projections for core inflation in 2009 was 1.3 to 1.6 percent; those for 2010 and 2011 were 1.0 to 1.5 percent and 0.9 to 1.7 percent, respectively. Most participants expected that sizable economic slack would continue to damp inflation pressures for the next few years and hence that total PCE inflation in 2011 would still be below their assessments of its appropriate longer-run level. Some thought that such slack would generate a decline in inflation over the next few years. Most, however, projected that, as the economy recovers, inflation would increase gradually and move closer to their individual assessments of the measured rate of inflation consistent with the Federal Reserve's dual mandate for maximum employment and price stability. Several participants, noting that the public's longer-run inflation expectations had not changed appreciably, expected that inflation would return more promptly to levels consistent with their judgments about longer-run inflation than these participants had projected in April. A few participants also anticipated that projected inflation in 2011 would be modestly above their longer-run inflation projections because of the possible effects of very low short-term interest rates and of the large expansion of the Federal Reserve's balance sheet on the public's inflation expectations. Overall, the range of participants' projections of inflation in 2011 remained quite wide.

As in April, the central tendency of projections of the longer-run inflation

rate was 1.7 to 2.0 percent. Most participants judged that a longer-run PCE inflation rate of 2 percent would be consistent with the Federal Reserve's dual mandate; others indicated that inflation of 1½ percent or 1¾ percent would be appropriate. Modestly positive longer-run inflation would allow the Committee to stimulate economic activity and support employment by setting the federal funds rate temporarily below the inflation rate when the economy suffers a large negative shock to demands for goods and services.

#### *Uncertainty and Risks*

In contrast to the participants' views over the past several quarters, in June a majority of participants saw the risks to their projections for real GDP growth and the unemployment rate as broadly balanced. In explaining why they perceived a reduction in downside risks to the outlook, these participants pointed to the tentative signs of economic stabilization, indications of some effectiveness of monetary and fiscal policy actions, and improvements in financial conditions. In contrast, several participants still saw the risks to their GDP growth forecasts as skewed to the downside and the associated risks to unemployment as skewed to the upside. Almost all participants shared the judgment that their projections of future economic activity and unemployment continued to be subject to greater-than-average uncertainty.<sup>11</sup> Many partici-

11. Table 2 provides estimates of forecast uncertainty for the change in real GDP, the unemployment rate, and total consumer price inflation over the period from 1989 to 2008. At the end of this summary, the box titled "Forecast Uncertainty" discusses the sources and interpretation of uncertainty in economic forecasts and explains the approach used to assess the uncertainty and risks attending participants' projections.

Table 2. Average historical projection error ranges  
Percentage points

Variable	2009	2010	2011
Change in real GDP <sup>1</sup> . . .	±1.0	±1.5	±1.6
Unemployment rate <sup>1</sup> . . . .	±0.4	±0.8	±1.0
Total consumer prices <sup>2</sup> . .	±0.9	±1.0	±1.0

NOTE: Error ranges shown are measured as plus or minus the root mean squared error of projections that were released in the winter from 1989 through 2008 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 (Washington: Board of Governors of the Federal Reserve System, November).

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

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

pants again highlighted the still-considerable uncertainty about the future course of the financial crisis and the risk that a resurgence of financial turmoil could adversely impact the real economy. In addition, some noted the difficulty in gauging the macroeconomic effects of the credit-easing policies that have been employed by the Federal Reserve and other central banks, given the limited experience with such tools.

Most participants judged the risks to the inflation outlook as roughly balanced, with the number doing so higher than in April. A few participants continued to view these risks as skewed to the downside, and one saw the inflation risks as tilted to the upside. Some participants noted the risk that inflation expectations might drift downward in response to persistently low inflation outcomes and continued significant slack in resource utilization. Several

participants pointed to the possibility of an upward shift in expected and actual inflation if the stimulative monetary policy measures and the attendant expansion of the Federal Reserve's balance sheet were not unwound in a timely fashion as the economy recovers. Most participants again saw the uncertainty surrounding their inflation projections as exceeding historical norms.

#### *Diversity of Views*

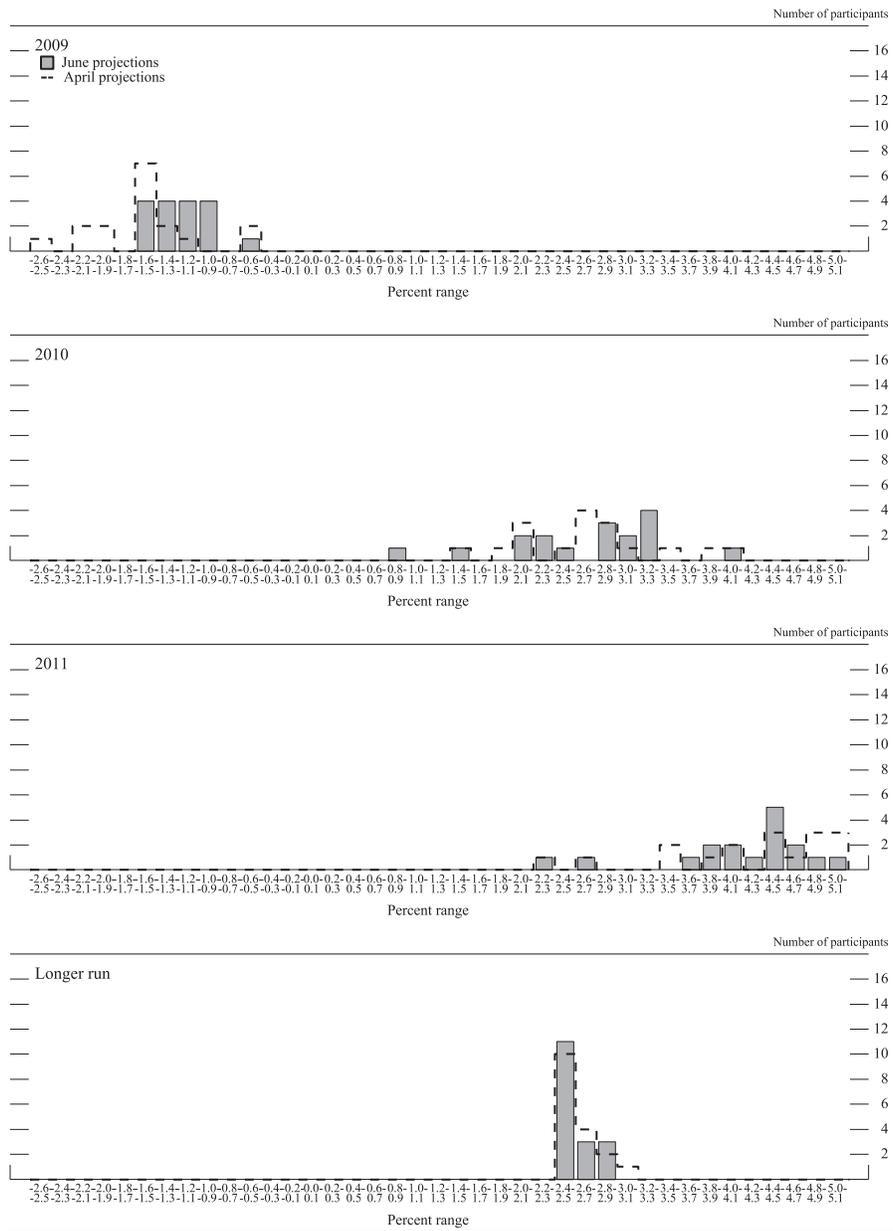
Figures 2.A and 2.B provide further details on the diversity of participants' views regarding likely outcomes for real GDP growth and the unemployment rate in 2009, 2010, 2011, and over the longer run. The dispersion in participants' June projections for the next three years reflects, among other factors, the diversity of their assessments regarding the effects of fiscal stimulus and nontraditional monetary policy actions as well as the likely pace of improvement in financial conditions. For real GDP growth, the distribution of projections for 2009 narrowed and shifted slightly higher, reflecting the somewhat better-than-expected data received during the intermeeting period. The distributions for 2010 and 2011 changed little. For the unemployment rate, the surprisingly large increases in unemployment reported during the intermeeting period prompted an upward shift in the distribution. Because of the persistence exhibited in many of the unemployment forecasts, there were similar upward shifts in the distributions for 2010 and 2011. The dispersion of these forecasts for all three years was roughly similar to that of April. The distribution of participants' projections of longer-run real GDP growth was about unchanged. A few participants raised their longer-run pro-

jections of the unemployment rate, widening the dispersion of these estimates, as they incorporated the effects of unexpectedly high recent unemployment data and of the reallocation of labor from declining sectors to expanding ones. The dispersion in participants' longer-run projections reflected differences in their estimates regarding the sustainable rates of output growth and unemployment to which the economy would converge under appropriate monetary policy and in the absence of any further shocks.

Figures 2.C and 2.D provide corresponding information about the diversity of participants' views regarding the inflation outlook. The distribution of the projections for total and core PCE inflation in 2009 moved upward, reflecting the higher inflation data released over the intermeeting period,

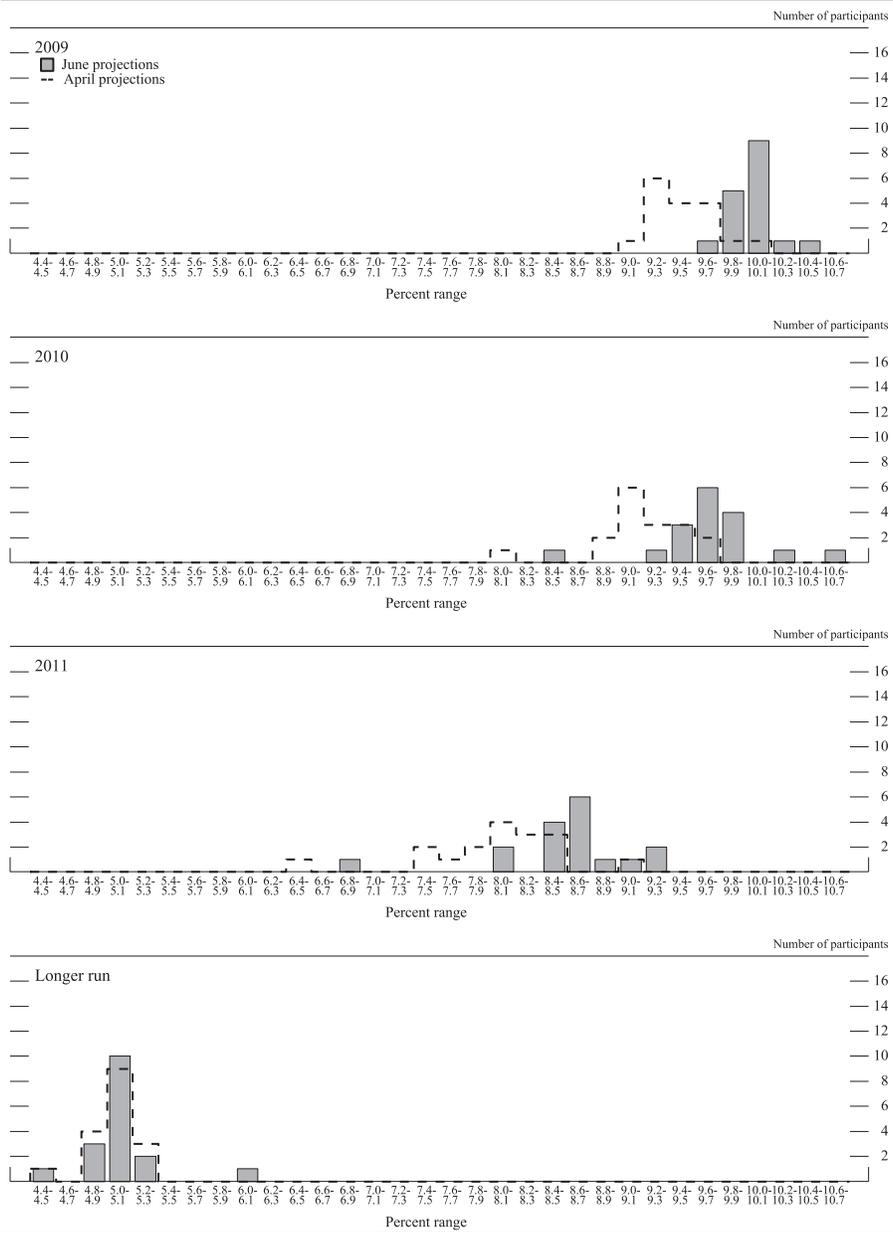
while distributions for the projections in 2010 and 2011 did not change significantly. The dispersion in participants' projections for total and core PCE inflation for 2009, 2010, and 2011 illustrates their varying assessments of the effects on inflation and inflation expectations of persistent economic slack as well as of the recent expansion of the Federal Reserve's balance sheet. These varying assessments are especially evident in the wide dispersion of inflation projections for 2011. In contrast, the tight distribution of participants' projections for longer-run inflation illustrates their substantial agreement about the measured rate of inflation that is most consistent with the Federal Reserve's dual objectives of maximum employment and stable prices.

Figure 2.A. Distribution of participants' projections for the change in real GDP, 2009–11 and over the longer run



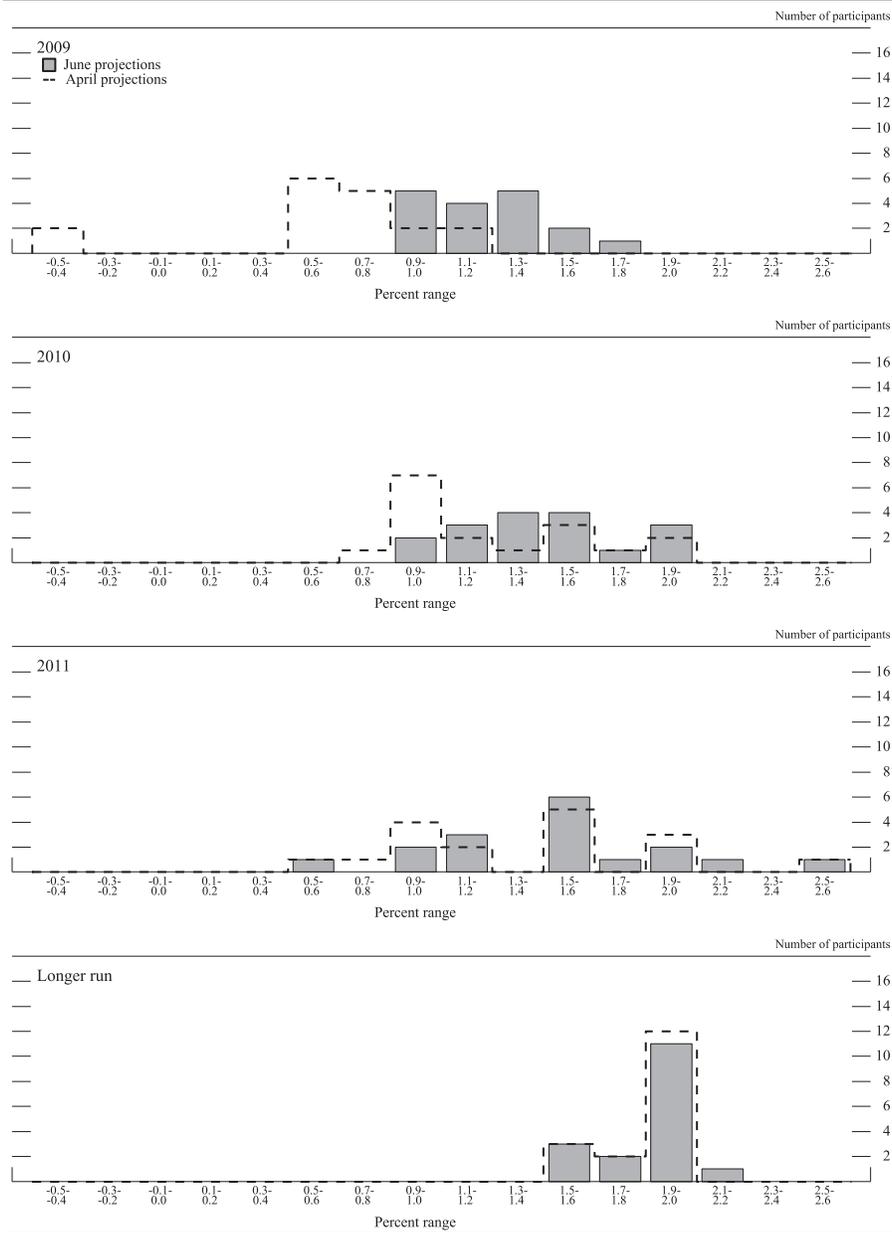
NOTE: Definitions of variables are in the general note to table 1.

Figure 2.B. Distribution of participants' projections for the unemployment rate, 2009–11 and over the longer run



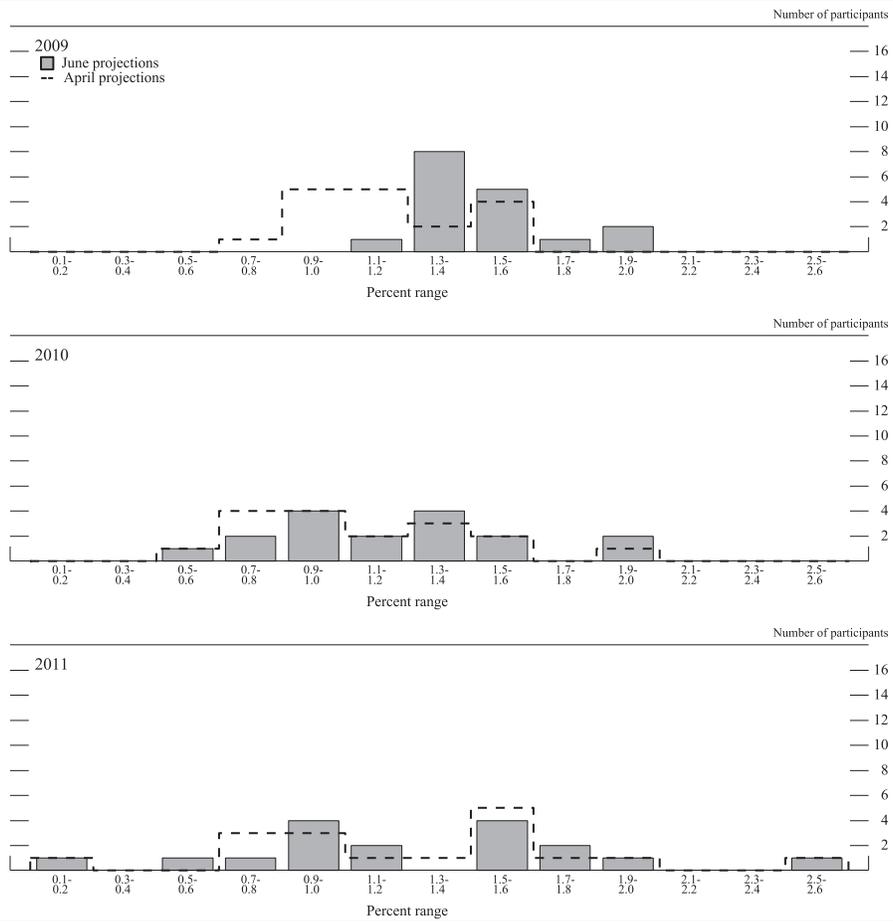
NOTE: Definitions of variables are in the general note to table 1.

Figure 2.C. Distribution of participants' projections for PCE inflation, 2009–11 and over the longer run



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

Figure 2.D. Distribution of participants' projections for core PCE inflation, 2009–11



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

## Forecast Uncertainty

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

Table 2 summarizes the average historical accuracy of a range of forecasts, including those reported in past *Monetary Policy Reports* and those prepared by Federal Reserve Board staff in advance of meetings of the Federal Open Market Committee. The projection error ranges shown in the table illustrate the considerable uncertainty associated with economic forecasts. For example, suppose a participant projects that real gross domestic product (GDP) and total consumer prices will rise steadily at annual rates of, respectively, 3 percent and 2 percent. If the uncertainty attending those projections is similar to that

experienced in the past and the risks around the projections are broadly balanced, the numbers reported in table 2 would imply a probability of about 70 percent that actual GDP would expand within a range of 2.0 to 4.0 percent in the current year, 1.5 to 4.5 percent in the second year, and 1.4 to 4.6 percent in the third year. The corresponding 70 percent confidence intervals for overall inflation would be 1.1 to 2.9 percent in the current year and 1.0 to 3.0 percent in the second and third years.

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

### Meeting Held on August 11–12, 2009

A joint meeting of the Federal Open Market Committee and the Board of Governors of the Federal Reserve System was held in the offices of the Board of Governors in Washington, D.C., on Tuesday, August 11, 2009, at 2:00 p.m. and continued on Wednesday, August 12, 2009, at 9:00 a.m.

*Present:*

Mr. Bernanke, Chairman  
Mr. Dudley, Vice Chairman  
Ms. Duke  
Mr. Evans  
Mr. Kohn  
Mr. Lacker  
Mr. Lockhart  
Mr. Tarullo  
Mr. Warsh  
Ms. Yellen

Mr. Bullard, Ms. Cumming, Mr. Hoenig, Ms. Pianalto, and Mr. Rosengren, Alternate Members of the Federal Open Market Committee

Messrs. Fisher, Plosser, and Stern, Presidents of the Federal Reserve Banks of Dallas, Philadelphia, and Minneapolis, respectively

Mr. Madigan, Secretary and Economist  
Ms. Danker, Deputy Secretary  
Mr. Luecke, Assistant Secretary  
Mr. Skidmore, Assistant Secretary  
Ms. Smith, Assistant Secretary  
Mr. Alvarez, General Counsel  
Mr. Baxter,<sup>12</sup> Deputy General Counsel  
Mr. Sheets, Economist  
Mr. Stockton, Economist

Messrs. Altig, Clouse, Connors, Slifman, Sullivan, and Wilcox, Associate Economists

Mr. Sack, Manager, System Open Market Account

Ms. Johnson, Secretary of the Board, Office of the Secretary, Board of Governors

Ms. George, Acting Director, Division of Banking Supervision and Regulation, Board of Governors

Mr. Frierson,<sup>12</sup> Deputy Secretary, Office of the Secretary, Board of Governors

Mr. Struckmeyer, Deputy Staff Director, Office of the Staff Director for Management, Board of Governors

Mr. English, Deputy Director, Division of Monetary Affairs, Board of Governors

Ms. Robertson, Assistant to the Board, Office of Board Members, Board of Governors

Ms. Liang, Messrs. Reifschneider and Wascher, Senior Associate Directors, Division of Research and Statistics, Board of Governors

Mr. Meyer, Senior Adviser, Division of Monetary Affairs, Board of Governors

Messrs. Leahy and Nelson,<sup>12</sup> Associate Directors, Divisions of International Finance and Monetary Affairs, respectively, Board of Governors

Mr. Carpenter, Deputy Associate Director, Division of Monetary Affairs, Board of Governors

Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors

Ms. Wei, Economist, Division of Monetary Affairs, Board of Governors

Ms. Beattie,<sup>12</sup> Assistant to the Secretary, Office of the Secretary, Board of Governors

Ms. Low, Open Market Secretariat Specialist, Division of Monetary Affairs, Board of Governors

Mr. Lyon, First Vice President, Federal Reserve Bank of Minneapolis

<sup>12</sup>. Attended Tuesday's session only.

Mr. Sniderman, Executive Vice President, Federal Reserve Bank of Cleveland

Mr. McAndrews,<sup>12</sup> Ms. McLaughlin, Messrs. Rudebusch, Sellon, Tootell, and Waller, Senior Vice Presidents, Federal Reserve Banks of New York, New York, San Francisco, Kansas City, Boston, and St. Louis, respectively

Messrs. Burke, Dotsey, Koenig, and Pesenti, Vice Presidents, Federal Reserve Banks of New York, Philadelphia, Dallas, and New York, respectively

Mr. Weber, Senior Research Officer, Federal Reserve Bank of Minneapolis

Mr. Hetzel, Senior Economist, Federal Reserve Bank of Richmond

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

The Manager of the System Open Market Account reported on recent developments in domestic and foreign financial markets. The Manager also reported on System open market operations in Treasury securities, agency debt, and agency mortgage-backed securities (MBS) since the Committee's June 23–24 meeting. By unanimous vote, the Committee ratified those transactions. There were no open market operations in foreign currencies for the System's account during the intermeeting period. The Federal Reserve's total assets were about unchanged, on balance, since the Committee met in June, remaining at approximately \$2 trillion as the System's purchases of securities were essentially matched by a further decline in usage of the System's credit and liquidity facilities.

Meeting participants again discussed the merits of including agency MBS backed by adjustable-rate mortgages

(ARMs) in the Committee's MBS purchase program: Some thought it would be useful to include agency ARM MBS, noting that doing so could reduce the unusually large spreads between ARM rates and yields on similar-duration Treasury securities—spreads that were far larger than the comparable spreads on fixed-rate mortgages; others saw little potential benefit, given the small stock and limited issuance of ARM MBS, and were hesitant to involve the Federal Reserve in another market segment. The Committee made no decision on purchasing ARM MBS at this meeting. Participants also discussed the merits of progressively reducing the pace at which the Federal Reserve buys Treasury securities, agency debt, and agency MBS prior to the end of the asset purchase programs. They generally were of the view that gradually slowing the pace of the Committee's purchases of \$300 billion of Treasury securities and extending their completion to the end of October could help promote a smooth transition in markets. A number of participants noted that a similar tapering of agency debt and MBS purchases could be helpful in the future as those programs approach completion. The Committee made no decisions on tapering those purchases at this meeting.

The staff presented an update on the continuing development of several tools that could help support a smooth withdrawal of policy accommodation at the appropriate time. These measures include executing reverse repurchase agreements on a large scale, potentially with counterparties other than the primary dealers; implementing a term deposit facility that would be available to depository institutions in order to reduce the supply of excess reserves; and taking steps to tighten the link between the interest rate paid on reserve bal-

ances held at the Federal Reserve Banks and the federal funds rate. Several participants noted the need to continue refining the Committee's strategy for an eventual withdrawal of policy accommodation. The staff also updated the Committee on developments in the Term Asset-Backed Securities Loan Facility (TALF), summarized the pros and cons of expanding the range of collateral eligible for TALF loans, and recommended extending the final date for making new TALF loans into 2010. Participants generally supported the extension of TALF into 2010 but were skeptical about expanding the range of assets at this time.

Secretary's note: As announced on August 17, 2009, the Board of Governors subsequently approved an extension of the TALF while holding in abeyance any further expansion in the types of collateral eligible for the TALF.

#### Staff Review of the Economic Situation

The information reviewed at the August 11–12 meeting suggested that overall economic activity was stabilizing after a contraction in real gross domestic product (GDP) during 2008 and early 2009 that the Bureau of Economic Analysis recently reported to have been greater than it had previously estimated. Employment continued to move lower through July, but the pace of job losses had slowed noticeably in recent months. A sizable pickup in motor vehicle production appeared to be under way. Housing activity apparently was beginning to turn up. Consumer spending dropped only a little further in the first half of this year, on balance, after falling sharply in the second half of last year. The

decline in equipment and software (E&S) investment seemed to be moderating, although the incoming data did not point to an imminent recovery. The sharp cuts in production this year reduced inventory stocks significantly, though they remained high relative to the level of sales. A jump in gasoline prices pushed up overall consumer price inflation in June, but core consumer price inflation remained relatively stable in recent months.

Job losses continued to abate in July, and aggregate hours of production and nonsupervisory workers were unchanged. The step-up in motor vehicle assemblies boosted employment in that industry; job losses decreased in a number of other manufacturing industries, and factory workweeks generally rose. Employment declines in business and financial services in July were also smaller than those in recent months. Payrolls in nonbusiness services posted their third monthly gain, supported by the continued uptrend in health and education and a small gain in the leisure and hospitality industry. However, job losses in the construction industry continued at about the recent rate. In the household survey, the unemployment rate edged down in July to 9.4 percent, while the labor force participation rate fell back to its March level. Other indicators also suggested a reduced pace of deterioration in labor demand. Both initial claims for unemployment insurance and insured unemployment moved down since June. However, with labor markets still quite slack, year-over-year growth in average hourly earnings of production and nonsupervisory workers slowed further in July.

The contraction in industrial production slowed markedly in the second quarter, although the rate of decline remained rapid and the factory utiliza-

tion rate recorded a new low in June. The moderation in the pace of decline in industrial production in the second quarter was widespread across industries and major market groups. Available indicators suggested that industrial production increased noticeably in July, led by motor vehicle assemblies; manufacturing output excluding motor vehicles likely also rose in July.

Real personal consumption expenditures (PCE) edged down in June after holding steady in May and declining in April. Apart from a jump in motor vehicle purchases, which were boosted appreciably by the government's "cash-for-clunkers" program, indicators of consumer spending in July were mixed. Most determinants of spending remained weak on balance. In particular, the weak labor market continued to place significant strains on household income, and earlier declines in net worth were still holding back spending. However, household net worth received a boost from the rise in equity prices since their low in March. In addition, the July Senior Loan Officer Opinion Survey on Bank Lending Practices indicated that the fraction of banks tightening standards and terms for consumer credit had diminished further. Moreover, measures of consumer sentiment, though they recently retraced a portion of their earlier gains, remained well above levels seen at the turn of the year.

Data from the housing sector indicated that construction activity appeared to be emerging from its extended decline. Single-family housing starts registered a sizable increase in June, and the number of starts stood well above the record low recorded in the first quarter of this year. However, in the much smaller multifamily sector, starts continued to decline, on net, in 2009 after falling significantly in the

second half of 2008 amid tight credit conditions and rapidly deteriorating demand fundamentals for apartment buildings. The latest sales data suggested that demand for new houses may be strengthening after stabilizing in the early portion of this year. Although sales remained quite modest, they were enough, given the very slow pace of production, to pare the overhang of unsold new single-family houses: In June, these inventories stood at about one-half of their peak in the summer of 2006, and the months' supply of new homes was down considerably from its record high in January. Sales of existing single-family houses, which were fairly flat early in the year, posted their third consecutive monthly increase in June, and pending home sales agreements through June suggested that resale activity would rise further in the months ahead. Sales of existing homes had been supported for much of the year by heightened volumes of transactions involving bank-owned and other distressed properties; the uptick in May and June, however, appeared to have been driven by an increase in transactions of non-distressed properties. The apparent stabilization in housing demand seen in recent months was likely due, in part, to improvements in housing affordability stemming from low interest rates for conforming mortgages and lower house prices.

Real investment in E&S continued to contract in the second quarter; however, the estimated rate of decline was substantially smaller than in the previous two quarters. Business outlays on motor vehicles leveled off in the second quarter after an extended period of steep declines. Real spending in the high-tech sector declined, although real outlays for computing equipment posted their first gain in a year. Outside

of high-tech and transportation, real spending on equipment dropped again in the second quarter but at a slower pace than in the previous quarter. Although the fundamental determinants of investment in E&S remained weak, conditions appeared less unfavorable, on balance, than earlier in the year. In particular, the decline in business output was less pronounced in the second quarter than in prior quarters, and estimates of the user cost of capital fell back somewhat in the second quarter after spiking last year. Other forward-looking indicators generally improved, but they remained at levels consistent with a weak outlook for E&S investment. Corporate bond spreads over Treasury securities continued to ease, and monthly surveys of business conditions and sentiment generally were less downbeat than earlier in the year. In addition, the July Senior Loan Officer Opinion Survey reported that the net percentage of banks that had tightened standards and terms on commercial and industrial (C&I) loans receded somewhat, although the July National Federation of Independent Business survey showed that the share of small businesses reporting increased difficulty in obtaining credit remained high. Conditions in the nonresidential construction sector generally remained quite poor, with spending in most major categories staying on a downward trajectory through June. Vacancy rates continued to rise, property prices fell further, and, as indicated by the July Senior Loan Officer Opinion Survey, financing for nonresidential construction projects became even tighter.

In May, the U.S. international trade deficit narrowed to its lowest level since 1999, as exports increased moderately and imports declined. The increase in exports of goods and services was led by a climb in exports of

industrial supplies, particularly of petroleum products, and reflected both higher prices and greater volumes. The value of imports of goods and services fell at a slower pace than in April. Imports of petroleum products exhibited the largest decline, with the fall wholly reflecting lower volumes, as petroleum prices rose. Imports of services and automotive products moved down somewhat, while non-oil industrial supplies were largely unchanged. Overall imports of consumer goods were also about unchanged, as a large decline in pharmaceuticals offset increases in a number of other goods. In contrast, imports of computers moved up strongly in May.

Recent indicators of economic activity in the advanced foreign economies suggested that the pace of contraction in those countries moderated further. Purchasing managers indexes continued to rebound but did not yet point to expansion for all countries. Industrial production, while remaining well below pre-crisis levels, moved up strongly in Japan and edged up in the euro area and in the United Kingdom. Indicators of economic sentiment also improved. However, labor market conditions continued to deteriorate, and credit standards remained generally tight. In emerging market economies, recent data showed that economic activity surged across emerging Asia in the second quarter. Real GDP rebounded sharply in China and South Korea, and the preliminary estimate in Singapore indicated a substantial increase. In China, policy stimulus lifted activity and thus helped boost China's imports, primarily from other countries in Asia. Indicators for these other countries also pointed to a strong rebound in the second quarter. Activity remained depressed in Mexico, partly reflecting the adverse effect of a swine

flu outbreak. In contrast, activity in Brazil appeared to have begun to recover.

In the United States, overall PCE prices rose in June following little change in each of the previous three months. The increase largely reflected a sizable increase in gasoline prices, which appeared to have caught up with earlier increases in crude oil prices. The latest available survey data showed that gasoline prices flattened out, on net, in July. Excluding food and energy, PCE prices moved up moderately in June. For the second quarter as a whole, core inflation picked up from the pace in the first quarter, which had been revised down because of smaller increases in the imputed prices of non-market services. Median year-ahead inflation expectations in the Reuters/University of Michigan Survey of Consumers held relatively steady in July, as in recent months. Longer-term inflation expectations were about the same as the average over 2008. The producer price index for core intermediate materials turned up in June following a string of monthly declines that likely reflected the pass-through of the large declines in spot prices of commodities in the second half of last year. All measures of hourly compensation and wages suggested that labor costs decelerated markedly this year in response to the considerable deterioration in labor market conditions.

#### Staff Review of the Financial Situation

The decisions by the Federal Open Market Committee (FOMC) at the June meeting to leave the target range for the federal funds rate unchanged and to maintain the sizes of its large-scale asset purchase programs, along with the accompanying statement, were

broadly in line with market expectations. However, investors initially marked up their expected path for the federal funds rate following the release of the statement, as they apparently interpreted it as suggesting a more favorable assessment of prospects for economic growth than had been anticipated. Subsequently, investors revised down the expected policy path after the June employment report and the Chairman's semiannual monetary policy testimony. These declines were more than offset by the favorable economic information received toward the end of the intermeeting period, including the stronger-than-expected July employment report. On net, the market-implied path of the federal funds rate ended the period about the same as at the time of the June FOMC meeting. Yields on nominal Treasury securities were also little changed, on balance, over the intermeeting period, though there were sizable intraday movements in response to macroeconomic data releases and Federal Reserve communications. Inflation compensation based on five-year Treasury inflation-protected securities (TIPS) declined, on net, over the intermeeting period, while five-year inflation compensation five years ahead rose somewhat. Liquidity in the TIPS market reportedly continued to be poor, making unclear the extent to which movements in TIPS inflation compensation reflected changes in investors' expectations of future inflation.

Functioning in short-term funding markets generally showed further improvement over the intermeeting period. Consistent with reduced concerns about the financial condition of large banking institutions, London interbank offered rates (Libor) continued to edge down. Three- and six-month Libor-OIS (overnight index swap)

spreads—while still somewhat elevated by historical standards—declined a bit further and stood at levels last recorded in early 2008. Bid-asked spreads for most types of repurchase agreements edged down. Since June, spreads on A2/P2-rated commercial paper and AA-rated asset-backed commercial paper were little changed, on net, remaining at the low ends of their ranges over the past two years. Indicators of Treasury market functioning were little changed over the intermeeting period, and functioning continued to be somewhat impaired. Bid-asked spreads held roughly steady, and trading volumes remained low. The on-the-run liquidity premium for the 10-year Treasury note was little changed at elevated levels, although it was well below its peak last fall.

Broad stock price indexes rose, on net, over the intermeeting period, as investors responded to strong second-quarter earnings reports and indications that the economy may be stabilizing. The spread between an estimate of the expected real equity return over the next 10 years for S&P 500 firms and an estimate of the real 10-year Treasury yield—a rough gauge of the equity risk premium—narrowed a bit more but remained high by recent historical standards. Option-implied volatility on the S&P 500 index also dropped a bit further. Yields on BBB-rated and speculative-grade corporate bonds declined over the intermeeting period. As a result, corporate bond spreads narrowed further and dropped below the previous peak levels reached in 2002 following the 2001 recession. Conditions in the leveraged loan market continued to improve as secondary-market prices rose further and bid-asked spreads narrowed.

Investor sentiment toward the financial sector improved further over the

intermeeting period, boosted, in part, by better-than-expected second-quarter earnings results at larger banking institutions. Over the period, bank equity prices rose, and credit default swap spreads on financial firms declined. Nonetheless, some investors commented that the positive upside surprises at large financial institutions were mostly related to investment banking and trading activities, which may not provide a stable source of earnings, and to mortgage refinancing activity, which may recede if longer-term rates rise. Market participants also focused on the large consumer loan losses reported by many banks. The financial condition of CIT Group, Inc., one of the largest lenders to middle-market firms, worsened sharply over the period, but broader financial market conditions appeared to be largely unaffected by this development.

The level of private domestic nonfinancial sector debt apparently declined again in the second quarter, as household debt was estimated to have dropped and nonfinancial business debt appeared to have been essentially unchanged. Gross issuance of speculative- and investment-grade bonds by nonfinancial corporations slowed in July from its outsized second-quarter pace. Issuance of institutional loans in the syndicated leveraged loan market reportedly remained extremely weak in July, while bank loans and commercial paper continued to run off, leaving net debt financing by nonfinancial corporations at around zero. In contrast, the federal government issued debt at a rapid clip, and state and local government debt was estimated to have expanded moderately.

Commercial bank credit contracted further in June and July. All major loan categories declined, apparently reflecting the combined effects of weaker de-

mand for most types of loans, some substitution from bank loans to other funding sources, and an ongoing tightening of lending standards and terms. Commercial and industrial lending dropped steeply amid subdued origination activity and broad-based paydowns of outstanding loans. In the July Senior Loan Officer Opinion Survey, respondents indicated that the most important reasons for the decline in C&I loans in 2009 were weaker demand from creditworthy borrowers and the deterioration in credit quality that had reduced the number of firms that respondents viewed as creditworthy. The contraction in commercial real estate (CRE) lending accelerated. Large fractions of respondents to the July survey again noted that they had tightened standards and that the demand for CRE loans had weakened further.

M2 was little changed, on net, in June and July. Retail money market mutual funds and small time deposits dropped significantly in June and were estimated to have contracted again in July, likely reflecting the very low rates of interest on these assets and a continued reallocation of wealth toward riskier assets. These declines were partly offset by a net increase in liquid deposits, also suggesting some portfolio reallocation within M2 assets. Currency expanded weakly, apparently because of soft foreign demand.

The tone of financial markets abroad improved further during the intermeeting period. Stock markets rose globally, as positive U.S. earnings reports and news of strong economic rebounds in emerging Asian economies reportedly lifted investor sentiment. European bank stocks rose especially rapidly, spurred by reports of better-than-expected earnings among some European banks as well as some U.S. financial institutions. The dollar depreciated

mildly on a trade-weighted basis since late June.

The European Central Bank (ECB), the Bank of England, the Bank of Canada, and the Bank of Japan kept their respective policy rates constant over the intermeeting period. However, overnight interest rates in the euro area declined in the wake of the June 24 injection by the ECB of one-year funds at a fixed rate of 1 percent. The ECB also began its purchases of covered bonds, and yields on intermediate-term European covered bonds declined since the purchases began in early July. After leaving the size of its Asset Purchase Facility (APF) unchanged at its July meeting, the Bank of England, at its August meeting, raised the size of the APF to £175 billion and widened the set of gilts it would purchase. Benchmark gilt yields fell noticeably on the announcement after moving higher in July.

#### Staff Economic Outlook

In the forecast prepared for the August FOMC meeting, the staff's outlook for the change in real activity over the next year and a half was essentially the same as at the time of the June meeting. Consumer spending had been on the soft side lately. The new estimates of real disposable income that were reported in the comprehensive revision to the national income and product accounts showed a noticeably slower increase in 2008 and the first half of 2009 than previously thought. By themselves, the revised income estimates would imply a lower forecast of consumer spending in coming quarters. But this negative influence on aggregate demand was roughly offset by other factors, including higher household net worth as a result of the rise in equity prices since March, lower corpo-

rate bond rates and spreads, a lower dollar, and a stronger forecast for foreign economic activity. All told, the staff continued to project that real GDP would start to increase in the second half of 2009 and that output growth would pick up to a pace somewhat above its potential rate in 2010. The projected increase in production in the second half of 2009 was expected to be the result of a slowing in the pace of inventory liquidation; final sales were not projected to increase until 2010. The step-up in economic activity in 2010 was expected to be supported by an ongoing improvement in financial conditions, which, along with accommodative monetary policy, was projected to set the stage for further improvements in household and business sentiment and an acceleration in aggregate demand.

The staff forecast for inflation was also about unchanged from that at the June meeting. Interpretation of the incoming data on core PCE inflation was complicated by changes in the definition of the core measure recently implemented by the Bureau of Economic Analysis, as well as by unusually low readings for some nonmarket components of the price index.<sup>13</sup> After accounting for these factors, the underlying pace of core inflation seemed to be running a little higher than the staff had anticipated. Survey measures of inflation expectations showed no significant change. Nonetheless, with the unemployment rate anticipated to increase somewhat during the remainder of

2009 and to decline only gradually in 2010, the staff still expected core PCE inflation to slow substantially over the forecast period; the very low readings on hourly compensation lately suggested that such a process might already be in train.

### Participants' Views on Current Conditions and the Economic Outlook

In their discussion of the economic situation and outlook, meeting participants agreed that the incoming data and anecdotal evidence had strengthened their confidence that the downturn in economic activity was ending and that growth was likely to resume in the second half of the year. Many noted that their baseline projections for the second half of 2009 and for subsequent years had not changed appreciably since the Committee met in June but that they now saw smaller downside risks. Consumer spending appeared to be in the process of leveling out, and activity in a number of local housing markets had stabilized or even increased somewhat. Reports from business contacts supported the view that firms were making progress in bringing inventories into better alignment with their reduced sales and that production was stabilizing in many sectors—albeit at low levels—and beginning to rise in some. Nonetheless, most participants saw the economy as likely to recover only slowly during the second half of this year, and all saw it as still vulnerable to adverse shocks. Conditions in the labor market remained poor, and business contacts generally indicated that firms would be quite cautious in hiring when demand for their products picks up. Moreover, declines in employment and weakness in growth of labor compensation meant that income

13. As part of the July 2009 comprehensive revision of the national income and product accounts, the Bureau of Economic Analysis reclassified restaurant meals from the food category to the services category. As a result, the price index for PCE excluding food and energy (the core PCE price index) now includes prices of restaurant meals.

growth was sluggish. Also, households likely would continue to face unusually tight credit conditions. These factors, along with past declines in wealth that had been only partly offset by recent increases in equity prices, would weigh on consumer spending. The data and business contacts indicated very substantial excess capacity in many sectors; this excess capacity, along with the tight credit conditions facing many firms, likely would mean further weakness in business fixed investment for a time. Even so, less-aggressive inventory cutting and continuing monetary and fiscal policy stimulus could be expected to support growth in production during the second half of 2009 and into 2010. In addition, the outlook for foreign economies had improved somewhat, auguring well for U.S. exports. Participants expected the pace of recovery to pick up in 2010, but they expressed a range of views, and considerable uncertainty, about the likely strength of the upturn—particularly about the pace of projected gains in consumer spending and the extent to which credit conditions would normalize.

Most participants anticipated that substantial slack in resource utilization would lead to subdued and potentially declining wage and price inflation over the next few years; a few saw a risk of substantial disinflation. However, some pointed to the problems in measuring economic slack in real time, and several were skeptical that temporarily low levels of resource utilization would reduce inflation appreciably, given the loose empirical relationship of economic slack to inflation and the fact that the public did not appear to have reduced its expectations of inflation. Participants noted concerns among some analysts and business contacts that the sizable expansion of the Fed-

eral Reserve's balance sheet and large continuing federal budget deficits ultimately could lead to higher inflation if policies were not adjusted in a timely manner. To address these concerns, it would be important to continue communicating that the Federal Reserve has the tools and willingness to begin withdrawing monetary policy accommodation at the appropriate time to prevent any persistent increase in inflation.

Developments in financial markets during the intermeeting period were again seen as broadly positive; the cumulative improvement in market functioning since the spring was viewed as quite significant. Markets for corporate debt continued to improve, and private credit spreads narrowed further. With the TALF continuing to provide important support, markets for asset-backed securities also showed improvement, and recent issuance had neared levels observed prior to the second half of 2008. Higher equity prices appeared to result not only from generally better-than-expected corporate earnings, which seemed largely to reflect aggressive cost cutting, but also from a reduction in the perceived risk of extremely adverse outcomes and a consequent increase in investors' appetite for riskier assets. However, participants noted that many markets were still strained and that financial risks remain. The improvement in financial markets was due, in part, to support from various government programs, and market functioning might deteriorate as those programs wind down. While financial markets had improved, credit remained tight, with many banks—though fewer than in recent quarters—having reported that they again tightened loan standards and terms. Increases in interest rates and reductions in lines on credit cards were affecting small busi-

nesses as well as consumers. All categories of bank lending had continued to decline. Worsening credit quality was still cited by banks as an important reason for the tightening of credit conditions, though anecdotal evidence suggested that the deterioration in the credit quality of consumer loans might be slowing. Nonetheless, several participants noted that banks still faced a sizable risk of additional credit losses and that many small and medium-sized banks were vulnerable to deteriorating performance of commercial real estate loans. Participants again observed that obtaining or renewing financing for commercial real estate properties and projects was extremely difficult amid worsening fundamentals in that sector, though some noted anecdotal evidence that the addition of highly rated commercial MBS to the list of securities that can be pledged as collateral for TALF loans had contributed to an improvement in liquidity in that market.

Labor market conditions remained of particular concern to meeting participants. Though recent data indicated that the pace at which employment was declining had slowed appreciably, job losses remained sizable. Moreover, long-term unemployment and permanent separations continued to rise, suggesting possible problems of skill loss and a need for labor reallocation that could slow recovery in employment as the economy begins to expand. The unusually large fraction of those who were working part time for economic reasons and the unusually low level of the average workweek, combined with indications from business contacts that firms would resist hiring as sales and production turn up, also pointed to a period of modest job gains and thus a slow decline in the unemployment rate. Wages and benefits continued to decelerate, reflecting—in the judgment of

many participants—substantial slack in labor markets. Several participants noted that the deceleration in labor costs should eventually support a pickup in hiring. Recently, however, it contributed to weakness in household incomes.

Consumer spending remained weak, but participants saw evidence that it was stabilizing, even before the boost to auto purchases provided by the cash-for-clunkers program. Real PCE declined little, on balance, during the first half of 2009 after dropping sharply during the second half of 2008 and was essentially constant during May and June. Several participants noted the recent rebound in equity prices and thus household wealth as a factor that was likely to support consumer spending. Many noted, however, that households still faced considerable headwinds, including reduced wealth, tight credit, high levels of debt, and uncertain job prospects. With these forces restraining spending, and with labor income likely to remain soft, participants generally expected no more than moderate growth in consumer spending going forward. An important source of uncertainty in the outlook for consumer spending was whether households' propensity to save, which had risen in recent quarters, would increase further: Analysis based on responses to past changes in wealth relative to income suggested that the personal saving rate could level out near its current value; however, there was some chance that the increased income volatility and reduced access to credit that had characterized recent experience could lead households to save a still-larger fraction of their incomes.

Regional surveys and anecdotal reports continued to indicate low levels of activity across many goods-producing industries and in the service

sector, but they also pointed to some optimism about the outlook. Firms appeared to be making substantial progress in reducing inventories toward desired levels; indeed, inventories of motor vehicles appeared quite lean following earlier production shutdowns and the recent boost to sales from the cash-for-clunkers program. Accordingly, participants expected firms to slow the pace of inventory reduction by raising production; this adjustment was likely to make an important contribution to economic recovery in the second half of this year. In contrast, business contacts generally reported setting a high bar for increasing capital investment once sales pick up, because their firms now have unusually high levels of excess capacity.

In the residential real estate sector, home sales, prices, and construction had shown signs of stabilization in many areas and were increasing modestly in others, but a still-sizable inventory of unsold existing homes continued to restrain homebuilding. Commercial real estate activity, in contrast, was being weighed down by deteriorating fundamentals, including declining occupancy and rental rates; by falling prices; and by difficulty in refinancing loans on existing properties.

Manufacturing firms appeared to have benefitted recently from an earlier- and stronger-than-expected pickup in foreign economic activity, especially in Asia, and the resulting increase in demand for U.S. exports. Several participants noted that improving growth abroad would likely contribute to greater growth in U.S. exports going forward.

A number of participants noted that fiscal policy helped support the stabilization in economic activity, in part by buoying household incomes and by

preventing even larger cuts in state and local government spending. Participants generally anticipated that fiscal stimulus already in train would contribute to growth in economic activity during the second half of 2009 and into 2010, but the stimulative effects of policy would fade as 2010 went on and would need to be replaced by private demand and income growth.

### Committee Policy Action

In their discussion of monetary policy for the period ahead, Committee members agreed that the stance of monetary policy should not be changed at this meeting. Given the prospects for an initially modest economic recovery, substantial resource slack, and subdued inflation, the Committee agreed that it should maintain its target range for the federal funds rate at 0 to  $\frac{1}{4}$  percent. The future path of the federal funds rate would continue to depend on the Committee's evolving outlook, but, for now, given their forecasts for only a gradual upturn in economic activity and subdued inflation, members thought it most likely that the federal funds rate would need to be maintained at an exceptionally low level for an extended period. With the downside risks to the economic outlook now considerably reduced but the economic recovery likely to be damped, the Committee also agreed that neither expansion nor contraction of its program of asset purchases was warranted at this time. The Committee did, however, decide to gradually slow the pace of the remainder of its purchases of \$300 billion of Treasury securities and extend their completion to the end of October to help promote a smooth transition in markets. Members noted that, with the programs for purchases of agency debt and MBS not due to ex-

pire until the end of the year, it was not necessary to make decisions at this meeting about any potential modifications to those programs. The Committee agreed that it would continue to evaluate the timing and overall amounts of its purchases of securities in light of the evolving economic outlook and conditions in financial markets.

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

“The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ¼ percent. The Committee directs the Desk to purchase agency debt, agency MBS, and longer-term Treasury securities during the intermeeting period with the aim of providing support to private credit markets and economic activity. The timing and pace of these purchases should depend on conditions in the markets for such securities and on a broader assessment of private credit market conditions. The Desk is expected to purchase up to \$200 billion in housing-related agency debt and up to \$1.25 trillion of agency MBS by the end of the year. The Desk is expected to purchase about \$300 billion of longer-term Treasury securities by the end of October, gradually slowing the pace of these purchases until they are completed. The Committee anticipates that outright purchases of securities will cause the size of the Federal Reserve’s balance sheet to expand significantly in coming months. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System’s balance sheet that could affect the attainment over time of the Committee’s objectives of maximum employment and price stability.”

The vote encompassed approval of the statement below to be released at 2:15 p.m.:

“Information received since the Federal Open Market Committee met in June suggests that economic activity is leveling out. Conditions in financial markets have improved further in recent weeks. Household spending has continued to show signs of stabilizing but remains constrained by ongoing job losses, sluggish income growth, lower housing wealth, and tight credit. Businesses are still cutting back on fixed investment and staffing but are making progress in bringing inventory stocks into better alignment with sales. Although economic activity is likely to remain weak for a time, the Committee continues to anticipate that policy actions to stabilize financial markets and institutions, fiscal and monetary stimulus, and market forces will contribute to a gradual resumption of sustainable economic growth in a context of price stability.

The prices of energy and other commodities have risen of late. However, substantial resource slack is likely to dampen cost pressures, and the Committee expects that inflation will remain subdued for some time.

In these circumstances, the Federal Reserve will employ all available tools to promote economic recovery and to preserve price stability. The Committee will maintain the target range for the federal funds rate at 0 to ¼ percent and continues to anticipate that economic conditions are likely to warrant exceptionally low levels of the federal funds rate for an extended period. As previously announced, to provide support to mortgage lending and housing markets and to improve overall conditions in private credit markets, the Federal Reserve will purchase a total of up to \$1.25 trillion of agency mortgage-backed securities and up to \$200 billion of agency debt by the end of the year. In addition, the Federal Reserve is in the process of buying \$300 billion of Treasury securities. To promote a smooth transition in markets as these purchases of Treasury securities are completed, the Committee has decided to gradually slow the pace of these transactions and anticipates that the full amount will be purchased by the end of October. The Committee will

continue to evaluate the timing and overall amounts of its purchases of securities in light of the evolving economic outlook and conditions in financial markets. The Federal Reserve is monitoring the size and composition of its balance sheet and will make adjustments to its credit and liquidity programs as warranted.”

Voting for this action: Messrs. Bernanke and Dudley, Ms. Duke, Messrs. Evans, Kohn, Lacker, Lockhart, Tarullo, and Warsh, and Ms. Yellen.

Voting against this action: None.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, September 22–23, 2009. The meeting adjourned at 11:40 a.m. on August 12, 2009.

#### Notation Vote

By notation vote completed on July 14, 2009, the Committee unanimously approved the minutes of the FOMC meeting held on June 23–24, 2009.

Brian F. Madigan  
Secretary

#### Meeting Held on September 22–23, 2009

A joint meeting of the Federal Open Market Committee and the Board of Governors of the Federal Reserve System was held in the offices of the Board of Governors in Washington, D.C., on Tuesday, September 22, 2009, at 2:00 p.m. and continued on Wednesday, September 23, 2009, at 9:00 a.m.

#### Present:

Mr. Bernanke, Chairman  
Mr. Dudley, Vice Chairman  
Ms. Duke  
Mr. Evans  
Mr. Kohn  
Mr. Lacker  
Mr. Lockhart  
Mr. Tarullo  
Mr. Warsh  
Ms. Yellen

Mr. Bullard, Ms. Cumming, Mr. Hoenig, Ms. Pianalto, and Mr. Rosengren, Alternate Members of the Federal Open Market Committee

Messrs. Fisher and Plosser, Presidents of the Federal Reserve Banks of Dallas and Philadelphia, respectively

Mr. Lyon, First Vice President, Federal Reserve Bank of Minneapolis

Mr. Madigan, Secretary and Economist  
Mr. Luecke, Assistant Secretary  
Mr. Skidmore, Assistant Secretary  
Ms. Smith, Assistant Secretary  
Mr. Alvarez, General Counsel  
Mr. Ashton, Assistant General Counsel  
Mr. Sheets, Economist  
Mr. Stockton, Economist

Messrs. Altig, Clouse, Connors, Kamin, Slifman, Sullivan, Tracy, Weinberg, and Wilcox, Associate Economists

Mr. Sack, Manager, System Open Market Account

Ms. Johnson, Secretary of the Board, Office of the Secretary, Board of Governors

Mr. Struckmeyer, Deputy Staff Director, Office of the Staff Director for Management, Board of Governors

Ms. Barger and Mr. English, Deputy Directors, Divisions of Banking Supervision and Regulation and Monetary Affairs, respectively, Board of Governors

Ms. Robertson, Assistant to the Board, Office of Board Members, Board of Governors

Ms. Edwards, Messrs. Reifschneider and Wascher, Senior Associate Directors, Divisions of Monetary Affairs, Research and Statistics, and Research and Statistics, respectively, Board of Governors

Mr. Oliner, Senior Adviser, Division of Research and Statistics, Board of Governors

- Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors
- Ms. Low, Open Market Secretariat Specialist, Division of Monetary Affairs, Board of Governors
- Mr. Williams, Records Management Analyst, Division of Monetary Affairs, Board of Governors
- Mr. Connolly,<sup>14</sup> First Vice President, Federal Reserve Bank of Boston
- Messrs. Fuhrer and Rosenblum, Executive Vice Presidents, Federal Reserve Banks of Boston and Dallas, respectively
- Mr. Hakkio, Ms. Mester, Messrs. Rasche, Rudebusch, and Schweitzer, Senior Vice Presidents, Federal Reserve Banks of Kansas City, Philadelphia, St. Louis, San Francisco, and Cleveland, respectively
- Mr. Weber, Senior Research Officer, Federal Reserve Bank of Minneapolis
- Mr. McCarthy and Ms. O'Connor, Assistant Vice Presidents, Federal Reserve Bank of New York
- Mr. Chatterjee, Senior Economic Advisor, Federal Reserve Bank of Philadelphia

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

The Manager of the System Open Market Account reported on recent developments in domestic and foreign financial markets. The Manager also reported on System open market operations in Treasury securities, agency debt, and agency mortgage-backed securities (MBS) since the Committee's August 11–12 meeting. By unanimous vote, the Committee ratified those transactions. There were no open mar-

ket operations in foreign currencies for the System's account during the intermeeting period. Since the Committee met in August, the Federal Reserve's total assets had risen about \$125 billion, on balance, to approximately \$2.1 trillion, as the System's purchases of securities exceeded a further decline in usage of the System's credit and liquidity facilities.

The staff briefed the Committee on the current status of the asset purchase programs. Participants noted that the primary influence of the programs is likely through the cumulative effect that they generate on the publicly available stocks of securities. However, they also observed that the rate of new purchases could have an effect on asset prices, especially of MBS. Given this possibility, participants remarked that a gradual reduction in the pace at which the Federal Reserve buys agency debt and agency MBS could help promote a smooth transition in markets as the announced asset purchases are completed. Participants observed that such a strategy would be similar to the approach adopted in August for the purchases of Treasury securities and generally viewed it as a useful step to mitigate the risk of a sharp change in yields as purchases end. Participants expressed a range of views about the rate at which asset purchases should be slowed. Some suggested tapering quickly and completing the purchases by year-end, while a few preferred slowing the rate of purchases over a longer period in order to maintain flexibility regarding the pace and the cumulative amount purchased and thus potentially better calibrate the programs to evolving economic and financial market conditions. Most participants supported extending purchases of agency debt and agency MBS through the first quarter of 2010.

14. Attended Tuesday's session only.

The staff also briefed the Committee on the likely implications of very high reserve balances for bank balance sheet management and for the economy. The staff's assessment, based in part on consultations with market participants, was that many banks were currently comfortable holding high levels of reserves as a means of managing liquidity risks, and these balances or further increases along the lines implied by the announced programs were not likely to crowd out other lending through pressures on capital positions. As the economy improves, however, banks could seek to lower their levels of reserve balances by purchasing securities, thereby putting downward pressure on market interest rates, or by easing their credit standards and terms in order to expand lending. Such effects, if significant, would provide further impetus to economic growth. The staff analysis indicated that these effects would likely emerge only gradually and that their magnitude could be quite limited. However, some participants thought that declining demand for reserves might already be putting downward pressure on yields. Participants expressed a range of views about the likely stimulative effect of a further expansion of reserve balances on economic activity, as well as the potential impact of elevated reserves on inflation expectations. Some meeting participants noted that the announced decrease in the balance in the Treasury's Supplementary Financing Account (SFA) would increase reserves in the banking system unless it were offset by Federal Reserve actions or by a further reduction in borrowing from the Federal Reserve's various credit and liquidity facilities, and that these increases could be expansionary. Others noted that the decrease in the SFA could well be temporary and, in any

event, that the macroeconomic effects of the increase in reserves would probably be limited in the current environment.

The staff presented an update on the continuing development of several tools that could help support a smooth withdrawal of policy accommodation at the appropriate time. These measures included executing reverse repurchase agreements on a large scale, potentially with counterparties other than the primary dealers; implementing a term deposit facility, available to depository institutions, to reduce the supply of reserve balances; and taking steps to tighten the link between the interest rate paid on reserve balances held at the Federal Reserve Banks and the federal funds rate. Participants expressed confidence that these tools, along with the payment of interest on reserves and possible sales of assets from the System's portfolio, would allow them to remove policy accommodation at the appropriate time and pace. Completing development of these tools would remain a top priority of the Federal Reserve.

The staff presented proposed schedules for operations under the Term Auction Facility (TAF) and Term Securities Lending Facility (TSLF) through January 2010. As conditions in short-term funding markets had continued to improve, usage of these facilities had diminished. The proposed schedules were consistent with not only the Federal Reserve's previously announced intention to gradually scale back these facilities in response to continued improvements in financial market conditions, but also with a desire to assure market participants that the Federal Reserve will provide sufficient liquidity over year-end. There was general agreement that the Federal Reserve should assess over the next several

months whether to maintain a TAF on a permanent basis.

Secretary's note: On September 24, 2009, the Federal Reserve announced schedules for operations under the TAF and the TSLF through January 2010 and indicated that it would seek public comment on a proposal for a permanent TAF.

### Staff Review of the Economic Situation

The information reviewed at the September 22–23 meeting suggested that overall economic activity was beginning to pick up. Factory output, particularly motor vehicle production, rose in July and August. Consumer spending on motor vehicles during that period was boosted by government rebates and greater dealer incentives, and household spending outside of motor vehicles appeared to rise in August after having been roughly flat from May through July. Although employment continued to contract in August, the pace of job losses slowed noticeably from that of earlier in the year. Investment in equipment and software (E&S) also seemed to be stabilizing. Sales and construction of single-family homes during July and August, while still at low levels, were significantly above the readings at the beginning of the year. The sharp cuts in production this year reduced inventory stocks significantly, though they remained elevated relative to the recent level of sales. Core consumer price inflation continued to be subdued in July and August, but higher gasoline prices raised overall consumer price inflation in August.

Firms continued to reduce payrolls, but job losses abated further in August, with the decline in private payroll em-

ployment the smallest since that of August 2008. Although employment losses continued to be widespread, the rate of decline diminished in most industries. The length of the average workweek for production and nonsupervisory workers remained steady, albeit at a low level, and the rate of decline in aggregate hours for this group over July and August was the smallest of the past year. In the household survey, although the unemployment rate rose in August to 9.7 percent, the rise in the unemployment rate slowed, on net, in recent months from its pace earlier in the year. The labor force participation rate in August remained at the low level that had prevailed through much of the year. Continuing claims for unemployment insurance through regular state programs fell slightly, on balance, from its earlier peak, but the total including extended and emergency benefits stayed near its recent high level. Initial claims for unemployment insurance fluctuated within a narrow range that was consistent with further declines in employment. With labor markets still weak, the year-over-year increase in average hourly earnings of production and non-supervisory workers slowed further in August, even with the higher federal minimum wage that went into effect at the end of July.

Industrial production rose in July and August, led by a rebound in motor vehicle production from the extraordinarily low assembly rates in the first half of the year. Manufacturing production outside of motor vehicles increased solidly, likely reflecting stronger demand for materials from the motor vehicle sector and a slower pace of inventory liquidation elsewhere. Business survey indicators suggested further gains in factory output over the near term. Nevertheless, the factory uti-

lization rate in August was only modestly above its recent historical low.

Real personal consumption expenditures increased modestly in July, led by a strong advance in motor vehicle purchases, which were boosted appreciably by the government's "cash-for-clunkers" program. This program contributed to a further surge in motor vehicle sales in August to their highest level since the first half of 2008. After declining in July, sales at retailers, excluding those at motor vehicle dealers, building materials stores, and gasoline stations, rose significantly in August, suggesting an increase in real consumer expenditures on non-motor-vehicle goods for the month. Even so, many determinants of spending continued to be tepid. In particular, the weak labor market continued to restrain growth in household income, and the prior declines in household net worth probably continued to weigh on spending. However, an increase in household net worth since March, a rise in nominal labor compensation in July, and increases in various measures of consumer sentiment indicated some improvement in the outlook for consumer spending.

Data from the housing sector indicated that a gradual recovery in activity was under way. Although single-family housing starts fell modestly in August, this decrease followed five consecutive monthly increases, and the number of starts in August was well above the record low reached in the first quarter of the year. In contrast, in the much smaller multifamily sector, where credit conditions were still particularly tight and vacancy rates remained high, starts continued to be down, on net, in 2009 after a significant fall in the second half of 2008. The sales data for July indicated further increases in the demand for both new and existing single-

family homes. Even though new home sales remained modest, they had been sufficient, given the slow pace of construction, to pare the overhang of unsold new single-family houses: In July, the level of inventories of such homes was about one-half of its peak in the summer of 2006, and the months' supply had fallen considerably from its record high in January. Sales of existing homes in July were at their fastest pace since mid-2007, and pending home sales agreements suggested that resale activity would rise further in following months. Although sales of distressed properties remained elevated, the rise in total sales of existing homes over the summer appeared to have been driven by an increase in transactions involving nondistressed properties. The apparent modest strengthening of housing demand was likely due, in part, to improvements in housing affordability stemming from low interest rates for conforming mortgages, a lower level of house prices, and possibly the first-time homebuyer tax credit. In addition, demand may have been buoyed by a sense that house prices were beginning to stabilize. Through the end of the second quarter, many house price indexes had smaller year-over-year declines than they had shown earlier this year, and some indexes recorded positive changes for the second quarter.

Real spending on E&S appeared to be stabilizing after falling sharply for more than a year. Business purchases of transportation equipment seemed to be expanding solidly in the third quarter. Nominal shipments and orders for high-tech equipment in July were significantly above their second-quarter averages; moreover, a few major producers of high-tech equipment reported some signs of improvement in demand. Business investment in equipment other

than high tech and transportation showed tentative signs of stabilization. Some forward-looking indicators of investment in E&S improved, suggesting that conditions had become less adverse than earlier in the year. Monthly surveys of business conditions and sentiment recently recovered to levels consistent with a modest rise in business spending, and corporate bond spreads over Treasury securities narrowed further. In contrast, conditions in the non-residential construction sector generally remained quite poor, and measures of construction spending excluding energy-related projects stayed on a downward trajectory through July. Vacancy rates continued to rise, property prices fell further, and financing for nonresidential construction projects remained very tight. The nominal book value of businesses inventories continued to fall in July, which contributed to further declines in inventory-to-sales ratios; however, those ratios stayed elevated.

After narrowing to a 10-year low in May, the U.S. international trade deficit widened in June and July, as strong increases in exports were more than offset by sizable rises in imports. The July trade data provided additional evidence that the levels of both exports and imports probably reached their trough in the second quarter. About one-half of the increase in exports of goods and services in July was in exports of automotive products; the other gains were widespread across other major categories of exports. As with exports, the largest increase in imports of goods and services in July was in automotive products, reflecting some recovery in North American motor vehicle production. Imports of consumer goods, capital goods, and industrial supplies also rose markedly. Imports of oil increased more moderately,

with the rise wholly reflecting higher prices.

Real gross domestic product (GDP) in the advanced foreign economies contracted more moderately in the second quarter than in the first quarter, with growth resuming in several countries. In Japan, a trade-related rebound in industrial production led to an increase in overall output. Government incentives for motor vehicle purchases contributed to a modest expansion of the German and French economies, but the euro-area economy as a whole contracted slightly as inventory drawdowns weighed on activity. Output also fell in Canada and the United Kingdom. Purchasing managers indexes (PMIs) rose further in the major economies during the intermeeting period, and reached levels consistent with stabilization or moderate expansion of output in the third quarter. Indicators of consumer sentiment continued to increase, but remained well below pre-recession levels, in part because of concerns about rising unemployment. In most emerging market economies, particularly in Asia, economic activity rebounded in the second quarter; however, output declined again in Mexico. Indicators of activity in the third quarter pointed to a continued expansion of output in most emerging market countries, and PMIs moved into the expansionary range in many of them. International trade in emerging market economies picked up, supported by Chinese demand, while demand from advanced economies still appeared weak.

In the United States, core consumer price inflation remained subdued in July and August, as price increases in housing services moderated and durable goods prices declined. Overall consumer price inflation increased in August, boosted by a sharp upturn in energy prices, particularly those of

gasoline. The latest available survey data indicated that gasoline prices edged up further in the first half of September. Consumer food prices were little changed in August. According to the preliminary September release of the Reuters/University of Michigan Surveys of Consumers, median year-ahead inflation expectations decreased modestly in the first half of September, but remained somewhat above the low levels posted at the beginning of the year. Longer-term inflation expectations from this survey stayed in the narrow range that has prevailed over recent years. The producer price index for core intermediate materials rose in August, its third consecutive monthly increase; over those three months, the index retraced about one-third of the decline of the previous eight months. All measures of nominal hourly compensation and wages suggested that labor costs had decelerated markedly this year amid the considerable weakness in labor markets.

#### Staff Review of the Financial Situation

The decisions by the Federal Open Market Committee (FOMC) at the August meeting to leave the target range for the federal funds rate unchanged and to maintain the maximum sizes of its large-scale asset purchase programs, along with the accompanying statement, were broadly in line with market expectations. The announcement in the statement of the decision to slow the pace of Treasury securities purchases so that the full amount of \$300 billion would be completed by the end of October reduced uncertainty about the timing of the end of this program and the ultimate amount of purchases. After the release of the statement, the expected path for

the federal funds rate implied by money market futures prices declined modestly. Subsequently, the expected policy path shifted down further, on net, as investors apparently interpreted weak labor market conditions and generally quiescent inflation as consistent with an outlook that would lead the FOMC to maintain low policy rates over the medium term. In addition, investors' uncertainty about the future policy rate path appeared to diminish, which may have also contributed to the lowering of the path implied by futures prices by reducing term premiums. Yields on nominal Treasury securities also decreased since the Committee met in August. A decline in implied volatility on longer-term Treasury yields suggested that some of the drop in yields was due to reduced risk premiums. Inflation compensation based on five-year Treasury inflation-protected securities (TIPS) increased a little, on balance, over the intermeeting period, while five-year inflation compensation five years ahead declined modestly; the decrease in forward inflation compensation partially reversed increases in prior intermeeting periods. Liquidity in the TIPS market reportedly continued to be poor, complicating inferences about investors' expectations of future inflation.

Conditions in short-term funding markets showed modest further improvement over the intermeeting period. Spreads between London interbank offered rates (Libor) and overnight index swaps (OIS) at the one- and three-month maturities returned to near the levels that prevailed before the onset of the financial crisis in August 2007. Longer-term Libor-OIS spreads also narrowed, but they remained high by historical standards. Reports continued to suggest that lending institutions were unusually selective about their

counterparties in funding markets. Spreads on A2/P2-rated commercial paper and AA-rated asset-backed commercial paper were little changed, on net, remaining at the low end of their ranges over the past two years. Indicators of Treasury market functioning showed no material change, and functioning continued to be somewhat impaired. Bid-asked spreads held roughly steady, and trading volumes remained low. The on-the-run liquidity premium for the 10-year Treasury note was little changed at an elevated level, although it was well below its peak last fall; the premiums on two- and five-year Treasury securities stayed low.

Amid lower interest rates as well as further indications that the contraction in economic activity may have ended, broad stock price indexes rose, on net, over the intermeeting period. The spread between an estimate of the expected real equity return over the next 10 years for S&P 500 firms and an estimate of the real 10-year Treasury yield—a rough gauge of the equity risk premium—remained high by historical standards. After having dropped significantly in prior months, option-implied volatility on the S&P 500 index declined modestly, on balance, over the intermeeting period, but was still at a level comparable with that of previous recessions. Yields on corporate bonds fell a bit more than those on Treasury securities of similar duration. Indicators suggested that liquidity in the secondary market for corporate bonds increased a bit further. Conditions in the secondary market for leveraged syndicated loans continued to improve slowly, as secondary-market prices rose slightly and bid-asked spreads narrowed.

Changes in investor sentiment toward claims on financial firms were mixed over the intermeeting period.

Equity prices for larger banks increased, but stock prices for regional and smaller banks were little changed. Market participants reportedly took note of the increased number of failures at regional and smaller banks and remained concerned about the credit quality of such banks' loan portfolios and their ability to raise capital. Credit default swap spreads for banking institutions changed little, on net, over the intermeeting period. A number of financial institutions issued debt that was not guaranteed by the Federal Deposit Insurance Corporation.

The level of debt of the private domestic nonfinancial sector declined again in the second quarter, as both household and nonfinancial business debt fell. Consumer credit posted its sixth consecutive monthly decline in July; both revolving and nonrevolving credit showed sizable drops. While issuance of consumer credit asset-backed securities decreased in August, a large volume of securities eligible for the Term Asset-Backed Securities Loan Facility was issued in early September. Gross bond issuance by nonfinancial corporations rose in August following a lull in July; the rebound was particularly robust for speculative-grade firms. However, commercial paper outstanding was unchanged and bank loans fell again; as a result, borrowing by the nonfinancial business sector declined, on net, again in August. In contrast, the federal government continued to issue debt at a rapid pace, and gross issuance of state and local government debt was robust, supported in part by issuance of Build America Bonds authorized under the fiscal stimulus program.

Commercial bank credit contracted further in August; all major loan categories declined. Commercial and industrial (C&I) lending again decreased steeply amid reported broad-based pay-

downs of outstanding loans. At the same time, the latest Survey of Terms of Business Lending showed that C&I loan spreads over comparable-maturity market instruments rose noticeably in recent months. The contraction of commercial real estate loans held by banks also intensified in August. Even though originations of residential mortgages apparently increased during August, banks sold an unusually large volume of loans to the government-sponsored enterprises; consequently, banks' balance sheet holdings of residential mortgages decreased markedly.

After declining in July, M2 contracted more quickly in August. The reduced demand for M2 assets likely reflected low interest rates on retail deposits and money market mutual fund shares, as well as a continued reallocation of wealth toward riskier assets. Small time deposits and retail money market mutual funds fell more sharply in August than earlier in the year. Liquid deposits increased in August, but at a slower rate than in July. Currency expanded less rapidly in July and August than in the first half of the year, as demand from abroad evidently was restrained.

Global financial markets showed some further signs of stabilization over the intermeeting period. Stock indexes in Europe rose solidly, apparently reflecting an improved economic outlook, but the Japanese stock market declined modestly. In emerging markets, credit default swap spreads on sovereign debt declined slightly, and equity prices in most countries rose moderately; however, stock prices fell notably in China, partly driven by reports that authorities were taking actions to moderate loan growth. Despite fairly positive economic indicators, sovereign yields fell in major industrial economies, reportedly in part because of the reiteration

by major central banks of their intention to keep policy interest rates low. On a trade-weighted basis, the dollar depreciated against major foreign currencies, notably against the euro and Japanese yen; it was little changed, on average, against the currencies of the other major trading partners of the United States.

The European Central Bank, the Bank of England, the Bank of Canada, and the Bank of Japan kept their respective policy rates constant over the intermeeting period. On the first day of the FOMC meeting, the Bank of Canada announced the expiration of two temporary liquidity facilities at the end of October 2009.

#### Staff Economic Outlook

In the forecast prepared for the September FOMC meeting, the staff raised its projection for real GDP growth over the second half of 2009 and over 2010. The information received during the intermeeting period appeared to indicate a more noticeable upturn than anticipated at the time of the August meeting: Sales and starts of single-family homes provided evidence of some firming in housing activity, capital spending indicators pointed to an earlier-than-anticipated trough for investment in E&S, and some data suggested a modest recovery in consumer spending. These tentative signs of a recovery of economic activity were supported by other factors, including recent rises in house and equity prices that would support household net worth, declines in interest rates on corporate bonds and fixed-rate mortgages, and a stronger outlook for activity in foreign economies. The staff expected that these positive factors would lead to a modest increase in final sales in the second half of 2009, despite continued

weakness in commercial construction and some further deterioration in labor markets. As a result of the expected increase in final sales and an anticipated reduction in inventory liquidation, the staff projected that real GDP would increase in the second half of 2009 at a rate somewhat above the growth rate of potential output. For 2010, the staff forecast that output growth would continue to strengthen, supported by an ongoing improvement in financial conditions, a fading of the drag from earlier declines in income and wealth, accommodative monetary and fiscal policy, and recovery in the housing sector. These factors also contributed to an expected further increase in real GDP growth in 2011, despite an anticipated decline in the impetus from fiscal policy. Even though the upward revision to the projection for output was expected to generate larger gains in employment than previously forecast, the staff still projected only a slow improvement in labor markets, with the unemployment rate moving down to about 9¼ percent by the end of 2010 and then falling to about 8 percent by the end of 2011.

The staff forecast for inflation was little changed from that at the August meeting. The recent data on consumer price inflation were a little above staff expectations, but still indicated a slower increase in core prices compared with those of earlier in the year. Survey measures of inflation expectations displayed no significant change. Nonetheless, with the significant underutilization of resources expected to persist through 2011, the staff forecast core inflation to slow somewhat further over the next two years from the pace of the first half of 2009. Because of recent increases in energy prices, overall consumer price inflation was projected to be somewhat above core in-

flation in the second half of 2009 and 2010, but it was expected to be near the core rate in 2011.

#### Participants' Views on Current Conditions and the Economic Outlook

In their discussion of the economic situation and outlook, meeting participants agreed that the incoming data and information received from business contacts suggested that economic activity had picked up following its severe downturn; most thought an economic recovery was under way. Many participants noted that since August, they had revised up their projections for the second half of 2009 and for subsequent years. A number of factors were expected to support growth over the next few quarters: Activity in the housing sector was evidently rising, and house prices had apparently stabilized or even increased; consumer spending seemed to be in the process of leveling out; reports from business contacts and regional surveys were consistent with firms making progress in bringing inventories into better alignment with sales and with production stabilizing or beginning to rise in many sectors; the outlook for growth abroad had also improved, auguring well for U.S. exports; and financial market conditions had continued to improve over the past several months. Despite these positive factors, many participants noted that the economic recovery was likely to be quite restrained. Credit from banks remained difficult to obtain and costly for many borrowers; these conditions were expected to improve only gradually. In light of recent experience, consumers were likely to be cautious in spending, and business contacts indicated that their firms would also be cautious in hiring and investing even as

demand for their products picked up. Some of the recent gains in activity probably reflected government policy support, and participants expressed considerable uncertainty about the likely strength of the upturn once those supports were withdrawn or their effects waned. Overall, the economy was projected to expand over the remainder of 2009 and during 2010, but at a pace that was unlikely to reduce the unemployment rate appreciably. Subsequently, as the housing market picked up further and financial conditions improved, economic growth was expected to strengthen, leading to more-substantial increases in resource utilization over time.

Nonetheless, most participants anticipated that slack in both labor and product markets would be substantial over the next few years, leading to subdued and potentially declining wage and price inflation. Some participants were skeptical of the usefulness of measures of resource utilization in gauging inflation pressures, partly because of the difficulty of measuring slack, especially in real time. Also, those participants noted that the degree to which slack reduces inflation depends on the stability of longer-term inflation expectations, which in turn depends on expectations for monetary policy. In any case, all participants recognized that inflation expectations are a key determinant of inflation, and that various measures of inflation expectations, although imperfect, needed to be carefully monitored in the current environment. Participants discussed the extent to which the size of the Federal Reserve's balance sheet would affect inflation expectations going forward. To keep inflation expectations well anchored, all agreed on the importance of the Federal Reserve continuing to communicate that it has the tools and willingness to begin with-

drawing monetary policy accommodation at the appropriate time and pace to prevent any persistent increase in inflation. Overall, many participants viewed the risks to their inflation outlook over the next few quarters as being roughly balanced. A few continued to see some risk of substantial further disinflation, but that risk had eased somewhat further over the intermeeting period. Over a longer horizon, a few felt the risks were tilted to the upside.

Developments in financial markets were again regarded as broadly positive; participants saw the cumulative improvement in market functioning and pricing since the spring as substantial. Over the intermeeting period, the strengthening in the economic outlook led to an increase in investors' appetite for riskier assets. Markets for corporate debt continued to improve, private credit spreads narrowed further, and equity prices rose. Given the improved economic prospects, the decline in longer-term Treasury yields and the apparent marking down of the implied path for the policy interest rate were seen as somewhat puzzling but supportive of recovery. Some participants saw the decline in yields on Treasury securities and other instruments as an indication that the expansion of excess reserve balances was putting downward pressure on market rates; some others viewed the configuration of rate movements as consistent with reduced concerns about inflation and with lower term premiums in a more settled economic environment. In any event, the ongoing improvement in broader financial and economic conditions seemed to some participants to reflect the onset of a positive feedback loop in which better financial conditions contribute to stronger growth in output and employment, which in turn bolsters expected returns and strengthens financial firms,

leading to a further easing in financial conditions. Others noted, however, that many financial markets and institutions were still strained and that downside financial risks remained. In particular, because the improvement in financial markets was due, in part, to support from various government programs, market functioning might deteriorate as those programs wind down. Moreover, credit remained quite tight for many businesses and households dependent on banks, and many regional and small banks were vulnerable to the deteriorating performance of commercial real estate loans. Participants noted that all categories of bank lending continued to decline.

Participants emphasized that labor market conditions remained weak. Although recent data indicated that the pace at which employment was declining had slowed, job losses remained sizable and the unemployment rate was high. The unusually large fraction of those who were working part time for economic reasons, the unusually low level of the average workweek, and indications from business contacts that firms would be slow to hire additional staff as sales and production turn up all pointed to a period of modest job gains, and thus only a slow decline in the unemployment rate as the economic recovery proceeds. Significant cost cutting by firms was thought to have led to a sizable increase in productivity growth in the first half of the year; sustained outsized gains in productivity could further damp hiring. Finally, high levels of long-term unemployment and permanent separations could lead to losses of skills and greater needs for labor reallocation that could slow employment growth.

Consumer spending had picked up more than expected over the intermeeting period, but participants saw that

increase as partly reflecting special factors like the cash-for-clunkers program. Recent increases in house prices and equity prices were positives, but participants generally expected no more than moderate growth in consumer spending over the near term. Households still faced considerable headwinds, including tight credit, high levels of debt, uncertain job prospects, and wealth levels that remained relatively low despite the recent rise in equity prices and stabilization in house prices. In that environment, households' saving behavior remained an important source of uncertainty in the outlook. The household saving rate had risen considerably in recent quarters, and the most likely outcome was for the saving rate to remain near its higher level; however, some participants noted that there was some chance that the sharp drop in household net worth over the past few years, reduced access to credit, and high household debt burdens could lead households to save a substantially larger fraction of their incomes going forward.

Firms appeared to be reducing inventories and fixed investment at a slower pace than earlier in the year and had made substantial progress in reducing stocks toward desired levels. With inventories low, firms were beginning to raise production to meet at least a portion of new demand; this adjustment was likely to make an important contribution to economic recovery in the second half of this year. Recent data on new orders and shipments pointed to an earlier bottoming out in equipment and investment spending than previously anticipated. Some participants reported that while business contacts had expressed relief that the most severe economic outcomes had been avoided, they remained cautious about the recovery. This caution, together with low

utilization rates and substantial excess capacity, could hold back the rate of increase of new capital spending.

In the residential real estate sector, home sales and construction had increased from very low levels, and house prices appeared to be stabilizing. Participants welcomed the cumulating evidence that the housing sector was beginning to recover, and many participants had marked up their forecasts for housing activity. However, some viewed the improvement as quite tentative, pointing to the pending termination of the temporary tax credit for first-time homebuyers and the winding down of the Federal Reserve's agency MBS purchase program as potential risks to the outlook for the sector. Also, some participants questioned whether the recent stabilization in house prices would be sustained as likely further increases in foreclosures would probably put downward pressure on prices. Still, a better outlook for house prices was an important input to the improved economic outlook; not only would household wealth benefit from a turnaround in such prices, but the exposure of lenders to real estate losses would be diminished. In contrast to developments in the residential sector, commercial real estate activity continued to fall markedly in most districts, reflecting deteriorating fundamentals, including declining occupancy and rental rates and very tight credit conditions.

Participants marked up their outlook for foreign economies, mainly reflecting better-than-expected incoming data from a range of countries. The pickup in foreign economic activity, especially in Asia, had buoyed U.S. export growth, and several participants noted that higher growth abroad would support growth in U.S. exports going forward.

### Committee Policy Action

In their discussion of monetary policy for the period ahead, Committee members agreed that no significant changes to its policy target rate or large-scale asset purchase programs were warranted at this meeting. Although the economic outlook had improved further in recent weeks and the risks to the forecast had become more balanced, the level of economic activity was likely to be quite weak and resource utilization low. With substantial resource slack likely to persist and longer-term inflation expectations stable, the Committee anticipated that inflation would remain subdued for some time. Under these circumstances, the Committee judged that the costs of growth turning out to be weaker than anticipated could be relatively high. Accordingly, the Committee agreed that it was appropriate to maintain its target range for the federal funds rate at 0 to ¼ percent and to reiterate its view that economic conditions were likely to warrant an exceptionally low level of the federal funds rate for an extended period. With respect to the large-scale asset purchase programs, some members thought that an increase in the maximum amount of the Committee's purchases of agency MBS could help to reduce economic slack more quickly than in the baseline outlook. Another member believed that the recent improvement in the economic outlook could warrant a reduction in the Committee's maximum purchases. However, all members were able to support an indication by the Committee of its intention at this time to purchase the full \$1.25 trillion of agency MBS that it had previously established as the maximum for this program. With respect to agency debt, the Committee agreed to reiterate its intention to purchase up to

\$200 billion of these securities. To promote a smooth transition in markets as these programs are concluded, members decided to gradually slow the pace of both its agency MBS and agency debt purchases and to extend their completion through the end of the first quarter of 2010. The Committee agreed that it would continue to evaluate the timing and overall amounts of its purchases of securities in light of the evolving economic outlook and conditions in financial markets. Members discussed the importance of maintaining flexibility to expand the asset purchase programs should the economic outlook deteriorate or to scale back the programs should economic and financial conditions improve more than anticipated.

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

“The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to  $\frac{1}{4}$  percent. The Committee directs the Desk to purchase agency debt, agency MBS, and longer-term Treasury securities during the intermeeting period with the aim of providing support to private credit markets and economic activity. The timing and pace of these purchases should depend on conditions in the markets for such securities and on a broader assessment of private credit market conditions. The Desk is expected to complete purchases of about \$300 billion of longer-term Treasury securities by the end of October. It is also expected to execute purchases of up to \$200 billion in housing-related agency debt and about \$1.25 trillion of agency MBS by the end of the first quarter of 2010. The

Desk is expected to gradually slow the pace of these purchases as they near completion. The Committee anticipates that outright purchases of securities will cause the size of the Federal Reserve’s balance sheet to expand significantly in coming months. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System’s balance sheet that could affect the attainment over time of the Committee’s objectives of maximum employment and price stability.”

The vote encompassed approval of the statement below to be released at 2:15 p.m.:

“Information received since the Federal Open Market Committee met in August suggests that economic activity has picked up following its severe downturn. Conditions in financial markets have improved further, and activity in the housing sector has increased. Household spending seems to be stabilizing, but remains constrained by ongoing job losses, sluggish income growth, lower housing wealth, and tight credit. Businesses are still cutting back on fixed investment and staffing, though at a slower pace; they continue to make progress in bringing inventory stocks into better alignment with sales. Although economic activity is likely to remain weak for a time, the Committee anticipates that policy actions to stabilize financial markets and institutions, fiscal and monetary stimulus, and market forces will support a strengthening of economic growth and a gradual return to higher levels of resource utilization in a context of price stability.

With substantial resource slack likely to continue to dampen cost pressures and with longer-term inflation expectations stable, the Committee expects that inflation will remain subdued for some time.

In these circumstances, the Federal Reserve will continue to employ a wide range of tools to promote economic recovery and to preserve price stability. The Committee will maintain the target range for the federal funds rate at 0 to  $\frac{1}{4}$  percent and continues to anticipate that economic conditions are likely to warrant exceptionally low levels of the federal funds rate for an extended period. To provide support to mortgage lending and housing markets and

to improve overall conditions in private credit markets, the Federal Reserve will purchase a total of \$1.25 trillion of agency mortgage-backed securities and up to \$200 billion of agency debt. The Committee will gradually slow the pace of these purchases in order to promote a smooth transition in markets and anticipates that they will be executed by the end of the first quarter of 2010. As previously announced, the Federal Reserve's purchases of \$300 billion of Treasury securities will be completed by the end of October 2009. The Committee will continue to evaluate the timing and overall amounts of its purchases of securities in light of the evolving economic outlook and conditions in financial markets. The Federal Reserve is monitoring the size and composition of its balance sheet and will make adjustments to its credit and liquidity programs as warranted."

Voting for this action: Messrs. Bernanke and Dudley, Ms. Duke, Messrs. Evans, Kohn, Lacker, Lockhart, Tarullo, and Warsh, and Ms. Yellen.

Voting against this action: None.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, November 3–4, 2009. The meeting adjourned at 12:35 p.m. on September 23, 2009.

#### Notation Votes

By notation vote completed on August 28, 2009, the Committee unanimously approved the designation of Matthew M. Luecke as the Committee's Chief Freedom of Information Act Officer, with authority to subdelegate duties as appropriate.

By notation vote completed on September 1, 2009, the Committee unanimously approved the minutes of the FOMC meeting held on August 11–12, 2009.

Brian F. Madigan  
Secretary

#### Meeting Held on November 3–4, 2009

A joint meeting of the Federal Open Market Committee and the Board of Governors of the Federal Reserve System was held in the offices of the Board of Governors in Washington, D.C., on Tuesday, November 3, 2009, at 2:00 p.m. and continued on Wednesday, November 4, 2009, at 9:00 a.m.

#### *Present:*

Mr. Bernanke, Chairman  
Mr. Dudley, Vice Chairman  
Ms. Duke  
Mr. Evans  
Mr. Kohn  
Mr. Lacker  
Mr. Lockhart  
Mr. Tarullo  
Mr. Warsh  
Ms. Yellen

Mr. Bullard, Mr. Hoenig, Ms. Pianalto, and Mr. Rosengren, Alternate Members of the Federal Open Market Committee

Messrs. Fisher, Kocherlakota, and Plosser, Presidents of the Federal Reserve Banks of Dallas, Minneapolis, and Philadelphia, respectively

Mr. Madigan, Secretary and Economist  
Mr. Luecke, Assistant Secretary  
Mr. Skidmore, Assistant Secretary  
Ms. Smith, Assistant Secretary  
Mr. Alvarez, General Counsel  
Mr. Baxter, Deputy General Counsel  
Mr. Sheets, Economist  
Mr. Stockton, Economist

Messrs. Altig, Clouse, Connors, Kamin, Slifman, Sullivan, Wilcox, and Williams, Associate Economists

Mr. Sack, Manager, System Open Market Account

Ms. Johnson, Secretary of the Board, Office of the Secretary, Board of Governors

- Mr. Frierson, Deputy Secretary, Office of the Secretary, Board of Governors
- Mr. Struckmeyer, Deputy Staff Director, Office of the Staff Director for Management, Board of Governors
- Mr. English, Deputy Director, Division of Monetary Affairs, Board of Governors
- Ms. Robertson, Assistant to the Board, Office of Board Members, Board of Governors
- Ms. Edwards, Messrs. Levin and Nelson, Senior Associate Directors, Division of Monetary Affairs, Board of Governors; Messrs. Reifschneider and Wascher, Senior Associate Directors, Division of Research and Statistics, Board of Governors
- Mr. Leahy,<sup>15</sup> Associate Director, Division of International Finance, Board of Governors
- Mr. Palumbo, Deputy Associate Director, Division of Research and Statistics, Board of Governors
- Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors
- Ms. Ihrig, Section Chief, Division of Monetary Affairs, Board of Governors
- Ms. Low, Open Market Secretariat Specialist, Division of Monetary Affairs, Board of Governors
- Mr. Williams, Records Management Analyst, Division of Monetary Affairs, Board of Governors
- Ms. Holcomb, First Vice President, Federal Reserve Bank of Dallas
- Messrs. Fuhrer and Sniderman, Executive Vice Presidents, Federal Reserve Banks of Boston and Cleveland, respectively
- Mr. Barkema, Mses. Mester and Mosser, and Mr. Waller, Senior Vice Presidents, Federal Reserve Banks of Kansas City, Philadelphia, New York, and St. Louis, respectively
- Mr. Weber, Senior Research Officer, Federal Reserve Bank of Minneapolis
- Mr. Burke and Ms. Yucel, Vice Presidents, Federal Reserve Banks of New York and Dallas, respectively
- Ms. Sbordone and Mr. Sill, Assistant Vice Presidents, Federal Reserve Banks of New York and Philadelphia, respectively
- Mr. Hetzel, Senior Economist, Federal Reserve Bank of Richmond

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

The Manager of the System Open Market Account reported on recent developments in domestic and foreign financial markets. The Manager also reported on System open market operations in Treasury securities, agency debt, and agency mortgage-backed securities (MBS) since the Committee's September 22–23 meeting. By unanimous vote, the Committee ratified those transactions. There were no open market operations in foreign currencies for the System's account during the intermeeting period. Since the Committee met in September, the Federal Reserve's total assets were about unchanged, on balance, at approximately \$2.2 trillion, as the increase in the System's holdings of securities roughly matched a further decline in usage of the System's credit and liquidity facilities.

15. Attended the portion of the meeting relating to financial developments, open market operations, and System facilities.

ties. The Manager noted that, as of October 30, \$300 billion in Treasury securities had been purchased, as directed by the Committee. Overall, the Treasury market had recovered substantially from the strains during the financial crisis, and the Manager reported that the completion of the Federal Reserve's purchase program did not appear to have led to any significant upward pressure on Treasury yields or to any notable deterioration in Treasury market functioning. There was little evidence, to date, of a buildup in year-end funding pressures, although demand for Treasury bills with maturities extending just beyond the year-end seemed to be elevated. The Manager noted that the recent path of purchases of agency debt was consistent with buying a cumulative amount of \$175 billion by the end of the first quarter of 2010.

The staff briefed the Committee on recent developments regarding various Federal Reserve liquidity and credit facilities, including the Term Auction Facility (TAF), the primary credit program, the Term Asset-Backed Securities Loan Facility (TALF), and the swap lines with foreign central banks. Usage of these facilities had been declining in recent months as financial market conditions continued to improve. On September 24, the Board of Governors announced a gradual reduction in amounts to be auctioned under the TAF through January and indicated that auctions of credit with maturities longer than 28 days would be phased out. The staff reviewed the changes that had been made since the onset of the crisis to the terms of the primary credit program, including loan maturities and interest rates. The staff noted that reducing the maximum maturity of loans available under the primary credit program from 90 days to 28 days

would represent another step toward normalization of the Federal Reserve's policy-implementation framework and would align the maximum maturities of the primary credit program with those under the TAF, but no action on this matter was taken by the Board at this meeting. Regarding the TALF, the staff indicated that auto and credit card asset-backed security issuance was increasingly being funded by non-TALF sources; however, commercial MBS remained more dependent on TALF financing.

The staff presented another update on the continuing development of several tools that could help support a smooth withdrawal of policy accommodation at the appropriate time. These measures include executing reverse repurchase agreements (RPs) on a large scale, potentially with counterparties other than the primary dealers; implementing a term deposit facility, available to depository institutions, to reduce the supply of reserve balances; and taking steps to tighten the link between the interest rate paid on reserve balances held at the Federal Reserve Banks and the federal funds rate. The staff had made considerable further progress on these tools. Participants expressed confidence that the Committee would be in a position to remove policy accommodation when appropriate by raising the rate of interest paid on excess reserves and by employing reserve-management tools such as reverse RPs, term deposits, and, if desirable, asset sales. Completing the operational work necessary to establish reverse RPs and term deposits as tools that can drain large volumes of reserves was viewed as an important near-term objective. Participants anticipated that the Federal Reserve would conduct tests of these tools, but they stressed that such testing would not im-

ply that these tools would be employed for policy purposes any time soon.

Participants expressed a range of views about how the Committee might use its various tools in combination to foster most effectively its dual objectives of maximum employment and price stability. As part of the Committee's strategy for eventual exit from the period of extraordinary policy accommodation, several participants thought that asset sales could be a useful tool to reduce the size of the Federal Reserve's balance sheet and lower the level of reserve balances, either prior to or concurrently with increasing the policy rate. In their view, such sales would help reinforce the effectiveness of paying interest on excess reserves as an instrument for firming policy at the appropriate time and would help quicken the restoration of a balance sheet composition in which Treasury securities were the predominant asset. Other participants had reservations about asset sales—especially in advance of a decision to raise policy interest rates—and noted that such sales might elicit sharp increases in longer-term interest rates that could undermine attainment of the Committee's goals. Furthermore, they believed that other reserve management tools such as reverse RPs and term deposits would likely be sufficient to implement an appropriate exit strategy and that assets could be allowed to run off over time, reflecting prepayments and the maturation of issues. Participants agreed to continue to evaluate various potential policy-implementation tools and the possible combinations and sequences in which they might be used. They also agreed that it would be important to develop communication approaches for clearly explaining to the public the use of these tools and the Committee's exit strategy more broadly.

#### Staff Review of the Economic Situation

The information reviewed at the November 3–4 meeting suggested that overall economic activity continued to rise in recent months. Manufacturers increased production in September for the third consecutive month. The gradual recovery in construction of single-family homes from its extremely low level earlier in the year continued, and home sales increased in the third quarter. Although consumer spending on motor vehicles declined in September after the expiration of government rebates, other household spending rose. Outlays for equipment and software (E&S) appeared to be stabilizing. However, the labor market weakened further, and business spending on non-residential structures continued to decline. Meanwhile, consumer price inflation remained subdued in recent months.

The labor market continued to weaken in September, but the pace of deterioration lessened from that seen earlier in the year. Job losses remained widespread across industries. The length of the average workweek for production and nonsupervisory workers decreased, and the index of aggregate hours worked for this group fell, albeit more slowly than earlier in the year. In the household survey, the unemployment rate rose in September to 9.8 percent, and the labor force participation rate fell to its lowest level of the year. Continuing claims for unemployment insurance through regular state programs declined through early October, but total claims, including those for extended and emergency benefits, remained high.

Industrial production rose in September for the third consecutive month. A substantial portion of the third-quarter

gain was directly attributable to a rebound in motor vehicle assemblies and related parts production, but increases in production were widespread across the industrial sector. Indicators from business surveys suggested that there would be further gains in factory output over the near term. Nevertheless, considerable slack remained in the manufacturing sector, as the factory utilization rate for September was up only a bit from its historical low earlier this year.

For the third quarter as a whole, real personal consumption expenditures (PCE) rose at a solid rate, with noticeable increases in motor vehicles, furniture, electronics, and other durable goods. However, real outlays declined in September after a sharp increase in August. The monthly pattern in expenditures was significantly affected by swings in motor vehicle sales during and after the government's "cash-for-clunkers" program. Real disposable personal income fell for the fourth consecutive month in September, reflecting the weakness in the labor market. Poor labor market conditions and prior declines in household net worth appeared to have weighed on consumer sentiment, and the October Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS) suggested that many banking institutions continued to tighten standards for consumer lending in the third quarter.

The housing sector continued to recover, on balance. Although single-family starts were about flat in September, the number of starts was well above the record low reached in the first quarter of the year. In the much smaller multifamily sector, where tight credit conditions persisted and vacancies remained elevated, starts were about unchanged. Sales of new homes, although down a bit in September, rose

over the third quarter as a whole. The inventory of unsold new homes declined further, as sales outpaced construction. Sales of existing single-family homes increased in September and for the quarter as a whole, and recent resale activity appeared to be driven primarily by transactions of nondistressed properties. The average interest rate on 30-year conforming fixed-rate mortgages remained very low over the intermeeting period. Although some house price indexes had risen in recent months, such indexes remained below year-earlier levels.

Real spending on E&S appeared to have stabilized in the third quarter. Real business outlays on high-tech E&S increased modestly further, outlays for aircraft posted another gain, and business investment in motor vehicles and other areas was down only slightly. The improvements in a number of the fundamental determinants of investment in E&S, including a decline in the cost of capital and a rise in business output, suggested further, albeit sluggish, gains in spending over the next few quarters. The responses to the October SLOOS indicated that banks continued to tighten standards on commercial and industrial (C&I) loans to firms. Meanwhile, conditions in the nonresidential construction sector generally remained quite poor. The recent trend in architectural billings was consistent with further declines in nonresidential construction, and employment in the sector continued to decline. The October SLOOS suggested that financing for new construction projects was very difficult for businesses to obtain. The Bureau of Economic Analysis estimated that businesses continued to liquidate inventories in the third quarter, but at a slower rate than in the preceding quarter.

In August, the U.S. international trade deficit narrowed, as exports edged up and imports declined, but it remained wider than it had been at its recent low point in May. The increase in exports of goods and services was held down by a sharp drop in the volatile aircraft category. The decline in imports of goods and services was led by a lower volume of imported oil. In contrast, imports of machinery, automotive products, and industrial supplies increased.

Indicators of economic activity in the advanced foreign economies during the third quarter were mixed, but consistent with economic recovery in the aggregate. In most countries, purchasing managers surveys were at levels consistent with expansion, and many indicators of consumer and business confidence continued to show improvement. Economic indicators were strongest in Japan and the euro area, where industrial production rebounded sharply. In contrast, real gross domestic product (GDP) contracted in the United Kingdom in the third quarter, and real GDP in Canada edged down in July and August. In most emerging market economies, recent data showed that economic recovery continued in the third quarter. Real GDP increased strongly in China, Korea, and Singapore, and the recovery in Brazil continued. In Mexico, available data suggested that activity had begun to expand after several quarters of contraction. Across most of the major foreign economies, price pressures remained subdued. Twelve-month inflation remained elevated but declined further in Mexico and Brazil.

In the United States, recent monthly data indicated that consumer price inflation remained subdued. The PCE price index moved up only a bit in September as increases in energy prices

were largely offset by declines in food prices. Core PCE prices also edged up during the month. Gasoline prices rose again in October. Median year-ahead inflation expectations in the final October Reuters/University of Michigan Surveys of Consumers increased, remaining higher than at the turn of the year, but longer-term inflation expectations from this survey were about unchanged. Measures of labor compensation rose moderately in the third quarter after decelerating significantly in the first half of the year. The employment cost index for wages and salaries was boosted by increases in several industry categories that might have been affected by the rise in the minimum wage in July. Output per hour rose sharply in the second and third quarters, contributing to a sizable decline in unit labor costs so far this year.

#### Staff Review of the Financial Situation

Market participants largely anticipated the decisions by the Federal Open Market Committee (FOMC) at the September meeting to leave the target range for the federal funds rate unchanged and to extend the Federal Reserve's purchases of agency MBS and agency debt through the end of the first quarter of 2010 to allow for a gradual reduction in the pace of these purchases. The announcement of the Committee's intent to purchase the full \$1.25 trillion of agency MBS securities reduced some uncertainty about the cumulative amount of these purchases. After the release of the statement, investors marked down their expected path for the federal funds rate slightly; over subsequent weeks, that initial reaction was largely reversed so that, on balance, the expected path appeared to

change little over the intermeeting period. Yields on nominal Treasury securities were about unchanged on net. Inflation compensation based on five-year Treasury inflation-protected securities (TIPS) rose over the intermeeting period, apparently owing in part to an increase in oil and other commodity prices, while five-year inflation compensation five years ahead was little changed.

Overall conditions in short-term funding markets eased a bit further during the intermeeting period. Spreads between London interbank offered rates (Libor) and overnight index swap (OIS) rates at the one- and three-month maturities were about unchanged and were near their pre-crisis levels. Spreads at the six-month maturity narrowed but remained elevated. Spreads on A2/P2-rated commercial paper (CP) and AA-rated asset-backed CP remained at the lower ends of their respective ranges over the past two years. Indicators of Treasury market functioning, including on-the-run liquidity premiums for the 10-year Treasury note and trading volumes in both the nominal and TIPS markets, showed some signs of improvement over the intermeeting period, but trading conditions remained somewhat impaired. Year-end pressures in funding markets generally appeared modest. However, some evidence pointed to increased demand for Treasury securities that mature soon after the turn of the year.

Broad stock price indexes were about unchanged, on net, over the intermeeting period despite initial third-quarter earnings reports that mostly beat analysts' forecasts. Option-implied volatility on the S&P 500 index moved up slightly. The spread between an estimate of the expected real return on equity over the next 10 years for S&P 500 firms and an estimate of the real

10-year Treasury yield—a rough gauge of the equity risk premium—remained elevated. Corporate bond spreads narrowed further as yields on investment- and speculative-grade corporate bonds decreased more than those on comparable-maturity Treasury securities. Bid-asked spreads for corporate bonds—a measure of liquidity in this market—remained at moderate levels. Conditions in the secondary market for leveraged syndicated loans continued to improve, as secondary-market prices rose and bid-asked spreads narrowed.

Investor sentiment toward the banking sector appeared to deteriorate over the intermeeting period. Bank share prices fell, with equity prices for large banks declining more than those for regional and smaller banks. Credit default swap spreads for large bank holding companies were about flat, but they widened for regional and smaller banking organizations. Market participants reportedly remained concerned about the earnings prospects for banks in an environment of weak economic activity and rising loan losses.

Debt of the private domestic nonfinancial sector appeared to have declined again in the third quarter, as estimates suggested that household debt edged down and nonfinancial business debt decreased. Consumer credit contracted for the seventh consecutive month in August, reflecting declines in both revolving and nonrevolving credit; issuance of consumer credit asset-backed securities also fell. Gross issuance of bonds by investment-grade nonfinancial corporations slowed somewhat in October, even as speculative-grade firms continued to issue bonds at a robust pace. CP outstanding increased, though gains were concentrated at a few large issuers. Bank loans continued to contract rapidly. In contrast, the federal government con-

tinued to issue debt at a brisk pace, and gross issuance of state and local government debt remained strong in October.

Bank credit declined in September and in the first half of October, as the contraction in C&I loans contributed importantly to a further decline in total loans over the period. According to the SLOOS, bank lending standards and terms tightened further and demand continued to decline, on net, for most types of loans in the third quarter. Commercial real estate (CRE) loans also continued to decrease, reportedly because of widespread paydowns and charge-offs. In addition, residential mortgage loans on banks' books fell, and revolving home equity loans and consumer loans also contracted. The pace of decline in total loans at large banks continued to exceed that at smaller banks. The allowance for loan and lease losses rose further at large banks in September, but it was about unchanged at small banks.

M2 appeared to have expanded at a moderate rate in September and October. While liquid deposits rose rapidly, small time deposits and retail money market mutual funds continued to contract. Meanwhile, currency increased amid moderate demand for U.S. currency from abroad.

Stock indexes fell over the intermeeting period in most major industrial economies, while 10-year sovereign yields declined in Europe and were little changed in Japan and Canada. Equity prices were mixed in emerging markets, and credit spreads on emerging market sovereign debt edged up. The trade-weighted index of the foreign exchange value of the dollar was little changed over the intermeeting period. The Reserve Bank of Australia and Norges Bank raised their policy rates, while most other central banks

left their respective policy rates unchanged over the intermeeting period. The European Central Bank, the Bank of England, and the Bank of Japan continued implementing their special liquidity and asset purchase programs, although Bank of Japan officials indicated they would let some credit-easing programs expire at the end of the year.

### Staff Economic Outlook

In the forecast prepared for the November FOMC meeting, the staff raised its projection for real GDP growth over the second half of 2009 but left the forecast for output growth in 2010 and 2011 roughly unchanged. The spending and production data received during the intermeeting period suggested that economic activity, especially household spending, was a little stronger in the summer than previously estimated. Also, industrial production increased more than had been anticipated at the September meeting. But with labor market conditions somewhat weaker than anticipated, earlier declines in wealth still weighing on household balance sheets, and measures of consumer sentiment relatively low, the staff did not take much signal from the recent unexpected strength in spending and output. Indeed, the staff boosted its projection for the unemployment rate over the next several years. Still, the staff continued to believe that several factors that were restraining spending would gradually fade. The staff anticipated that the strengthening of the recovery in real output during 2010 and 2011 would be supported by an ongoing improvement in financial conditions and household balance sheets, continued recovery in the housing sector, improved household and business confidence, and accommodative mone-

tary policy even as the impetus to real activity from fiscal policy diminished.

The staff forecast for inflation was little changed from the September meeting. Although oil prices moved higher, likely boosting near-term inflation, the staff also revised up its estimate of the degree of slack in the economy, leaving the forecast for total and core PCE inflation over the next two years little changed. With significant underutilization of resources expected to persist for several years, the staff continued to project that core inflation would slow somewhat further over the next two years.

#### Participants' Views on Current Conditions and the Economic Outlook

In conjunction with this FOMC meeting, all meeting participants—the five members of the Board of Governors and the presidents of the 12 Federal Reserve Banks—provided projections for economic growth, the unemployment rate, and consumer price inflation for each year from 2009 through 2012 and over a longer horizon. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge over time under appropriate monetary policy and in the absence of further shocks. Participants' forecasts through 2012 and over the longer run are described in the Summary of Economic Projections, which is attached as an addendum to these minutes.

In the meeting participants' discussion of the economic situation and outlook, they agreed that the incoming data and information received from business contacts suggested that economic activity was picking up as anticipated, with output continuing to expand in the fourth quarter. A number

of factors were expected to support near-term growth: Business inventories were being brought into better alignment with sales, and the pace of inventory runoff was slowing; activity in the housing sector appeared to be turning up, and house prices seemed to be leveling out or beginning to rise by some measures; consumer spending appeared to be rising even apart from the effects of fiscal incentives to purchase autos; the outlook for growth abroad had improved since earlier in the year, auguring well for U.S. exports; and U.S. and global financial market conditions, while roughly unchanged over the intermeeting period, were substantially better than earlier in the year. Above-trend output growth in the third quarter was a welcome development. Moreover, the upturn in real GDP appeared to reflect stronger final demand and not just a slower pace of inventory decumulation. While these developments were positive, participants noted that it was not clear how much of the recent firming in final demand reflected the effects of temporary fiscal programs to support the auto and housing sectors, and some participants expressed concerns about the ability of the economy to generate a self-sustaining recovery without government support. Nonetheless, participants expected the recovery to continue in subsequent quarters, although at a pace that would be rather slow relative to historical experience, particularly the robust recoveries that followed previous steep downturns. Such a modest pace of expansion would imply only slow improvement in the labor market next year, with unemployment remaining high. Indeed, participants noted that business contacts continued to report plans to be cautious in hiring and capital spending even as demand for their products increased. Nonetheless, economic growth was ex-

pected to strengthen during the next two years as housing construction continued to rise and financial conditions improved further, leading to more-substantial increases in resource utilization in product and labor markets.

Most participants now viewed the risks to their growth forecasts as being roughly balanced rather than tilted to the downside, but uncertainty surrounding these forecasts was still viewed as quite elevated. Downside risks to growth included the continued weakness in the labor market and its implications for income growth and consumer confidence, as well as the potential for credit availability to remain relatively tight for consumers and some businesses. In this regard, some participants noted the difficulty that smaller, bank-dependent firms were having in securing financing. The CRE sector was also considered a downside risk to the forecast and a possible source of increased pressure on banks. On the other hand, consumer spending on items other than autos had been stronger than expected, which might be signaling more underlying momentum in the recovery and some chance that the step-up in spending would be sustained going forward. In addition, growth abroad had exceeded expectations for some time, potentially providing more support to U.S. exports and domestic growth than anticipated.

Financial market developments over recent months were generally regarded as supportive of continued economic recovery, with equity prices considerably higher, private credit spreads substantially lower, and financial markets generally performing significantly better than earlier in the year. Participants noted, however, that bank credit remained tight. With rising levels of nonperforming loans expected to continue to be a source of stress, and with

many regional and small banks vulnerable to the deteriorating performance of CRE loans, banks continued to tighten lending standards for C&I loans and consumer loans, although the net percentage of banks reporting further tightening in each category had fallen in recent surveys. Bank loans continued to contract sharply in all categories. Participants noted that the dichotomy between significant easing of conditions in capital markets and continuing tight conditions in the banking sector implied that financing conditions differed for large and small firms. Large firms with access to debt and equity markets for financing had relatively little difficulty in obtaining credit and in many cases also had high levels of retained earnings with which to fund their operations and investment. In contrast, smaller firms, which tend to be more dependent on commercial banks for financing, reportedly faced substantial constraints in their access to credit. Limited credit availability, along with weak aggregate demand, was viewed as likely to restrain hiring at small businesses, which are normally a source of employment growth in recoveries.

The weakness in labor market conditions remained an important concern to meeting participants, with unemployment expected to remain elevated for some time. Although the pace of job losses was moderating, the unusually large fraction of those who were working part time for economic reasons and the unusually low level of the average workweek pointed to only a gradual decline in the unemployment rate as the economic recovery proceeded. In addition, business contacts reported that they would be cautious in their hiring and would continue to aggressively seek cost savings in the absence of revenue growth. Indeed, participants expected that businesses would be able

to meet any increases in demand in the near term by raising their employees' hours and boosting productivity, thus delaying the need to add to their payrolls; this view was supported by aggregate data indicating rapid productivity growth in recent quarters. Moreover, the need to reallocate labor across sectors as the recovery proceeds, as well as losses of skills caused by high levels of long-term unemployment and permanent separations, could limit the pace of gains in employment. Participants discussed the possibility that this recovery could resemble the past two, which were characterized by a slow pace of hiring for a time even after aggregate demand picked up.

The prospect for continued weakness in labor markets remained an important factor in the outlook for consumer spending. Although consumer spending had picked up more than expected in recent months, participants saw that increase as partly reflecting special factors such as the cash-for-clunkers program. Uncertain job prospects, slow income growth, and tight credit, as well as wealth levels that remained relatively low despite the recent rise in equity prices and stabilization in house prices, were seen as weighing on consumer confidence and the growth of consumer spending for some time to come. In such an environment, households' saving behavior was an important source of uncertainty in the outlook. Participants continued to believe that the most likely outcome was for the saving rate to remain near its average level over the past few quarters or to edge up gradually. However, they could not completely discount the possibility of a further substantial rise in the saving rate as households took further steps to repair their balance sheets.

Participants noted that firms seemed to be reducing inventories at a slower

pace than earlier in the year and apparently had made substantial progress in reducing stocks toward desired levels. With inventories lower, firms were beginning to raise production to meet at least a portion of increased demand, and this adjustment was expected to make an important contribution to economic recovery in the fourth quarter of the year and, to a lesser extent, in 2010 as well. Investment in E&S appeared to have stabilized in the third quarter, and recent data on new orders continued to point to a pickup next year. However, many participants expressed the view that cautious business sentiment, together with low industrial utilization rates, was likely to keep new capital spending subdued until firms became more confident about the durability of increases in demand.

In the residential real estate sector, home sales and construction increased over recent months from very low levels; moreover, house prices appeared to be stabilizing and in some areas had reportedly moved higher. Generally, the outlook was for these trends to continue. However, some participants still viewed the improvements as quite tentative, pointing to potential sources of softness from the pending termination of the temporary tax credit for first-time homebuyers, the winding down of the Federal Reserve's agency MBS purchase program, and the downward pressure that anticipated further increases in foreclosures would put on house prices. In contrast to developments in the residential sector, CRE activity continued to fall markedly in most Districts as a result of deteriorating fundamentals, including declining occupancy and rental rates and very tight credit conditions.

Stronger foreign economic activity, especially in Asia, as well as the partial reversal this year of the dollar's appre-

ciation during the latter part of 2008, was providing support to U.S. exports. Participants noted that the recent fall in the foreign exchange value of the dollar had been orderly and appeared to reflect an unwinding of safe-haven demand in light of the recovery in financial market conditions this year, but that any tendency for dollar depreciation to intensify or to put significant upward pressure on inflation would bear close watching. Further improvements in foreign economies would likely buoy U.S. exports going forward, but as the recovery took hold in the United States, import growth would also strengthen.

Participants continued to discuss the appropriate weights to place on resource slack, inflation expectations, and other factors in assessing the inflation outlook. In the near term, most participants anticipated that substantial slack in both labor and product markets would likely keep inflation subdued. Indeed, the considerable decelerations in wages and unit labor costs this year were cited as factors putting downward pressure on inflation. However, some participants noted that the recent rise in the prices of oil and other commodities, as well as increases in import prices stemming from the decline in the foreign exchange value of the dollar, could boost inflation pressures. Overall, many participants viewed the risks to their inflation outlooks over the next few quarters as being roughly balanced. Some saw the risks as tilted to the downside in the near term, reflecting the quite elevated level of economic slack and the possibility that inflation expectations could begin to decline in response to the low level of actual inflation. But others felt that risks were tilted to the upside over a longer horizon, because of the possibility that inflation expectations could rise as a

result of the public's concerns about extraordinary monetary policy stimulus and large federal budget deficits. Moreover, these participants noted that banks might seek to reduce appreciably their excess reserves as the economy improves by purchasing securities or by easing credit standards and expanding their lending substantially. Such a development, if not offset by Federal Reserve actions, could give additional impetus to spending and, potentially, to actual and expected inflation. To keep inflation expectations anchored, all participants agreed that it was important for policy to be responsive to changes in the economic outlook and for the Federal Reserve to continue to clearly communicate its ability and intent to begin withdrawing monetary policy accommodation at the appropriate time and pace.

#### Committee Policy Action

In the members' discussion of monetary policy for the period ahead, they agreed that no substantive changes to the Committee's federal funds target range or large-scale asset purchase programs were warranted at this meeting. On balance, the economic outlook had changed little since the September meeting. The recovery appeared to be continuing and was expected to gradually strengthen over time. Still, most members projected that over the next couple of years, the unemployment rate would remain quite elevated and the level of inflation would remain below rates consistent over the longer run with the Federal Reserve's objectives. Based on this outlook, members decided to maintain the federal funds target range at 0 to  $\frac{1}{4}$  percent and to continue to state their expectation that economic conditions were likely to warrant exceptionally low rates for an

extended period. Low levels of resource utilization, subdued inflation trends, and stable inflation expectations were among the important factors underlying their expectation for monetary policy, and members agreed that policy communications would be enhanced by citing these conditions in the policy statement. Members noted the possibility that some negative side effects might result from the maintenance of very low short-term interest rates for an extended period, including the possibility that such a policy stance could lead to excessive risk-taking in financial markets or an unanchoring of inflation expectations. While members currently saw the likelihood of such effects as relatively low, they would remain alert to these risks. All agreed that the path of short-term rates going forward would be dependent on the evolution of the economic outlook.

With respect to the large-scale asset purchase programs, all members supported reiterating the Committee's intention to purchase \$1.25 trillion of agency MBS by the end of the first quarter of 2010. The Committee also agreed to specify that its agency debt purchases would cumulate to about \$175 billion by the end of the first quarter, \$25 billion less than the previously announced maximum for these purchases. Owing to the limited availability of agency debt and concerns that larger purchases could impair market functioning, the Committee's transactions in these instruments for some time had been on a trajectory that would leave total purchases somewhat below the previously established maximum. Announcing that purchases would total about \$175 billion was viewed as providing greater clarity to the public regarding the expected amount of purchases and would not reflect a decision to scale back the de-

gree of policy accommodation. Members also decided to reiterate their intention to gradually slow the pace of the Committee's agency MBS and agency debt purchases to promote a smooth transition in markets as the announced purchases are completed. The Committee agreed that it would continue to evaluate the timing and overall amounts of its purchases of securities in light of the evolving economic outlook and conditions in financial markets.

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

"The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ¼ percent. The Committee directs the Desk to purchase agency debt and agency MBS during the intermeeting period with the aim of providing support to private credit markets and economic activity. The timing and pace of these purchases should depend on conditions in the markets for such securities and on a broader assessment of private credit market conditions. The Desk is expected to execute purchases of about \$175 billion in housing-related agency debt and about \$1.25 trillion of agency MBS by the end of the first quarter of 2010. The Desk is expected to gradually slow the pace of these purchases as they near completion. The Committee anticipates that outright purchases of securities will cause the size of the Federal Reserve's balance sheet to expand significantly in coming months. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability."

The vote encompassed approval of the statement below to be released at 2:15 p.m.:

“Information received since the Federal Open Market Committee met in September suggests that economic activity has continued to pick up. Conditions in financial markets were roughly unchanged, on balance, over the intermeeting period. Activity in the housing sector has increased over recent months. Household spending appears to be expanding but remains constrained by ongoing job losses, sluggish income growth, lower housing wealth, and tight credit. Businesses are still cutting back on fixed investment and staffing, though at a slower pace; they continue to make progress in bringing inventory stocks into better alignment with sales. Although economic activity is likely to remain weak for a time, the Committee anticipates that policy actions to stabilize financial markets and institutions, fiscal and monetary stimulus, and market forces will support a strengthening of economic growth and a gradual return to higher levels of resource utilization in a context of price stability.

With substantial resource slack likely to continue to dampen cost pressures and with longer-term inflation expectations stable, the Committee expects that inflation will remain subdued for some time.

In these circumstances, the Federal Reserve will continue to employ a wide range of tools to promote economic recovery and to preserve price stability. The Committee will maintain the target range for the federal funds rate at 0 to  $\frac{1}{4}$  percent and continues to anticipate that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels of the federal funds rate for an extended period. To provide support to mortgage lending and housing markets and to improve overall conditions in private credit markets, the Federal Reserve will purchase a total of \$1.25 trillion of agency mortgage-backed securities and about \$175 billion of agency debt. The amount of agency debt purchases, while somewhat less than the previously announced maximum of \$200 billion, is consistent with the recent path of purchases and reflects the limited availability of agency debt. In order to promote a smooth

transition in markets, the Committee will gradually slow the pace of its purchases of both agency debt and agency mortgage-backed securities and anticipates that these transactions will be executed by the end of the first quarter of 2010. The Committee will continue to evaluate the timing and overall amounts of its purchases of securities in light of the evolving economic outlook and conditions in financial markets. The Federal Reserve is monitoring the size and composition of its balance sheet and will make adjustments to its credit and liquidity programs as warranted.”

Voting for this action: Messrs. Bernanke and Dudley, Ms. Duke, Messrs. Evans, Kohn, Lacker, Lockhart, Tarullo, and Warsh, and Ms. Yellen.

Voting against this action: None.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, December 15–16, 2009. The meeting adjourned at 12:40 p.m. on November 4, 2009.

#### Notation Vote

By notation vote completed on October 13, 2009, the Committee unanimously approved the minutes of the FOMC meeting held on September 22–23, 2009.

Brian F. Madigan  
Secretary

#### Addendum: Summary of Economic Projections

In conjunction with the November 3–4, 2009, FOMC meeting, the members of the Board of Governors and the presidents of the Federal Reserve Banks, all of whom participate in deliberations of the FOMC, submitted projections for output growth, unemployment, and inflation for the years 2009 to 2012 and over the longer run. The projections were based on information available through the end of the meeting and on

Table 1. Economic projections of Federal Reserve Governors and Reserve Bank presidents, November 2009  
Percent

Variable	Central tendency <sup>1</sup>					Range <sup>2</sup>				
	2009	2010	2011	2012	Longer Run	2009	2010	2011	2012	Longer Run
Change in real GDP . . . . .	-0.4 to -0.1	2.5 to 3.5	3.4 to 4.5	3.5 to 4.8	2.5 to 2.8	-0.5 to 0.0	2.0 to 4.0	2.5 to 4.6	2.8 to 5.0	2.4 to 3.0
June projection . . . . .	-1.5 to -1.0	2.1 to 3.3	3.8 to 4.6	n.a.	2.5 to 2.7	-1.6 to -0.6	0.8 to 4.0	2.3 to 5.0	n.a.	2.4 to 2.8
Unemployment rate . . . . .	9.9 to 10.1	9.3 to 9.7	8.2 to 8.6	6.8 to 7.5	5.0 to 5.2	9.8 to 10.3	8.6 to 10.2	7.2 to 8.7	6.1 to 7.6	4.8 to 6.3
June projection . . . . .	9.8 to 10.1	9.5 to 9.8	8.4 to 8.8	n.a.	4.8 to 5.0	9.7 to 10.5	8.5 to 10.6	6.8 to 9.2	n.a.	4.5 to 6.0
PCE inflation . . . . .	1.1 to 1.2	1.3 to 1.6	1.0 to 1.9	1.2 to 1.9	1.7 to 2.0	1.0 to 1.7	1.1 to 2.0	0.6 to 2.4	0.2 to 2.3	1.5 to 2.0
June projection . . . . .	1.0 to 1.4	1.2 to 1.8	1.1 to 2.0	n.a.	1.7 to 2.0	1.0 to 1.8	0.9 to 2.0	0.5 to 2.5	n.a.	1.5 to 2.1
Core PCE inflation <sup>3</sup> . . . . .	1.4 to 1.5	1.0 to 1.5	1.0 to 1.6	1.0 to 1.7		1.3 to 1.6	0.9 to 2.0	0.5 to 2.4	0.2 to 2.3	
June projection . . . . .	1.3 to 1.6	1.0 to 1.5	0.9 to 1.7	n.a.		1.2 to 2.0	0.5 to 2.0	0.2 to 2.5	n.a.	

NOTE: Projections of change in real gross domestic product (GDP) and in inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The June projections were made in conjunction with the meeting of the Federal Open Market Committee on June 23–24, 2009.

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 consists of all participants' projections, from lowest to highest, for that variable in that year.

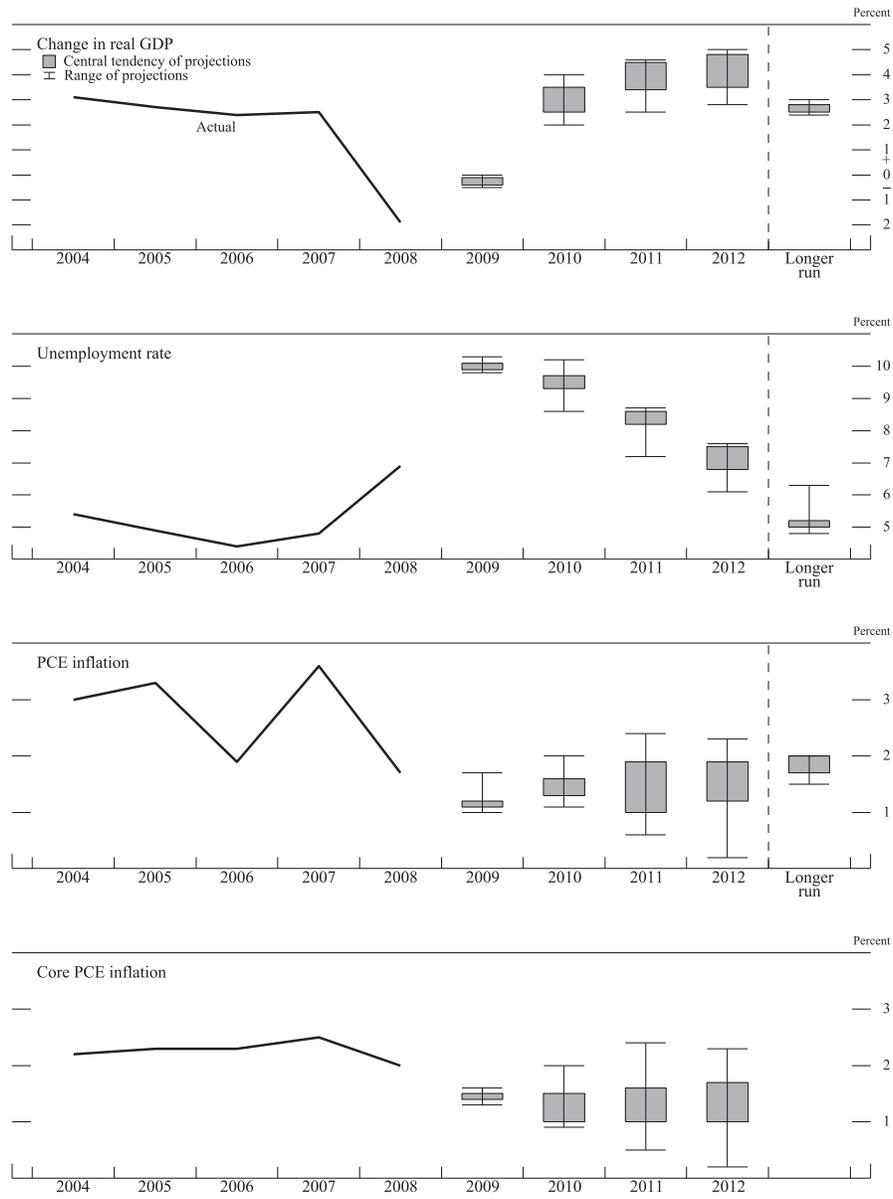
3. Longer-run projections for core PCE inflation are not collected.

each participant's assumptions about factors likely to affect economic outcomes, including his or her assessment of appropriate monetary policy. "Appropriate monetary policy" is defined as the future path of policy that the participant deems most likely to foster outcomes for economic activity and inflation that best satisfy his or her interpretation of the Federal Reserve's dual objectives of maximum employment and stable prices. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge over time under appropriate monetary policy and in the absence of further shocks.

As depicted in Figure 1, FOMC participants anticipated that economic recovery would be gradual, with real gross domestic product (GDP) growing at a moderate pace and the unemployment rate declining slowly over the next few years. Most participants also

expected that inflation would remain subdued over this period. As indicated in Table 1, participants marked up their projections for real GDP growth in 2009, reflecting a faster pickup in output during the second half of the year than they had anticipated at the time of their previous forecasts, which were made in conjunction with the June FOMC meeting. Looking beyond 2009, the contours of the participants' outlook for economic activity and inflation were broadly similar to those in their June projections, with the pace of the economic recovery expected to be restrained by household and business uncertainty, weak labor market conditions, and slow waning of tight credit conditions in the banking system. Most participants anticipated that about five or six years would be needed for the economy to converge fully to a longer-run path characterized by a sustainable rate of output growth and by rates of unemployment and inflation consistent

Figure 1. Central tendencies and ranges of economic projections, 2009–12 and over the longer run



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

with their interpretation of the Federal Reserve's objectives. However, some participants indicated that the convergence process might well require even longer, while a few expected that although inflation would settle at its longer-run rate in the next several years, the convergence process for the real economy was likely to occur over a somewhat longer period. With a further waning of downside risks to growth since June, nearly all participants now judged the risks to their growth outlook as roughly balanced, and most also saw roughly balanced risks surrounding their inflation projections. As in June, however, participants generally judged that their projections for economic activity and inflation were subject to an unusually high degree of uncertainty relative to historical norms.

#### *The Outlook*

Participants' projections for real GDP growth in 2009 had a central tendency of negative 0.4 percent to negative 0.1 percent, around a percentage point above the central tendency of their June projections. The projections for the year as a whole were broadly consistent with participants' previous expectations that economic activity would bottom out around midyear. However, the contraction over the first half was a bit sharper than many participants had anticipated at the time of the June FOMC meeting, which took place about a month before the Bureau of Economic Analysis (BEA) published its advance estimate of second-quarter GDP and its comprehensive revision of previous estimates, including a substantial downward revision to the estimate of first-quarter GDP growth. Subsequent data on consumer spending, housing starts, and industrial produc-

tion, as well as the advance estimate of third-quarter GDP, suggested that the economy was growing at a moderate pace over the second half of the year. Participants took note of the continuing improvement in financial market conditions, the progress that businesses appeared to be making in bringing inventories into line with sales, and the signs of stronger growth abroad, especially in Asia. Participants also indicated that GDP growth in the second half of 2009 had likely been boosted by transitory factors such as the "cash-for-clunkers" program and the first-time homebuyers' credit, which had brought forward spending that would have otherwise occurred in subsequent quarters.

Looking beyond this year, participants' outlook for real GDP growth was generally similar to that reflected in their June forecasts. The central tendency of their output growth projections was 2.5 to 3.5 percent for 2010, 3.4 to 4.5 percent for 2011, and 3.5 to 4.8 percent for 2012. Participants indicated that consumer spending would likely be bolstered by the turnaround in housing prices, further increases in equity values, and gradual improvements in credit availability. With an improved sales outlook, businesses would rebuild their inventory stocks and spending on equipment and software would pick up; in addition, exports would likely receive a significant boost from stronger global growth. Monetary and fiscal stimulus would provide further support to aggregate demand next year. Nevertheless, the pace of expansion would probably be damped for some time by elevated uncertainty on the part of households and businesses and by the slow and lagging recovery of labor markets, which would hold down income growth and limit any rebound in household confi-

dence. In addition, distress in commercial real estate markets would likely weigh further on the balance sheets of banking institutions, thereby contributing to continued tight credit conditions for many households and smaller firms. However, participants anticipated that the recovery would gather steam in 2011 and 2012 as a consequence of further improvements in consumer and business confidence and in the condition of financial markets and institutions. In the absence of any further shocks, participants generally expected that the economy would converge over time to a sustainable path with real GDP growing at a rate of 2.5 to 2.8 percent, reflecting longer-term demographic trends and improvements in labor productivity.

Participants generally anticipated that the unemployment rate would rise somewhat further during the final months of 2009 and then decline steadily over the next few years. Their projections for the average unemployment rate in the fourth quarter of 2009 had a central tendency of 9.9 to 10.1 percent, somewhat higher than the actual unemployment rate of 9.8 percent in September—the latest reading available at the time of the November FOMC meeting. Participants noted that, as in the early stages of previous recoveries the unemployment rate was continuing to rise after output turned up, reflecting firms' uncertainty about the pace of recovery and their efforts to raise productivity and hold down costs. Looking further ahead, participants' unemployment rate projections had a central tendency of 9.3 to 9.7 percent for the fourth quarter of 2010, 8.2 to 8.6 percent for the end of 2011, and 6.8 to 7.5 percent for the final quarter of 2012. A number of participants made modest upward revisions to their estimates of the longer-run sustainable rate

of unemployment in light of their assessments of the extent to which ongoing structural adjustments would be associated with somewhat higher labor market frictions. Thus, participants' longer-run unemployment rate projections had a central tendency of 5.0 to 5.2 percent, about a quarter percentage point higher than in June.

The central tendency of participants' projections for personal consumption expenditures (PCE) inflation in 2009 was 1.1 to 1.2 percent, and the central tendency of their projections for core PCE inflation was 1.4 to 1.5 percent.<sup>16</sup> While actual PCE inflation over the first half of the year turned out to be somewhat lower than participants had anticipated at the time of the June FOMC meeting, recent increases in energy prices led most of them to make upward revisions to their second-half inflation forecasts; thus, participants' PCE inflation projections for the year as a whole were broadly similar to their previous forecasts. Core PCE inflation was 1.6 percent at an annual rate over the first half of 2009, about a quarter point lower than most participants had anticipated last June, and nearly all participants projected that core PCE inflation would decline further to an annual rate of about 1¼ percent in the second half.

Looking beyond this year, participants generally anticipated that inflation would remain subdued. The central tendency of their projections for PCE inflation was 1.3 to 1.6 percent for 2010, 1.0 to 1.9 percent for 2011, and 1.2 to 1.9 percent for 2012, and the

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16. In July 2009, the BEA adjusted the definition of core PCE inflation to include prices for food consumed at restaurants and other establishments away from home. FOMC participants indicated that this definitional adjustment did not cause any material changes in their core inflation projections for 2009 or beyond.

central tendency of their projections for core PCE inflation was 1.0 to 1.5 percent for 2010, 1.0 to 1.6 percent for 2011, and 1.0 to 1.7 percent for 2012. Many participants stated that well-anchored inflation expectations would play an important role in avoiding further declines in inflation over the next few years despite the persistence of sizable resource slack. Participants also pointed out that strong global growth was likely to place significant upward pressure on the prices of energy and other commodities; as a consequence, their projections for overall inflation over the next several years were generally a notch higher than their projections for core inflation. As in June, the central tendency of projections for PCE inflation over the longer run was 1.7 to 2.0 percent, reflecting participants' assessments of the measured rate of inflation that would best satisfy the Federal Reserve's dual mandate of maximum employment and stable prices. Most participants expected that inflation in 2012 would remain below its longer-run value, but a few expected inflation to have converged to its longer-run value by that time.

#### *Uncertainty and Risks*

As in June, nearly all participants judged the degree of uncertainty surrounding their projections of output growth and unemployment as higher than historical norms.<sup>17</sup> Participants generally saw the risks to these projec-

17. Table 2 provides estimates of forecast uncertainty for the change in real GDP, the unemployment rate, and total consumer price inflation over the period from 1989 to 2008. At the end of this summary, the box "Forecast Uncertainty" discusses the sources and interpretation of uncertainty in economic forecasts and explains the approach used to assess the uncertainty and risks attending participants' projections.

Table 2. Average historical projection error ranges  
Percentage points

Variable	2009	2010	2011	2012
Change in real GDP <sup>1</sup> . . .	±0.6	±1.4	±1.6	±1.5
Unemployment rate <sup>1</sup> . . .	±0.2	±0.7	±0.9	±1.1
Total consumer prices <sup>2</sup> . .	±0.5	±1.0	±1.0	±1.0

NOTE: Error ranges shown are measured as plus or minus the root mean squared error of projections for 1989 through 2008 that were released in the fall by various private and government forecasters. As described in the box "Forecast Uncertainty," under certain assumptions, there is about a 70 percent probability that actual outcomes for real GDP, unemployment, and consumer prices will be in ranges implied by the average size of projection errors made in the past. Further information is in David Reifschneider and Peter Tulip (2007), "Gauging the Uncertainty of the Economic Outlook from Historical Forecasting Errors," Finance and Economics Discussion Series 2007-60 (Washington: Board of Governors of the Federal Reserve System, November).

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

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

tions as roughly balanced, although a few indicated that the risks to the unemployment outlook remained weighted to the upside. In explaining these judgments, participants highlighted the intrinsic difficulties in predicting the dynamics of the economy following a financial crisis and a severe recession. Participants noted that the recent pickup in economic growth might reflect stronger underlying momentum in economic activity than anticipated and hence point to a faster pace of recovery going forward. On the other hand, participants referred to the possibility that deteriorating performance of commercial real estate and consumer loans could have adverse effects on the financial system that would damp the growth of output and employment over coming quarters.

Most participants continued to see the uncertainty surrounding their inflation projections as unusually high, although a few viewed the extent of

such uncertainty as roughly in line with historical norms. Participants generally judged the risks to the inflation outlook to be roughly balanced, and many of them indicated that these risks were linked, at least in part, to the risks associated with the economic outlook. Participants cited the risk that longer-term inflation expectations might start drifting downward in response to persistent economic slack and low inflation outcomes; alternatively, those expectations could shift upwards in response to a sharper recovery, especially if extraordinary monetary policy stimulus were not unwound in a timely fashion. Participants also noted the possibility that an acceleration in global economic activity could induce a surge in the prices of energy and other commodities that would place upward pressure on headline inflation.

#### *Diversity of Views*

Figures 2.A and 2.B provide further details on the diversity of participants' views regarding likely outcomes for real GDP growth and the unemployment rate in 2009, 2010, 2011, 2012, and over the longer run. The dispersion in these projections reflects, among other factors, differences in the participants' assessments regarding the current degree of underlying momentum in economic activity, the evolution of consumer and business sentiment, and the trajectory for private saving, and in their interpretations of the continued weakness in bank credit. The distribution of participants' GDP growth projections for 2009 shifted upward about a percentage point and became narrower in response to the economic and financial information received since the June FOMC meeting. Most participants only shaded up their growth projections for 2010, but a few participants made

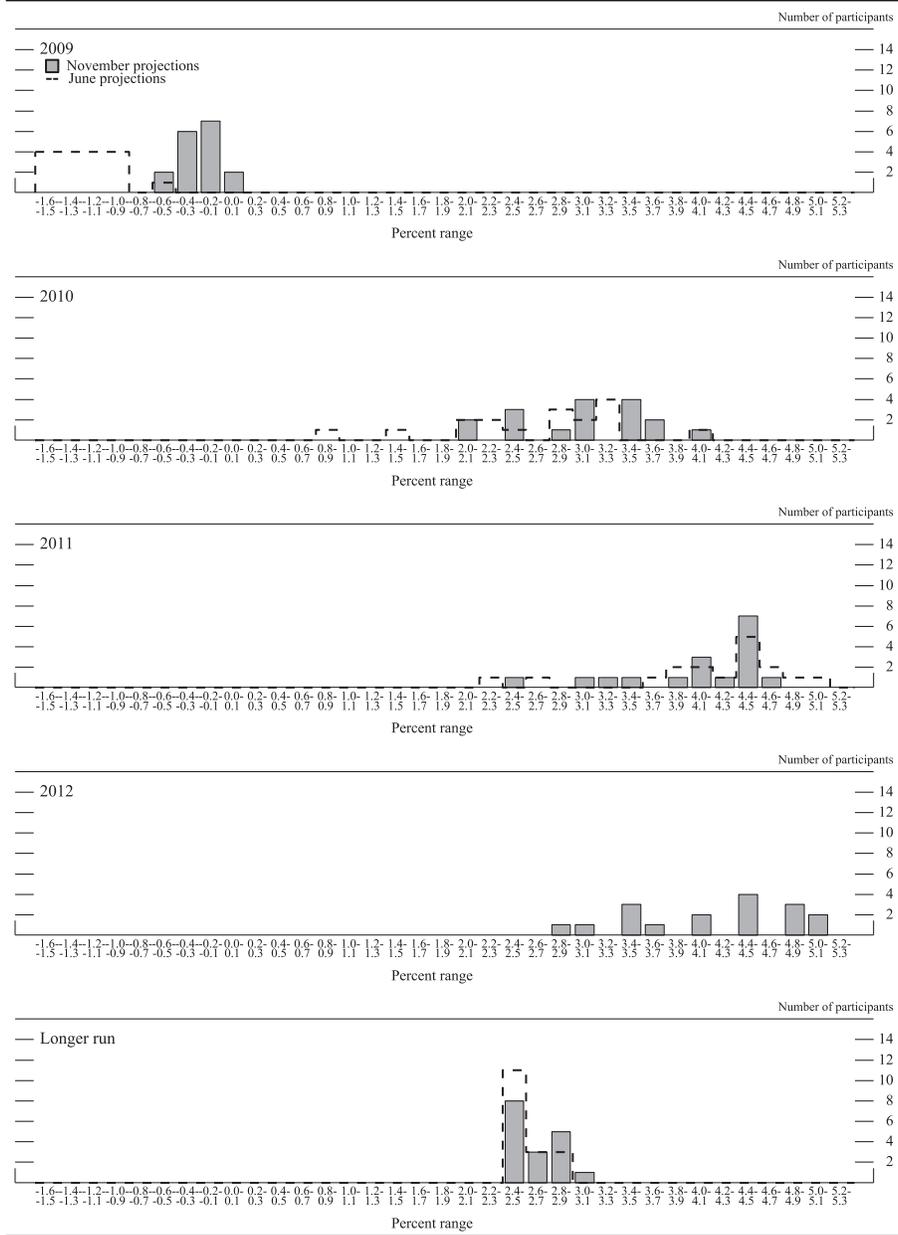
more substantial upward revisions; hence the lowest points in the distribution increased markedly while the median was just a notch higher than in June. The distribution of growth projections for 2011 was little changed from June, while the distribution for 2012 was centered at a slightly higher rate than for 2011 with about the same degree of dispersion. A few participants made modest upward revisions to their estimates of the longer-run sustainable rate of output growth, producing a slight widening of the range for these longer-run projections. Regarding participants' unemployment rate projections, the distribution for 2009 narrowed but with roughly the same mode as in June, while the distributions for 2010 and 2011 shifted down a bit and narrowed somewhat. The distribution of unemployment rate projections for 2012 exhibited noticeably greater dispersion than for 2011. The distribution of longer-run unemployment rate projections was generally more tightly concentrated than in June, reflecting modest upward revisions to some participants' estimates of the sustainable rate of unemployment to which the economy would converge under appropriate monetary policy and in the absence of further shocks.

Figures 2.C and 2.D provide corresponding information about the diversity of participants' views regarding the inflation outlook. For total PCE inflation, the distribution of participants' projections for 2009 was narrower than in June, whereas the distributions of their projections for 2010 and 2011 did not change significantly, and there was virtually no change in the distribution of longer-run projections. For core PCE inflation, participants' projections for 2009 became more tightly concentrated, while their projections for 2010 and 2011 were only slightly less dis-

persed than in June. The distributions of total and core PCE inflation projections for 2012 exhibited somewhat greater dispersion than those for 2011. The dispersion in participants' projections for 2010, 2011, and 2012 mainly reflected differences in their judgments regarding the determinants of inflation, including their estimates of prevailing resource slack and their assessments of

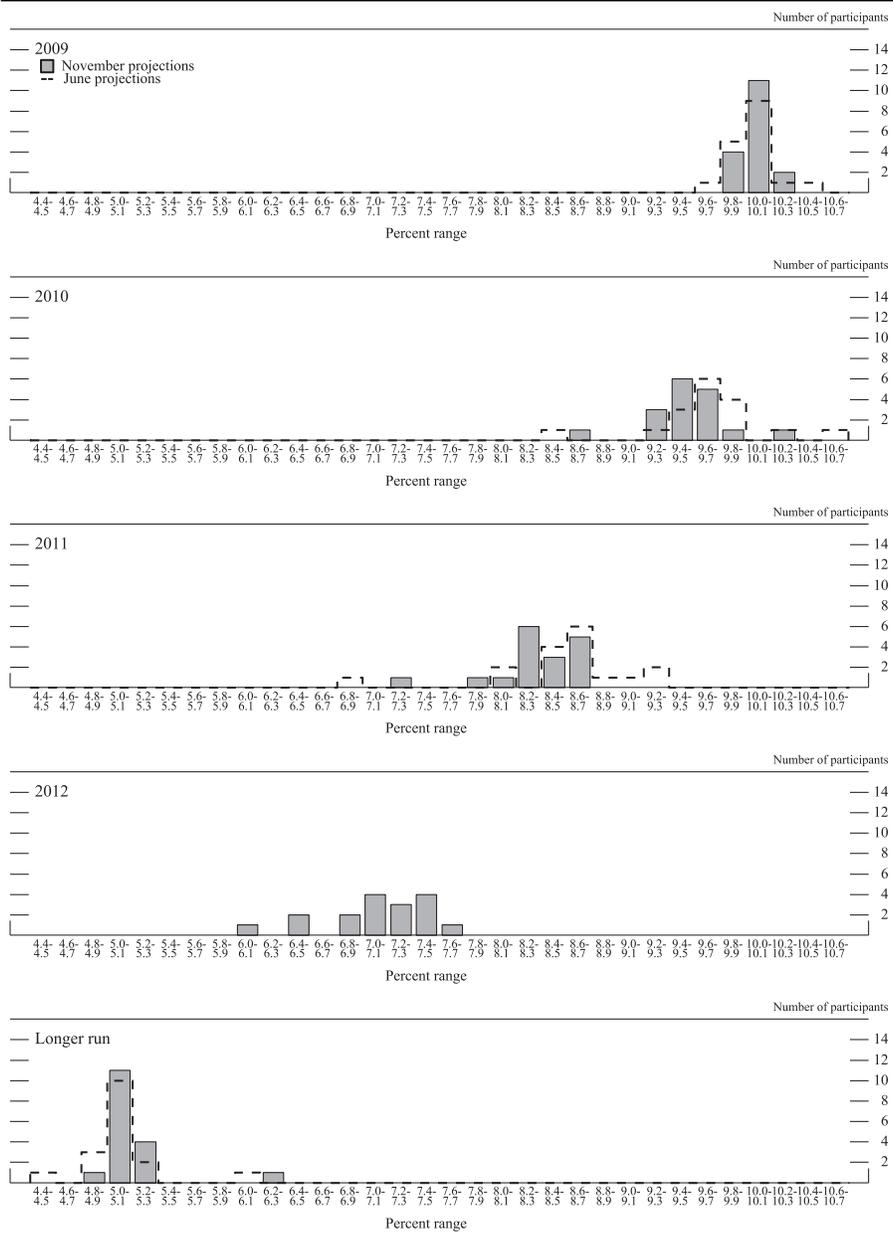
the extent to which that slack affects inflation outcomes and expectations. In contrast, the relatively concentrated distribution of longer-run inflation projections indicates substantial agreement among participants regarding the measured rate of inflation that best satisfies the Federal Reserve's dual objectives of maximum employment and stable prices.

Figure 2.A. Distribution of participants' projections for the change in real GDP, 2009–12 and over the longer run



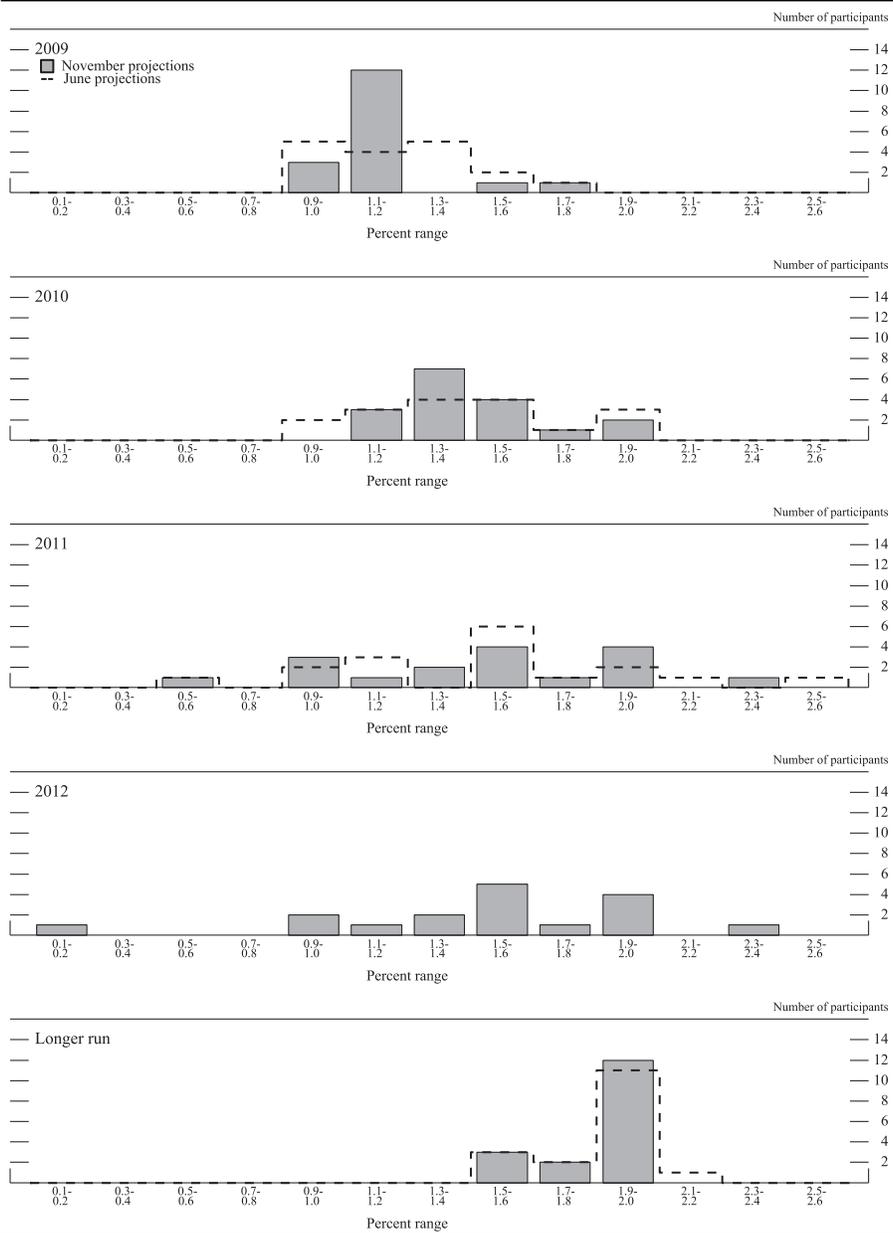
NOTE: Definitions of variables are in the general note to table 1.

Figure 2.B. Distribution of participants' projections for the unemployment rate, 2009–12 and over the longer run



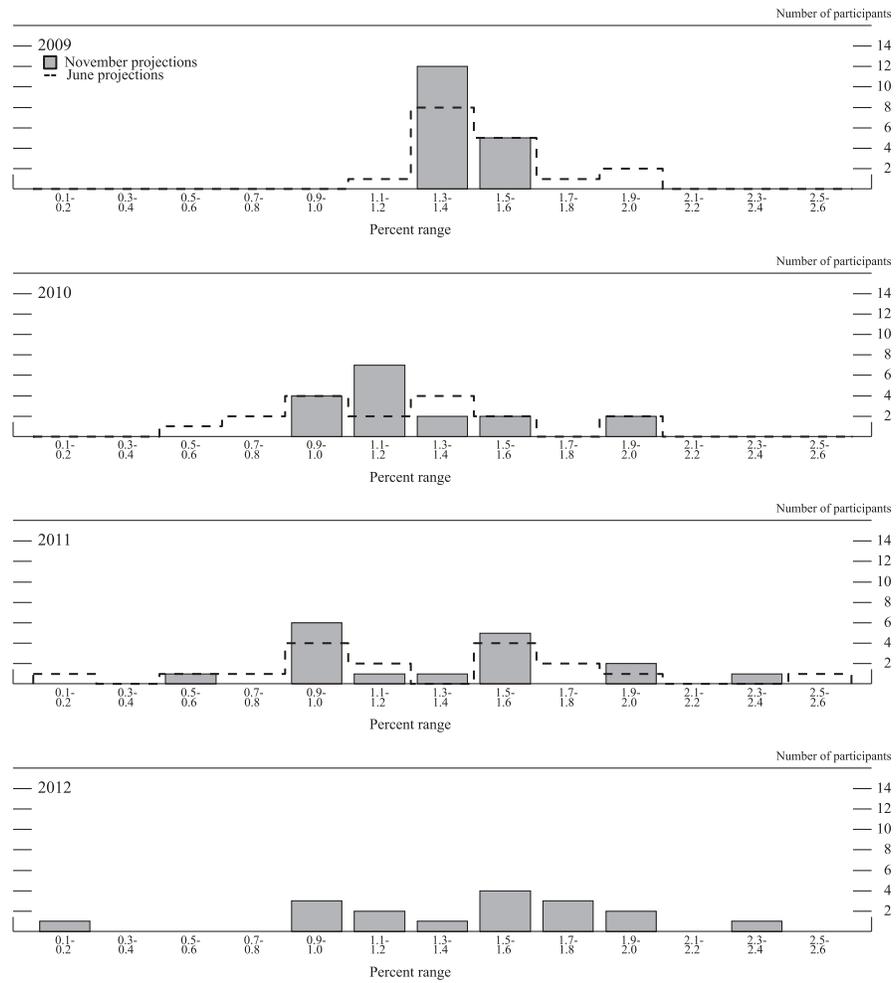
NOTE: Definitions of variables are in the general note to table 1.

Figure 2.C. Distribution of participants' projections for PCE inflation, 2009–12 and over the longer run



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

Figure 2.D. Distribution of participants' projections for core PCE inflation, 2009–12



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

## Forecast Uncertainty

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

Table 2 summarizes the average historical accuracy of a range of forecasts, including those reported in past *Monetary Policy Reports* and those prepared by Federal Reserve Board staff in advance of meetings of the Federal Open Market Committee. The projection error ranges shown in the table illustrate the considerable uncertainty associated with economic forecasts. For example, suppose a participant projects that real gross domestic product (GDP) and total consumer prices will rise steadily at annual rates of, respectively, 3 percent and 2 percent. If the uncertainty attending those projections is similar to that

experienced in the past and the risks around the projections are broadly balanced, the numbers reported in table 2 would imply a probability of about 70 percent that actual GDP would expand within a range of 2.4 to 3.6 percent in the current year, 1.6 to 4.4 percent in the second year, 1.4 to 4.6 in the third year and 1.5 to 4.5 percent in the fourth year. The corresponding 70 percent confidence intervals for overall inflation would be 1.5 to 2.5 percent in the current year and 1.0 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, are weighted to the downside, or are broadly balanced. That is, participants judge whether each variable is more likely to be above or below their projections of the most likely outcome. These judgments about the uncertainty and the risks attending each participant's projections are distinct from the diversity of participants' views about the most likely outcomes. Forecast uncertainty is concerned with the risks associated with a particular projection rather than with divergences across a number of different projections.

**Meeting Held on  
December 15–16, 2009**

A joint meeting of the Federal Open Market Committee and the Board of Governors of the Federal Reserve System was held in the offices of the Board of Governors in Washington, D.C., on Tuesday, December 15, 2009, at 2:00 p.m. and continued on Wednesday, December 16, 2009, at 9:00 a.m.

*Present:*

- Mr. Bernanke, Chairman
- Mr. Dudley, Vice Chairman
- Ms. Duke
- Mr. Evans
- Mr. Kohn
- Mr. Lacker
- Mr. Lockhart
- Mr. Tarullo
- Mr. Warsh
- Ms. Yellen
  
- Mr. Bullard, Ms. Cumming, Mr. Hoenig, Ms. Pianalto, and Mr. Rosengren, Alternate Members of the Federal Open Market Committee
  
- Messrs. Fisher, Kocherlakota, and Plosser, Presidents of the Federal Reserve Banks of Dallas, Minneapolis, and Philadelphia, respectively
  
- Mr. Madigan, Secretary and Economist
- Mr. Luecke, Assistant Secretary
- Mr. Skidmore, Assistant Secretary
- Ms. Smith, Assistant Secretary
- Mr. Alvarez, General Counsel
- Mr. Baxter, Deputy General Counsel
- Mr. Sheets, Economist
  
- Messrs. Altig, Clouse, Connors, Kamin, Slifman, Tracy, and Wilcox, Associate Economists
  
- Mr. Sack, Manager, System Open Market Account
  
- Ms. Johnson, Secretary of the Board, Office of the Secretary, Board of Governors
  
- Mr. Parkinson, Director, Division of Bank Supervision and Regulation, Board of Governors
  
- Mr. Frierson,<sup>18</sup> Deputy Secretary, Office of the Secretary, Board of Governors
  
- Mr. Struckmeyer, Deputy Staff Director, Office of the Staff Director for Management, Board of Governors
  
- Mr. English, Deputy Director, Division of Monetary Affairs, Board of Governors
  
- Ms. Robertson, Assistant to the Board, Office of Board Members, Board of Governors
  
- Ms. Edwards, Messrs. Levin<sup>19</sup> and Nelson,<sup>18</sup> Senior Associate Directors, Division of Monetary Affairs, Board of Governors; Messrs. Reifschneider and Wascher, Senior Associate Directors, Division of Research and Statistics, Board of Governors
  
- Mr. Meyer, Senior Adviser, Division of Monetary Affairs, Board of Governors; Mr. Oliner, Senior Adviser, Division of Research and Statistics, Board of Governors
  
- Ms. Zickler, Deputy Associate Director, Division of Research and Statistics, Board of Governors
  
- Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors
  
- Mr. Bassett, Section Chief, Division of Monetary Affairs, Board of Governors; Mr. Roberts,<sup>19</sup> Section Chief, Division of Research and Statistics, Board of Governors
  
- Ms. Beattie,<sup>20</sup> Assistant to the Secretary, Office of the Secretary, Board of Governors
  
- Ms. Low, Open Market Secretariat Specialist, Division of Monetary Affairs, Board of Governors

18. Attended Tuesday's session only.

19. Attended the portion of the meeting related to inflation dynamics.

20. Attended Wednesday's session only.

- Mr. Williams, Records Management Analyst, Division of Monetary Affairs, Board of Governors
- Messrs. Fuhrer and Rosenblum, Executive Vice Presidents, Federal Reserve Banks of Boston and Dallas, respectively
- Mr. Krane, Ms. Mester, Messrs. Schweitzer and Waller, Senior Vice Presidents, Federal Reserve Banks of Chicago, Philadelphia, Cleveland, and St. Louis, respectively
- Mr. Weber, Senior Research Officer, Federal Reserve Bank of Minneapolis
- Messrs. Clark, Dotsey,<sup>19</sup> Fernald, Hornstein, Olivei,<sup>19</sup> and Wynne,<sup>19</sup> Vice Presidents, Federal Reserve Banks of Kansas City, Philadelphia, San Francisco, Richmond, Boston, Dallas, respectively
- Messrs. Friedman and van der Klaauw,<sup>19</sup> Assistant Vice Presidents, Federal Reserve Bank of New York
- Mr. Martinez-Garcia,<sup>19</sup> Research Economist, Federal Reserve Bank of Dallas

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

The Manager of the System Open Market Account reported on developments in domestic and foreign financial markets since the Committee's November 3–4 meeting. Financial conditions generally had become somewhat more supportive of economic growth. There was little evidence of year-end funding pressures, although demand for Treasury bills with maturities extending just beyond year-end remained elevated. The Manager also reported on System open market operations in agency debt and agency mortgage-backed securities

(MBS) during the intermeeting period. The Desk continued to gradually slow the pace of purchases of these securities in accordance with the program for asset purchases that the Committee announced at the end of its November meeting. By unanimous vote, the Committee ratified those transactions. There were no open market operations in foreign currencies for the System's account during the intermeeting period. Since the Committee met in November, the Federal Reserve's total assets were about unchanged, at nearly \$2.2 trillion, as the increase in the System's holdings of securities roughly matched a further decline in usage of the System's credit and liquidity facilities. The Manager noted that the System's holdings of securities will tend to decline gradually after the completion of the asset purchase programs, reflecting maturing issues and prepayments on holdings of MBS. The Manager noted that the Committee would likely wish to discuss in detail its policy for reinvesting the proceeds of maturing issues and prepayments; he proposed, as an interim approach, continuing the practice of not reinvesting the proceeds of maturing agency securities or MBS prepayments. Meeting participants supported that interim approach pending further discussion at future meetings.

The staff presented another update on the continuing development of several tools that could be used to support a smooth withdrawal of policy accommodation at the appropriate time; these tools include executing reverse repurchase agreements (RRPs) on a large scale and implementing a term deposit facility (TDF). To further test its RRP capabilities, in early December, the Desk executed a few small RRPs with primary dealers, using both Treasury and agency debt as collateral. These transactions confirmed the operational

capability to execute triparty RRP's on a larger scale if so directed by the Committee. The Desk was continuing to develop the capacity to conduct RRP's using agency MBS collateral and anticipated that this work would be completed by the spring. In addition, the Desk reported that it was exploring the operational issues associated with expanding potential counterparties for RRP's beyond the primary dealers. Staff also reported significant progress in developing and implementing a TDF. The staff noted that it planned to ask the Board to approve a *Federal Register* notice requesting public comments on a TDF and summarized the contents of the draft notice.

The staff also briefed the Committee on recent developments regarding various Federal Reserve liquidity and credit facilities, including the Term Auction Facility (TAF), the primary credit program, and the Term Asset-Backed Securities Loan Facility (TALF). TAF auctions continued to be undersubscribed even as the Federal Reserve progressively reduced the total amount of funding available from the TAF. With the exception of the TALF, usage of the other facilities declined further as financial market conditions continued to improve. The TALF expanded modestly, supporting issuance of asset-backed securities collateralized by consumer, small business, and student loans as well as commercial mortgage-backed securities (CMBS). Indeed, over the intermeeting period, TALF lending supported the first new CMBS issue since June 2008. On November 17, the Board of Governors announced a reduction in the maximum maturity of loans available under the discount window's primary credit program from 90 days to 28 days, effective January 14, 2010. Participants agreed it would be useful to

consider further steps the Federal Reserve might take to move toward normalization of its lending facilities at upcoming meetings, when the Committee plans to discuss alternative approaches to implementing monetary policy in the longer-run.

#### Staff Review of the Economic Situation

The information reviewed at the December 15–16 meeting suggested that the recovery in economic activity was gaining momentum. The pace of job losses slowed noticeably in recent months, and total hours worked increased in November; however, the unemployment rate remained quite elevated. Industrial production sustained the broad-based expansion that began in the third quarter, but capacity utilization remained very low. Consumer spending expanded solidly in October, reflecting in part a faster pace of motor vehicle sales. Both light vehicle sales and total retail sales rose again in November. Sales of new homes increased significantly in recent months, a development that, given the slow pace of construction, reduced the inventory of unsold new homes; sales of existing homes rose strongly. Spending on equipment and software continued to stabilize, but investment in nonresidential structures declined further as conditions in nonresidential real estate markets remained poor. Both imports and exports continued to recover from their depressed levels of earlier this year, and the U.S. trade deficit in September and October was wider than in earlier months. Although a jump in energy prices pushed up headline inflation somewhat, core consumer price inflation remained subdued.

Data received over the intermeeting period suggested that the pace of job

loss slowed considerably in recent months relative to the steep declines that occurred in the first half of the year. The average decline in private payrolls in October and November was much smaller than in the third quarter; that recent improvement was widespread across industries. The length of the average workweek for production and nonsupervisory workers increased in November; moreover, aggregate hours worked registered the first substantial increase since the recession began. The unemployment rate dropped in November but remained quite high, while the labor force participation rate continued to decrease. The four-week moving average of initial claims for unemployment benefits declined somewhat through early December. Continuing claims for unemployment insurance through regular state programs also moved down, but the average length of spells of unemployment continued to increase.

After expanding briskly in the third quarter, industrial production increased further in October and November. The gains continued to be fairly broad based, and were particularly strong for consumer durables and materials. Business surveys suggested that factory output would advance further in the coming months. Capacity utilization rose again in November, but remained at a very low level by historical standards.

Real personal consumption expenditures increased at a solid pace in October, with broad-based advances in both goods and services. The data for nominal retail sales in November showed continued widespread improvement, particularly at general merchandise stores, electronics and appliance stores, and nonstore retailers. Outlays for motor vehicles bounced back in October after a slump in September that followed the end of the “cash-for-

clunkers” program in August. Sales of new light vehicles increased again in November. Real disposable personal income rose in October, reflecting modest gains in nominal labor income; moreover, the increase in real after-tax income during the spring and summer was revised up. The latest readings from indexes of consumer sentiment remained within the relatively low range that prevailed over the previous six months, apparently still weighed down by weak labor market conditions and prior declines in household net worth.

Housing construction held fairly steady in recent months, while demand for housing continued to firm. Single-family housing starts remained roughly flat from June to November at levels only modestly above those reported earlier in the year. In the much smaller multifamily sector, where tight credit conditions persisted and vacancies stayed elevated, the average pace of starts in October and November decreased somewhat from the already very low rate in the third quarter. In contrast, sales of existing single-family homes increased significantly again in October. Sales of new homes also rose in October after two months of little change. With sales continuing to outpace construction, the inventory of unsold new homes declined to its lowest level in three years. The recent increases in sales likely reflected improved fundamentals: The average interest rate on 30-year conforming fixed-rate mortgages declined to less than 5 percent, and surveys suggested that households now expected home prices to be fairly stable over the next year. Although some house price indexes declined a little in September and October, they remained above the troughs reached last spring.

Real spending on equipment and software was estimated to have risen

slightly in the third quarter after falling sharply for more than a year. Increased outlays for transportation equipment and high-tech goods accounted for the stabilization. Outside of those sectors, spending declined a bit further in the third quarter, although not as steeply as it had earlier in the year. Shipments of transportation and high-tech equipment remained strong in October, but shipments of nondefense capital goods excluding those categories declined, and new orders fell sharply across a range of products. Business purchases of motor vehicles rose significantly again in November. Moreover, monthly surveys of business conditions, sentiment, and capital spending plans pointed to a moderate rise in business spending going forward. In contrast, conditions in the nonresidential construction sector generally remained quite poor. For instance, real outlays on structures outside of the drilling and mining sector plunged in the third quarter. Also in the third quarter, vacancy rates on nonresidential properties rose further, and property prices continued to fall amid difficult financing conditions. The book value of manufacturing and trade inventories excluding motor vehicles and parts increased in October for the first time in more than a year, even as the ratio of such inventories to sales declined further. Capital markets continued to become somewhat more supportive of business investment over the intermeeting period. In contrast, available data indicated that banks continued to raise spreads on business loans.

The U.S. international trade deficit was somewhat wider in September and October than in previous months. Exports of goods and services increased sharply, and the gains were broadly distributed across most major categories of exports. After surging in Sep-

tember, imports flattened out in October, although the slowing almost entirely reflected reduced oil purchases. Most other categories of imports, including automotive goods, industrial supplies other than oil and gold, consumer goods, and capital goods, posted solid increases in the past two months.

The most recent data from the advanced foreign economies suggested that they continue to emerge from their deep recessions. Real gross domestic product (GDP) rose in the third quarter in Japan, the euro area, and Canada, and the pace of contraction in the United Kingdom moderated substantially. The limited data relating to the fourth quarter suggested that economic activity advanced in all of those economies. Surveys of purchasing managers and indicators of business and consumer confidence generally improved further. Data for October indicated that trade volumes continued to rise in each of these economies, retail sales increased in the United Kingdom and stopped declining in the euro area, housing starts climbed in Canada, and industrial production increased in Japan for the eighth consecutive month. Third-quarter real GDP growth was surprisingly strong in several emerging market economies, most notably Mexico and India. In emerging Asia and in Latin America, indicators suggested that economic activity was expanding somewhat less rapidly, but still briskly, in the fourth quarter. Price pressures remained subdued in most of the advanced foreign economies, although headline inflation generally moved up. Headline inflation also increased in emerging Asia, generally from low levels, but declined further in Latin America, likely in part because of the recent appreciation of several Latin American currencies.

In the United States, the latest data indicated that total consumer price inflation turned up in recent months, while core consumer price inflation remained subdued. The higher readings on headline consumer price inflation were the result of a rebound in energy prices. Core consumer prices increased modestly in October and were unchanged in November. Median year-ahead inflation expectations in the Reuters/University of Michigan Survey of Consumers declined in early December, and the same survey's measure of longer-term inflation expectations moved down to the lower end of the narrow range that prevailed over the previous few years. Revised data showed solid increases in hourly compensation in the second and third quarters, along with quite rapid productivity growth and a further decline in unit labor costs. Average hourly earnings of production and nonsupervisory workers increased modestly, on average, in October and November.

#### Staff Review of the Financial Situation

Market participants largely anticipated the decisions by the Federal Open Market Committee (FOMC) at the November meeting to keep the target range for the federal funds rate unchanged and to retain the "extended period" language in the accompanying statement. However, market participants took note of the Committee's explicit enumeration of the factors that were expected to continue to warrant this policy stance, and Eurodollar futures rates fell a bit on the release. In contrast, the announcement that the Federal Reserve would purchase only about \$175 billion of agency debt securities had not been generally anticipated. Spreads on those securities widened a few basis points

following the release, but declined, on net, over the intermeeting period. Incoming economic data, while somewhat better than expected, seemed to have little net effect on interest rate expectations. Indeed, the expected path of the federal funds rate shifted down somewhat over the intermeeting period. Consistent with the decrease in short-term interest rates, yields on 2-year nominal off-the-run Treasury securities declined slightly, on net, over the intermeeting period. In contrast, yields on nominal 10-year Treasury securities edged higher on balance. Inflation compensation based on 5-year Treasury inflation-protected securities (TIPS) increased, apparently owing in part to an announcement by the Treasury of a smaller-than-expected amount of issuance of TIPS next year. Five-year inflation compensation five years ahead also rose, and was near the upper end of its range in recent years.

Conditions in short-term funding markets were little changed over the intermeeting period. Spreads between London interbank offered rates (Libor) and overnight index swap (OIS) rates at one- and three-month maturities were about flat; spreads at the six-month maturity narrowed somewhat further but remained above pre-crisis levels. Spreads on A2/P2-rated commercial paper (CP) and AA-rated asset-backed CP remained near their lows of the past two years. Indicators of functioning in the market for nominal Treasury securities—including trading volumes and liquidity premiums for the on-the-run 10-year note—were roughly stable. Liquidity conditions in the TIPS market showed further improvement. Year-end pressures in short-term funding markets, including the CP and bank funding markets, remained modest. However, high demand for Treasury bills maturing just past December 31

drove yields on such issues to zero in some recent auctions.

Over the intermeeting period, broad stock price indexes increased further. The rise in share prices likely reflected the improvement in the economic outlook and strong third-quarter earnings, which led analysts to mark up their estimates of future earnings. The gains were widespread across industry sectors. However, financial stocks significantly underperformed the market, as investors continued to express concerns about the future profitability of the banking industry. Option-implied volatility on the S&P 500 index declined. The spread between an estimate of the expected real return on equity over the next 10 years and an estimate of the real 10-year Treasury yield—a rough gauge of the equity risk premium—remained about unchanged at a relatively high level. Yields on investment- and speculative-grade corporate bonds fell a little more than those on comparable-maturity nominal Treasury securities, leaving their spreads somewhat narrower. Bid-asked spreads for corporate bonds—a measure of the liquidity of such instruments—were about unchanged. Prices and bid-asked spreads in the secondary market for leveraged loans also were stable over the intermeeting period. Spreads on credit default swaps (CDS) for large bank holding companies narrowed a bit.

Debt of the private domestic nonfinancial sector appeared to be declining again in the fourth quarter, as estimates suggested a further drop in household debt and a tick down in nonfinancial business debt. Consumer credit contracted for the ninth consecutive month in October, reflecting a steep decline in revolving credit that offset a small increase in nonrevolving credit. Issuance of consumer credit asset-backed

securities rebounded in November from its subdued pace in October. Moreover, with support from the TALF, the first CMBS issue in nearly 18 months came to market. A few other CMBS deals were subsequently completed without support from the TALF. Business debt was held down in November by another drop in bank loans, as well as a decrease in CP outstanding, though the latter was concentrated among a few large firms. In contrast, gross issuance of investment- and speculative-grade bonds was robust in November. The federal government continued to issue debt at a brisk pace, and gross issuance of state and local government debt remained strong in November.

Commercial bank credit decreased further in November, although the pace of decline slowed relative to recent months. Commercial and industrial (C&I) loans continued to drop, likely reflecting weak demand and a continued tightening of credit terms by banks. The Survey of Terms of Business Lending conducted in November indicated that the average C&I loan rate spread over comparable-maturity market instruments rose for the fifth consecutive survey. The runoff in commercial real estate loans continued, consistent with the further weakening of fundamentals in that sector. Bank loans to households rose, reflecting a slowdown in loan sales to the housing-related government-sponsored enterprises that resulted in a modest increase in banks' on-balance-sheet holdings of closed-end residential mortgages in November. However, home equity loans and consumer loans fell again. According to third-quarter Call Report data, unused loan commitments shrank for the seventh consecutive quarter, though the rate of decline slowed, especially for commitments to lend to businesses. The aggregate profitability

of the banking sector turned positive in the third quarter, but most of the increase was due to strong earnings at a few large institutions. Credit quality appeared to worsen as delinquency and charge-off rates increased further for most major loan categories. Banks' regulatory capital ratios increased again as banks continued to raise equity and shrink their balance sheets.

M2 expanded at a moderate rate in November. As was the case in recent months, liquid deposits grew rapidly, while small time deposits and retail money market mutual funds contracted, albeit at slightly slower paces. Currency declined somewhat in November as foreign demand for U.S. banknotes appeared to ebb, consistent with the continued stabilization in most global financial markets.

Broad stock price indexes in major advanced foreign economies rose, although generally somewhat less than those in the United States. Stock price indexes in major emerging markets increased as well, particularly in Brazil and Mexico, amid generally rising commodity prices and a better-than-expected Mexican GDP report; Chinese stock prices also increased strongly. Long-term government bond yields declined in most advanced foreign economies, but increased in the United Kingdom. The dollar depreciated over much of the intermeeting period, but then reversed course following the release of better-than-expected U.S. data on employment and retail sales for November. On balance, the dollar ended the period up slightly against the major foreign currencies and down a little relative to the currencies of other important trading partners.

Concerns about the potential for default by some sovereign borrowers rose over the intermeeting period. News that the Dubai government had requested a

standstill on debts owed by Dubai World, a government-owned corporation, temporarily roiled some financial markets. However, those pressures eased as investors concluded that Dubai World's difficulties were likely to be isolated. Subsequently, the sovereign debt rating for Greece was lowered amid long-standing concerns over its public finances and a widening of its sovereign CDS spreads.

Although the central banks of the major foreign industrial economies kept policy rates on hold, the Bank of England expanded its asset purchase program and the Bank of Japan announced a new secured lending facility. In contrast, the European Central Bank took some initial steps toward scaling back emergency lending. It announced that the one-year refinancing operation in December would be its last and that the cost of the funds provided would float with interest rates set in future refinancing operations rather than being fixed as in previous such operations.

#### Staff Economic Outlook

In the forecast prepared for the December FOMC meeting, the staff raised its projection for average real GDP growth in the second half of 2009 somewhat, and it also modestly increased its forecast for economic growth in 2010 and 2011. Better-than-expected data on employment, consumer spending, home sales, and industrial production received during the intermeeting period pointed to a somewhat stronger increase in real GDP in the current quarter than had previously been projected. In addition, the positive signal from the incoming data, along with the sizable upward revisions to household income in earlier quarters and more supportive financial market conditions,

led to small upward adjustments to projected growth in real GDP over the rest of the forecast period. The staff again anticipated that the recovery would strengthen in 2010 and 2011, supported by further improvement in financial conditions and household balance sheets, continued recovery in the housing sector, growing household and business confidence, and accommodative monetary policy, even as the impetus to real activity from fiscal policy diminished. However, the projected pace of real output growth in 2010 and 2011 was expected to exceed that of potential output by only enough to produce a very gradual reduction in economic slack.

The staff forecast for inflation was nearly unchanged. The staff interpreted the increases in prices of energy and nonmarket services that recently boosted consumer price inflation as largely transitory. Although the projected degree of slack in resource utilization over the next two years was a little lower than shown in the previous staff forecast, it was still quite substantial. Thus, the staff continued to project that core inflation would slow somewhat from its current pace over the next two years. Moreover, the staff expected that headline consumer price inflation would decline to about the same rate as core inflation in 2010 and 2011.

#### Participants' Views on Current Conditions and the Economic Outlook

In their discussion of the economic situation and outlook, meeting participants agreed that the incoming data and information received from business contacts suggested that economic growth was strengthening in the fourth quarter, that firms were reducing pay-

rolls at a less rapid pace, and that downside risks to the outlook for economic growth had diminished a bit further. Although some of the recent data had been better than anticipated, most participants saw the incoming information as broadly in line with the projections for moderate growth and subdued inflation in 2010 that they had submitted just before the Committee's November 3–4 meeting; accordingly, their views on the economic outlook had not changed appreciably. Participants expected the economic recovery to continue, but, consistent with experience following previous financial crises, most anticipated that the pickup in output and employment growth would be rather slow relative to past recoveries from deep recessions. A moderate pace of expansion would imply slow improvement in the labor market next year, with unemployment declining only gradually. Participants agreed that underlying inflation currently was subdued and was likely to remain so for some time. Some noted the risk that, over the next couple of years, inflation could edge further below the rates they judged most consistent with the Federal Reserve's dual mandate for maximum employment and price stability; others saw inflation risks as tilted toward the upside in the medium term.

A number of factors were expected to support near-term expansion in economic activity. Consumer spending appeared to be on a moderately rising trend, reflecting gains in after-tax income and wealth this year. Recent upward revisions to official estimates of the level of household income in recent quarters gave participants somewhat greater confidence that consumer spending would continue to expand. The housing sector showed continuing signs of improvement, though housing starts had leveled out after increasing

earlier in the year and activity remained quite low. Businesses seemed to be reducing the pace of inventory reductions. The outlook for growth abroad had improved since earlier in the year, auguring well for U.S. exports. In addition, financial market conditions generally had become more supportive of economic growth. While these developments were positive, participants noted several factors that likely would continue to restrain the expansion in economic activity. Business contacts again emphasized they would be cautious in adding to payrolls and capital spending, even as demand for their products increases. Conditions in the commercial real estate (CRE) sector were still deteriorating. Bank credit had contracted further, and with many banks facing continuing loan losses, tight bank credit could continue to weigh on the spending of some households and businesses. Some participants remained concerned about the economy's ability to generate a self-sustaining recovery without government support. In particular, they noted the risk that improvements in the housing sector might be undercut next year as the Federal Reserve's purchases of MBS wind down, the homebuyer tax credits expire, and foreclosures and distress sales continue. Though the near-term outlook remains uncertain, participants generally thought the most likely outcome was that economic growth would gradually strengthen over the next two years as financial conditions improved further, leading to more-substantial increases in resource utilization.

Financial market conditions were generally regarded as having become more supportive of continued economic recovery during the intermeeting period: Equity prices rose further, private credit spreads narrowed somewhat,

and financial markets generally continued to function significantly better than early in the year. Participants noted, however, that securitization markets were still substantially impaired. In general, U.S. asset values did not seem out of line with improving fundamentals. While investors evidently had become less cautious and more willing to bear risk, they appeared to be discriminating among risky assets. Banks were raising new capital and in some cases paying back funds received from the Troubled Asset Relief Program. Bank loans, however, continued to contract sharply in all categories, reflecting lack of demand, deterioration in potential borrowers' credit quality, uncertainty about the economic outlook, and banks' concerns about their own capital positions. With rising levels of nonperforming loans expected to be a continuing source of stress, and with many regional and small banks vulnerable to the deteriorating performance of CRE loans, bank lending terms and standards were seen as likely to remain tight. Participants again noted the contrast between large and small firms' access to financing. Large firms that can issue debt in the markets appeared to have relatively little difficulty obtaining credit. In contrast, smaller firms, which tend to be more dependent on commercial banks for financing, reportedly faced substantial constraints in gaining access to credit. While survey evidence suggested that small businesses considered weak demand to be a larger problem than access to credit, participants saw limited credit availability as a potential constraint on future investment and hiring by small businesses, which normally are a significant source of employment growth in recoveries.

The weakness in labor markets continued to be an important concern to meeting participants, who generally ex-

pected unemployment to remain elevated for quite some time. The unemployment rate was not the only indicator pointing to substantial slack in labor markets: The employment-to-population ratio had fallen to a 25-year low, and aggregate hours of production workers had dropped more than during the 1981–82 recession. Although the November employment report was considerably better than anticipated, several participants observed that more than one good report would be needed to provide convincing evidence of recovery in the labor market. Participants also noted that the slowing pace of employment declines mainly reflected a diminished pace of layoffs; few firms were hiring. Moreover, the unusually large fraction of those individuals with jobs who were working part time for economic reasons, as well as the uncommonly low level of the average workweek, pointed to only a gradual decline in unemployment as the economic recovery proceeded. Indeed, many business contacts again reported that they would be cautious in their hiring, saying they expected to meet any near-term increase in demand by raising their existing employees' hours and boosting productivity, thus delaying the need to add employees. The necessity of reallocating labor across sectors as the recovery proceeds, as well as the loss of skills caused by high levels of long-term unemployment and permanent separations, also could limit the pace of employment gains. Nonetheless, the reported rise in employment of temporary workers in recent months could presage a broader increase in job growth and thus was a welcome development.

The prognosis for labor markets remained an important factor in the outlook for consumer spending. Recent data on household expenditures were

encouraging. Retail sales increased, spurred by price discounting. The Bureau of Economic Analysis revised up its estimates of the level of real disposable income—and thus of the personal saving rate—in the second and third quarters of this year. Those revisions, along with recent gains in equity prices, suggested a smaller probability that households would reduce spending to rebuild their savings more rapidly. However, uncertain job prospects, modest growth in real incomes, tight credit, and wealth levels that remained relatively low despite this year's rise in equity prices and stabilization in house prices were seen as likely to weigh on consumer confidence and the growth of consumer spending for some time to come. Anecdotal evidence on consumer spending in this year's holiday season was mixed.

Participants noted that firms had made substantial progress in reducing inventories toward desired levels and were cutting stocks at a slower pace than earlier in the year. This adjustment likely was making an important contribution to economic growth in the fourth quarter, and participants expected that it would do so into 2010 as well. The combination of rising consumer spending, slower destocking, and rising goods production was reflected in reports from major transportation companies that shipping volumes were up.

Investment in equipment and software appeared to have stabilized, and recent data on new orders continued to point to some pickup next year. Even so, many participants expressed the view that cautious business sentiment, together with low industrial utilization rates, was likely to keep new capital spending subdued until firms became more confident about the durability of increases in demand. Many also noted widespread reports from business con-

tacts that uncertainties about health-care, tax, and environmental policies were adding to businesses' reluctance to commit to higher capital spending. CRE activity continued to fall markedly in most parts of the country as a result of deteriorating fundamentals, including declining occupancy and rental rates, and very tight credit conditions. Prospects for nonresidential construction remained weak.

In the residential real estate sector, home sales and construction had risen relative to the very low levels reported in the spring; moreover, house prices appeared to be stabilizing and in some areas had reportedly moved higher. Generally, the outlook was for gains in housing activity to continue. However, some participants still viewed the improved outlook as quite tentative and again pointed to potential sources of softness, including the termination next year of the temporary tax credits for homebuyers and the downward pressure that further increases in foreclosures could put on house prices. Moreover, mortgage markets could come under pressure as the Federal Reserve's agency MBS purchases wind down.

Stronger foreign economic activity, especially in the emerging market economies in Asia, as well as the partial reversal this year of the dollar's appreciation during the latter part of 2008, was providing further support to U.S. exports, including agricultural exports. Further improvements in foreign economies would likely buoy U.S. exports going forward, but import growth would also strengthen as the recovery took hold in the United States. Participants noted that any tendency for dollar depreciation to put significant upward pressure on inflation would bear close watching.

Most participants anticipated that substantial slack in labor and product

markets, along with well-anchored inflation expectations, would keep inflation subdued in the near term, although they had differing views as to the relative importance of those two factors. The decelerations in wages and unit labor costs this year, and the accompanying deceleration in marginal costs, were cited as factors putting downward pressure on inflation. Moreover, anecdotal evidence suggested that most firms had little ability to raise their prices in the current economic environment. Some participants noted, however, that rising prices of oil and other commodities, along with increases in import prices, could boost inflation pressures going forward. Overall, many participants viewed the risks to their inflation outlooks as being roughly balanced. Some saw inflation risks as tilted to the downside, reflecting the quite elevated level of economic slack and the possibility that inflation expectations could begin to decline in response to the low level of actual inflation. But others felt that inflation risks were tilted to the upside, particularly in the medium term, because of the possibility that inflation expectations could rise as a result of the public's concerns about extraordinary monetary policy stimulus and large federal budget deficits. Moreover, a few participants noted that banks might seek, as the economy improves, to reduce their excess reserves quickly and substantially by purchasing securities or by easing credit standards and expanding their lending. A rapid shift, if not offset by Federal Reserve actions, could give excessive impetus to spending and potentially result in expected and actual inflation higher than would be consistent with price stability. To keep inflation expectations anchored, all participants agreed that monetary policy would need to be re-

sponsive to any significant improvement or worsening in the economic outlook and that the Federal Reserve would need to continue to clearly communicate its ability and intent to begin withdrawing monetary policy accommodation at the appropriate time and pace.

In the Committee's discussion of monetary policy for the period ahead, all members agreed that no changes to the Committee's large-scale asset purchase programs, or to its target range for the federal funds rate, were warranted at this meeting, inasmuch as the economic outlook had changed little since the November meeting. Accordingly, the Committee affirmed its intention to purchase \$1.25 trillion of agency MBS and about \$175 billion of agency debt by the end of the first quarter of 2010 and to gradually slow the pace of these purchases to promote a smooth transition in markets. The Committee emphasized that it would continue to evaluate the timing and overall amounts of its purchases of securities in light of the evolving economic outlook and conditions in financial markets. A few members noted that resource slack was expected to diminish only slowly and observed that it might become desirable at some point in the future to provide more policy stimulus by expanding the planned scale of the Committee's large-scale asset purchases and continuing them beyond the first quarter, especially if the outlook for economic growth were to weaken or if mortgage market functioning were to deteriorate. One member thought that the improvement in financial market conditions and the economic outlook suggested that the quantity of planned asset purchases could be scaled back, and that it might become appropriate to begin reducing the Federal Reserve's holdings of

longer-term assets if the recovery gains strength over time. The Committee maintained the federal funds target range at 0 to ¼ percent and, based on the outlook for a slow economic recovery, decided to reiterate its anticipation that economic conditions, including low levels of resource utilization, subdued inflation trends, and stable inflation expectations, were likely to warrant exceptionally low rates for an extended period. Although members generally saw little risk that maintaining very low short-term interest rates could raise inflation expectations or create instability in asset markets, they noted that it was important to remain alert to these risks. All agreed that the path of short-term rates going forward would depend on the evolution of the economic outlook.

Committee members and Board members agreed that there had been substantial improvements in the functioning of financial markets; accordingly they agreed that the statement to be released following the meeting should indicate an anticipation that most of the Federal Reserve's special liquidity facilities will expire on February 1, 2010; these facilities include the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility, the Commercial Paper Funding Facility, the Primary Dealer Credit Facility, and the Term Securities Lending Facility. Committee members also agreed to announce that the Federal Reserve will be working with its central bank counterparties to close its temporary liquidity swap arrangements by February 1. In addition, the statement would announce an expectation that amounts provided under the Term Auction Facility will continue to be scaled back in early 2010, and that the anticipated expiration dates for the Term Asset-Backed Securities Loan Fa-

cility remained June 30, 2010, for loans backed by new-issue CMBS, and March 31, 2010, for loans backed by all other types of collateral. Members emphasized that they were prepared to modify these plans if necessary to support financial stability and economic growth. In that context, several members noted that the TALF was still providing important support for securitization markets, particularly the CMBS market, and that improvements in the functioning of securitization markets were lagging behind those in other financial markets.

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

“The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to  $\frac{1}{4}$  percent. The Committee directs the Desk to purchase agency debt and agency MBS during the intermeeting period with the aim of providing support to private credit markets and economic activity. The timing and pace of these purchases should depend on conditions in the markets for such securities and on a broader assessment of private credit market conditions. The Desk is expected to execute purchases of about \$175 billion in housing-related agency debt and about \$1.25 trillion of agency MBS by the end of the first quarter of 2010. The Desk is expected to gradually slow the pace of these purchases as they near completion. The Committee anticipates that outright purchases of securities will cause the size of the Federal Reserve’s balance sheet to expand significantly in coming months. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System’s bal-

ance sheet that could affect the attainment over time of the Committee’s objectives of maximum employment and price stability.”

The vote encompassed approval of the statement below to be released at 2:15 p.m.:

“Information received since the Federal Open Market Committee met in November suggests that economic activity has continued to pick up and that the deterioration in the labor market is abating. The housing sector has shown some signs of improvement over recent months. Household spending appears to be expanding at a moderate rate, though it remains constrained by a weak labor market, modest income growth, lower housing wealth, and tight credit. Businesses are still cutting back on fixed investment, though at a slower pace, and remain reluctant to add to payrolls; they continue to make progress in bringing inventory stocks into better alignment with sales. Financial market conditions have become more supportive of economic growth. Although economic activity is likely to remain weak for a time, the Committee anticipates that policy actions to stabilize financial markets and institutions, fiscal and monetary stimulus, and market forces will contribute to a strengthening of economic growth and a gradual return to higher levels of resource utilization in a context of price stability.

With substantial resource slack likely to continue to dampen cost pressures and with longer-term inflation expectations stable, the Committee expects that inflation will remain subdued for some time.

The Committee will maintain the target range for the federal funds rate at 0 to  $\frac{1}{4}$  percent and continues to anticipate that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels of the federal funds rate for an extended period. To provide support to mortgage lending and housing markets and to improve overall conditions in private credit markets, the Federal Reserve is in the process of purchasing \$1.25 trillion of agency mortgage-backed securities and about \$175 billion of agency debt. In order to promote a smooth transition in markets, the Committee is gradually slowing the pace of these

purchases, and it anticipates that these transactions will be executed by the end of the first quarter of 2010. The Committee will continue to evaluate the timing and overall amounts of its purchases of securities in light of the evolving economic outlook and conditions in financial markets.

In light of ongoing improvements in the functioning of financial markets, the Committee and the Board of Governors anticipate that most of the Federal Reserve's special liquidity facilities will expire on February 1, 2010, consistent with the Federal Reserve's announcement of June 25, 2009. These facilities include the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility, the Commercial Paper Funding Facility, the Primary Dealer Credit Facility, and the Term Securities Lending Facility. The Federal Reserve will also be working with its central bank counterparties to close its temporary liquidity swap arrangements by February 1. The Federal Reserve expects that amounts provided under the Term Auction Facility will continue to be scaled back in early 2010. The anticipated expiration dates for the Term Asset-Backed Securities Loan Facility remain set at June 30, 2010, for loans backed by new-issue commercial mortgage-backed securities and March 31, 2010, for loans backed by all other types of collateral. The Federal Reserve is prepared to modify these plans if necessary to support financial stability and economic growth."

Voting for this action: Messrs. Bernanke and Dudley, Ms. Duke, Messrs. Evans, Kohn, Lacker, Lockhart, Tarullo, and Warsh, and Ms. Yellen.

Voting against this action: None.

Following the Committee's policy decision, staff gave several presentations on the key determinants of inflation dynamics. Theoretical and empirical research indicates that inflation can respond to deviations of economic activity from its longer-run sustainable path. However, in some theoretical frameworks, the connection between resource slack and inflation depends on the nature of the shock and its impact on marginal costs and markups. More-

over, estimates of the magnitude of slack and its effect on inflation are sensitive to the details of the analytical framework and the statistical methodology used in each study. While theory suggests that the degree of slack prevailing in foreign economies could affect domestic inflation, empirical evidence on the importance of such an effect was mixed. Evidence suggested that sizable shifts in the longer-run inflation expectations of households and firms had influenced the evolution of inflation over previous decades; in contrast, the anchoring of inflation expectations in recent years likely had damped somewhat the response of actual inflation to the recent economic downturn and to fluctuations in the prices of energy and other commodities. In discussing these issues, participants noted that they bear in mind the shocks hitting the economy and regularly monitor more than one measure of resource slack as they assess the outlook for economic activity and inflation. They also noted the importance of formulating monetary policy in ways that would work well across a range of possible economic structures rather than relying on any one analytical framework. Finally, they underscored the importance of keeping longer-run inflation expectations firmly anchored to help achieve the Federal Reserve's dual mandate for maximum employment and price stability.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, January 26–27, 2010. The meeting adjourned at 1:00 p.m. on December 16, 2009.

#### Notation Votes

By notation vote completed on November 23, 2009, the Committee unanimously approved the minutes of the

FOMC meeting held on November 3–4, 2009.

By notation vote completed on November 24, 2009, the Committee unanimously approved the following resolution:

“The Federal Open Market Committee authorizes the Federal Reserve Bank of New York to conduct reverse repo transactions involving U.S. Government securities, and securities that are direct obligations of,

or fully guaranteed as to principal and interest by, any agency of the United States, for the purpose of helping to ensure the readiness of the Federal Reserve’s tools for absorbing bank reserves. The reverse repo transactions authorized in this resolution shall have terms to maturity of 20 business days or less and the total amount of all transactions outstanding at a given time shall be \$5 billion or less.”

Brian F. Madigan  
Secretary

## Litigation

During 2009, the Board of Governors was a party in ten lawsuits or appeals filed that year and in seven other cases pending from previous years, for a total of seventeen cases. In 2008, the Board had been a party in a total of eleven cases. As of December 31, 2009, ten cases were pending.

*Gold Anti-Trust Action Committee, Inc., v. Board of Governors*, No. 09-2436 (D. District of Columbia, filed December 30, 2009), is a Freedom of Information Act case.

*Judicial Watch, Inc. v. Board of Governors*, No. 09-2138 (D. District of Columbia, filed November 13, 2009), is a Freedom of Information Act case.

*Citizens for Responsibility and Ethics in Washington v. Board of Governors*, No. 09-2113 (D. District of Columbia, filed November 10, 2009), is a Freedom of Information Act case.

*McKinley v. Board of Governors*, No. 09-1263 (D. District of Columbia, filed July 8, 2009), is a Freedom of Information Act case.

*Odoski v. Bernanke*, No. 09-cv-718 (W.D. Pennsylvania, filed June 5, 2009), was an employment discrimination case. On December 29, 2009, the district court dismissed the action.

*Citizens for Responsibility and Ethics in Washington v. Board of Governors*, No. 09-663 (D. District of Columbia, filed April 16, 2009), was a Freedom of Information Act case. On November 19, 2009, the district court granted the Board's motion for summary judgment.

*The New York Times Company v. Board of Governors*, No. 09-2645 (S.D. New York, filed March 23, 2009), was

a Freedom of Information Act case. The court dismissed the case on the parties' motion on November 30, 2009.

*Freedom Watch, Inc., v. Board of Governors*, No. 09-331 (D. District of Columbia, filed February 19, 2009), was a Freedom of Information Act case. The district court granted the Board's motion to dismiss the action on August 12, 2009.

*Barlow v. Federal Reserve System*, No. 09-177 (D. District of Columbia, filed February 25, 2009), was an action for writ of mandamus regarding a student loan. On September 1, 2009, the district court dismissed the case.

*Fox News Network v. Board of Governors*, No. 09-272 (S.D. New York, filed January 13, 2009), is a Freedom of Information Act case. On July 30, 2009, the district court granted the Board's motion for summary judgment (639 F. Supp. 2d 84). The plaintiff's appeal to the Second Circuit (09-3795, filed September 11, 2009) is pending.

*Murray v. Board of Governors*, No. 08-cv-15147 (E.D. Michigan, filed December 15, 2008), is a challenge to the constitutionality of federal expenditures relating to American International Group (AIG).

*Bumgarner v. Paulson, Bernanke, et al.*, No. 08-cv-5245 (D. New Jersey, amended complaint filed November 21, 2008), was a challenge to the implementation of the Economic Emergency Stabilization Act of 2008. On August 10, 2009, the district court dismissed the action.

*Bloomberg, L.P. v. Board of Governors*, No. 08-cv-9595 (S.D. New York, filed November 7, 2008), is a Freedom

of Information Act case. On August 4, 2009, the district court granted the plaintiff's motion for summary judgment (649 F. Supp. 2d 262). The Board's appeal to the Second Circuit (09-4083, filed October 1, 2009) is pending.

*Schulz v. United States Federal Reserve System*, No. 1:08-cv-991 (N.D. New York, filed September 18, 2008), is an action relating to the Federal Reserve's loan to American International Group. On September 25, 2008, the district court denied plaintiff's request for a temporary restraining order and preliminary injunction. On September 30, 2008, the plaintiff appealed the district court's order to the United States Court of Appeals for the Second Circuit (No. 08-4810).

*Jones v. Greenspan*, No. 04-1696 (D. District of Columbia, filed October 4, 2004), is an employment discrimination case. On March 10, 2008, the district

court granted the Board's motion and dismissed the plaintiff's claims. On the plaintiff's appeal (No. 08-5092, filed April 21, 2008), the District of Columbia Circuit affirmed in part and reversed in part, and remanded the action to the district court. 557 F.3d 670.

*Chandler v. Bernanke*, No. 06-2082 (D. District of Columbia, filed December 6, 2006), was an employment discrimination action. On September 21, 2009, the case was dismissed on the parties' stipulation.

*Artis v. Greenspan*, No. 09-5121 (District of Columbia Circuit, filed April 9, 2009), is an appeal from the district court's dismissal of the plaintiffs' employment discrimination claim (474 F. Supp. 2d 16 (January 31, 2007)) and subsequent denial of the plaintiffs' motion to alter or amend judgment (256 F.R.D. 4 (March 2, 2009)). ■