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*Records*



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

This report provides an account of actions taken by the Board on questions of policy in 2008 as implemented through (1) rules and regulations, (2) policy statements and other actions, (3) special liquidity facilities and other initiatives to address financial strains, and (4) discount rates for depository institutions. All actions were approved by a unanimous vote of the Board members, unless indicated otherwise. Full texts of the actions are available via the online version of the Annual Report, from the “Reading Rooms” on the Board’s FOIA web page, and on request from the Board’s Freedom of Information Office. Policy actions in 2009 that affect actions approved in 2008 have been summarized through March 31, 2009, in editorial notes.

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

#### **Regulation C** Home Mortgage Disclosure

[Docket No. R-1321]

*On October 20, 2008*, the Board approved amendments to conform the rules for reporting price information on higher-priced loans with the definition of “higher-priced mortgage loans” adopted by the Board for Regulation Z in July 2008. The new reporting thresholds for first-lien and subordinate-lien loans are based on the rate spread between a mortgage’s annual percentage rate (APR) and a survey-based estimate of APRs currently offered on

prime mortgages. They are intended to cover subprime mortgages (and generally avoid covering prime mortgages) by requiring mortgage loans to be reported if the rate spread is 1.5 percentage points or more for first liens and 3.5 percentage points or more for second liens. The amendments are effective October 1, 2009.

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

#### **Regulation D** Reserve Requirements of Depository Institutions

[Docket No. R-1334]

*On October 3, 2008*, the Board approved an interim final rule with request for comment to permit the Federal Reserve to begin paying interest on depository institutions’ required reserve balances (held by the Reserve Banks to satisfy depository institutions’ reserve requirements) and excess balances (held by the Reserve Banks in excess of required reserve and clearing balances). The Financial Services Regulatory Relief Act authorized the Federal Reserve to pay interest on such balances, beginning October 1, 2011, and the Emergency Economic Stabilization Act accelerated the effective date to October 1, 2008. The interest rates paid are determined by a formula based on the target federal funds rate. The Board also made minor changes to its clearing-balance policy and the method

for recovering float costs. The interim final rule is effective October 9, 2008.

*On October 21, 2008, and November 4, 2008,* the Board approved interim final rules with requests for comment to alter the formulas used for determining the interest rates paid on excess balances and on required reserves and excess balances, respectively.

*On December 16, 2008,* the Board approved an interim final rule to set the interest rates on required reserve balances and excess balances at  $\frac{1}{4}$  percent after the Federal Open Market Committee established a target range for the federal funds rate of 0 to  $\frac{1}{4}$  percent. The rule also provides that interest rates paid on those balances may be rates as determined by the Board from time to time rather than the rates in the regulation. The interim final rule is effective December 23, 2008, and the revised rates apply to maintenance periods beginning December 18, 2008.

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

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

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

[Docket No. R-1332]

*On September 19, 2008,* the Board approved an interim final rule with request for comment to provide state member banks or bank holding companies participating in the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF)

(discussed under “Special Liquidity Facilities and Other Initiatives”) with an exemption from the Board’s leverage and risk-based capital guidelines for asset-backed commercial paper held as a result of participation in the facility. The exemption is subject to safety and soundness conditions. The interim final rule is effective September 19, 2008, and expires January 30, 2009, unless extended by the Board.

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

NOTE: *On January 27, 2009,* the Board approved final rules to conform with the extension of the AMLF to October 30, 2009.

[Docket No. R-1329]

*On December 13, 2008,* the Board, acting with the Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, and Office of Thrift Supervision, approved a final rule that permits a banking organization to reduce the amount of goodwill that it must deduct from tier 1 capital by the amount of any deferred tax liability associated with that goodwill. The final rule is effective January 29, 2009, and may be applied, at the banking organization’s election, for purposes of the regulatory reporting period ending December 31, 2008.

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

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

[Docket No. R-1330]

*On September 14, 2008,* the Board approved an interim final rule with

request for comment to provide a temporary exemption for member banks from certain limitations in section 23A of the Federal Reserve Act and Regulation W. The exemption increases the capacity of member banks to enter into securities-financing transactions with their affiliates and is subject to safety and soundness conditions. The interim final rule is effective September 14, 2008, and expires January 30, 2009, unless extended by the Board.

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

NOTE: *On January 27, 2009*, the Board approved a final rule that extended the expiration date for the exemption to October 30, 2009.

[Docket No. R-1331]

*On September 19, 2008*, the Board approved an interim final rule with request for comment to provide a temporary exemption for member banks from certain provisions of sections 23A and 23B of the Federal Reserve Act and Regulation W to facilitate use of the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF) (discussed under “Special Liquidity Facilities and Other Initiatives”). The exemption increases the capacity of participating member banks to purchase asset-backed commercial paper from affiliated money market mutual funds and is subject to safety and soundness conditions. The interim final rule is effective September 19, 2008, and expires January 30, 2009, unless extended by the Board.

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

NOTE: *On January 27, 2009*, the Board approved a final rule to conform with

the extension of the AMLF to October 30, 2009.

*On October 5, 2008*, the Board granted a request by a depository institution for an exemption from the limits on transactions with affiliates under section 23A of the Federal Reserve Act and Regulation W to allow the institution to purchase assets from affiliated money market mutual funds under certain circumstances. The Board announced it would consider similar requests from depository institutions under similar circumstances.

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

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

[Docket No. R-1336]

*On October 13, 2008*, the Board approved an interim final rule with request for comment to allow bank holding companies to include in their tier 1 capital without restriction the senior perpetual preferred stock they issue to the Department of the Treasury (Treasury) under its capital purchase program. Treasury announced the program, which was established under the Emergency Economic Stabilization Act, on October 14, 2008. The interim final rule is effective October 17, 2008.

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

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

[Docket No. R-1305]

*On July 14, 2008*, the Board approved comprehensive amendments under the

Home Ownership and Equity Protection Act that are intended to (1) protect consumers in the home mortgage market from unfair, abusive, or deceptive mortgage lending and servicing practices; (2) preserve responsible lending and sustainable homeownership; (3) ensure that advertisements for mortgage loans provide accurate and balanced information and do not contain misleading or deceptive representations; and (4) provide consumers with transaction-specific disclosures early enough to assist them in selecting a mortgage. Among other changes, the final rule prohibits certain acts and practices in connection with mortgages, particularly higher-priced mortgages; revises the disclosure requirements for mortgage advertisements; and revises the timing requirements for providing disclosures for mortgages. The final rule is effective October 1, 2009, except for the requirement to establish escrow accounts for taxes and insurance for higher-priced mortgage loans, which is effective April 1, 2010 (October 1, 2010, for such loans secured by manufactured housing).

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

**Regulation AA**  
Unfair or Deceptive  
Acts or Practices

**Regulation DD**  
Truth in Savings

**Regulation Z**  
Truth in Lending

[Docket Nos. R-1314, R-1315, and R-1286]

*On December 18, 2008*, the Board approved comprehensive amendments

that prohibit certain unfair or deceptive credit card practices and improve consumer disclosures in connection with credit card accounts, other revolving credit plans, and overdraft services. Among other changes, the amendments to Regulation AA, which are adopted under the Federal Trade Commission Act, prohibit banks from (1) increasing the rate on a pre-existing credit card balance (except under limited circumstances), (2) applying payments in excess of the minimum in a manner that maximizes interest charges, and (3) imposing finance charges based on balances on days in the current billing cycle and in the previous billing cycle, a practice that is sometimes referred to as “two-cycle” billing. Amendments to Regulation DD, which implements the Truth in Savings Act, address depository institutions’ disclosure practices for overdraft services. Amendments to Regulation Z, which implements the Truth in Lending Act, revise the disclosures consumers receive in connection with their credit cards and other revolving (non-home-secured) credit plans to ensure that information is provided in a timely manner and in a form that is readily understandable. The Regulation AA and Regulation Z amendments are effective July 1, 2010, and the Regulation DD amendments are effective January 1, 2010.

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

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

[Docket No. R-1298]

*On November 7, 2008*, the Board approved a joint final rule to implement

the Unlawful Internet Gambling Enforcement Act. Under the new regulation, promulgated with the Department of the Treasury as required by the act, non-exempt U.S. financial institutions that participate in designated payment systems must establish policies and procedures that are reasonably designed to prevent or prohibit payments to gambling businesses involved in unlawful Internet gambling. The final rule also provides non-exclusive examples of such policies and procedures. Compliance with the final rule is required by December 1, 2009.

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

### **Rules of Practice for Hearings**

[Docket No. R-1333]

*On September 19, 2008*, the Board approved amendments to adjust the maximum amount of the statutory civil money penalties under its jurisdiction to account for inflation, as required by the Debt Collection Improvement Act. The amendments are effective October 12, 2008.

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

### **Rules regarding Equal Opportunity**

[Docket No. OP-1264]

*On March 25, 2008*, the Board approved the publication of an amendment to its Rules regarding Equal Opportunity as a final rule. Under the rule, certain noncitizen employees are eligible for access to sensitive information

if they meet particular conditions and subject to a preference for U.S. citizens over equally qualified noncitizens. The final rule is effective April 2, 2008.

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

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

#### **Statement to Servicers on Reporting of Loss Mitigation of Subprime Mortgages**

*On March 2, 2008*, the Board approved a statement encouraging Federal Reserve-supervised financial institutions that service subprime mortgage loans to report their loss-mitigation activities consistent with uniform standards and to consider using the HOPE NOW alliance's loan-modification reporting standards for subprime residential mortgages. The Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, Office of Thrift Supervision, and National Credit Union Administration issued similar statements to their supervised institutions.

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

#### **Illustrations of Consumer Information for Hybrid Adjustable-Rate Mortgage Products**

[Docket No. OP-1292]

*On April 15, 2008*, the Board, acting with the Federal Deposit Insurance Corporation, Office of the Comptroller of

the Currency, Office of Thrift Supervision, and National Credit Union Administration, approved final illustrations of consumer information for certain hybrid adjustable-rate mortgage products. The illustrations are intended to assist financial institutions in implementing the consumer protection provisions of the Interagency Statement on Subprime Mortgage Lending issued in July 2007. Financial institutions may use the illustrations as provided, change their format, or tailor the information to specific transactions or products. The illustrations are effective May 29, 2008.

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

### **Memorandum of Understanding with the Securities and Exchange Commission on Information Sharing**

On July 7, 2008, the Board approved a memorandum of understanding with the Securities and Exchange Commission that establishes a framework for collaborating, coordinating, and sharing information in areas of common regulatory and supervisory interest. The memorandum states that such efforts concerning certain banking and securities companies are important in maintaining effective oversight, promoting compliance with the banking and securities laws, fostering the stability of financial markets, and facilitating the effective execution of monetary policy by the Federal Reserve.

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

### **Interagency Guidance on the Supervisory Review Process for Capital Adequacy (Pillar 2) related to the Implementation of the Advanced Approaches Final Rule**

[Docket No. OP-1322]

On July 14, 2008, the Board, acting with the Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, and Office of Thrift Supervision, approved interagency guidance for banking organizations using the advanced approaches final rule of the new capital adequacy framework that is popularly known as Basel II. The advanced approaches rule, which became final on April 1, 2008, implements a new risk-based capital framework that encompasses three “pillars.” The interagency guidance relates to pillar 2 (supervisory review of capital adequacy) and provides details about the agencies’ standards for ensuring that each institution subject to the advanced approaches rule has a rigorous process for assessing its overall capital adequacy in relation to its risk profile and has a comprehensive strategy for maintaining appropriate capital levels.

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

### **Policy Statement on Equity Investments in Banks and Bank Holding Companies**

On September 19, 2008, the Board approved a policy statement to provide additional guidance on the Board’s position on the types of minority equity investments in banks and bank holding companies that would not constitute “control” for purposes of the Bank Holding Company Act. The guidance

covers director representation, total equity ownership, and consultations with management and discusses the permissible extent of a noncontrolling investment for each of these areas. The guidance also reiterates that control determinations are based on all the facts and circumstances surrounding an investor's investment in and relationship with a banking organization.

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

### **Systemic-Risk Exceptions for Federal Deposit Insurance Corporation Guarantees**

On October 13, 2008, the Board approved a proposal to broadly invoke the systemic-risk exception to the least-cost-resolution requirements in the Federal Deposit Insurance Act. Under the act, the Federal Deposit Insurance Corporation (FDIC) is generally required to resolve troubled depository institutions in a manner that is least costly to the deposit insurance fund. Invoking the systemic-risk exception allowed the FDIC to temporarily provide guarantees for new senior debt issued by insured depository institutions and their holding companies and for non-interest-bearing transaction deposit accounts at insured depository institutions. The FDIC provided the temporary guarantees in connection with the Department of the Treasury's capital purchase program that was announced on October 14, 2008.

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

On November 23, 2008, the Board approved a proposal to invoke the systemic-risk exception to allow the FDIC, with the Department of the Treas-

ury (Treasury), to provide protection against unusually large losses on a designated pool of Citigroup Inc. assets. The protection was one aspect of a package of coordinated actions by the Board, FDIC, and Treasury (discussed under "Special Liquidity and Other Facilities") that reflect the U.S. government's commitment to supporting financial market stability and restoring vigorous economic growth.

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

NOTE: On January 15, 2009, the Board approved a proposal to similarly invoke the systemic-risk exception to allow the FDIC, with Treasury, to provide protection against unusually large losses on a designated pool of Bank of America Corporation assets, as part of a package of coordinated actions by the Board, FDIC, and Treasury.

### **Interagency Statement on Meeting the Needs of Creditworthy Borrowers**

On November 5, 2008, the Board, acting with the Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, and Office of Thrift Supervision, approved an interagency statement to emphasize the need for banking organizations and their supervisors to work together to ensure that the needs of creditworthy borrowers are being met during the ongoing period of financial and economic stress. The statement encourages banking organizations to lend to creditworthy borrowers, engage in capital planning, work with borrowers to avoid preventable foreclosures, and structure compensation incentives to support prudent lending and discourage excessive risk-taking.

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

### **Memorandum of Understanding with the Commodity Futures Trading Commission and the Securities and Exchange Commission on Credit Default Swaps**

*On November 14, 2008*, the Board approved a memorandum of understanding with the Commodity Futures Trading Commission and the Securities and Exchange Commission that reflects the intent of the parties to cooperate, coordinate, and share information in carrying out their respective responsibilities and exercising their respective authorities with regard to central counterparties for credit default swaps. The memorandum states that such efforts are important in maintaining effective oversight; fostering stability in the market for credit default swaps and in the financial system as a whole; and promoting compliance with banking, commodities, and securities laws.

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

### **Policy on Payment System Risk**

[Docket Nos. OP-1345 and OP-1346]

*On December 13, 2008*, the Board approved revisions to part II of its Policy on Payment System Risk to improve intraday liquidity management and payment flows for the banking system and to help mitigate the credit exposures of Federal Reserve Banks from daylight overdrafts. The revisions include a new approach that explicitly recognizes the role of the central bank in providing intraday balances and credit to healthy

depository institutions, a zero fee for collateralized daylight overdrafts, a 50-basis-point (annual rate) charge for uncollateralized daylight overdrafts, and a biweekly daylight-overdraft-fee waiver of \$150. The Board also approved an interim policy change for foreign banking organizations that relates to the calculation of the amount to be deducted from daylight-overdraft fees and early implementation of a streamlined procedure for maximum daylight-overdraft capacity. The interim policy change is effective March 26, 2009. The other revisions will be effective in either late 2010 or early 2011; a specific date will be announced at least 90 days in advance. In addition, the Board decided not to pursue a proposal to change the daylight-overdraft posting rules but stated that it will reconsider the proposal in the future.

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

### **Interagency Questions and Answers regarding Community Reinvestment**

[Docket No. OP-1349]

*On December 17, 2008*, the Board, acting with the Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, and Office of Thrift Supervision, approved a final notice of new and revised Interagency Questions and Answers regarding Community Reinvestment. Among other new topics, the questions and answers provide guidance on (1) consideration by the agencies of a majority-owned financial institution's activities in cooperation with a minority- or women-owned financial institution or low-income credit union and (2) how an institution can demonstrate that investments in nationwide

community development funds meet the geographic requirements of the Community Reinvestment Act. The agencies' revisions to existing questions and answers include, as additional examples of community development services, foreclosure prevention programs for low- or moderate-income homeowners and credit counseling to help low- or moderate-income borrowers avoid foreclosure. The interagency questions and answers are effective January 6, 2009, and supersede all previously published questions and answers.

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

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

Against the background of continued fragility in financial markets, the Board established special liquidity facilities and authorized other initiatives in 2008 to address financial strains and support critical institutions. Unless otherwise indicated, the facilities and initiatives were established for the Federal Reserve Bank of New York and under section 13(3) of the Federal Reserve Act, which permits the Board, in unusual and exigent circumstances, to authorize Reserve Banks to extend credit to individuals, partnerships, or corporations that are unable to obtain adequate credit accommodations from other banking institutions. Also unless otherwise indicated, all facilities and initiatives authorized before August 31, 2008, were approved by the unanimous vote of Chairman Bernanke, Vice Chairman Kohn, and Governors Warsh, Kroszner, and Mishkin. After that date, all facilities and initiatives in 2008 were approved by the unanimous vote of Chairman Bernanke, Vice Chairman

Kohn, and Governors Warsh, Kroszner, and Duke.

### **Special Liquidity Facilities**

#### **Term Securities Lending Facility**

*On March 11, 2008*, the Board and the Federal Open Market Committee (FOMC) approved the establishment of the Term Securities Lending Facility (TSLF) to strengthen the financing position of primary dealers and foster improved conditions in financial markets more generally. Using an auction process, the facility lends up to \$200 billion of Treasury securities to primary dealers for a term of 28 days (previous practice was to lend overnight) in transactions secured by a pledge of other securities.

*On July 24, 2008*, the Board and the FOMC extended their authorizations for the TSLF until January 30, 2009.

*On September 14, 2008*, the Board and the FOMC broadened the collateral accepted under the TSLF to include all investment-grade debt securities.

*On November 24, 2008*, the Board and the FOMC extended their authorizations for the TSLF until April 30, 2009.

NOTE: *On January 27, 2009*, the Board and the FOMC extended their authorizations for the TSLF until October 30, 2009.

#### **Primary Dealer Credit Facility**

*On March 16, 2008*, the Board approved the establishment of the Primary Dealer Credit Facility (PDCF) to bolster market liquidity, promote orderly market functioning, and improve the ability of primary dealers to provide financing to participants in securitiza-

tion markets. Under the facility, overnight loans to primary dealers may be collateralized by a broad range of investment-grade debt securities.

*On July 24, 2008*, the Board extended its authorization for the PDCF until January 30, 2009.

*On September 14, 2008*, the Board broadened the collateral accepted by the PDCF to closely match the types of collateral that may be pledged in the tri-party funding arrangements of the major clearing banks.

*On September 21, 2008*, the Board authorized extensions of credit to the U.K. broker-dealer subsidiaries of Goldman Sachs, Morgan Stanley, and Merrill Lynch and to the primary-dealer subsidiaries of these firms. Among other terms and conditions, credit extensions under these authorizations must be secured by the types of collateral accepted (1) at the PDCF, for the U.K. broker-dealer subsidiaries, and (2) at the primary credit facility for depository institutions or at the PDCF, for the primary-dealer subsidiaries.

*On November 23, 2008*, the Board authorized extensions of credit to the London-based broker-dealer subsidiary of Citigroup Inc. under the same terms and conditions.

*On November 24, 2008*, the Board extended its authorization for the PDCF until April 30, 2009.

NOTE: *On January 27, 2009*, the Board extended its authorization for the PDCF until October 30, 2009.

#### Term Auction Facility

*On July 28, 2008*, the Board approved the establishment of auctions for 84-day

Term Auction Facility (TAF) loans, as a complement to the previously established auctions for 28-day TAF loans. The Board had initially established the TAF in December 2007 to provide depository institutions with a facility for obtaining advances from their local Reserve Banks at interest rates determined through auctions. By increasing depository institutions' access to funding, the TAF supports the ability of such institutions to meet the credit needs of their customers. The Board authorized the TAF under section 10B of the Federal Reserve Act, which permits (under certain terms and conditions) advances to individual member banks. The Federal Open Market Committee made coincident changes to its dollar-swap lines with several other central banks to accommodate similar auctions by those central banks of 84-day dollar loans.

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

*On September 19, 2008*, the Board approved the establishment of the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF) for the Federal Reserve Bank of Boston to provide funding to U.S. depository institutions and bank holding companies to help finance their purchases of high-quality asset-backed commercial paper from money market mutual funds. The facility is designed to assist money funds that hold such paper in meeting redemption demands from investors and to foster liquidity in asset-backed commercial paper markets and money markets more generally. The Board authorized the AMLF under sections 13(3) and 10B of the Federal Reserve Act (section 10B permits, under certain

terms and conditions, advances to individual member banks).

*On November 24, 2008*, the Board extended its authorization for the AMLF until April 30, 2009.

NOTE: *On January 27, 2009*, the Board extended its authorization for the AMLF until October 30, 2009.

#### Commercial Paper Funding Facility

*On October 7, 2008*, the Board approved the establishment of the Commercial Paper Funding Facility (CPFF) to provide a liquidity backstop to U.S. issuers of commercial paper (CP) through a special-purpose vehicle (SPV) that purchases three-month unsecured and asset-backed CP directly from eligible issuers. The CPFF removes much of the risk that eligible issuers will not be able to roll over their maturing CP, thereby encouraging investors to engage in term lending in the CP market. The CPFF is intended to improve liquidity in short-term funding markets, thus increasing the availability of credit for businesses and households. The SPV will stop purchasing CP on April 30, 2009, unless the Board extends the facility, and the SPV will continue to be funded by the Federal Reserve until the underlying assets mature.

*On October 13, 2008*, the Board approved additional details regarding the CPFF's implementation on October 27, 2008.

*On December 25, 2008*, the Board approved setting the interest rate on discount window loans to the CPFF's SPV at the maximum rate within the target range for the federal funds rate, if the target federal funds rate is a range of rates rather than a specific rate.

NOTE: *On January 27, 2009*, the Board extended its authorization for the CPFF until October 30, 2009.

#### Money Market Investor Funding Facility

*On October 21, 2008*, the Board approved the establishment of the Money Market Investor Funding Facility (MMIFF) to support a private-sector initiative designed to provide liquidity to U.S. money market investors, thus increasing their ability to meet redemption requests and their willingness to invest in money market instruments. Improved money market conditions in turn enhance the ability of banks and other financial intermediaries to accommodate the credit needs of businesses and households. Under the facility, the Federal Reserve provides senior secured funding to a series of private-sector special-purpose vehicles (SPVs). Each SPV purchases eligible money market instruments from eligible money market investors using financing from the facility and from the issuance of asset-backed commercial paper to investors. The SPVs will stop purchasing money market instruments on April 30, 2009, unless the Board extends the facility, and the SPVs will continue to be funded by the Federal Reserve until the underlying assets mature.

*On December 24, 2008*, the Board approved changes to the MMIFF that (1) expand the set of eligible investors that may participate in the facility and (2) adjust several of the facility's economic parameters to ensure that it remains a viable source of backup liquidity for money market investors even if money market interest rates are at low levels.

NOTE: *On January 27, 2009*, the Board extended its authorization for the MMIFF until October 30, 2009.

#### Term Asset-Backed Securities Loan Facility

*On November 24, 2008*, the Board approved the establishment of the Term Asset-Backed Securities Loan Facility (TALF) to support the issuance of asset-backed securities (ABS) collateralized by consumer and small business loans. The facility is designed to increase credit availability and support economic activity by facilitating renewed issuance of consumer and small business ABS at more-normal interest rate spreads. The TALF will lend up to \$200 billion on a nonrecourse basis to holders of certain AAA-rated ABS. Using funds from the Troubled Asset Relief Program, the Department of the Treasury (Treasury) will provide \$20 billion of credit protection to the Federal Reserve in connection with the facility.

*On December 19, 2008*, the Board approved revisions to the terms and conditions of the TALF.

NOTE: *On February 6, 2009*, and *February 23, 2009*, the Board approved further revisions to the TALF. *On March 3, 2009*, the Board and Treasury announced the launch of the TALF for eligible holders of ABS that are backed by newly and recently originated auto, credit card, and student loans and Small Business Administration-guaranteed small business loans. *On March 19, 2009*, the Board expanded the set of eligible collateral for loans under the TALF to include ABS backed by mortgage-servicing advances, loans or leases relating to business equipment, leases of vehicle fleets, and non-auto floorplan loans, and expanded the list of eligible auto-related receivables.

#### Other Initiatives

##### The Bear Stearns Companies Inc.

*On March 14, 2008*, the Board approved temporary emergency financing for The Bear Stearns Companies Inc. through an arrangement with JPMorgan Chase & Co. Bear Stearns, a major investment bank and primary dealer, was on the brink of failure after losing the confidence of investors and finding itself without access to short-term financing markets. The Board judged that a disorderly failure of Bear Stearns would threaten overall financial stability and would most likely have significant adverse implications for the U.S. economy.

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

*On March 16, 2008*, the Board authorized a nonrecourse loan of up to \$30 billion that would be fully collateralized by a pool of Bear Stearns assets to facilitate JPMorgan's acquisition of Bear Stearns. The acquisition was completed on June 26, 2008.

##### Provisional Lending to Fannie Mae and Freddie Mac

*On July 13, 2008*, the Board authorized lending to the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac) if necessary. The authorization was made under section 13(13) of the Federal Reserve Act, which permits (under certain terms and conditions) advances to an individual, a partnership, or a corporation on obligations of the United States, and is intended to supplement the Department of the Treasury's existing lending authority and to help ensure the ability of Fan-

nie Mae and Freddie Mac to promote the availability of home mortgage credit during a period of stress in financial markets. No lending took place, and the companies were placed in conservatorship on September 7, 2008.

#### American International Group, Inc.

*On September 16, 2008*, the Board approved, with the support of the Department of the Treasury (Treasury), a secured loan of up to \$85 billion for the American International Group, Inc. (AIG) to assist AIG in meeting its obligations as they become due and to facilitate a process under which it can sell certain businesses in an orderly manner with the least possible disruption to the overall economy. The condition of AIG, a large complex financial institution, had deteriorated rapidly, and a disorderly failure of AIG would likely have systemic implications and potentially adverse effects on the economy. The loan is subject to terms and conditions that protect the interests of the U.S. government and taxpayers.

*On October 6, 2008*, the Board authorized borrowing up to \$37.8 billion in securities from certain regulated U.S. insurance subsidiaries of AIG, in return for cash collateral. The authorization applied to investment-grade fixed-income securities previously lent by the insurance subsidiaries to third parties. This facility was subsequently repaid and terminated on December 12, 2008.

*On November 7, 2008*, the Board and Treasury approved a restructuring of the government's financial support to AIG. The new measures are intended to establish a more durable capital structure, resolve liquidity issues, facilitate AIG's execution of its plan to sell certain businesses in an orderly manner,

promote market stability, and protect the interests of the U.S. government and taxpayers. They include a purchase of AIG equity by Treasury, modified terms for the Federal Reserve's existing AIG liquidity facility, and two new Federal Reserve lending facilities that each support a distinct AIG portfolio of mortgage-related securities.

NOTE: *On March 2, 2009*, the Board and Treasury announced an additional restructuring for AIG, which continues to face significant challenges. The plan is intended to help stabilize the company and, in turn, the financial system.

#### Citigroup Inc.

*On November 23, 2008*, the Board approved financing, if necessary, for Citigroup Inc. that would backstop residual risk in a pool of approximately \$306 billion of Citigroup assets secured by residential and commercial real estate and certain other assets. Market anxiety about the condition of Citigroup had intensified, and concerns about the firm's access to funding continued to mount. The residual financing was approved as part of a package of coordinated actions with the Department of the Treasury (Treasury) and the Federal Deposit Insurance Corporation (FDIC). These actions included Treasury and the FDIC providing (1) protection against the possibility of unusually large losses on the Citigroup asset pool in return for preferred shares of Citigroup and (2) Treasury investing \$20 billion in Citigroup under the Troubled Asset Relief Program in return for additional preferred shares.

#### Bank of America Corporation

NOTE: *On January 15, 2009*, the Board approved an agreement with Bank of America Corporation that is similar to

the Citigroup arrangement of November 2008. Under the agreement, Treasury and the FDIC will provide protection against the possibility of unusually large losses on a pool of approximately \$118 billion of financial instruments, in return for preferred shares in Bank of America. If necessary, the Federal Reserve Bank of Richmond will provide nonrecourse credit to Bank of America against this pool of financial instruments.

### ***Discount Rates for Depository Institutions in 2008***

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

#### **Primary Credit**

Primary credit, the Federal Reserve's main lending program, is extended at a rate above the federal funds rate target set by the Federal Open Market Committee (FOMC). It is typically made available, with minimal administration and for very short terms, as a backup source of liquidity to depository institutions that, in the judgment of the lending Federal Reserve Bank, are in generally sound financial condition.

During 2008, the Board approved eight reductions in the primary credit rate, bringing the rate from 4¾ percent to ½ percent. One of these reductions came on March 16, when the Board approved a narrowing of the spread of the primary credit rate over the FOMC's target rate to 25 basis points,

from 50 basis points, and announced a temporary change to the Reserve Banks' discount window lending practices to allow the provision of term financing for as long as 90 days.<sup>1</sup> These changes remained in effect at the end of 2008. In the remaining seven instances, the Board reached its determinations on the primary credit rate recommendations of the Reserve Bank boards of directors in conjunction with the FOMC's decisions to lower the target federal funds rate from 4¼ percent to a range of 0 to ¼ percent. Monetary policy developments are reviewed more fully in other parts of this report (see the section "Monetary Policy and Economic Developments" and the minutes of FOMC meetings held in 2008).

#### **Secondary and Seasonal Credit**

Secondary credit is available in appropriate circumstances to depository institutions that do not qualify for primary credit. The secondary credit rate is set at a spread above the primary credit rate. Throughout 2008, the spread was set at 50 basis points.

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

At year-end, the secondary and seasonal credit rates were 1 percent and 1.05 percent, respectively.<sup>2</sup>

1. The spread of the primary credit rate over the FOMC's target rate is usually 100 basis points. In 2007, the Board had approved a narrowing of this spread to 50 basis points.

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

### Term Auction Facility Credit

In December 2007, the Federal Reserve established a temporary Term Auction Facility (TAF). Under the TAF, the Federal Reserve auctions term funds to depository institutions that are in generally sound financial condition and are eligible to borrow under the primary credit program. The amount of each auction is determined in advance by the Federal Reserve, and the interest rate on TAF credit is determined by the bidding process as the rate at which all bids can be fulfilled, up to the maximum auction amount and subject to a minimum bid rate. The Federal Reserve conducted regular auctions of 28- and 84-day TAF credit in 2008.<sup>3</sup>

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

About every two weeks during 2008, the Board approved proposals by the 12 Reserve Banks to maintain the formulas for computing the secondary and seasonal credit rates as well as the auction method by which the TAF credit rate is set. Details on the eight actions by the Board to approve changes in the primary credit rate are provided below.

*January 22, 2008.* Effective this date, the Board approved actions taken by the directors of the Federal Reserve Banks of Boston, New York, Philadelphia, Cleveland, Richmond, Chicago, Minneapolis, Dallas, and San Francisco to lower the rate on discounts and advances under the primary credit program by  $\frac{3}{4}$  percentage point, to 4 percent. The same decrease was approved for the Federal Reserve Bank of St.

Louis, effective January 23, 2008. The Board also approved identical actions subsequently taken by the directors of the Federal Reserve Banks of Atlanta and Kansas City, effective January 24, 2008.

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

*January 30, 2008.* Effective this date, the Board approved actions taken by the directors of the Federal Reserve Banks of Boston, New York, Philadelphia, Cleveland, Atlanta, Chicago, Kansas City, and San Francisco to lower the rate on discounts and advances under the primary credit program by  $\frac{1}{2}$  percentage point, to  $3\frac{1}{2}$  percent. The same decrease was approved for the Federal Reserve Bank of St. Louis, effective January 31, 2008. The Board also approved identical actions subsequently taken by the directors of the Federal Reserve Banks of Richmond, Minneapolis, and Dallas, effective January 31, 2008.

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

*March 16, 2008.* Effective this date, the Board approved an action taken by the directors of the Federal Reserve Bank of New York to lower the rate on discounts and advances under the primary credit program by  $\frac{1}{4}$  percentage point, to  $3\frac{1}{4}$  percent.<sup>4</sup> The Board also approved identical actions subsequently taken by the directors of the Federal Reserve Banks of Boston, Cleveland, Richmond, Chicago, Minneapolis, Kan-

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

4. As March 16, 2008, was a Sunday, the new primary credit rate for the Federal Reserve Bank of New York was first applied on the next business day, Monday, March 17.

sas City, and San Francisco, effective March 17, 2008.

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

*March 18, 2008.* Effective this date, the Board approved actions taken by the directors of the Federal Reserve Banks of Boston, New York, Cleveland, Chicago, Kansas City, and San Francisco to lower the rate on discounts and advances under the primary credit program by  $\frac{3}{4}$  percentage point, to  $2\frac{1}{2}$  percent. The Board also approved identical actions subsequently taken by the directors of the Federal Reserve Banks of Richmond and Minneapolis, effective March 19, 2008. The Board also approved actions taken to lower the rate on discounts and advances under the primary credit program by 1 percentage point, to  $2\frac{1}{2}$  percent, by the directors of the Federal Reserve Bank of Dallas, effective March 18, 2008; the Federal Reserve Banks of Atlanta and St. Louis, effective March 19, 2008; and the Federal Reserve Bank of Philadelphia, effective March 20, 2008.

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

*April 30, 2008.* Effective this date, the Board approved actions taken by the directors of the Federal Reserve Banks of New York, Cleveland, Atlanta, Chicago, Kansas City, and San Francisco to lower the rate on discounts and advances under the primary credit program by  $\frac{1}{4}$  percentage point, to  $2\frac{1}{4}$  percent. The same decrease was approved for the Federal Reserve Bank of St. Louis, effective May 1, 2008. The Board also approved identical actions subsequently taken by the directors of the Federal Reserve Banks of Boston,

Philadelphia, Richmond, Minneapolis, and Dallas, effective May 1, 2008.

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

*October 8, 2008.* Effective this date, the Board approved actions taken by the directors of the Federal Reserve Banks of Boston, New York, Philadelphia, Cleveland, Richmond, Atlanta, Chicago, Minneapolis, Kansas City, Dallas, and San Francisco to lower the rate on discounts and advances under the primary credit program by  $\frac{1}{2}$  percentage point, to  $1\frac{3}{4}$  percent. The same decrease was approved for the Federal Reserve Bank of St. Louis, effective October 9, 2008.

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

*October 29, 2008.* Effective this date, the Board approved actions taken by the directors of the Federal Reserve Banks of Boston, New York, Cleveland, Chicago, Kansas City, and San Francisco to lower the rate on discounts and advances under the primary credit program by  $\frac{1}{2}$  percentage point, to  $1\frac{1}{4}$  percent. The same decrease was approved for the Federal Reserve Bank of St. Louis, effective October 30, 2008. The Board also approved identical actions subsequently taken by the directors of the Federal Reserve Banks of Philadelphia, Richmond, Minneapolis, and Dallas, effective October 30, 2008; and the Federal Reserve Bank of Atlanta, effective October 31, 2008.

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

*December 16, 2008.* Effective this date, the Board approved actions taken by the directors of the Federal Reserve Banks of New York, Cleveland, Richmond,

Atlanta, Chicago, Minneapolis, Kansas City, and San Francisco to lower the rate on discounts and advances under the primary credit program by  $\frac{3}{4}$  percentage point, to  $\frac{1}{2}$  percent. The same decrease was approved for the Federal Reserve Bank of St. Louis, effective December 17, 2008. The Board also approved identical actions subsequently

taken by the directors of the Federal Reserve Banks of Boston and Dallas, effective December 17, 2008; and the Federal Reserve Bank of Philadelphia, effective December 18, 2008.

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



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## *Minutes of Federal Open Market Committee Meetings*

The policy actions of the Federal Open Market Committee, contained in the minutes of its meetings, are presented in the Annual Report of the Board of Governors pursuant to the requirements of section 10 of the Federal Reserve Act. That section provides that the Board shall keep a complete record of the actions taken by the Board and by the Federal Open Market Committee on all questions of policy relating to open market operations, that it shall record therein the votes taken in connection with the determination of open market policies and the reasons underlying each policy action, and that it shall include in its annual report to Congress a full account of such actions.

The minutes of the meetings contain the votes on the policy decisions made at those meetings as well as a summary of the information and discussions that led to the decisions. In addition, four times a year, starting with the October 2007 Committee meeting, a Summary of Economic Projections is published as an addendum to the minutes. The descriptions of economic and financial conditions in the minutes and the Summary of Economic Projections are based solely on the information that was available to the Committee at the time of the meetings.

Members of the Committee voting for a particular action may differ among themselves as to the reasons for their votes; in such cases, the range of their views is noted in the minutes. When members dissent from a decision, they are identified in the minutes and a sum-

mary 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.<sup>1</sup> Changes in the instruments during the year are reported in the minutes for the individual meetings.

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1. As of January 1, 2008, the Federal Reserve Bank of New York was operating under the Domestic Policy Directive approved at the December 11, 2007, Committee meeting. The other policy instruments (the Authorization for Domestic Open Market Operations, the Authorization for Foreign Currency Operations, the Foreign Currency Directive, and Procedural Instructions with Respect to Foreign Currency Operations) in effect as of January 1, 2008, were approved at the January 30–31, 2007, meeting.

### Meeting Held on January 29–30, 2008

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, January 29, 2008 at 2:00 p.m. and continued on Wednesday, January 30, 2008 at 9:00 a.m.

*Present:*

Mr. Bernanke, Chairman  
Mr. Geithner, Vice Chairman  
Mr. Fisher  
Mr. Kohn  
Mr. Kroszner  
Mr. Mishkin  
Ms. Pianalto  
Mr. Plosser  
Mr. Stern  
Mr. Warsh

Messrs. Evans, Lacker, and Lockhart, and Ms. Yellen, Alternate Members of the Federal Open Market Committee

Messrs. Hoenig, Poole, and Rosengren, Presidents of the Federal Reserve Banks of Kansas City, St. Louis, and Boston, respectively

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

Messrs. Connors, English, and Kamin, Ms. Mester, Messrs. Rosenblum, Slifman, Sniderman, Tracy, and Wilcox, Associate Economists

Mr. Dudley, Manager, System Open Market Account

Mr. Struckmeyer,<sup>2</sup> Deputy Staff Director, Office of Staff Director for Management, Board of Governors

2. Attended Wednesday's session.

Mr. Parkinson,<sup>3</sup> Deputy Director, Division of Research and Statistics, Board of Governors

Mr. Clouse, Senior Associate Director, Division of Monetary Affairs, Board of Governors

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

Ms. Barger<sup>3</sup> and Mr. Greenlee,<sup>3</sup> Associate Directors, Division of Banking Supervision and Regulation, Board of Governors

Mr. Gibson,<sup>3</sup> Deputy Associate Director, Division of Research and Statistics, Board of Governors

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

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

Messrs. Durham and Perli, Assistant Directors, Division of Monetary Affairs, Board of Governors

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

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

Mr. Bassett,<sup>4</sup> Senior Economist, Division of Monetary Affairs, Board of Governors

Mr. Doyle,<sup>4</sup> Senior Economist, Division of International Finance, Board of Governors

Ms. Kusko,<sup>4</sup> Senior Economist, Division of Research and Statistics, Board of Governors

3. Attended portion of the meeting relating to the analysis of policy issues raised by financial market developments.

4. Attended portion of the meeting relating to the economic outlook and monetary policy decision.

Mr. Luecke, Senior Financial Analyst, Division of Monetary Affairs, Board of Governors

Federal Reserve Bank of Richmond, as alternate.

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

Sandra Pianalto, President of the Federal Reserve Bank of Cleveland, with Charles L. Evans, President of the Federal Reserve Bank of Chicago, as alternate.

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

Richard W. Fisher, President of the Federal Reserve Bank of Dallas, with Dennis P. Lockhart, President of the Federal Reserve Bank of Atlanta, as alternate.

Ms. Green, First Vice President, Federal Reserve Bank of Richmond

Gary H. Stern, President of the Federal Reserve Bank of Minneapolis, with Janet L. Yellen, President of the Federal Reserve Bank of San Francisco, as alternate.

Messrs. Fuhrer and Judd, Executive Vice Presidents, Federal Reserve Banks of Boston and San Francisco, respectively

Messrs. Altig and Angulo,<sup>3</sup> Mses. Hirtle<sup>3</sup> and Mosser, Messrs. Peters<sup>3</sup> and Rasche, Senior Vice Presidents, Federal Reserve Banks of Atlanta, New York, New York, New York, New York, and St. Louis, respectively

By unanimous vote, the following officers of the Federal Open Market Committee were selected to serve until the selection of their successors at the first regularly scheduled meeting of the Committee in 2009:

Mr. Hakkio, Senior Adviser, Federal Reserve Bank of Kansas City

Ben S. Bernanke	Chairman
Timothy F. Geithner	Vice Chairman
Brian F. Madigan	Secretary and Economist

Mr. Krane, Vice President, Federal Reserve Bank of Chicago

Deborah J. Danker	Deputy Secretary
David W. Skidmore	Assistant Secretary
Michelle A. Smith	Assistant Secretary
Scott G. Alvarez	General Counsel
Thomas C. Baxter, Jr.	Deputy General Counsel

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

Richard M. Ashton	Assistant General Counsel
D. Nathan Sheets	Economist
David J. Stockton	Economist

In the agenda for this meeting, it was reported that advices of the election of the following members and alternate members of the Federal Open Market Committee for a term beginning January 29, 2008 had been received and that these individuals had executed their oaths of office.

The elected members and alternate members were as follows:

Timothy F. Geithner, President of the Federal Reserve Bank of New York, with Christine M. Cumming, First Vice President of the Federal Reserve Bank of New York, as alternate.

Charles I. Plosser, President of the Federal Reserve Bank of Philadelphia, with Jeffrey M. Lacker, President of the

Thomas A. Connors, William B. English, Steven B. Kamin, Loretta J. Mester, Arthur J. Rolnick, Harvey Rosenblum, Lawrence Slifman, Mark S. Sniderman, Joseph S. Tracy, and David W. Wilcox, Associate Economists

By unanimous vote, the Committee made a few amendments to its rules and to the Program for Security of FOMC Information. The amendments primarily addressed the Committee's practice of approving the minutes via notation vote, attendance at Committee meet-

ings, and access to Committee information by System employees.

By unanimous vote, the Federal Reserve Bank of New York was selected to execute transactions for the System Open Market Account.

By unanimous vote, William C. Dudley was selected to serve at the pleasure of the Committee as Manager, System Open Market Account, on the understanding that his selection was subject to being satisfactory to the Federal Reserve Bank of New York.

By unanimous vote, the Authorization for Domestic Open Market Operations was reaffirmed in the form shown below:

#### Authorization for Domestic Open Market Operations (Reaffirmed January 29, 2008)

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

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

(b) To buy U.S. Government securities, obligations that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States, from dealers for the account of the System Open Market Account under agreements for repurchase of such securities or obligations in 65 business days or less, at rates that, unless otherwise expressly authorized by the

Committee, shall be determined by competitive bidding, after applying reasonable limitations on the volume of agreements with individual dealers.

(c) To sell U.S. Government securities and obligations that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States to dealers for System Open Market Account under agreements for the resale by dealers of such securities or obligations in 65 business days or less, at rates that, unless otherwise expressly authorized by the Committee, shall be determined by competitive bidding, after applying reasonable limitations on the volume of agreements with individual dealers.

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

3. In order to ensure the effective conduct of open market operations, while assisting in the provision of short-term investments for foreign and international accounts maintained at the Federal Reserve Bank of New York and accounts maintained at the Federal Reserve Bank of New York as fiscal agent of the United States pursuant to Section 15 of the Federal Reserve Act, the Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York (a) for System Open Market Account, to sell U.S. Government securities to such accounts on the bases set forth in paragraph 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.

4. In the execution of the Committee's decision regarding policy during any intermeeting period, the Committee authorizes and directs the Federal Reserve Bank of New York, upon the instruction of the Chairman of the Committee, to adjust somewhat in exceptional circumstances the degree of pressure on reserve positions and hence the intended federal funds rate. Any such adjustment shall be made in the context of the Committee's discussion and decision at its most recent meeting and the Committee's long-run objectives for price stability and sustainable economic growth, and shall be based on economic, financial, and monetary developments during the intermeeting period. Consistent with Committee practice, the Chairman, if feasible, will consult with the Committee before making any adjustment.

By unanimous vote, the Committee approved the Authorization for Foreign Currency Operations with an amendment to paragraph 1.D. regarding the maximum open position in all foreign currencies. Accordingly, the Authorization for Foreign Currency Operations was adopted, as shown below:

**Authorization for  
Foreign Currency Operations  
(Amended January 29, 2008)**

1. The Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York, for System Open Market Account, to the extent necessary to carry out the Committee's foreign currency directive and express authorizations by the Committee pursuant thereto, and in conformity

with such procedural instructions as the Committee may issue from time to time:

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

Canadian dollars	Mexican pesos
Danish kroner	Norwegian kroner
Euro	Swedish kronor
Pounds sterling	Swiss francs
Japanese yen	

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

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

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

2. The Federal Open Market Committee directs the Federal Reserve Bank of New York to maintain reciprocal currency arrangements ("swap" arrangements) for the System Open Market Account for periods up to a maximum of 12 months with the following foreign banks, which are among those designated by the Board of Governors

of the Federal Reserve System under Section 214.5 of Regulation N, Relations with Foreign Banks and Bankers, and with the approval of the Committee to renew such arrangements on maturity:

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

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

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

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

5. Foreign currency holdings shall be invested to ensure that adequate liquidity is maintained to meet anticipated needs and so that each currency portfolio shall generally have an average duration of no more than 18 months (calculated as Macaulay duration). Such investments may include buying or selling outright obligations of, or fully guaranteed as to principal and interest by, a for-

foreign government or agency thereof; buying such securities under agreements for repurchase of such securities; selling such securities under agreements for the resale of such securities; and holding various time and other deposit accounts at foreign institutions. In addition, when appropriate in connection with arrangements to provide investment facilities for foreign currency holdings, U.S. Government securities may be purchased from foreign central banks under agreements for repurchase of such securities within 30 calendar days.

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

7. The Chairman is authorized:

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

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

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

8. Staff officers of the Committee are authorized to transmit pertinent information on System foreign currency operations to appropriate officials of the Treasury Department.

9. All Federal Reserve Banks shall participate in the foreign currency operations for System Account in accordance with paragraph 3G(1) of the Board of Governors' Statement of Procedure with Respect to Foreign Relationships of Federal Reserve Banks dated January 1, 1944.

By unanimous vote, the Foreign Currency Directive was reaffirmed in the form shown below:

#### Foreign Currency Directive (Reaffirmed January 29, 2008)

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

2. To achieve this end the System shall:

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

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

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

3. Transactions may also be undertaken:

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

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

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

4. System foreign currency operations shall be conducted:

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

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

C. In a manner consistent with the obligations of the United States in the Inter-

national Monetary Fund regarding exchange arrangements under IMF Article IV.

By unanimous vote, the Procedural Instructions with Respect to Foreign Currency Operations were reaffirmed in the form shown below:

#### Procedural Instructions with respect to Foreign Currency Operations (Reaffirmed January 29, 2008)

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

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

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

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

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

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

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

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

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

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

The Manager of the System Open Market Account reported on recent developments in foreign exchange markets. There were no open market operations in foreign currencies for the System's account in the period since the previous meeting. The Manager also reported on developments in domestic financial markets and on System open market operations in government securities and federal agency obligations during the period since the previous meeting. By unanimous vote, the Committee ratified these transactions.

The information reviewed at the January meeting, which included the advance data on the national income and product accounts for the fourth quarter, indicated that economic activity had decelerated sharply in recent months. The contraction in homebuilding intensified in the fourth quarter, the growth in consumer spending slowed, and survey measures of both consumer and business sentiment were at low levels. In addition, industrial production contracted in the fourth quarter. Conditions in the labor market deteriorated no-

ticeably, with private payroll employment posting a small decline in December and the unemployment rate rising. Readings on both headline and core inflation increased in recent months, although the twelve-month change in prices of core personal consumption expenditures in December was about the same as its year-earlier value.

On average, private nonfarm payroll employment in November and December rose at only about half of the average pace seen from July to October. Over 2007 as a whole, the deterioration in labor demand was most pronounced in the construction and financial activities industries, which had been hardest hit by the difficulties in the housing and mortgage markets. Manufacturing employment declined yet again in December, while the decrease in employment in retail trade nearly reversed the sizable increase in that sector recorded in November. Aggregate hours of production or nonsupervisory workers were unchanged in December. The unemployment rate rose to 5.0 percent in December after having been at or near 4.7 percent since September.

Industrial production declined in the fourth quarter, as a drag from motor vehicles and construction-related industries more than offset a positive contribution from other industries. Output in high-tech industries moderated in the fourth quarter, largely because of a deceleration in production of computers and semiconductors. Utilities output climbed for a second consecutive quarter, and mining output was boosted by increases in natural gas extraction and in crude oil.

The rise in real consumer spending moderated in the fourth quarter, with outlays on non-auto consumer goods increasing weakly. Spending on services rose solidly in November (the most recent month available), led by

energy services and commissions paid to stockbrokers, but warmer-than-usual temperatures in December likely damped expenditures for energy services in that month. Sales of light motor vehicles were moderate during the fourth quarter. Real disposable personal income was little changed in the fourth quarter, held down by higher consumer energy prices. Also, the wealth-to-income ratio ticked down in the third quarter, and appeared likely to decline again in the fourth quarter, as equity prices had fallen since the end of the third quarter and available indicators pointed to continued declines in house prices in the fourth quarter. In December, readings on consumer sentiment remained at relatively low levels by historical standards.

Both single-family housing starts and permit issuance fell in December. Meanwhile, multifamily housing starts plunged in December, but permit issuance pointed to a rebound in multifamily starts in the near term. New home sales dropped in November and December after having held relatively steady since August, keeping inventories of unsold homes at elevated levels. Sales of existing homes also moved down in December but, on balance, had declined less in recent months than sales of new homes. Demand for housing through the end of 2007 likely continued to be restrained by tight financing conditions for jumbo and nonprime mortgages.

Real spending on equipment and software rose at a sluggish rate in the fourth quarter after having posted a solid increase in the third quarter. Sales of medium and heavy trucks edged up after falling to a four-year low. Spending on high-tech capital goods increased at a moderate pace over the second half of last year. Outside of the transportation and high-tech sectors, spending on equipment appeared to have declined

last quarter after having posted sizable gains over the summer. Orders and shipments rose somewhat in the fourth quarter, but imports in the first two months of the quarter were below their average in the third quarter. Nonresidential construction remained vigorous in the fourth quarter. However, indicators of future spending in this sector pointed to a slowdown in coming months, with a decline in architectural billings, a rise in retail-sector vacancy rates, and survey reports that contractors were experiencing more difficulty in obtaining funding. More generally, surveys of business conditions and sentiment deteriorated and suggested that capital spending would be reduced in the near term.

Real nonfarm inventory investment excluding motor vehicles appeared to have stepped up from its average rate over the first three quarters of 2007. In November, the ratio of manufacturing and trade book-value inventories (excluding motor vehicles) to sales ticked down.

The U.S. international trade deficit widened slightly in October and then more substantially in November, as increases in imports in both months more than offset increases in exports. The increases in imports almost entirely reflected a jump in the value of imported oil. Non-oil goods imports were boosted by a large increase in imports of consumer goods and small increases in several other categories, which more than offset a steep decline in imports of non-oil industrial supplies. Imports of automotive products and capital goods recorded modest gains, with the increase in capital goods primarily reflecting a jump in imports of telecommunications equipment. Imports of services grew strongly. Exports in both months were boosted by higher exports of services. Exports of industrial sup-

plies also recorded a strong gain, aided by a large increase in exports of fuels in November. Higher exports of semiconductors, aircraft, and machinery pushed up exports of capital goods, while exports of agricultural goods increased only slightly following a large jump in the third quarter. In contrast, exports of consumer goods fell from their third-quarter level.

Economic growth in the advanced foreign economies appeared to have slowed in the fourth quarter, with recent data on household expenditures and retail sales weakening on balance and consumers and businesses considerably less upbeat about growth prospects. In Japan, the estimate of real GDP growth in the third quarter was revised down, and business sentiment declined in December amidst concerns about high oil prices. In the euro area, retail sales growth declined in October and November, and consumer and business surveys in November and December pointed to economic weakness. In the United Kingdom, although real GDP grew solidly in the fourth quarter, the estimate of third-quarter real GDP growth was revised down. In Canada, indicators suggested that growth in economic activity moderated in the fourth quarter. Private employment shrank in December after having posted very strong growth in November. Incoming data on emerging-market economies pointed, on balance, to a slowing of growth in the fourth quarter. Overall, growth in emerging Asia appeared to have moderated somewhat in the fourth quarter, with trade balances declining in several countries as exports slowed. Readings on economic activity in Latin America were more mixed. Incoming data suggested that growth slowed in Mexico in the fourth quarter. In Brazil, third-quarter growth was solid, but indicators for the fourth quarter were

mixed. Economic activity appeared to be strong in Argentina in both the third and fourth quarters.

In the United States, headline consumer price inflation stepped up noticeably in November and December from the low rates posted in the summer. Part of the increase reflected the rapid rise in energy prices, but prices of core personal consumption expenditures (PCE) also moved up faster in those months than they had earlier in the year. The pickup in core PCE inflation over the second half of 2007 reflected an acceleration in prices that had been unusually soft earlier in the year, such as prices for apparel, prescription drugs, and nonmarket services. For the year as a whole, core PCE prices increased at about the same rate as they had in 2006. Household survey measures of expectations for year-ahead inflation picked up in November and remained at that level in December and January. Households' longer-term inflation expectations rose in December but ticked down in January. Average hourly earnings increased faster in November and December than they had in October, although over the twelve months that ended in December, this wage measure rose a bit more slowly than the elevated pace posted in 2006.

At its December meeting, the FOMC lowered its target for the federal funds rate 25 basis points, to  $4\frac{1}{4}$  percent. In addition, the Board of Governors approved a decrease of 25 basis points in the discount rate, to  $4\frac{3}{4}$  percent, leaving the gap between the federal funds rate target and the discount rate at 50 basis points. The Committee's statement noted that incoming information suggested that economic growth was slowing, reflecting the intensification of the housing correction and some softening in business and consumer spending. Moreover, strains in financial markets

had increased in recent weeks. The Committee indicated that its action, combined with the policy actions taken earlier, should help promote moderate growth over time. Readings on core inflation had improved modestly during the year, but elevated energy and commodity prices, among other factors, might put upward pressure on inflation. In this context, the Committee judged that some inflation risk remained and said that it would continue to monitor inflation developments carefully. Recent developments, including the deterioration in financial market conditions, had increased the uncertainty surrounding the outlook for economic growth and inflation. The Committee stated that it would continue to assess the effects of financial and other developments on economic prospects and would act as needed to foster price stability and sustainable economic growth.

Over the intermeeting period, the expected path of monetary policy over the next year as measured by money market futures rates tilted down sharply, primarily in response to softer-than-expected economic data releases. The Committee's action at its December meeting was largely anticipated by market participants, although some investors were surprised by the absence of any indication of accompanying measures to address strains in term funding markets. Some of that surprise was reversed the next day, following the announcement of a Term Auction Facility (TAF) and associated swap lines with the European Central Bank and the Swiss National Bank. The subsequent release of the minutes of the meeting elicited little market reaction. However, investors did mark down the expected path of policy in response to speeches by Federal Reserve officials; the speeches were interpreted as suggesting that signs of broader economic weak-

ness and additional financial strains would likely require an easier stance of policy. The Committee's decision to reduce the target federal funds rate 75 basis points on January 22 surprised market participants and led investors to mark down further the path of policy over the next few months. Consistent with the shift in the economic outlook, the revision in policy expectations, and the reduction in the target federal funds rate, yields on nominal Treasury coupon securities declined substantially over the period since the December FOMC meeting. The yield curve steepened somewhat further, with the two-year yield dropping more than the ten-year yield. Near-term inflation compensation increased in early January amid rising oil prices, but it retreated in later weeks, along with oil prices, and declined, on net, over the period.

Conditions in short-term funding markets improved notably over the intermeeting period, but strains remained. Spreads of rates on securities in interbank funding markets over risk-free rates narrowed somewhat following the announcement of the TAF on December 12 and eased considerably after year-end, although they remained at somewhat elevated levels. Spreads of rates on asset-backed commercial paper over risk-free rates also fell, on net, and the level of such paper outstanding increased in the first two weeks of January for the first time since August. In longer-term corporate markets, yields on investment-grade corporate bonds fell less than those on comparable-maturity Treasury securities, while yields on speculative-grade bonds rose considerably. As a result, corporate bond spreads climbed to their highest levels since early 2003, apparently reflecting increased concern among investors about the outlook for corporate credit quality over the next few years.

Nonetheless, gross bond issuance in December remained strong. Commercial bank credit expanded briskly in December, supported by robust growth in business loans and in nonmortgage loans to households, and in the face of survey reports of tighter lending conditions. Over the intermeeting period, spreads on conforming mortgages over comparable-maturity Treasury securities remained about flat, as did spreads on jumbo mortgages, although credit availability for jumbo-mortgage borrowers continued to be tight. Broad stock price indexes fell over the intermeeting period on perceptions of a deteriorating economic outlook and additional write-downs by financial institutions. Similar stresses were again evident in the financial markets of major foreign economies. The trade-weighted foreign exchange value of the dollar against major currencies declined slightly, on balance, over the intermeeting period.

Debt in the domestic nonfinancial sector was estimated to have increased somewhat more slowly in the fourth quarter than in the third. The rate of increase of nonfinancial business debt decelerated in the fourth quarter from its rapid third-quarter pace despite robust bond issuance as the rise in commercial and industrial lending moderated. Household mortgage debt expanded at a slow rate in the fourth quarter, reflecting continued weakness in home prices, declining home sales, and tighter credit conditions for some borrowers. Nonmortgage consumer credit appeared to expand at a moderate pace. In December, the increase in M2 was up slightly from its November pace, boosted primarily by inflows into the relative safety and liquidity of money market mutual funds. The rise in small time deposits moderated but remained elevated, as several thrift

institutions offered attractive deposit rates to secure funding. In contrast, liquid deposits continued to increase weakly and currency contracted noticeably, the latter apparently reflecting an ongoing trend in overseas demand away from U.S. dollar bank notes and towards the euro and other currencies.

In the forecast prepared for this meeting, the staff revised up slightly its estimated increase in aggregate economic activity in the fourth quarter of 2007 but revised down its projected increase for the first half of 2008. Although data on consumer spending and nonresidential construction activity for the fourth quarter had come in above the staff's expectations, most of the information received over the intermeeting period was weaker than had been previously expected. The drop in housing activity continued to intensify, conditions in labor markets appeared to have deteriorated noticeably near year-end, and factory output had weakened. Consumer confidence remained low, and indicators of business sentiment had worsened. Equity prices had also fallen sharply so far in 2008, and, while the functioning of money markets had improved, conditions in some other financial markets had become more restrictive. The staff projection showed the weakness in spending dissipating over the second half of 2008 and 2009, in response to the cumulative easing of monetary policy since August, the abatement of housing weakness, a lessening drag from high oil prices, and the prospect of fiscal stimulus. Still, projected resource utilization was lower over the next two years than in the previous forecast. The projection for core PCE price inflation in 2008 was raised slightly in response to elevated readings in recent months. The forecast for headline PCE price inflation also incorporated a somewhat higher rate of in-

crease for energy prices for the first half of 2008; as a result, headline PCE price inflation was now expected to exceed core PCE price inflation slightly for that year. The forecasts for both headline and core PCE price inflation for 2009 were unchanged, with both receding from their 2008 levels.

In conjunction with the FOMC meeting in January, all meeting participants (Federal Reserve Board members and Reserve Bank presidents) provided annual projections for economic growth, unemployment, and inflation for the period 2008 through 2010. The projections are described in the Summary of Economic Projections, which is attached as an addendum to these minutes.

In their discussion of the economic situation and outlook, and in the projections that they had submitted for this meeting, participants noted that information received since the December meeting had been decidedly downbeat on balance. In particular, the drop in housing activity had intensified, factory output had weakened, news on business investment had been soft, and conditions in labor markets appeared to have deteriorated. In addition, consumer confidence had remained low and business confidence appeared to have worsened. Although the functioning of money markets had improved notably, strains remained evident in a number of other financial markets, and credit conditions had become generally more restrictive. Against this backdrop, participants expected economic growth to remain weak in the first half of this year before picking up in the second half, aided in part by a more accommodative stance of monetary policy and by likely fiscal stimulus. Further ahead, participants judged that economic growth would continue to pick up gradually in 2009 and 2010. Nonetheless, with housing

activity and house prices still declining and with financial conditions for businesses and households tightening further, significant uncertainties surrounded this outlook and the risks to economic growth in the near term appeared to be weighted to the downside. Indeed, several participants noted that the risks of a downturn in the economy were significant. Inflation data had been disappointing in recent months, and a few participants cited anecdotal reports that some firms were able to pass on costs to consumers. However, with inflation expectations anticipated to remain reasonably well anchored, energy and other commodity prices expected to flatten out, and pressures on resources likely to ease, participants generally expected inflation to moderate somewhat in coming quarters.

Meeting participants observed that conditions in short-term funding markets had improved considerably since the December meeting, reflecting the easing of pressures related to funding around the turn of the year as well as the implementation of the TAF. However, broader financial conditions had tightened significantly, on balance, in the weeks leading up to the meeting, as evidence of further deterioration in housing markets and investors' more pessimistic view of the economic outlook adversely affected a range of financial markets. Many participants were concerned that the drop in equity prices, coupled with the ongoing decline in house prices, implied reductions in household wealth that would likely damp consumer spending. Moreover, elevated volatility in financial markets likely reflected increased uncertainty about the economic outlook, and that greater uncertainty could lead firms and households to limit spending. The availability of credit to consumers and businesses appeared to be tighten-

ing, likely adding to restraint on economic growth. Participants discussed the risks to financial markets and institutions posed by possible further deterioration in the condition of financial guarantors, and many perceived a possibility that additional downgrades in these firms' credit ratings could put increased strains on financial markets. To be sure, some positive financial developments were evident. Banks appeared to be making some progress in strengthening their balance sheets, with several financial institutions able to raise significant amounts of capital to offset the large losses they had suffered in recent quarters. Nevertheless, participants generally viewed financial markets as still vulnerable to additional economic and credit weakness. Some noted the especially worrisome possibility of an adverse feedback loop, that is, a situation in which a tightening of credit conditions could depress investment and consumer spending, which, in turn, could feed back to a further tightening of credit conditions.

In their discussion of individual sectors of the economy, meeting participants emphasized that activity in housing markets had continued to deteriorate sharply. With single-family permits and starts still falling, sales of new homes dropping precipitously, sales of existing homes flat, and inventories of unsold homes remaining elevated even in the face of falling house prices, several participants noted the absence of signs of stabilization in the sector. Of further concern were the reduced availability of nonconforming loans and the apparent tightening by banks of credit standards on mortgages, both of which had the potential for intensifying the housing contraction. The recent declines in interest rates had spurred a surge in applications for mortgage refinancing and would limit the upward resets on

the rates on outstanding adjustable-rate mortgages, both of which would tend to improve some households' finances. Nonetheless, participants viewed the housing situation and its potential further effect on employment, income, and wealth as one of the major sources of downside risk to the economic outlook.

Recent data as well as anecdotal information indicated that consumer spending had decelerated considerably, perhaps partly reflecting a spillover from the weakness in the housing sector. Participants remarked that declining house prices and sales appeared to be depressing consumer sentiment and that the contraction in wealth associated with decreases in home and equity prices probably was restraining spending. In addition, consumption expenditures were being damped by slower growth in real disposable income induced by high energy prices and possibly by a softening of the labor market. The December employment report showed that job growth had slowed appreciably, and other indicators also pointed to emerging weakness in the labor market in the intermeeting period. And spending in the future could be affected by an ongoing tightening in the availability of consumer credit amid signs that lenders were becoming increasingly cautious in view of some deterioration of credit performance on consumer loans and widening expectations of slower income growth. Some participants, however, cited evidence that workers in some sectors were still in short supply and saw signs that the labor market remained resilient.

The outlook for business investment had turned weaker as well since the time of the December meeting. Several participants reported that firms in their districts were reducing capital expenditures in anticipation of a slowing in sales. Manufacturing activity appeared

to have slowed or contracted in many districts. Although a few participants reported more upbeat attitudes among firms in the technology and energy sectors, business sentiment overall appeared to be declining. Moreover, a number of indicators pointed to a tightening in credit availability to businesses. For example, the Senior Loan Officer Opinion Survey on Bank Lending Practices indicated that banks had tightened lending standards and pricing terms on business loans. Lending standards had been raised especially sharply on commercial real estate loans. While real outlays for nonresidential construction apparently continued to rise through the fourth quarter, anecdotal evidence pointed to a weakening of commercial real estate spending in several districts, with some projects being canceled or scaled back.

Most participants anticipated that a fiscal stimulus package, including tax rebates for households and bonus depreciation allowances for businesses, would be enacted before long and would support economic growth in the second half of the year. Some pointed out, however, that the fiscal stimulus package might not help in the near term, when the risks of a downturn in economic activity appeared largest. In addition, the effects of the proposed package would likely be temporary, with the stimulus reversing in 2009.

With regard to the external sector, some participants noted that growth abroad had recently been strong and that increasing U.S. exports had been a significant source of strength for the U.S. economy of late. However, available data suggested that economic activity outside the United States appeared to be decelerating somewhat. Although slowing foreign growth would reduce a source of support for the U.S. economy at the same time that

domestic spending was slackening, it could also damp commodity prices and help reduce global price pressures.

Participants agreed that the inflation data that were received since the December meeting had been disappointing. But many believed that the slow growth in economic activity anticipated for the first half of this year and the associated slack in resource utilization would contribute to an easing of price pressures. Moreover, a leveling-off of energy and commodity prices such as that embedded in futures markets would also help moderate inflation pressures. However, some participants cautioned that commodity prices had remained stubbornly high for quite some time and that inferences drawn in the past from futures markets about likely trends in such prices had often proven inaccurate. Participants also related anecdotal evidence of firms facing increasing input cost pressures and in some cases being able to pass on those costs to consumers. Moreover, headline inflation had been generally above 2 percent over the past four years, and participants noted that such persistently elevated readings could ultimately affect inflation expectations. Some survey measures of inflation expectations had edged up in recent months, and longer-term financial market gauges of inflation compensation had climbed. The latter probably reflected at least in part increased uncertainty—inflation risk—rather than greater inflation expectations; increases in nominal wages did not appear to be incorporating higher inflation expectations. On balance, expectations seemed to remain fairly well anchored, but participants agreed that continued stability of inflation expectations was essential.

In the discussion of monetary policy for the intermeeting period, most members believed that a further significant easing in policy was warranted at this

meeting to address the considerable worsening of the economic outlook since December as well as increased downside risks. As had been the case in some previous cyclical episodes, a relatively low real federal funds rate now appeared appropriate for a time to counter the factors that were restraining economic growth, including the slide in housing activity and prices, the tightening of credit availability, and the drop in equity prices. Members judged that a 50 basis point reduction in the federal funds rate, together with the Committee's previous policy actions, would bring the real short-term rate to a level that was likely to help the economy expand at a moderate pace over time. Still, with no signs of stabilization in the housing sector and with financial conditions not yet stabilized, the Committee agreed that downside risks to growth would remain even after this action. Members were also mindful of the need for policy to promote price stability, and some noted that, when prospects for growth had improved, a reversal of a portion of the recent easing actions, possibly even a rapid reversal, might be appropriate. However, most members agreed that a 50 basis point easing at this meeting would likely not contribute to an increase in inflation pressures given the actual and expected weakness in economic growth and the consequent reduction in pressures on resources. Rather, members agreed that inflation was likely to moderate in coming quarters, but they also concurred that it would be necessary to continue to monitor inflation developments carefully.

The Committee agreed that the statement to be released after the meeting should indicate that financial markets remained under considerable stress, that credit had tightened further for some businesses and households, and that

recent information pointed to a deepening of the housing contraction as well as to some softening in labor markets. The Committee again viewed it as appropriate to indicate that it expected inflation to moderate in coming quarters but also to emphasize that it would be necessary to monitor inflation developments carefully. The action taken at the meeting, combined with the cumulative policy easing already in place, should help to promote moderate growth over time and to mitigate the risks to economic activity. However, members concurred that downside risks to growth remained, and that the Committee would continue to assess the effects of financial and other developments on economic prospects and would act in a timely manner as needed to address those risks.

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

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with reducing the federal funds rate to an average of around 3 percent.

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

The Federal Open Market Committee decided today to lower its target for the federal funds rate 50 basis points to 3 percent.

Financial markets remain under considerable stress, and credit has tightened further for some businesses and households. Moreover, recent information indicates a deepening of the housing contraction as well as some softening in labor markets.

The Committee expects inflation to moderate in coming quarters, but it will be necessary to continue to monitor inflation developments carefully.

Today's policy action, combined with those taken earlier, should help to promote moderate growth over time and to mitigate the risks to economic activity. However, downside risks to growth remain. The Committee will continue to assess the effects of financial and other developments on economic prospects and will act in a timely manner as needed to address those risks.

Votes for this action: Messrs. Bernanke, Geithner, Kohn, Kroszner, and Mishkin, Ms. Pianalto, Messrs. Plosser, Stern, and Warsh. Votes against this action: Mr. Fisher.

Mr. Fisher dissented because he preferred to leave the federal funds rate unchanged. The rate had been lowered by 75 basis points just one week earlier in a decision he supported, which brought the funds rate down 175 basis points since September. Given these actions, he felt that monetary policy was already quite stimulative, while headline inflation was too high at more than 3 percent over the last year. Demand-pull inflation pressures from emerging-market economies abroad appeared to be continuing, and anecdotal reports from business contacts suggested greater willingness domestically to pass rising costs through to prices. Moreover, Mr. Fisher was concerned that inflation expectations could become unanchored if the perception of negative real rates of interest were to become pervasive. At the same time, the economy appeared to be still growing, albeit at a substantially weakened pace. Given the policy tradeoffs confronting the FOMC at this time, Mr. Fisher saw the upside risks to inflation as being greater than the downside risks to longer-term economic growth, especially in light of the recent, aggressive easing of monetary policy and the lag

before it would have its full effect on the economy.

The Committee then turned to a discussion of selected longer-term regulatory and structural issues raised by recent financial market developments. A staff presentation began by noting that the difficulties in financial markets started with unexpectedly heavy losses on subprime mortgages and related structured securities, which led investors to question the valuations of complex structured instruments more generally and to pull back from such investments. The resulting effects in markets put pressure on some large banking organizations, particularly through losses on subprime-mortgage-related securities and other assets, and through the unplanned expansion of balance sheets triggered by the disruption of various markets in which assets were securitized. The remainder of the presentation, and the discussion by meeting participants, focused on two issues: first, the important role of credit ratings in the securitization process, including the methods used to set ratings and the way investors use ratings in making their investment decisions; and second, how weaknesses in risk management practices at some large global financial services organizations appear to have led to outsized losses at those institutions, and the reasons that such weaknesses may have emerged at some firms and not at others.

It was agreed that the next meeting of the Committee would be held on Tuesday, March 18, 2008.

The meeting adjourned at 1:15 p.m.

#### Notation Vote

By notation vote completed on December 31, 2007, the Committee unanimously approved the minutes of the

FOMC meeting held on December 11, 2007.

### Conference Calls

On January 9, 2008, the Committee reviewed recent economic data and financial market developments. The available information suggested that the downside risks to growth had increased significantly since the time of the December FOMC meeting. Participants discussed the possibility that the slowing in economic growth and associated softening in labor markets might exacerbate the tightening in credit conditions and the correction in housing market activity and prices, which could in turn weigh further on economic activity. Participants emphasized the risks that such adverse dynamics could pose to economic and financial stability.

Participants noted that core price inflation had edged up in recent months, boosted in part by the pass-through of higher energy costs to the prices of core consumer goods and services. Inflation was expected to edge lower this year as energy prices leveled off and pressures on resources eased. However, this slowing in inflation was dependent on inflation expectations remaining well anchored, and participants noted that considerable uncertainty surrounded the inflation outlook.

Most participants were of the view that substantial additional policy easing in the near term might well be necessary to promote moderate economic growth over time and to reduce the downside risks to growth, and participants discussed the possible timing of such policy actions.

On January 21, 2008, the Committee again met by conference call. Incoming information since the conference call on January 9 had reinforced the view that the outlook for economic activity was

weakening. Among other developments, strains in some financial markets had intensified, as it appeared that investors were becoming increasingly concerned about the economic outlook and the downside risks to activity. Participants discussed the possibility that these developments could lead to an excessive pull-back in credit availability and in investment. Although inflation was expected to moderate from recent elevated levels, participants stressed that this outlook relied upon inflation expectations remaining well anchored and that the inflation situation should continue to be monitored carefully.

All members judged that a substantial easing in policy in the near term was appropriate to foster moderate economic growth and reduce the downside risks to economic activity. Most members judged that an immediate reduction in the federal funds rate was called for to begin aligning the real policy rate with a weakening economic situation. Such an action, by demonstrating the Committee's commitment to act decisively to support economic activity, might reduce concerns about economic prospects that seemed to be contributing to the deteriorating conditions in financial markets, which could feed back on the economy. However, some concern was expressed that an immediate policy action could be misinterpreted as directed at recent declines in stock prices, rather than the broader economic outlook, and one member believed it preferable to delay policy action until the scheduled FOMC meeting on January 29–30. Some members also noted that were policy to become very stimulative it would be important for the Committee to be decisive in reversing the course of interest rates once the economy had strengthened and downside risks had abated.

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

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with reducing the federal funds rate to an average of around 3½ percent.

The vote encompassed approval of the text below for inclusion in the statement to be released at 8:30 a.m. on Tuesday, January 22:

The Federal Open Market Committee has decided to lower its target for the federal funds rate 75 basis points to 3½ percent.

The Committee took this action in view of a weakening of the economic outlook and increasing downside risks to growth. While strains in short-term funding markets have eased somewhat, broader financial market conditions have continued to deteriorate and credit has tightened further for some businesses and households. Moreover, incoming information indicates a deepening of the housing contraction as well as some softening in labor markets.

The Committee expects inflation to moderate in coming quarters, but it will be necessary to continue to monitor inflation developments carefully.

Appreciable downside risks to growth remain. The Committee will continue to assess the effects of financial and other developments on economic prospects and will act in a timely manner as needed to address those risks.

Votes for this action: Messrs. Bernanke, Geithner, Evans, Hoenig, Kohn, Kroszner, Rosengren, and Warsh. Votes against this action: Mr. Poole. Absent and not voting: Mr. Mishkin

Mr. Poole dissented because he did not believe that current conditions justi-

fied policy action before the regularly scheduled meeting the following week.

Brian F. Madigan  
Secretary

#### Addendum: Summary of Economic Projections

In conjunction with the January 2008 FOMC meeting, the members of the Board of Governors and the presidents of the Federal Reserve Banks, all of whom participate in the deliberations of the FOMC, provided projections for economic growth, unemployment, and inflation in 2008, 2009, and 2010. Projections were based on information available through the conclusion of the January meeting, on each participant's assumptions regarding a range of factors likely to affect economic outcomes, and on his or her assessment of appropriate monetary policy. "Appropriate monetary policy" is defined as the future policy that, based on current information, is deemed most likely to foster outcomes for economic activity and inflation that best satisfy the participant's interpretation of the Federal Reserve's dual objectives of maximum employment and price stability.

The projections, which are summarized in table 1 and chart 1, suggest that FOMC participants expected that output would grow at a pace appreciably below its trend rate in 2008, owing primarily to a deepening of the housing contraction and a tightening in the availability of household and business credit, and that the unemployment rate would increase somewhat. Given the substantial reductions in the target federal funds rate through the January FOMC meeting as well as the assumption of appropriate policy going forward, output growth further ahead was projected to pick up to a pace around or

Table 1. Economic Projections of Federal Reserve Governors and Reserve Bank Presidents  
Percent

	2008	2009	2010
Central Tendency <sup>1</sup>			
Growth of real GDP .....	1.3 to 2.0	2.1 to 2.7	2.5 to 3.0
<i>October projections</i> .....	1.8 to 2.5	2.3 to 2.7	2.5 to 2.6
Unemployment rate .....	5.2 to 5.3	5.0 to 5.3	4.9 to 5.1
<i>October projections</i> .....	4.8 to 4.9	4.8 to 4.9	4.7 to 4.9
PCE inflation .....	2.1 to 2.4	1.7 to 2.0	1.7 to 2.0
<i>October projections</i> .....	1.8 to 2.1	1.7 to 2.0	1.6 to 1.9
Core PCE inflation .....	2.0 to 2.2	1.7 to 2.0	1.7 to 1.9
<i>October projections</i> .....	1.7 to 1.9	1.7 to 1.9	1.6 to 1.9
Range <sup>2</sup>			
Growth of real GDP .....	1.0 to 2.2	1.8 to 3.2	2.2 to 3.2
<i>October projections</i> .....	1.6 to 2.6	2.0 to 2.8	2.2 to 2.7
Unemployment rate .....	5.0 to 5.5	4.9 to 5.7	4.7 to 5.4
<i>October projections</i> .....	4.6 to 5.0	4.6 to 5.0	4.6 to 5.0
PCE inflation .....	2.0 to 2.8	1.7 to 2.3	1.5 to 2.0
<i>October projections</i> .....	1.7 to 2.3	1.5 to 2.2	1.5 to 2.0
Core PCE inflation .....	1.9 to 2.3	1.7 to 2.2	1.4 to 2.0
<i>October projections</i> .....	1.7 to 2.0	1.5 to 2.0	1.5 to 2.0

NOTE: Projections of the growth of real GDP, of PCE inflation, and of core PCE inflation are percent changes from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures and the price index for personal consumption expenditures excluding food and energy. Projections for the unemployment rate are for the average civilian unem-

ployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy.

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

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

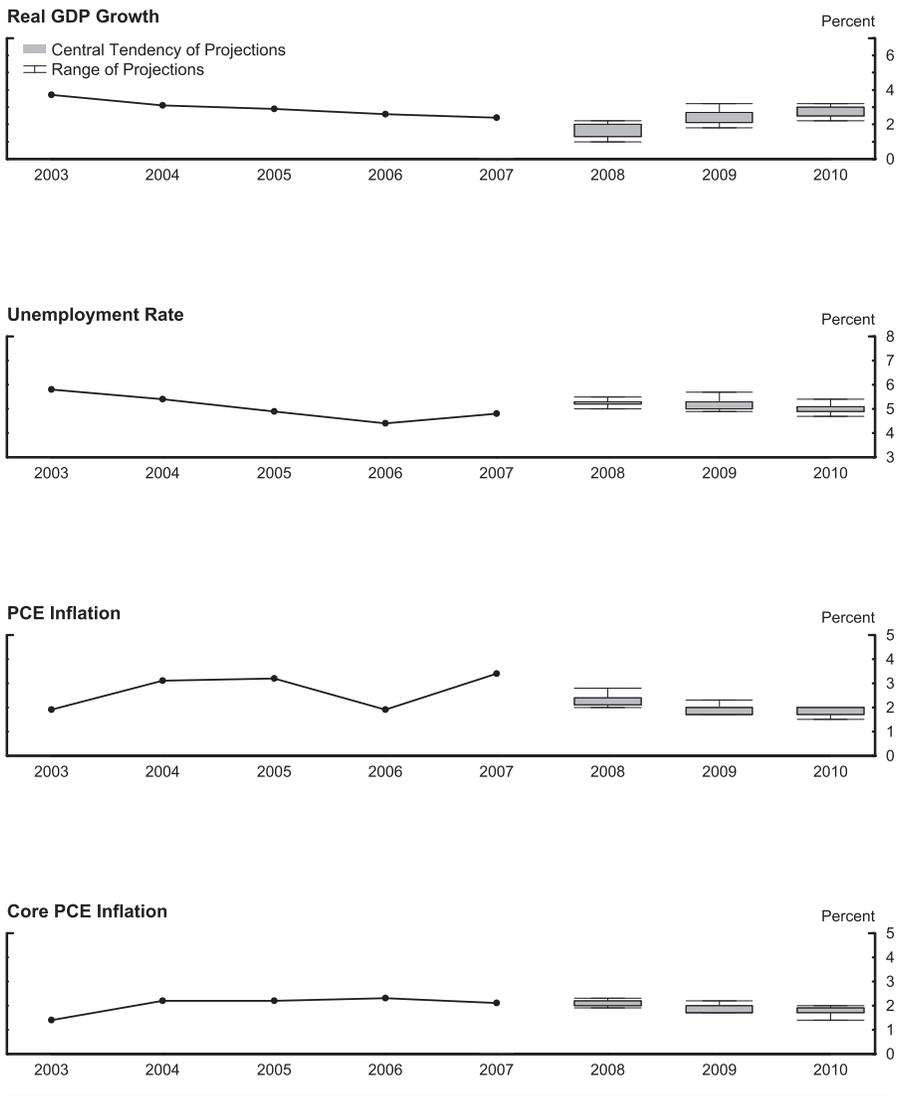
a bit above its long-run trend by 2010. Inflation was expected to decline in 2008 and 2009 from its recent elevated levels as energy prices leveled out and economic slack contained cost and price increases. Most participants judged that considerable uncertainty surrounded their projections for output growth and viewed the risks to their forecasts as weighted to the downside. A majority of participants viewed the risks to the inflation outlook as broadly balanced, but a number of participants saw the risks to inflation as skewed to the upside.

#### *The Outlook*

The central tendency of participants' projections for real GDP growth in 2008, at 1.3 to 2.0 percent, was considerably lower than the central tendency

of the projections provided in conjunction with the October FOMC meeting, which was 1.8 to 2.5 percent. These downward revisions to the 2008 outlook stemmed from a number of factors, including a further intensification of the housing market correction, tighter credit conditions amid increased concerns about credit quality and ongoing turmoil in financial markets, and higher oil prices. However, some participants noted that a fiscal stimulus package would likely provide a temporary boost to domestic demand in the second half of this year. Beyond 2008, a number of factors were projected to buoy economic growth, including a gradual turnaround in housing markets, lower interest rates associated with the substantial easing of monetary policy to date and appropriate adjustments to policy going

Chart 1. Central Tendencies and Ranges of Economic Projections\*



\* See notes to Table 1 for variable definitions.

forward, and an anticipated reduction in financial market strains. Real GDP was expected to accelerate somewhat in 2009 and by 2010 to expand at or a little above participants' estimates of the rate of trend growth.

With output growth running below trend over the next year or so, most participants expected that the unemployment rate would edge higher. The central tendency of participants' projections for the average rate of unemploy-

ment in the fourth quarter of 2008 was 5.2 to 5.3 percent, above the 4.8 to 4.9 percent unemployment rate forecasted in October and broadly suggestive of some slack in labor markets. The unemployment rate was generally expected to change relatively little in 2009 and then to edge lower in 2010 as output growth picks up, although in both years the unemployment rate was projected to be a little higher than had been anticipated in October.

The higher-than-expected rates of overall and core inflation since October, which were driven in part by the steep run-up in oil prices, had caused participants to revise up somewhat their projections for inflation in the near term. The central tendency of participants' projections for core PCE inflation in 2008 was 2.0 to 2.2 percent, up from the 1.7 to 1.9 percent central tendency in October. However, core inflation was expected to moderate over the next two years, reflecting muted pressures on resources and fairly well-anchored inflation expectations. Overall PCE inflation was projected to decline from its current elevated rate over the coming year, largely reflecting the assumption that energy and food prices would flatten out. Thereafter, overall PCE inflation was projected to move largely in step with core PCE inflation.

Participants' projections for 2010 were importantly influenced by their judgments about the measured rates of inflation consistent with the Federal Reserve's dual mandate to promote maximum employment and price stability and about the time frame over which policy should aim to attain those rates given current economic conditions. Many participants judged that, given the recent adverse shocks to both aggregate demand and inflation, policy would be able to foster only a gradual return of key macroeconomic variables

to their longer-run sustainable or optimal levels. Consequently, the rate of unemployment was projected by some participants to remain slightly above its longer-run sustainable level even in 2010, and inflation was judged likely still to be a bit above levels that some participants judged would be consistent with the Federal Reserve's dual mandate.

#### *Risks to the Outlook*

Most participants viewed the risks to their GDP projections as weighted to the downside and the associated risks to their projections of unemployment as tilted to the upside. The possibility that house prices could decline more steeply than anticipated, further reducing households' wealth and access to credit, was perceived as a significant risk to the central outlook for economic growth and employment. In addition, despite some recovery in money markets after the turn of the year, financial market conditions continued to be strained—stock prices had declined sharply since the December meeting, concerns about further potential losses at major financial institutions had mounted amid worries about the condition of financial guarantors, and credit conditions had tightened in general for both households and firms. The potential for adverse interactions, in which weaker economic activity could lead to a worsening of financial conditions and a reduced availability of credit, which in turn could further damp economic growth, was viewed as an especially worrisome possibility.

Regarding risks to the inflation outlook, several participants pointed to the possibility that real activity could rebound less vigorously than projected, leading to more downward pressure on costs and prices than anticipated. How-

ever, participants also saw a number of upside risks to inflation. In particular, the pass-through of recent increases in energy and commodity prices as well as of past dollar depreciation to consumer prices could be greater than expected. In addition, participants recognized a risk that inflation expectations could become less firmly anchored if the current elevated rates of inflation persisted for longer than anticipated or if the recent substantial easing in monetary policy was misinterpreted as reflecting less resolve among Committee members to maintain low and stable inflation. On balance, a larger number of participants than in October viewed the risks to their inflation forecasts as broadly balanced, although several participants continued to indicate that their inflation projections were skewed to the upside.

The ongoing financial market turbulence and tightening of credit conditions had increased participants' uncertainty about the outlook for economic activity. Most participants judged that the uncertainty attending their January projections for real GDP growth and for the unemployment rate was above typical levels seen in the past. (Table 2 provides an estimate of average ranges of forecast uncertainty for GDP growth, unemployment, and inflation over the past twenty years.<sup>5</sup>) In contrast, the uncertainty attached to participants' inflation projections was generally viewed as being broadly in line with past experience, although several participants judged that the degree of uncertainty about inflation was higher than normal.

5. The box "Forecast Uncertainty" at the end of this summary discusses the sources and interpretation of uncertainty in economic forecasts and explains the approach used to assess the uncertainty and risks attending participants' projections.

Table 2. Average Historical Projection Error Ranges  
Percentage points

	2008	2009	2010
Real GDP <sup>1</sup> .....	±1.2	±1.4	±1.4
Unemployment rate <sup>2</sup> .....	±0.5	±0.8	±1.0
Total consumer prices <sup>3</sup> ...	±1.0	±1.0	±0.9

NOTE: Error ranges shown are measured as plus or minus the root mean squared error of projections that were released in the winter from 1986 through 2006 for the current and following two years by various private and government forecasters. As described in the box "Forecast Uncertainty," under certain assumptions, there is about a 70 percent probability that actual outcomes for real GDP, unemployment, and consumer prices will be in ranges implied by the average size of projection errors made in the past. Further information is in David Reifschneider and Peter Tulip (2007), "Gauging the Uncertainty of the Economic Outlook from Historical Forecasting Errors," Finance and Economics Discussion Series #2007-60 (November).

1. Projection is percent change, fourth quarter of the previous year to fourth quarter of the year indicated.

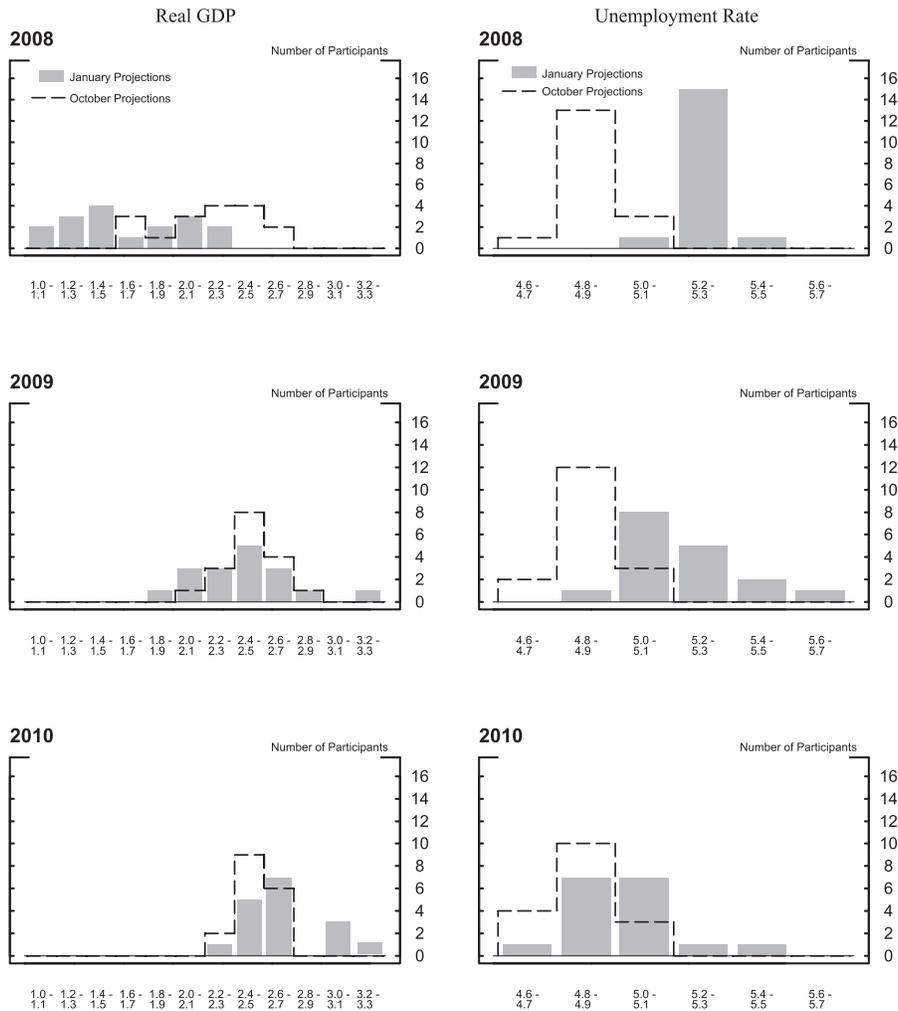
2. Projection is the fourth quarter average of the civilian unemployment rate (percent).

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

#### *Diversity of Participants' Views*

Charts 2(a) and 2(b) provide more detail on the diversity of participants' views. The dispersion of participants' projections for real GDP growth was markedly wider than in the forecasts submitted in October, which in turn were considerably more diverse than those submitted in conjunction with the June FOMC meeting and included in the Board's *Monetary Policy Report to the Congress* in July. Mirroring the increase in diversity of views on real GDP growth, the dispersion of participants' projections for the rate of unemployment also widened notably, particularly for 2009 and 2010. The dispersion of projections for output and employment seemed largely to reflect differing assessments of the effect of financial

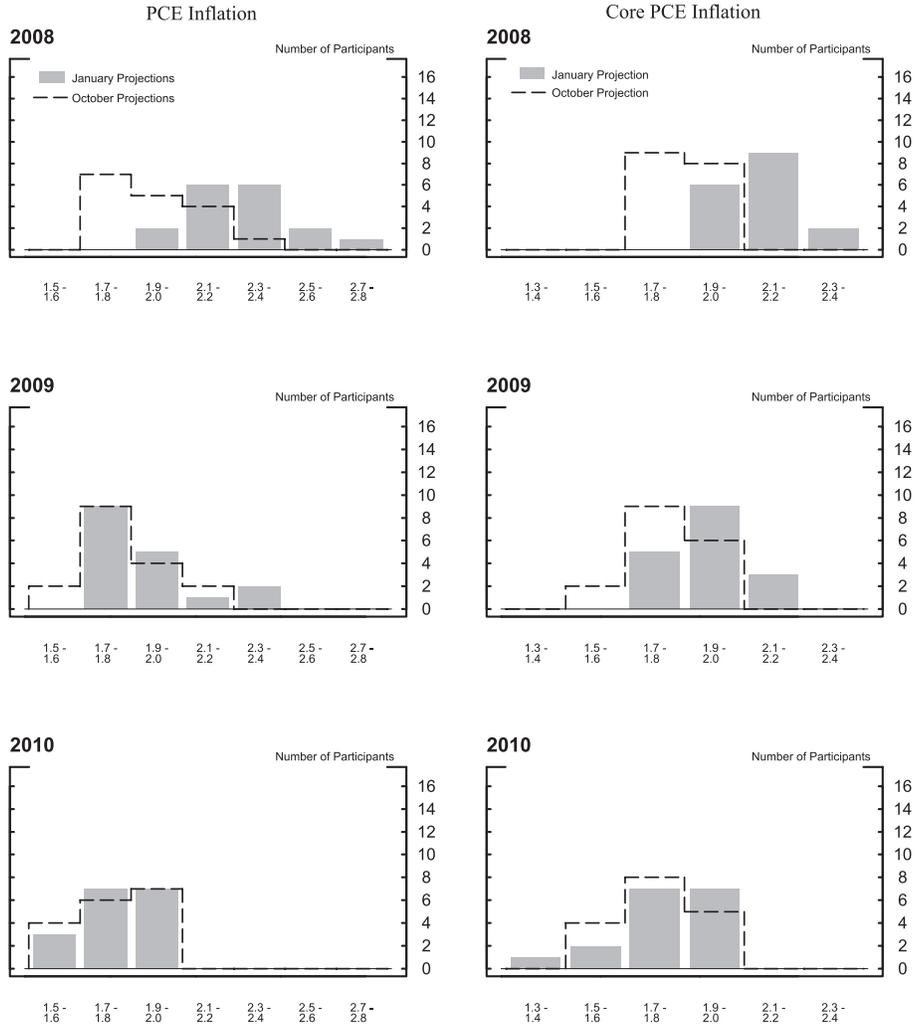
Chart 2(a). Distribution of Participants' Projections (percent)



market conditions on real activity, the speed with which credit conditions might improve, and the depth and duration of the housing market contraction. The dispersion of participants' longer-term projections was also affected to some degree by differences in their judgments about the economy's trend growth rate and the unemployment rate that would be consistent over time with

maximum employment. Views also differed about the pace at which output and employment would recover toward those levels over the forecast horizon and beyond, given appropriate monetary policy. The dispersion of the projections for PCE inflation in the near term partly reflected different views on the extent to which recent increases in energy and other commodity prices

Chart 2(b). Distribution of Participants' Projections (percent)



would pass through into higher consumer prices and on the influence that inflation expectations would exert on inflation over the short and medium run. Participants' inflation projections further out were influenced by their

views of the rate of inflation consistent with the Federal Reserve's dual objectives and the time it would take to achieve these goals given current economic conditions and appropriate policy.

## Forecast Uncertainty

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

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

jections are broadly balanced, the numbers reported in table 2 might imply a probability of about 70 percent that actual GDP would expand between 1.8 percent to 4.2 percent in the current year, and 1.6 percent to 4.4 percent in the second and third years. The corresponding 70 percent confidence intervals for overall inflation would be 1 percent to 3 percent in the current and second years, and 1.1 percent to 2.9 percent in the third year.

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

**Meeting Held on  
March 18, 2008**

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, March 18, 2008 at 8:30 a.m.

*Present:*

Mr. Bernanke, Chairman  
Mr. Geithner, Vice Chairman  
Mr. Fisher  
Mr. Kohn  
Mr. Kroszner  
Mr. Mishkin  
Ms. Pianalto  
Mr. Plosser  
Mr. Stern  
Mr. Warsh

Messrs. Evans, Lacker, and Lockhart, and Ms. Yellen, Alternate Members of the Federal Open Market Committee

Messrs. Hoenig and Rosengren, Presidents of the Federal Reserve Banks of Kansas City and Boston, respectively

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

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

Messrs. Connors, English, and Kamin, Ms. Mester, Messrs. Rolnick, Rosenblum, Slifman, Sniderman, and Wilcox, Associate Economists

Mr. Dudley, Manager, System Open Market Account

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

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

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

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

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

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

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

Mr. Carpenter, Assistant Director, Division of Monetary Affairs, Board of Governors

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

Mr. Luecke, Section Chief, Division of Monetary Affairs, Board of Governors

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

Mr. Judd, Executive Vice President, Federal Reserve Bank of San Francisco

Messrs. Altig, Rasche, Sellon, and Sullivan, Senior Vice Presidents, Federal Reserve Banks of Atlanta, St. Louis, Kansas City, and Chicago, respectively

Mr. Olivei, Vice President, Federal Reserve Bank of Boston

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

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

The Manager of the System Open Market Account reported on recent developments in foreign exchange markets. There were no open market operations in foreign currencies for the System's account in the period since the previous meeting. The Manager also reported on developments in domestic financial markets and on System open market operations in government securities and federal agency obligations during the period since the previous meeting. By unanimous vote, the Committee ratified these transactions.

The information reviewed at the March meeting indicated that economic activity had continued to decelerate in recent months. The contraction in homebuilding intensified, consumer spending appeared to be weakening, and survey measures of both consumer and business sentiment were at depressed levels. Industrial production fell in February, and private payroll employment posted a third consecutive monthly decline. After having increased in recent months through January, both headline and core inflation as measured by the consumer price index (CPI) dropped noticeably in February. In early March, however, prices of oil and other commodities rose sharply.

Labor demand softened markedly in recent months. The decline in private payroll employment that began last December steepened through February. Although employment by firms in the nonbusiness services sector and in state and local governments continued to rise, declines elsewhere were widespread. Losses were greatest in the manufacturing, construction, and retail trade sectors. Aggregate hours of private production or nonsupervisory workers fell slightly in the first two months of the year. The unemployment rate edged down to 4.8 percent in February, but was still up from the 4.5 per-

cent rate of a year earlier. The labor force participation rate declined in February.

Industrial production declined in February after edging up slightly in the previous two months. The output of utilities dropped back after a weather-related surge in January, while mining output fell somewhat in the first two months of the year on average. Manufacturing production edged down after having flattened out in January. The motor vehicle and construction-related industries continued to hold down overall manufacturing output even as high-tech production posted moderate increases. The factory utilization rate edged down in February to a level noticeably below its recent high in the third quarter of 2007.

Real consumer spending appeared to have stalled in recent months. Real outlays for nondurable and durable consumer goods, including automobiles, were estimated to have declined, on average, in January and February. Real disposable personal income was unchanged in the fourth quarter, held down by higher food and energy prices, and moved up only slightly in January. Further declines in house prices led to a noticeable decrease in the ratio of household wealth to disposable income in the fourth quarter. The downturn in equity prices since December further reduced household wealth in the first quarter. Readings on consumer sentiment dropped sharply in February from already low levels, and the Reuters/University of Michigan survey remained at a depressed level in early March.

The contraction in residential construction continued into early 2008. Single-family housing starts fell in both January and February. After having dropped especially sharply in December, multifamily housing starts re-

bounded somewhat in the first two months of the year. New home sales declined again in January, thereby pushing inventories of unsold homes to even higher levels relative to sales. Sales of existing homes held roughly steady in January, and the index of pending sales agreements in that month was consistent with flat sales in February and March. Overall, demand for housing continued to be restrained by tight financing conditions for jumbo and nonprime mortgages.

Real spending on equipment and software rose at a sluggish rate in the fourth quarter. In January, orders and shipments of nondefense capital goods excluding aircraft were above their fourth-quarter levels. However, the overall outlook for capital spending in the first quarter was weak in light of the deterioration in surveys of business conditions and attitudes and the worsening situation in markets for business finance. On the heels of robust gains during most of last year, nominal spending on nonresidential structures decelerated in December and posted an outright decline in January. Although spending in this sector is often volatile, the recent deceleration was consistent with mounting indications of slowing demand for nonresidential buildings and tightening credit conditions.

Real investment in nonfarm inventories excluding motor vehicles remained at a steady pace in the fourth quarter of 2007, but motor vehicle inventories fell sharply. After declining in November, the ratio of manufacturing and trade book-value inventories (excluding motor vehicles) to sales ticked up in December and held steady in January, but this ratio remained well below its average value in 2007.

The U.S. international trade deficit narrowed substantially in December and was about unchanged in January.

Exports rose sharply in both months, while imports dipped in December before recovering in January. Increases in exports were broadly based except for automotive exports, which dropped sharply in December and remained low in January. Imports of services were up moderately. Oil imports soared, reflecting increases in both prices and volumes. Most other categories of imports dropped in December and January on net, with especially large declines in imports of automotive and consumer goods.

In the major advanced foreign economies, the rate of growth of real gross domestic product (GDP) generally declined in the fourth quarter. The source of the slowdown varied substantially across economies. In the euro area and in the United Kingdom, output was restrained by a softening in domestic demand. In contrast, Canadian domestic demand continued to increase at a very strong pace, but because of an offsetting steep decline in net exports, real GDP rose only modestly. Japan was the exception among the advanced foreign economies to the pattern of slower growth; real GDP there strengthened in the fourth quarter with higher domestic spending and continued strength in exports. Japanese exports to the United States, however, declined. Available first-quarter economic indicators for the advanced foreign economies were mixed, but, on balance, they pointed to slowing growth. Real activity also appeared to have slowed a bit in emerging markets, though it continued to advance at a fairly strong rate. In emerging Asia, the pace of real GDP growth picked up in the fourth quarter in China and South Korea, but it softened in most other countries. The rate of increase in economic activity slowed in Brazil, Mexico, and several other

countries in Latin America in the fourth quarter, but remained generally strong.

In the United States, the headline CPI continued to rise rapidly in January but was flat in February. For those two months on average, the rate of headline inflation was down significantly from its elevated level in the fourth quarter of 2007, as retail energy prices stopped rising and core inflation moderated a bit; these two factors more than offset an acceleration of food prices. However, the increase in world petroleum prices in early March pointed to a renewed burst of energy price inflation in the near term. Available information, including producer prices for February, suggested that prices of core personal consumption expenditures (PCE) moved up a bit more slowly than the core CPI in January and somewhat faster than the core CPI in February. Household survey measures of expectations for year-ahead inflation jumped in March to their highest levels in about two years; in contrast, survey measures of longer-term inflation expectations were unchanged or up slightly. Average hourly earnings increased at a somewhat slower rate in January and February than they had in November and December. Over the twelve months that ended in February, this wage measure rose a bit more slowly than in the previous twelve months.

At its January 30 meeting, the FOMC lowered its target for the federal funds rate 50 basis points, to 3 percent. In addition, the Board of Governors approved a decrease of 50 basis points in the discount rate, to 3½ percent. The Committee's statement noted that financial markets remained under considerable stress and that credit had tightened further for some businesses and households. Moreover, incoming information indicated a deepening of the housing contraction as well as some softening in

labor markets. The Committee expected inflation to moderate in coming quarters but said that it would be necessary to continue to monitor inflation developments carefully. The Committee indicated that its action, combined with the policy actions taken earlier, should help to promote moderate growth over time and to mitigate the risks to economic activity. However, the Committee noted that downside risks to growth remained. The Committee stated that it would continue to assess the effects of financial and other developments on economic prospects and would act in a timely manner as needed to address these risks.

Over the intermeeting period, conditions in some short-term funding markets worsened. Spreads in interbank funding markets widened, as did spreads on lower-rated commercial paper. Obtaining credit through repurchase agreements backed by agency and private-label mortgage-backed securities (MBS) also became more difficult amid reports of larger "haircuts" being applied by lenders and news that some market participants missed margin calls on positions as a result. Concerns over the health of financial guarantors caused dislocations in the markets for municipal securities, and the ratios of municipal bond yields to those on comparable-maturity Treasuries climbed to historically high levels. In longer-term corporate markets, yields on investment-grade and speculative-grade corporate bonds rose, pushing their spreads relative to Treasuries to the highest levels since 2002 or even earlier in some cases. Nonetheless, gross bond issuance in January and February remained solid for investment-grade firms.

Commercial bank credit decelerated in January and February, damped by a reduction in merger and acquisition

activity, weak business spending, fewer previously committed loan deals coming onto banks' books, and slower residential mortgage lending. Commercial real estate lending at banks, however, continued to advance briskly in January and February, while the rise in consumer loans was moderate. Over the intermeeting period, spreads on conforming and jumbo residential mortgages over comparable-maturity Treasury securities jumped, and credit default swap premiums for the government-sponsored enterprises increased to record highs. Issuance of conforming MBS continued to be strong, while credit availability for jumbo and nonprime mortgage borrowers remained tight. Broad stock price indexes fell further over the intermeeting period on negative economic news as well as concerns about the outlook for many financial institutions.

Similar stresses were again evident in the financial markets of major foreign economies. However, economic news in these economies was generally less downbeat than in the United States, leading to expectations of greater monetary easing in the United States than elsewhere. The trade-weighted foreign exchange value of the dollar against major currencies declined notably.

M2 increased strongly in January and February, boosted primarily by heightened demands for the relative safety and liquidity of money market mutual funds. The decline in opportunity costs associated with monetary policy easing also supported rapid growth of liquid deposits.

In the two weeks prior to the March meeting, the Federal Reserve announced several measures to bolster liquidity and promote orderly functioning in financial markets. On March 7, the Federal Reserve announced that it would initiate a series of term repur-

chase transactions that would facilitate funding of primary dealers' assets and that the volume of lending through the Term Auction Facility (TAF) would be increased. On March 11, the Federal Reserve, in coordination with other central banks, announced the expansion and extension of the reciprocal currency arrangements that were established in December as well as the creation of a Term Securities Lending Facility (TSLF) under which the Federal Reserve would lend Treasury securities to primary dealers for longer terms than in the existing program and based on a broader range of collateral. On March 14, the Federal Reserve Board approved the temporary financing arrangement announced that morning by JPMorgan Chase & Co. and The Bear Stearns Companies Inc. On March 16, the Federal Reserve announced the creation of a lending facility to improve the ability of primary dealers to provide financing to participants in securitization markets. In addition, the Federal Reserve lowered the primary credit rate, or discount rate, 25 basis points to 3.25 percent, and extended the maximum maturity of primary credit loans to ninety days from thirty days. It also approved the longer-term financing arrangement announced that evening by JPMorgan Chase and Bear Stearns in conjunction with the acquisition of Bear Stearns by JPMorgan Chase.

Over the intermeeting period, the expected path of monetary policy over the next year as measured by money market futures rates moved down sharply, largely in response to softer-than-expected economic data releases and deteriorating financial market conditions. The Committee's action at the January 30 meeting had been viewed by market participants as the most likely outcome, but near-term futures rates declined a few basis points as investors

had placed some probability on a smaller policy move. Neither the subsequent release of the minutes of the meeting nor the March 7 Federal Reserve announcements elicited significant market reaction. The March 11 TSLF announcement was followed by a step-up in money market futures rates as liquidity concerns eased somewhat and market participants evidently concluded that less policy easing would be needed than previously anticipated. However, liquidity concerns reemerged subsequently, prompting a further drop in money market futures rates. Consistent with the shift in the economic outlook, the revision in policy expectations, and the reduction in the target federal funds rate, yields on short- and medium-term nominal Treasury coupon securities declined substantially after the January 30 FOMC meeting. However, yields on long-term Treasuries fell much less than those on shorter-term instruments, and the yield curve steepened significantly. Inflation compensation—the difference between yields on nominal Treasury securities and those on inflation-indexed issues—was little changed on balance for shorter-term issues, but longer-term inflation compensation rose.

In the forecast prepared for this meeting, the staff substantially revised down its projection for the pace of real GDP throughout 2008. Although the available data on spending and production early in the first quarter were not materially weaker than the staff's expectations, many other indicators of real activity were more negative. Payroll employment declined substantially; oil prices surged again, crimping real household incomes; and measures of consumer and business sentiment deteriorated sharply. Moreover, house prices fell by more than anticipated, and conditions in a broad range of debt markets

became more restrictive. The staff projection showed a contraction of real GDP in the first half of 2008 followed by a slow rise in the second half. The recently enacted fiscal stimulus package was expected to boost real GDP in the second half of 2008, but that effect was projected to unwind in 2009. The forecast showed real GDP rising at a rate somewhat above the growth rate of its potential in 2009, in response to the impetus from cumulative monetary policy easing, continued strength in net exports, a lessening drag from high oil prices, and a relaxation of financial market strains. Even with this pickup in growth in 2009, resource utilization was anticipated to follow a lower trajectory than in the previous forecast.

The forecast for core PCE price inflation over the first half of 2008 was raised in response to elevated readings in recent months. In addition, the forecast for headline PCE price inflation incorporated a much higher rate of increase for energy prices for the first half of the year; as a result, headline PCE price inflation was expected to substantially exceed core PCE price inflation in 2008. By 2009, the forecasts for both the headline and core PCE price indexes showed inflation receding from its 2008 level, in line with the previous forecasts.

In their discussion of the economic situation and outlook, FOMC participants noted that prospects for both economic activity and near-term inflation had deteriorated in view of increasingly fragile financial markets and tighter credit conditions, rising prices for oil and other commodities, and the deepening contraction in the housing sector. Home prices had declined more steeply than anticipated, and the weakening housing market, combined with a softening in labor markets, appeared to be weighing on consumer sentiment. Busi-

nesses also were seen as becoming more pessimistic and cautious, despite a strong foreign demand for U.S. goods. Strains in financial markets had increased, portending a possible further tightening in the availability of credit to households and businesses. Against this backdrop, many participants thought some contraction in economic activity in the first half of 2008 now appeared likely. The economy was expected to begin to recover in the second half of the year, supported by recent monetary policy easing and fiscal stimulus. Accommodative monetary policy and a recovery in financial markets along with an abatement of the downdraft in housing activity were expected to help foster a further pickup in economic growth in 2009. However, considerable uncertainty surrounded this forecast, and some participants expressed concern that falling house prices and stresses in financial markets could lead to a more severe and protracted downturn in activity than currently anticipated. Participants noted that recent readings on inflation had generally been elevated, that energy prices had risen sharply, and that some indicators of inflation expectations had risen. Most participants anticipated that a flattening of oil and other commodity prices and easing pressures on resources would contribute to some moderation in inflation pressures. Nonetheless, uncertainties about the outlook for inflation had risen.

Stresses in financial markets had intensified noticeably since the January meeting. Several meeting participants noted that price discovery for mortgage-related financial assets had become increasingly difficult in an environment of declining house prices and considerable uncertainty as to the ultimate extent of such declines. With the magnitude and distribution of losses on

mortgage assets quite unclear and many financial institutions experiencing significant balance sheet pressures, many lenders pulled back from risk taking—notably by increasing collateral margins on secured lending—and liquidity diminished in a number of financial markets. In these circumstances, many market participants were experiencing greater difficulties obtaining funding, and meeting participants regarded financial markets as unusually fragile. The new liquidity facilities recently introduced by the Federal Reserve would probably be helpful in bolstering market liquidity and promoting orderly market functioning, but even so, the ongoing strains were likely to raise the price and reduce the availability of credit to businesses and households. Evidence that an adverse feedback loop was under way, in which a restriction in credit availability prompts a deterioration in the economic outlook that, in turn, spurs additional tightening in credit conditions, was discussed. Several participants noted that the problems of declining asset values, credit losses, and strained financial market conditions could be quite persistent, restraining credit availability and thus economic activity for a time and having the potential subsequently to delay and damp economic recovery.

Participants noted that the contraction in the housing sector had deepened and that considerable uncertainty surrounded the outlook for housing. Although some stabilization in housing markets was likely needed to help underpin an economic recovery in coming quarters, there was little indication that that process had yet begun. Elevated rates of foreclosures and large inventories of unsold property were likely to depress home prices for some time. Lower home prices would eventually buoy home buying, but in the mean-

time the prospect of continued price declines could lead potential homebuyers to defer purchases for a time, further damping housing activity and adding to downward pressure on home values. Participants noted that the trajectory of house prices was a major source of uncertainty in their economic outlook.

Recent data and anecdotal reports from business contacts suggested that consumer spending was decelerating noticeably, though it apparently had not yet actually declined substantially. Participants noted that private payroll employment had fallen in February for the third consecutive month, and suggested that increasing concerns among workers about prospects for employment and income likely were holding down consumer outlays. Rising energy prices were also damping growth in real incomes. One participant reported that lenders were restricting draws on home equity lines, and the tightening of credit availability more generally was probably starting to constrain consumer spending. Also, the continued fall in home prices and declines in equity prices were weighing on household wealth, with a depressing effect on spending.

The outlook for business spending had also dimmed since the time of the January meeting. Anecdotal reports from many regions of the country pointed to a retrenchment in capital spending in response to increased pessimism about economic prospects and heightened caution on the part of business managers. The tightening supply of credit was seen as exacerbating this softness in business outlays and contributing particularly to a pullback from nonresidential construction projects. However, investment spending on agricultural equipment was reported to be quite strong, spurred by soaring crop prices. Reports on inventories were

mixed but, overall, inventories appeared to be roughly in balance with desired levels.

In discussing the external sector of the economy, some participants indicated that net exports remained a notable source of support for the economy. Growth in exports was being supported by strength in foreign economies as well as declines in the foreign exchange value of the dollar. However, some of the recent increase in net exports resulted from weaker imports, which reflected softer domestic spending. Some participants saw somewhat slower global economic growth as a possible consequence of the problems in financial markets and weakness in the United States and noted that such a development could potentially limit the support that exports would provide to the U.S. economy going forward.

The recent information on inflation was seen as disappointing. With the exception of the February report on consumer prices, readings on inflation had generally been elevated. Agricultural prices were rising at a substantial clip, partly in response to strong global demand, lean supplies, and a lower foreign exchange value of the dollar. Other commodity prices also were climbing rapidly, and crude oil prices were near record levels. Several participants stated that business contacts had emphasized that their input costs were rising and that they were seeking to pass on higher costs to their customers. Some participants, however, expressed the view that emerging economic slack would limit the extent to which firms could pass on their higher costs and could serve to damp inflation more generally. Moreover, available data and anecdotal reports suggested that unit labor costs were rising only modestly, and thus were seen as unlikely to exert significant upward pressure on prices. Weaker

growth, both in the United States and abroad, should also contribute to a flattening of oil and other commodity prices over time, which would also reduce price pressures and the threat of rising inflation expectations. On balance, most participants still expected inflation to moderate later this year and in 2009. However, the recent depreciation of the dollar could boost import prices and thus contribute to higher inflation. Moreover, with both core and headline inflation having been somewhat elevated, participants expressed some concern that inflation expectations might become less firmly anchored. Indeed, some indicators suggested that inflation expectations had edged higher of late. In view of these considerations, significant uncertainty attended the near-term outlook for price pressures. On balance, however, participants emphasized that appropriate monetary policy, combined with effective communication of the Committee's commitment to price stability, would foster price stability over time.

In the Committee's discussion of monetary policy for the intermeeting period, most members judged that a substantial easing in the stance of monetary policy was warranted at this meeting. The outlook for economic activity had weakened considerably since the January meeting, and members viewed the downside risks to economic growth as having increased. Indeed, some believed that a prolonged and severe economic downturn could not be ruled out given the further restriction of credit availability and ongoing weakness in the housing market. Members recognized that monetary policy alone could not address fully the underlying problems in the housing market and in financial markets, but they noted that, through a range of channels, lower short-term real interest

rates should help buoy economic activity and ameliorate strains in these markets. Even with a substantial easing at this meeting, most members saw overall inflation as likely to moderate in coming quarters, reflecting a projected leveling-out of energy and commodity prices and an easing of pressures on resource utilization. However, inflation pressures had apparently risen even as the outlook for growth had weakened. With the uncertainties in the outlook for both economic activity and inflation elevated, members noted that appropriately calibrating the stance of policy was difficult, partly because some time would be required to assess the effects of the substantial easing of policy to date. All in all, members judged that a 75 basis point easing of policy at this meeting was appropriate to address the combination of risks of slowing economic growth, inflationary pressures, and financial market disruptions.

The Committee agreed that the statement to be released after the meeting should indicate that economic activity had weakened further, reflecting slower growth in consumer spending and softening in the labor market, that financial markets remained under considerable stress, and that the tightening of credit conditions and the deepening of the housing market contraction were likely to weigh on economic growth over the next few quarters. Given recent developments, the Committee concurred that the statement should note that inflation had been elevated and that some indicators of inflation expectations had risen, but agreed that the announcement should also reiterate that inflation was expected to moderate in coming quarters. As in recent statements, the Committee emphasized that it would continue to monitor inflation developments carefully. The Federal Reserve had implemented a number of measures to fos-

ter market liquidity in recent weeks, and members thought that the statement should note that policy actions taken today and earlier, including those liquidity measures, would promote moderate growth over time. In light of the uncertainties regarding the housing sector and financial market developments, however, the Committee repeated its recent indications that downside risks to growth remained. The Committee agreed on the need to act in a timely manner to promote its dual objectives of sustainable economic growth and price stability.

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

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with reducing the federal funds rate to an average of around 2¼ percent.

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

The Federal Open Market Committee decided today to lower its target for the federal funds rate 75 basis points to 2¼ percent.

Recent information indicates that the outlook for economic activity has weakened further. Growth in consumer spending has slowed and labor markets have softened. Financial markets remain under considerable stress, and the tightening of credit conditions and the deepening of the housing contraction are likely to weigh on economic growth over the next few quarters.

Inflation has been elevated, and some indicators of inflation expectations have risen. The Committee expects inflation to

moderate in coming quarters, reflecting a projected leveling-out of energy and other commodity prices and an easing of pressures on resource utilization. Still, uncertainty about the inflation outlook has increased. It will be necessary to continue to monitor inflation developments carefully.

Today's policy action, combined with those taken earlier, including measures to foster market liquidity, should help to promote moderate growth over time and to mitigate the risks to economic activity. However, downside risks to growth remain. The Committee will act in a timely manner as needed to promote sustainable economic growth and price stability.

Votes for this action: Messrs. Bernanke, Geithner, Kohn, Kroszner, and Mishkin, Ms. Pianalto, Messrs. Stern and Warsh. Votes against this action: Messrs. Fisher and Plosser.

Messrs. Fisher and Plosser dissented because, in light of heightened inflation risks, they favored easing policy less aggressively. Incoming data suggested a weaker near-term outlook for economic growth, but the Committee's earlier policy moves had already reduced the target federal funds rate by 225 basis points to address risks to growth, and the full effect of those rate cuts had yet to be felt. While financial markets remained under stress, the Federal Reserve had already taken separate, significant actions to address liquidity issues in markets. In fact, Mr. Fisher felt that focusing on measures targeted at relieving liquidity strains would improve economic prospects more quickly and lastingly than would further reductions in the federal funds rate at this point; he believed that alleviating these strains would increase the efficacy of the earlier rate cuts. Both Messrs. Fisher and Plosser were concerned that inflation expectations could potentially become unhinged should the Committee continue to lower the funds rate in the current environment. They pointed to measures of inflation and indicators

of inflation expectations that had risen, and Mr. Fisher stressed the international influences on U.S. inflation rates. Mr. Plosser noted that the Committee could not afford to wait until there was clear evidence that inflation expectations were no longer anchored, as by then it would be too late to prevent a further increase in inflation pressures.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, April 29–30, 2008.

The meeting adjourned at 1:15 p.m.

#### Notation Vote

By notation vote completed on February 19, 2008, the Committee unanimously approved the minutes of the FOMC meeting held on January 29–30, 2008.

#### Conference Call

On March 10, 2008, the Committee met to review financial market developments and to consider proposals aimed at supporting the liquidity and orderly functioning of those markets. In light of the sharp further deterioration of some key money and credit markets, and against the backdrop of a weaker economic outlook, meeting participants discussed the potential usefulness and risks of instituting a Term Securities Lending Facility, under which primary dealers would be able to borrow Treasury securities for a term of approximately one month against any collateral eligible for open market operations and the highest-quality private mortgage securities. Most participants concluded that offering this facility was an appropriate step that could help alleviate pressures in the financing markets for Treasury and some mortgage-backed securities. By improving conditions in funding markets, the measure was

expected to help restore the functioning of financial markets more generally and thereby promote the effective conduct of monetary policy as well as macroeconomic stability. During the discussion, participants expressed concerns that establishment of the facility could be viewed as setting a precedent and thus raise expectations of other actions in the future, and they also noted some uncertainty about how effective the facility would be in practice. On balance, the Committee decided that the facility could prove useful in preventing an escalation of an unhealthy dynamic that was developing in money and credit markets, in which liquidity and collateral concerns were spreading. In addition, the Committee agreed to expand and extend the existing reciprocal currency agreements with the European Central Bank and the Swiss National Bank.

The Committee voted to approve the following resolutions:

#### *Term Securities Lending Facility*

In addition to the current authorization granted to the Federal Reserve Bank of New York to engage in overnight securities lending transactions, and in order to ensure the effective conduct of open market operations, the Federal Open Market Committee authorizes the Federal Reserve Bank of New York to lend up to \$200 billion of U.S. Government securities held in the System Open Market Account to primary dealers for a term that does not exceed 35 days at rates that shall be determined by competitive bidding.

These lending transactions may be against pledges of U.S. Government securities, other assets that the Reserve Bank is specifically authorized to buy and sell under section 14 of the Federal Reserve Act (including federal agency residential-mortgage-backed securities

(MBS)), and non-agency AAA-rated residential MBS.

The Federal Reserve Bank of New York shall set a minimum lending fee consistent with the objectives of the program and apply reasonable limitations on the total amount of a specific issue that may be auctioned and on the amount of securities that each dealer may borrow.

The Federal Reserve Bank of New York may reject bids which could facilitate a dealer's ability to control a single issue as determined solely by the Federal Reserve Bank of New York.

This authority shall expire at such time as determined by the Federal Open Market Committee or the Board of Governors.

Secretary's note: By notation vote completed on March 20, 2008, the Committee unanimously approved a resolution that added non-agency AAA-rated commercial-mortgage-backed securities to the list of collateral acceptable in connection with the Term Securities Lending Facility.

#### *Swap Authorizations*

The Federal Open Market Committee directs the Federal Reserve Bank of New York to increase the amount available from the System Open Market Account under the existing reciprocal currency arrangement ("swap" arrangement) with the European Central Bank to an amount not to exceed \$30 billion. Within that aggregate limit, draws of up to \$15 billion are hereby authorized. The current swap arrangement shall be extended until September 30, 2008, unless further extended by the Federal Open Market Committee.

The Federal Open Market Committee directs the Federal Reserve Bank of New York to increase the amount available from the System Open Market Account under the existing reciprocal

currency arrangement ("swap" arrangement) with the Swiss National Bank to an amount not to exceed \$6 billion. Draws are authorized up to the full amount of the swap. The current swap arrangement shall be extended until September 30, 2008, unless further extended by the Federal Open Market Committee.

Votes for these actions: Messrs. Bernanke, Geithner, Fisher, Kohn, and Kroszner, Ms. Pianalto, Messrs. Plosser and Warsh, and Ms. Yellen. Votes against these actions: None. Absent and not voting: Mr. Mishkin. Ms. Yellen voted as alternate member.

Brian F. Madigan  
Secretary

#### **Meeting Held on April 29–30, 2008**

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, April 29, 2008 at 2:00 p.m. and continued on Wednesday, April 30, 2008 at 9:00 a.m.

#### *Present:*

Mr. Bernanke, Chairman  
Mr. Geithner, Vice Chairman  
Mr. Fisher  
Mr. Kohn  
Mr. Kroszner  
Mr. Mishkin  
Ms. Pianalto  
Mr. Plosser  
Mr. Stern  
Mr. Warsh

Ms. Cumming, Messrs. Evans, Lacker, and Lockhart, and Ms. Yellen, Alternate Members of the Federal Open Market Committee

Messrs. Bullard, Hoenig, and Rosengren, Presidents of the Federal Reserve Banks of St. Louis, Kansas City, and Boston, respectively

- Mr. Lyon, First Vice President, Federal Reserve Bank of Minneapolis
- Mr. Madigan, Secretary and Economist
- Ms. Danker, Deputy Secretary
- Mr. Skidmore, Assistant Secretary
- Ms. Smith, Assistant Secretary
- Mr. Alvarez, General Counsel
- Mr. Baxter, Deputy General Counsel
- Mr. Sheets, Economist
- Mr. Stockton, Economist
- Messrs. Connors, English, and Kamin, Ms. Mester, Messrs. Rosenblum, Slifman, Sniderman, and Wilcox, Associate Economists
- Mr. Dudley, Manager, System Open Market Account
- Ms. J. Johnson,<sup>6</sup> Secretary, Office of the Secretary, Board of Governors
- Ms. Roseman,<sup>6</sup> Director, Division of Reserve Bank Operations and Payment Systems, Board of Governors
- Mr. Struckmeyer, Deputy Staff Director, Office of Staff Director for Management, Board of Governors
- Mr. Blanchard, Assistant to the Board, Office of Board Members, Board of Governors
- Mr. Frierson,<sup>6</sup> Deputy Secretary, Office of the Secretary, Board of Governors
- Ms. Bailey, Deputy Director, Division of Banking Supervision and Regulation, Board of Governors
- Mr. Clouse, Deputy Director, Division of Monetary Affairs, Board of Governors
- Messrs. Hammond<sup>6</sup> and Marquardt,<sup>6</sup> Deputy Directors, Division of Reserve Bank Operations and Payment Systems, Board of Governors
- Ms. Edwards,<sup>6</sup> Associate Director, Division of Monetary Affairs, Board of Governors
- Ms. Shanks,<sup>6</sup> Associate Secretary, Office of the Secretary, Board of Governors
- Messrs. Reifschneider and Wascher, Associate Directors, Division of Research and Statistics, Board of Governors
- Mr. Gagnon, Visiting Associate Director, Division of Monetary Affairs, Board of Governors
- Ms. Martin,<sup>6</sup> Associate General Counsel, Legal Division, Board of Governors
- Mr. Carpenter,<sup>6</sup> Assistant Director, Division of Monetary Affairs, Board of Governors
- Mr. Dale, Senior Adviser, Division of Monetary Affairs, Board of Governors
- Mr. Oliner, Senior Adviser, Division of Research and Statistics, Board of Governors
- Ms. Allison,<sup>6</sup> Senior Counsel, Legal Division, Board of Governors
- Mr. Gross,<sup>6</sup> Special Assistant to the Board, Office of Board Members, Board of Governors
- Ms. Weinbach, Adviser, Division of Monetary Affairs, Board of Governors
- Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors
- Mr. Luecke, Section Chief, Division of Monetary Affairs, Board of Governors
- Ms. Beattie,<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
- Ms. Hughes,<sup>6</sup> Staff Assistant, Office of the Secretary, Board of Governors

6. Attended portion of the meeting relating to the implications of interest on reserves for monetary policy implementation.

Mr. Fuhrer, Executive Vice President,  
Federal Reserve Bank of Boston

Messrs. Hilton, McAndrews,<sup>6</sup> Rasche,  
Rudebusch, Steindel, Sullivan,  
and Weinberg, Senior Vice Presi-  
dents, Federal Reserve Banks of  
New York, New York, St. Louis,  
San Francisco, New York, Chi-  
cago, and Richmond, respectively

Messrs. Clark and Meyer,<sup>6</sup> Vice Presi-  
dents, Federal Reserve Banks of  
Kansas City and Philadelphia,  
respectively

Mr. Weber, Senior Research Officer,  
Federal Reserve Bank of Minne-  
apolis

Mr. Roberds, Policy Adviser, Federal  
Reserve Bank of Atlanta

The Manager of the System Open Market Account reported on recent developments in foreign exchange markets. There were no open market operations in foreign currencies for the System's account in the period since the previous meeting. The Manager also reported on developments in domestic financial markets and on System open market operations in government securities and federal agency obligations during the period since the previous meeting. By unanimous vote, the Committee ratified these transactions.

By unanimous vote, the Committee extended for one year beginning in mid-December 2008 the reciprocal currency ("swap") arrangements with the Bank of Canada and the Banco de Mexico. The arrangement with the Bank of Canada is in the amount of \$2 billion equivalent and that with the Banco de Mexico is in the amount of \$3 billion equivalent. Both arrangements are associated with the Federal Reserve's participation in the North American Framework Agreement of 1994. The vote to renew the System's participation in the swap arrangements maturing in Decem-

ber was taken at this meeting because of the provision that each party must provide six months' prior notice of an intention to terminate its participation.

In view of continuing strains in inter-bank and other financial markets, the Committee took up proposals to expand several of the liquidity arrangements that had been put in place in recent months. Chairman Bernanke indicated his intention to increase the overall size of the Term Auction Facility under delegated authority from the Board of Governors, and he proposed increases in the swap lines with the European Central Bank and Swiss National Bank to help address pressures in short-term dollar funding markets. Meeting participants discussed the possible costs and benefits of a proposed broadening of eligible collateral for the Term Securities Lending Facility (TSLF). On balance, the Committee agreed that expanding the range of eligible collateral for the TSLF might help to increase the effectiveness of the facility and so further promote the orderly functioning of financial markets.

By unanimous votes, the Committee approved the following three resolutions:

The Federal Open Market Committee directs the Federal Reserve Bank of New York to increase the amount available from the System Open Market Account under the existing reciprocal currency arrangement ("swap" arrangement) with the European Central Bank to an amount not to exceed \$50 billion. Within that aggregate limit, draws of up to \$25 billion are hereby authorized. The current swap arrangement shall be extended until January 30, 2009, unless further extended by the Federal Open Market Committee.

The Federal Open Market Committee directs the Federal Reserve Bank of New York to increase the amount available from the System Open Market Account under the existing reciprocal currency arrangement ("swap" arrangement) with the Swiss

National Bank to an amount not to exceed \$12 billion. Within that aggregate limit, draws of up to \$6 billion are hereby authorized. The current swap arrangement shall be extended until January 30, 2009, unless further extended by the Federal Open Market Committee.

In connection with the Term Securities Lending Facility, the Federal Reserve Bank of New York may accept pledges of AAA-rated asset-backed securities (in addition to the other assets previously authorized by the FOMC) as collateral against loans of U.S. Government securities.

The information reviewed at the April meeting, which included the advance data on the national income and product accounts for the first quarter, indicated that economic growth had remained weak so far this year. Labor market conditions had deteriorated further, and manufacturing activity was soft. Housing activity had continued its sharp descent, and business spending on both structures and equipment had turned down. Consumer spending had grown very slowly, and household sentiment had tumbled further. Core consumer price inflation had slowed in recent months, but overall inflation remained elevated.

Labor demand continued to weaken in March. Private payroll employment fell in March at a rate similar to that in January and February. The reduction in jobs was again widespread, with losses registered at firms in the construction, manufacturing, and professional and business services sectors. Employment at firms in the nonbusiness services sector, which includes health care, continued to rise. Aggregate hours of private production or nonsupervisory workers moved up in March but posted a decline for the first quarter as a whole after having contracted slightly in the first two months of the year. The unemployment rate rose to 5.1 percent in March, significantly above its level a year ago,

and the labor force participation rate was little changed.

Although industrial production rose in March, production over the first quarter as a whole was soft, having declined, on average, in January and February. Gains in manufacturing output of consumer and high-tech goods in March were partially offset by a sharp drop in production of motor vehicles and parts and by ongoing weakness in the output of construction-related industries. The output of utilities rebounded in March following a weather-related drop in February, and mining output moved up after exhibiting weakness earlier in the year. The factory utilization rate edged up in March but stayed well below its recent high in the third quarter of 2007.

Real consumer spending expanded slowly in the first quarter. Real outlays on durable goods, including automobiles, were estimated to have declined in March, but expenditures on nondurable goods were thought to have edged up, boosted by a sizable increase in real outlays for gasoline. For the quarter as a whole, however, real expenditures on both durable and nondurable goods declined. Real disposable personal income also grew slowly in the first quarter, restrained by rapidly rising prices for energy and food. The ratio of household wealth to disposable income appeared to have moved down again in the first quarter, damped by the appreciable net decline in broad equity prices over that period and by further reductions in house prices. Measures of consumer sentiment fell sharply in March and April; the April reading of consumer sentiment published in the Reuters/University of Michigan Survey of Consumers was near the low levels posted in the early 1990s.

Residential construction continued its rapid contraction in the first quarter. Single-family housing starts maintained

their steep downward trajectory in March, and starts of multifamily homes declined to the lower portion of their recent range. Sales of new single-family homes declined in February to a very low rate and dropped further in March. Even though production cuts by homebuilders helped to reduce the level of inventories at the end of February, the slow pace of sales caused the ratio of unsold new homes to sales to increase further. Sales of existing homes remained weak, on average, in February and March, and the index of pending sales agreements in February suggested continued sluggish activity in coming months. The recent softening in residential housing demand was consistent with reports of tighter credit conditions for both prime and nonprime borrowers.

In the business sector, real spending on equipment and software contracted slightly in the first quarter after having posted a small increase in the fourth quarter. Following declines in both shipments and orders of nondefense capital goods excluding aircraft in January and February, shipments increased in March, but orders were flat. The deteriorating outlook for sales, reduced credit availability, and downbeat readings on business sentiment all pointed to further weakness in capital spending in the near term. Real outlays for non-residential structures also were estimated to have declined in the first quarter. Indicators suggested that the demand for commercial properties had fallen off substantially from record levels last year, and commercial property prices appeared to be decelerating. Reduced credit availability and less-favorable lending terms had apparently weighed on activity in this sector.

Real investment in nonfarm inventories excluding motor vehicles was estimated to have bounced back to a moderate annual rate in the first quarter,

but motor vehicle inventories continued to fall. Some of the drop in motor vehicle stocks was a result of the disruption to production from a labor dispute. The ratio of book-value inventories to sales in the manufacturing and trade sector (excluding motor vehicles) moved up a little, on average, in January and February. Still, outside of categories tied to housing and construction, firms did not appear to be burdened with excess stocks.

The U.S. international trade deficit widened in February. Imports rose sharply, more than offsetting continued robust growth of exports. Most major categories of non-oil imports increased in February, and imports of natural gas, automobiles, and consumer goods surged. Imports of services continued to rise at a robust pace. By contrast, oil imports moved down. Increases in exports in February were concentrated in agricultural goods, automobiles, and industrial supplies, particularly fuels. Exports of capital goods declined for the second consecutive month, with weakness evident across a wide range of products.

Real economic growth in the major advanced foreign economies was estimated to have slowed further in the first quarter and consumer and business sentiment was generally down. In Japan, business sentiment fell significantly and indicators of investment remained weak. In the euro area, growth was estimated to have remained subdued in the first quarter, with Germany and France faring better than Italy and Spain. Growth in the United Kingdom slowed in the first quarter, as credit conditions tightened. Available data for Canada indicated a continued substantial drag from exports in the first quarter, although domestic demand appeared relatively robust. In emerging market economies, economic growth slowed some

in the fourth quarter and was estimated to have held about steady in the first quarter. In emerging Asia, real economic growth was estimated to have picked up in the first quarter from a robust pace in the fourth quarter, led by brisk expansions in China and Singapore. Growth in other emerging Asian economies generally remained subdued. The pace of expansion in Latin America likely declined some in the first quarter, largely because the Mexican economy slowed in the wake of softer growth in the United States.

Headline inflation in the United States was elevated in March. Although the increase in food prices slowed in March relative to earlier in the year, energy prices rose sharply. Excluding these categories, core inflation rose at a relatively subdued rate again in March. The core personal consumption expenditures (PCE) price index increased at a somewhat more moderate rate in the first quarter than in the fourth quarter of 2007. Survey measures of households' expectations for year-ahead inflation rose further in early April, but survey measures of longer-term inflation expectations moved relatively little. Average hourly earnings increased in March at a somewhat slower pace than in January and February. This wage measure rose significantly less over the 12 months that ended in March than in the previous 12 months. The employment cost index for hourly compensation continued to rise at a moderate rate in the first quarter.

At its March 18 meeting, the Federal Open Market Committee (FOMC) lowered its target for the federal funds rate 75 basis points, to  $2\frac{1}{4}$  percent. In addition, the Board of Governors approved a decrease of 75 basis points in the discount rate, to  $2\frac{1}{2}$  percent. The Committee's statement noted that recent information indicated that the outlook for

economic activity had weakened further; growth in consumer spending had slowed, and labor markets had softened. It also indicated that financial markets remained under considerable stress, and that the tightening of credit conditions and the deepening of the housing contraction were likely to weigh on economic growth over the next few quarters. Inflation had been elevated, and some indicators of inflation expectations had risen, but the Committee expected inflation to moderate in coming quarters, reflecting a projected leveling-out of energy and other commodity prices and an easing of pressures on resource utilization. Still, the Committee noted that uncertainty about the inflation outlook had increased, and that it would be necessary to continue to monitor inflation developments carefully. The Committee said that its action, combined with those taken earlier, including measures to foster market liquidity, should help to promote moderate growth over time and to mitigate the risks to economic activity. The Committee noted, however, that downside risks to growth remained, and indicated that it would act in a timely manner as needed to promote sustainable economic growth and price stability.

Conditions in U.S. financial markets improved somewhat, on balance, over the intermeeting period, but strains in some short-term funding markets increased. Pressures on bank balance sheets and capital positions appeared to mount further, reflecting additional losses on asset-backed securities and on business and household loans. Against this backdrop, term spreads in interbank funding markets and spreads on commercial paper issued by financial institutions widened significantly. Financial institutions continued to tap the Federal Reserve's credit programs. Primary credit borrowing picked up noticeably

after March 16, when the Federal Reserve reduced the spread between the primary credit rate and the target federal funds rate to 25 basis points. Demand for funds from the Term Auction Facility stayed high over the period. In addition, the Primary Dealer Credit Facility drew substantial demand through late March, although the amount outstanding subsequently declined somewhat. Early in the period, historically low interest rates on Treasury bills and on general-collateral Treasury repurchase agreements indicated a considerable demand for safe-haven assets. However, Federal Reserve actions that increased the availability of Treasury securities to the public apparently helped to improve conditions in those markets. In five weekly auctions beginning on March 27, the Term Securities Lending Facility provided a substantial volume of Treasury securities in exchange for less-liquid assets. Yields on short-term Treasury securities and Treasury repurchase agreements moved higher, on balance, following these auctions; nonetheless, “haircuts” applied by lenders on non-Treasury collateral remained elevated, and in some cases increased somewhat, toward the end of the period.

In longer-term credit markets, yields on investment-grade corporate bonds rose, but their spreads relative to Treasury securities decreased a bit from recent multiyear highs. In contrast, yields on speculative-grade issues dropped, and their spreads relative to Treasury yields narrowed significantly. Gross bond issuance by nonfinancial firms was robust in March and the first half of April and included a small amount of issuance by speculative-grade firms. Supported by increases in business and residential real estate loans, commercial bank credit expanded briskly in March despite the report of tighter lending

conditions in the Senior Loan Officer Opinion Survey on Bank Lending Practices conducted in April. Part of the strength in commercial and industrial loans was apparently due to increased utilization of existing credit lines, the pricing of which reflects changes in lending policies only with a lag. Some banks surveyed in April reported that they had started to take actions to limit their exposure to home equity lines of credit, draws on which had grown rapidly in recent months. After having tightened considerably in March, conditions in the conforming segment of the residential mortgage market recovered somewhat. Spreads of rates on conforming residential mortgages over those on comparable-maturity Treasury securities decreased, and credit default swap premiums for the government-sponsored enterprises declined substantially. Broad stock price indexes increased markedly over the intermeeting period, mainly in response to earnings reports and announcements of recapitalizations from major financial institutions that evidently lessened investors’ concerns about the possibility of severe difficulties materializing at those firms.

Conditions in the money markets of major foreign economies remained strained, particularly in the United Kingdom and the euro area. Term interbank funding spreads rose in these areas, despite steps taken by their central banks to help ease liquidity pressures. Yields on sovereign debt in the advanced foreign economies moved up in a range that was about in line with the increases in comparable Treasury yields in the United States. The trade-weighted foreign exchange value of the dollar against major currencies rose.

M2 expanded briskly again in March, as households continued to seek the relative liquidity and safety of liquid deposits and retail money market mu-

tual funds. The increases in these components were also supported by declines in opportunity costs stemming from monetary policy easing.

Over the intermeeting period, the expected path of monetary policy over the next year as measured by money market futures rates moved up significantly on net, apparently because economic data releases and announcements by large financial firms imparted greater confidence among investors about the prospects for the economy's performance in coming quarters. Futures rates also moved up in response to both the Committee's decision to lower the target for the federal funds rate by 75 basis points at the March 18 meeting, which was a somewhat smaller reduction than market participants had expected, and the Committee's accompanying statement, which reportedly conveyed more concern about inflation than had been anticipated. The subsequent release of the minutes of the March FOMC meeting elicited limited reaction. Consistent with the higher expected path for policy and easing of safe-haven demands, yields on nominal Treasury coupon securities rose substantially over the period, and the Treasury yield curve flattened. Measures of inflation compensation for the next five years derived from yields on inflation-indexed Treasury securities were quite volatile around the time of the March FOMC meeting and on balance increased somewhat over the intermeeting period, although they remained in the lower portion of their range over the past several months. Measures of longer-term inflation compensation declined, returning to around the middle of their recent elevated range.

In the forecast prepared for this meeting, the staff made little change to its projection for the growth of real gross domestic product (GDP) in 2008 and

2009. The available indicators of recent economic activity had come in close to the staff's expectations and had continued to suggest that a substantial softening in economic activity was under way. The staff projection pointed to a contraction of real GDP in the first half of 2008 followed by a modest rise in the second half of this year, aided in part by the fiscal stimulus package. The forecast showed real GDP expanding at a rate somewhat above its potential in 2009, reflecting the impetus from cumulative monetary policy easing, continued strength in net exports, a gradual lessening in financial market strains, and the waning drag from past increases in energy prices. Despite this pickup in the pace of activity, the trajectory of resource utilization anticipated through 2009 implied noticeable slack. The projection for core PCE price inflation in 2008 as a whole was unchanged; it was reduced a bit over the first half of the year to reflect the somewhat lower-than-expected readings of recent core PCE inflation and raised a bit over the second half of the year to incorporate the spillover from larger-than-anticipated increases in prices of crude oil and non-oil imports since the previous FOMC meeting. The forecast of headline PCE inflation in 2008 was revised up in light of the further run-up in energy prices and somewhat higher food price inflation; headline PCE inflation was expected to exceed core PCE price inflation by a considerable margin this year. In view of the projected slack in resource utilization in 2009 and flattening out of oil and other commodity prices, both core and headline PCE price inflation were projected to drop back from their 2008 levels, in line with the staff's previous forecasts.

In conjunction with the FOMC meeting in April, all meeting participants (Federal Reserve Board members and

Reserve Bank presidents) provided annual projections for economic growth, the unemployment rate, and inflation for the period 2008 through 2010. The projections are described in the Summary of Economic Projections, which is attached as an addendum to these minutes.

In their discussion of the economic situation and outlook, FOMC participants noted that the data received since the March FOMC meeting, while pointing to continued weakness in economic activity, had been broadly consistent with their expectations. Conditions across a number of financial markets were judged to have improved over the intermeeting period, but financial markets remained fragile and strains in some markets had intensified. Although participants anticipated that further improvement in market conditions would occur only slowly and that some backsliding was possible, the generally better state of financial markets had caused participants to mark down the odds that economic activity could be severely disrupted by a further substantial deterioration in the financial environment. Economic activity was anticipated to be weakest over the next few months, with many participants judging that real GDP was likely to contract slightly in the first half of 2008. GDP growth was expected to begin to recover in the second half of this year, supported by accommodative monetary policy and fiscal stimulus, and to increase further in 2009 and 2010. Views varied about the likely pace and vigor of the recovery through 2009, although all participants projected GDP growth to be at or above trend in 2010. Incoming information on the inflation outlook since the March FOMC meeting had been mixed. Readings on core inflation had improved somewhat, but some of this improvement was thought likely to re-

flect transitory factors, and energy and other commodity prices had increased further since March. Total PCE inflation was projected to moderate from its current elevated level to between 1½ percent and 2 percent in 2010, although participants stressed that this expected moderation was dependent on food and energy prices flattening out and critically on inflation expectations remaining reasonably well anchored.

Conditions across a number of financial markets had improved since the previous FOMC meeting. Equity prices and yields on Treasury securities had increased, volatility in both equity and debt markets had ebbed somewhat, and a range of credit risk premiums had moved down. Participants noted that the better tone of financial markets had been helped by the apparent willingness and ability of financial institutions to raise new capital. Investors' confidence had probably also been buoyed by corporate earnings reports for the first quarter, which suggested that profit growth outside of the financial sector remained solid, and also by the resolution of the difficulties of a major broker-dealer in mid-March. Moreover, the various liquidity facilities introduced by the Federal Reserve in recent months were thought to have bolstered market liquidity and aided a return to more orderly market functioning. But participants emphasized that financial markets remained under considerable stress, noted that the functioning of many markets remained impaired, and expressed concern that some of the recent recovery in markets could prove fragile. Strains in short-term funding markets had intensified over the intermeeting period, in part reflecting continuing pressures on the liquidity positions of financial institutions. Despite a narrowing of spreads on corporate bonds, credit conditions were seen as

remaining tight. The Senior Loan Officer Opinion Survey on Bank Lending Practices conducted in April indicated that banks had tightened lending standards and pricing terms on loans to both businesses and households. Participants stressed that it could take some time for the financial system to return to a more normal footing, and a number of participants were of the view that financial headwinds would probably continue to restrain economic activity through much of next year. Even so, the likelihood that the functioning of the financial system would deteriorate substantially further with significant adverse implications for the economic outlook was judged by participants to have receded somewhat since the March FOMC meeting.

The housing market had continued to weaken since the previous meeting, and participants saw little indication of a bottoming out in either housing activity or prices. Housing starts and the demand for new homes had declined further, house prices in many parts of the country were falling faster than they had towards the end of 2007, and inventories of unsold homes remained quite elevated. A small number of participants reported tentative signs that housing activity in a few areas of the country might be beginning to pick up, and a narrowing of credit risk spreads on AAA indexes of sub-prime mortgages in recent weeks was also noted. Nonetheless, the outlook for the housing market remained bleak, with housing demand likely to be affected by restrictive conditions in mortgage markets, fears that house prices would fall further, and weakening labor markets. The possibility that house prices could decline by more than anticipated, and that the effects of such a decline could be amplified through their impact on financial institutions and financial markets,

remained a key source of downside risk to participants' projections for economic growth.

Growth in consumer spending appeared to have slowed to a crawl in recent months and consumer sentiment had fallen sharply. The pressure on households' real incomes from higher energy prices and the erosion of wealth resulting from continuing declines in house prices likely contributed to the deceleration in consumer outlays. Reports from contacts in the banking and financial services sectors indicated that the availability of both consumer credit and home equity lines had tightened considerably further in recent months and that delinquency rates on household credit had continued to drift upwards. Consumer sentiment and spending had also been held down by the softening in labor markets—nonfarm payroll employment had fallen for the third consecutive month in March and the unemployment rate had moved up. The restraint on spending emanating from weakness in labor markets was expected to increase over coming quarters, with participants projecting the unemployment rate to pick up further this year and to remain elevated in 2009.

Consumption spending was likely to be supported in the near term by the fiscal stimulus package, which was expected to boost spending temporarily in the middle of this year. Some participants suggested that the weak economic environment could increase the propensity of households to use their tax rebates to pay down existing debt and so might diminish the impact of the package. However, it was also noted that the tightening in credit availability might mean a significant number of households may be credit constrained and this might increase the proportion of the rebates that is spent. The timing

and magnitude of the impact of the stimulus package on GDP was also seen as depending on the extent to which the boost to consumption spending is absorbed by a temporary run-down in firms' inventories or by an increase in imports rather than by an expansion in domestic output.

The outlook for business spending remained decidedly downbeat. Indicators of business sentiment were low, and reports from business contacts suggested that firms were scaling back their capital spending plans. Several participants reported that uncertainty about the economic outlook was leading firms to defer spending projects until prospects for economic activity became clearer. The tightening in the supply of business credit was also seen as holding back investment, with some firms apparently reluctant to reduce their liquidity positions in the current environment. Spending on nonresidential construction projects continued to slow, although the extent of that slowing varied across the country. A few participants reported that the commercial real estate market in some areas remained relatively firm, supported by low vacancy rates.

The strength of U.S. exports remained a notable bright spot. Growth in exports, which had been supported by solid advances in foreign economies and by declines in the foreign exchange value of the dollar, had partially insulated the output and profits of U.S. companies, especially those in the manufacturing sector, from the effects of weakening domestic demand. Several participants voiced concern, however, that the pace of activity in the rest of the world could slow in coming quarters, suggesting that the impetus provided from net exports might well diminish.

The information received on the inflation outlook since the March FOMC

meeting had been mixed. Recent readings on core inflation had improved somewhat, although participants noted that some of that improvement probably reflected transitory factors. Moreover, the increase in crude oil prices to record levels, together with rapid increases in food and import prices in recent months, was likely to put upward pressure on inflation over the next few quarters. Prices embedded in futures contracts continued to point to a leveling-off of energy and commodity prices. Although these futures contracts probably remained the best basis for projecting movements in commodity prices, participants emphasized the considerable uncertainty attending the likely path of commodity prices and cautioned that commodity prices in recent years had often advanced more quickly than had been implied by futures contracts. Several participants reported that business contacts had expressed growing concerns about the increase in their input costs and that there were signs that an increasing number of firms were seeking to pass on these higher costs to their customers in the form of higher prices. Other participants noted, however, that the extent of the pass-through of higher energy and food prices to core retail prices appeared relatively limited to date, and that profit margins in the nonfinancial sector remained reasonably high, suggesting that there was some scope for firms to absorb cost increases without raising prices. Available data and anecdotal reports indicated that gains in labor compensation remained moderate, and some participants suggested that wage growth was unlikely to pick up sharply in coming quarters if, as anticipated, labor markets remained relatively soft. However, several participants were of the view that wage inflation tended to lag increases in prices and so may

not provide a useful guide to emerging price pressures.

On balance, participants expected the recent increases in oil and food prices to continue to boost overall consumer price inflation in the near term; thereafter, total inflation was projected to moderate, with all participants expecting total PCE inflation of between 1½ percent and 2 percent by 2010. Participants stressed that the expected moderation in inflation was dependent on the continued stability of inflation expectations. A number of participants voiced concern that long-term inflation expectations could drift upwards if headline inflation remained elevated for a protracted period or if the recent substantial policy easing was misinterpreted by the public as suggesting that Committee members had a greater tolerance for inflation than previously thought. The possibility that inflation expectations could increase was viewed as a key upside risk to the inflation outlook. However, participants emphasized that appropriate monetary policy, combined with effective communication of the Committee's commitment to price stability, would mitigate this risk.

Participants stressed the difficulty of gauging the appropriate stance of policy in current circumstances. Some participants noted that the level of the federal funds target, especially when compared with the current rate of inflation, was relatively low by historical standards. Even taking account of current financial headwinds, such a low rate could suggest that policy was reasonably accommodative. However, other participants observed that the pronounced strains in banking and financial markets imparted much greater uncertainty to such assessments and meant that measures of the stance of policy based on the real federal funds rate were not likely to provide a reliable guide in the current envi-

ronment. Several participants expressed the view that the easing in monetary policy since last fall had not as yet led to a loosening in overall financial conditions, but rather had prevented financial conditions from tightening as much as they otherwise would have in response to escalating strains in financial markets. This view suggested that the stimulus from past monetary policy easing would be felt mainly as conditions in financial markets improved.

In the Committee's discussion of monetary policy for the intermeeting period, most members judged that policy should be eased by 25 basis points at this meeting. Although prospects for economic activity had not deteriorated significantly since the March meeting, the outlook for growth and employment remained weak and slack in resource utilization was likely to increase. An additional easing in policy would help to foster moderate growth over time without impeding a moderation in inflation. Moreover, although the likelihood that economic activity would be severely disrupted by a sharp deterioration in financial markets had apparently receded, most members thought that the risks to economic growth were still skewed to the downside. A reduction in interest rates would help to mitigate those risks. However, most members viewed the decision to reduce interest rates at this meeting as a close call. The substantial easing of monetary policy since last September, the ongoing steps taken by the Federal Reserve to provide liquidity and support market functioning, and the imminent fiscal stimulus would help to support economic activity. Moreover, although downside risks to growth remained, members were also concerned about the upside risks to the inflation outlook, given the continued increases in oil and commodity prices and the fact that some indicators sug-

gested that inflation expectations had risen in recent months. Nonetheless, most members agreed that a further, modest easing in the stance of policy was appropriate to balance better the risks to achieving the Committee's dual objectives of maximum employment and price stability over the medium run.

The Committee agreed that the statement to be released after the meeting should take note of the substantial policy easing to date and the ongoing measures to foster market liquidity. In light of these significant policy actions, the risks to growth were now thought to be more closely balanced by the risks to inflation. Accordingly, the Committee felt that it was no longer appropriate for the statement to emphasize the downside risks to growth. Given these circumstances, future policy adjustments would depend on the extent to which economic and financial developments affected the medium-term outlook for growth and inflation. In that regard, several members noted that it was unlikely to be appropriate to ease policy in response to information suggesting that the economy was slowing further or even contracting slightly in the near term, unless economic and financial developments indicated a significant weakening of the economic outlook.

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

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with reducing the federal funds rate to an average of around 2 percent.

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

The Federal Open Market Committee decided today to lower its target for the federal funds rate 25 basis points to 2 percent.

Recent information indicates that economic activity remains weak. Household and business spending has been subdued and labor markets have softened further. Financial markets remain under considerable stress, and tight credit conditions and the deepening housing contraction are likely to weigh on economic growth over the next few quarters.

Although readings on core inflation have improved somewhat, energy and other commodity prices have increased, and some indicators of inflation expectations have risen in recent months. The Committee expects inflation to moderate in coming quarters, reflecting a projected leveling-out of energy and other commodity prices and an easing of pressures on resource utilization. Still, uncertainty about the inflation outlook remains high. It will be necessary to continue to monitor inflation developments carefully.

The substantial easing of monetary policy to date, combined with ongoing measures to foster market liquidity, should help to promote moderate growth over time and to mitigate risks to economic activity. The Committee will continue to monitor economic and financial developments and will act as needed to promote sustainable economic growth and price stability.

Votes for this action: Messrs. Bernanke, Geithner, Kohn, Kroszner, and Mishkin, Ms. Pianalto, Messrs. Stern and Warsh. Votes against this action: Messrs. Fisher and Plosser.

Messrs. Fisher and Plosser dissented because they preferred no change in the target federal funds rate at this meeting. Although the economy had been weak, it had evolved roughly as expected since the previous meeting. Stresses in financial markets also had continued, but the Federal Reserve's liquidity facilities were helpful in that regard and the more worrisome development in

their view was the outlook for inflation. Rising prices for food, energy, and other commodities; signs of higher inflation expectations; and a negative real federal funds rate raised substantial concerns about the prospects for inflation. Mr. Plosser cited the recent rapid growth of monetary aggregates as additional evidence that the economy had ample liquidity after the aggressive easing of policy to date. Mr. Fisher was concerned that an adverse feedback loop was developing by which lowering the funds rate had been pushing down the exchange value of the dollar, contributing to higher commodity and import prices, cutting real spending by businesses and households, and therefore ultimately impairing economic activity. To help prevent inflation expectations from becoming unhinged, both Messrs. Fisher and Plosser felt the Committee should put additional emphasis on its price stability goal at this point, and they believed that another reduction in the funds rate at this meeting could prove costly over the longer run.

In a joint session of the Federal Open Market Committee and the Board of Governors, meeting participants turned to a discussion of the implications of the payment of interest on reserves for monetary policy implementation. Following passage of the Financial Services Regulatory Relief Act of 2006, which will permit the Federal Reserve to reduce reserve requirements and to pay interest on reserves beginning in 2011, the staff had undertaken work to explore and evaluate alternative approaches to monetary policy implementation using these new authorities. After a staff presentation summarizing the work to date, policymakers discussed the potential advantages and disadvantages of several of the alternative approaches. Considerations included re-

ducing the burden and complexity associated with the current system of reserve requirements and ensuring that the Committee's interest rate targets could be reliably achieved. Participants noted that frameworks for monetary policy implementation employed in other countries span a wide range and that the experiences of these countries provided useful information for the Federal Reserve's consideration of alternative approaches. They agreed that further study was required to narrow the range of options under consideration and that it would be important to consult closely with depository institutions and others in the design of a new system.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, June 24–25, 2008.

The meeting adjourned at 1:00 p.m.

#### Notation Votes

By notation vote completed on March 20, 2008, the Committee unanimously approved a resolution that added non-agency AAA-rated commercial-mortgage-backed securities to the list of collateral acceptable in connection with the Term Securities Lending Facility.

By notation vote completed on April 7, 2008, the Committee unanimously approved the minutes of the FOMC meeting held on March 18, 2008.

Brian F. Madigan  
Secretary

#### Addendum: Summary of Economic Projections

In conjunction with the April 2008 FOMC meeting, the members of the Board of Governors and the presidents of the Federal Reserve Banks, all of whom participate in the deliberations of

Table 1. Economic Projections of Federal Reserve Governors and Reserve Bank Presidents  
Percent

	2008	2009	2010
<b>Central Tendency<sup>1</sup></b>			
Growth of real GDP .....	0.3 to 1.2	2.0 to 2.8	2.6 to 3.1
<i>January projections</i> .....	1.3 to 2.0	2.1 to 2.7	2.5 to 3.0
Unemployment rate .....	5.5 to 5.7	5.2 to 5.7	4.9 to 5.5
<i>January projections</i> .....	5.2 to 5.3	5.0 to 5.3	4.9 to 5.1
PCE inflation .....	3.1 to 3.4	1.9 to 2.3	1.8 to 2.0
<i>January projections</i> .....	2.1 to 2.4	1.7 to 2.0	1.7 to 2.0
Core PCE inflation .....	2.2 to 2.4	1.9 to 2.1	1.7 to 1.9
<i>January projections</i> .....	2.0 to 2.2	1.7 to 2.0	1.7 to 1.9
<b>Range<sup>2</sup></b>			
Growth of real GDP .....	0.0 to 1.5	1.8 to 3.0	2.0 to 3.4
<i>January projections</i> .....	1.0 to 2.2	1.8 to 3.2	2.2 to 3.2
Unemployment rate .....	5.3 to 6.0	5.2 to 6.3	4.8 to 5.9
<i>January projections</i> .....	5.0 to 5.5	4.9 to 5.7	4.7 to 5.4
PCE inflation .....	2.8 to 3.8	1.7 to 3.0	1.5 to 2.0
<i>January projections</i> .....	2.0 to 2.8	1.7 to 2.3	1.5 to 2.0
Core PCE inflation .....	1.9 to 2.5	1.7 to 2.2	1.3 to 2.0
<i>January projections</i> .....	1.9 to 2.3	1.7 to 2.2	1.4 to 2.0

NOTE: Projections of the growth of real GDP, of PCE inflation, and of core PCE inflation are percent changes from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures and the price index for personal consumption expenditures excluding food and energy. Projections for the unemployment rate are for the average civilian unem-

ployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy.

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

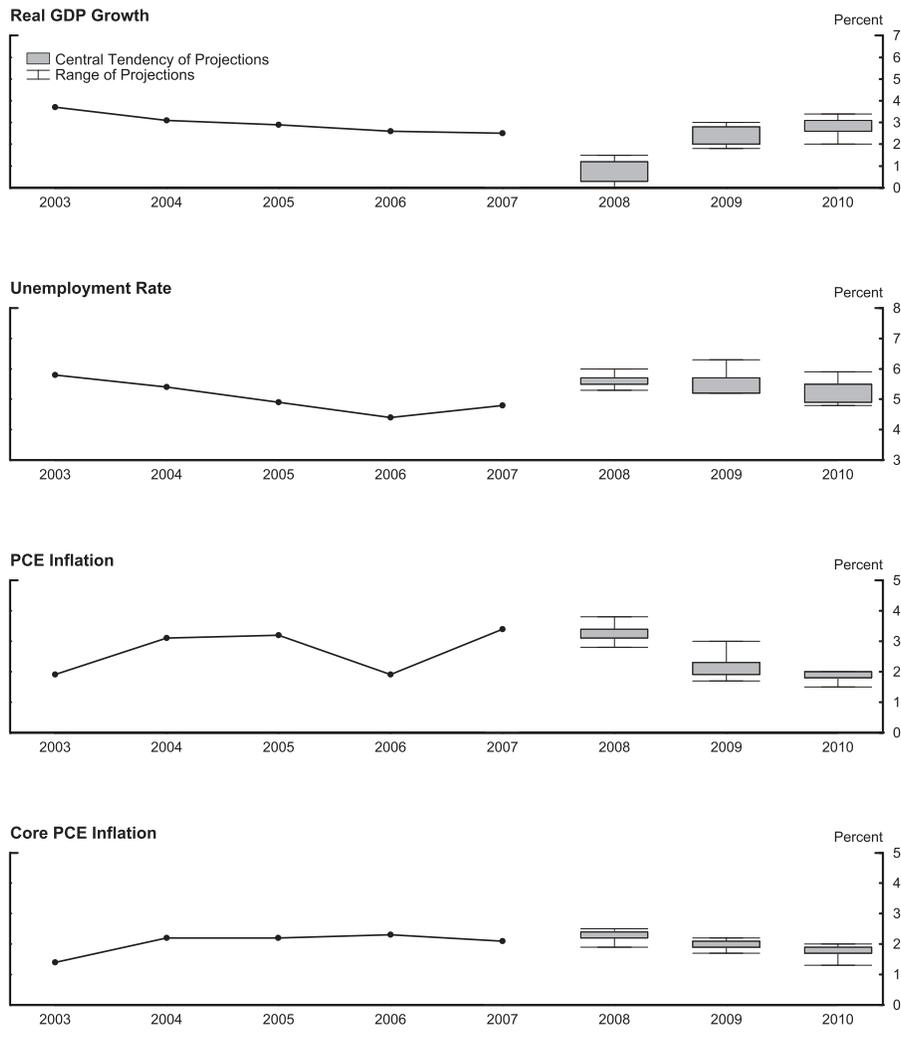
2. The range for a variable in a given year includes all participants' projections, from lowest to highest, for that variable in that year.

the FOMC, provided projections for the rates of economic growth, unemployment, and inflation in 2008, 2009, and 2010. Projections were based on information available through the conclusion of the April meeting, on each participant's assumptions regarding a range of factors likely to affect economic outcomes, and on his or her assessment of appropriate monetary policy. "Appropriate monetary policy" is defined as the future policy that, based on current information, is deemed most likely to foster outcomes for economic activity and inflation that best satisfy the participant's interpretation of the Federal Reserve's dual objectives of maximum employment and price stability.

The projections, which are summarized in table 1 and chart 1, suggest that FOMC participants expected economic

growth to be much weaker in 2008 than last year, owing primarily to a continued contraction of housing activity, a reduction in the availability of household and business credit, and rising energy prices. The unemployment rate was expected to increase significantly. However, output growth further ahead was projected to pick up by enough to begin to reverse some of the increase in the unemployment rate by 2010. In light of the recent surge in the prices of oil and other commodities, inflation was expected to remain elevated in 2008. Inflation was projected to moderate in 2009 and 2010 as the prices of crude oil and other commodities level out and economic slack damps cost and price pressures. Most participants judged that the uncertainty around their projections for both output growth and

Chart 1. Central Tendencies and Ranges of Economic Projections\*



\* See notes to Table 1 for variable definitions.

inflation was greater than normal. Most viewed the risks to output as weighted to the downside. Participants were roughly evenly divided as to whether the risks to the inflation outlook are broadly balanced or skewed to the upside.

### The Outlook

The central tendency of participants' projections for real GDP growth in 2008, at 0.3 to 1.2 percent, was considerably lower than the central tendency of the projections provided in conjunc-

tion with the January FOMC meeting, which was 1.3 to 2.0 percent. Participants viewed activity as likely to be particularly weak in the first half of 2008; some rebound was anticipated in the second half of the year. Incoming data on spending and employment already indicated a softening economy this year. Real incomes were being held down by higher oil prices; falling house prices had reduced household wealth; and households and businesses were facing tighter credit conditions. Exports were seen as a notable source of strength this year owing to continued economic growth overseas and the depreciation of the dollar over the past year or so. Many participants also said that the substantial easing of monetary policy since last year and the fiscal stimulus package should help to support spending in the second half of the year. Beyond 2008, factors projected to buoy economic growth included the continued effects of an accommodative stance of monetary policy in conjunction with a gradual easing of financial market strains, a stabilization in housing markets, and a leveling-off of oil and commodity prices. Participants were encouraged by steps taken at major financial institutions to bolster their balance sheets and to raise new capital. Some expressed the view that financial market sentiment may have swung excessively to the pessimistic side, and that risk spreads would come down and credit would become more available as risk aversion diminishes. Also, demand and supply in the housing market should become better aligned as the decline in house prices increases the affordability of homeownership and the decline in housing starts reduces the supply of new homes. Most participants expected real GDP to grow roughly at their estimates of its trend rate in 2009 and somewhat above trend in 2010.

With output growth well below trend this year, most participants expected that the unemployment rate would move up. The central tendency of participants' projections for the average rate of unemployment in the fourth quarter of 2008 was 5.5 to 5.7 percent, above the 5.2 to 5.3 percent unemployment rate forecasted in January and consistent with significant slack in labor markets and the economy. Most participants expected the unemployment rate to edge down in 2009 and 2010.

The steep run-up in the prices of oil and other commodities since January was the primary factor leading participants to revise up sharply their projections for overall inflation in the near term. In contrast, the central tendencies of the projections for core PCE inflation in 2008 increased only moderately, from 2.0 to 2.2 percent in January to 2.2 to 2.4 percent in April, reflecting the effects of higher food and energy prices on other goods and services and the rise in import prices associated with the decline in the dollar and higher inflation in our trading partners.

Rates of both overall and core inflation were expected to decline over the next two years, reflecting a flattening out of the prices of oil and other commodities consistent with futures market prices and the effects of significant economic slack. Participants' projections for 2010 were importantly influenced by their judgments about the measured rates of inflation consistent with the Federal Reserve's dual mandate to promote maximum employment and price stability and about the time frame over which policy should aim to attain those rates given current economic conditions. Many participants judged that, given the recent adverse shocks to both aggregate demand and inflation, policy would be able to foster only a gradual return of key macroeconomic variables

to their longer-run sustainable or optimal levels. Consequently, the rate of unemployment was projected by many participants to remain above its longer-run sustainable level even in 2010, and inflation was viewed likely still to be a bit above levels that some participants judged would be consistent with the Federal Reserve's dual mandate.

#### *Risks to the Outlook*

Most participants viewed the risks to their GDP projections as weighted to the downside and the associated risks to their projections of the unemployment rate as tilted to the upside. The possibility that house prices could decline more steeply than anticipated, putting further downward pressure on residential investment and consumption, was perceived as a significant risk to the outlook for economic growth and employment. Another risk was the possibility that foreign economies might slow more than expected, damping U.S. exports. Financial market conditions continued to pose serious risks—stock prices had declined on net since the January meeting and credit conditions had tightened further for both households and firms. Although several participants noted that financial strains had eased somewhat in April, most agreed that overall financial conditions remained tighter than at the beginning of the year. The potential for adverse interactions, in which weaker economic activity could lead to a worsening of financial conditions and a reduced availability of credit, which in turn could further damp economic growth, continued to be viewed as a worrisome possibility.

Regarding risks to the inflation outlook, participants pointed to the possibility that economic slack could put either more or less downward pressure on costs and prices than anticipated.

Some noted that downside risks to aggregate demand implied a risk of greater economic slack and corresponding downside risks to price pressures. However, many participants (noticeably more than in January) saw the upside risks to inflation as greater than the downside risks to inflation. In particular, the pass-through of recent increases in energy and commodity prices as well as of past dollar depreciation to consumer prices could be greater than expected. In addition, some participants expressed concern that commodity prices may not flatten out as implied by futures prices, thus putting further upward pressure on prices. Finally, inflation expectations could become less firmly anchored if the current elevated rates of inflation were to persist for longer than anticipated or if the public were to misinterpret the recent substantial policy easing as reflecting less resolve among Committee members to maintain low and stable inflation.

Participants continued to view uncertainty about the outlook for economic activity as higher than normal, with some noting that economic slowdowns are generally associated with heightened uncertainty as are episodes of unusual credit restraint. In addition, participants expressed notably more uncertainty about their inflation projections than they had in January, reflecting in part the difficulty of assessing the opposing effects of increased economic slack and higher energy prices. (Table 2 provides estimates of average ranges of forecast uncertainty for GDP growth, unemployment, and inflation since 1987.<sup>7</sup>)

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7. The box "Forecast Uncertainty" at the end of this summary discusses the sources and interpretation of uncertainty in economic forecasts and explains the approach used to assess the uncertainty and risks attending participants' projections.

Table 2. Average Historical Projection Error Ranges  
Percentage points

	2008	2009	2010
Real GDP <sup>1</sup> .....	±1.0	±1.3	±1.4
Unemployment rate <sup>2</sup> .....	±0.4	±0.7	±1.0
Total consumer prices <sup>3</sup> ...	±0.7	±1.0	±1.0

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

1. Projection is percent change, fourth quarter of the previous year to fourth quarter of the year indicated.

2. Projection is the fourth-quarter average of the civilian unemployment rate (percent).

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

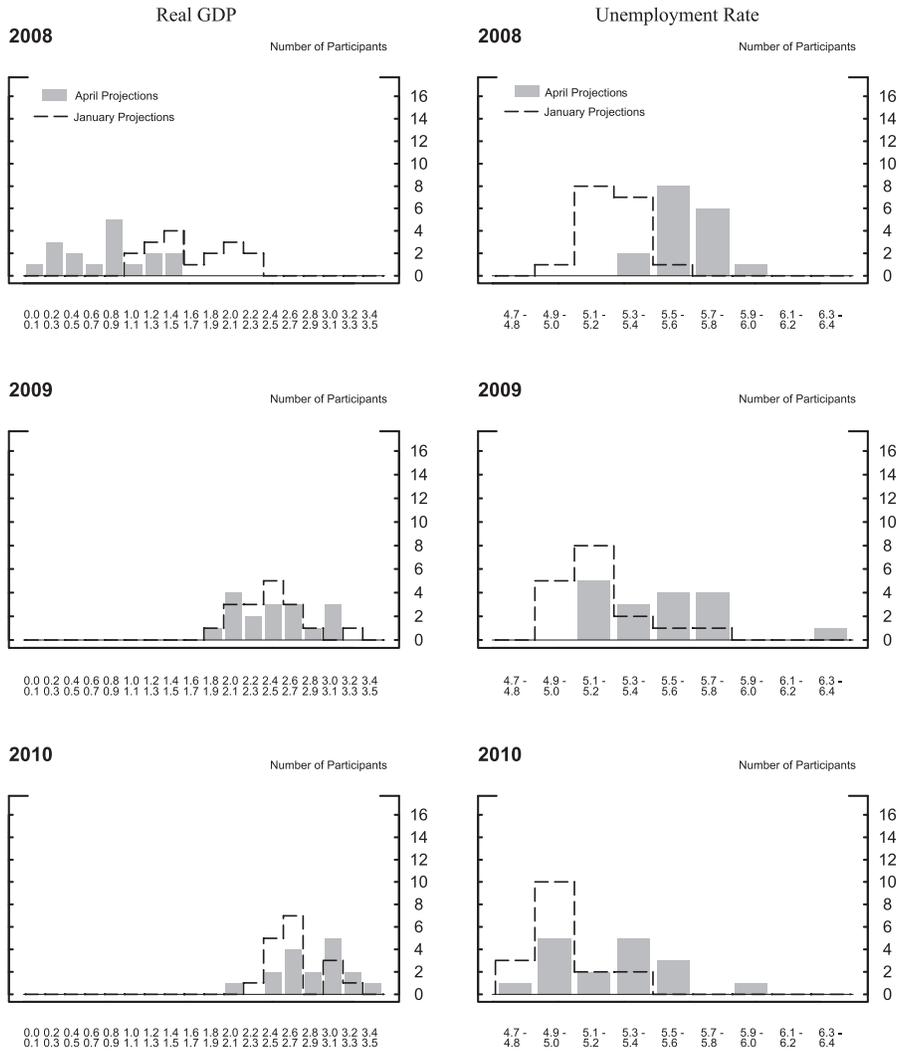
#### *Diversity of Participants' Views*

Charts 2(a) and 2(b) provide more detail on the diversity of participants' views. The dispersions of participants' projections for real GDP growth in 2008 and 2009 were roughly equally wide in January and April, but for 2010 the dispersion was a bit wider in April. Relative to the projections made in June 2007, just before the onset of financial market turbulence, the diversity in views about real activity had widened considerably.<sup>8</sup> This increased dispersion

8. The June 2007 projections were included in the Board's *Monetary Policy Report to the Congress* in July 2007.

was also apparent in projections for the unemployment rate. The dispersion of projections for output and employment in 2008 seemed largely to reflect differing assessments of the effect of financial market conditions on real activity, the speed with which credit conditions might improve, and the depth and duration of the housing market contraction. For 2009, views differed notably about the pace at which output and employment would recover, with some participants concerned that financial strains could prove more persistent than most participants expected. The dispersion of participants' longer-term projections was also affected to some degree by differences in their judgments about the economy's trend growth rate and the unemployment rate that would be consistent over time with maximum employment. The dispersion of the projections for PCE inflation in 2008 and 2009 had widened somewhat since January, reflecting different views on the extent to which recent increases in the prices of oil and other commodities would pass through into higher consumer prices, on whether the prices of oil and other commodities would flatten out as implied in futures market prices, and on the influence that inflation expectations would exert on inflation over the short and medium run. Participants' inflation projections further out were influenced by their views of the rate of inflation consistent with the Federal Reserve's dual objectives and the time it would take to achieve these goals given current economic conditions and appropriate policy.

Chart 2(a). Distribution of Participants' Projections (percent)





## Forecast Uncertainty

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

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

jections are broadly balanced, the numbers reported in table 2 would imply a probability of about 70 percent that actual GDP would expand between 2.0 percent to 4.0 percent in the current year, 1.7 percent to 4.3 percent in the second year, and 1.6 percent to 4.4 percent in the third year. The corresponding 70 percent confidence intervals for overall inflation would be 1.3 percent to 2.7 percent in the current year and 1.0 percent to 3.0 percent in the second and third years.

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

### Meeting Held on June 24–25, 2008

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, June 24, 2008 at 2:00 p.m. and continued on Wednesday, June 25, 2008 at 9:00 a.m.

*Present:*

Mr. Bernanke, Chairman  
 Mr. Geithner, Vice Chairman  
 Mr. Fisher  
 Mr. Kohn  
 Mr. Kroszner  
 Mr. Mishkin  
 Ms. Pianalto  
 Mr. Plosser  
 Mr. Stern  
 Mr. Warsh

Ms. Cumming, Messrs. Evans, Lacker, and Lockhart, and Ms. Yellen, Alternate Members of the Federal Open Market Committee

Messrs. Bullard, Hoenig, and Rosengren, Presidents of the Federal Reserve Banks of St. Louis, Kansas City, and Boston, respectively

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

Messrs. Connors, English, and Kamin, Ms. Mester, Messrs. Rolnick, Rosenblum, Slifman, Tracy, and Wilcox, Associate Economists

Mr. Dudley, Manager, System Open Market Account

Ms. J. Johnson,<sup>9</sup> Secretary, Office of the Secretary, Board of Governors

Mr. Cole, Director, Division of Banking Supervision and Regulation, Board of Governors

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

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

Mr. Frierson,<sup>9</sup> Deputy Secretary, Office of the Secretary, Board of Governors

Ms. Bailey,<sup>9</sup> Deputy Director, Division of Banking Supervision and Regulation, Board of Governors

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

Mr. Parkinson,<sup>9</sup> Deputy Director, Division of Research and Statistics, Board of Governors

Ms. Barger,<sup>9</sup> Deputy Director, Division of Banking Supervision and Regulation, Board of Governors

Mr. Stehm,<sup>9</sup> Associate Director, Division of Reserve Bank Operations and Payment Systems, Board of Governors

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

Mr. Gagnon,<sup>10</sup> Visiting Associate Director, Division of Monetary Affairs, Board of Governors

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

Mr. Zakrajšek, Assistant Director, Division of Monetary Affairs, Board of Governors

Mr. Erceg,<sup>10</sup> Assistant Director, Division of International Finance, Board of Governors

9. Attended portion of the meeting relating to the supervisory report concerning investment banks and related policy issues.

10. Attended portions of the meeting through the policy vote.

- Mr. Oliner, Senior Adviser, Division of Research and Statistics, Board of Governors
- Mr. Gross,<sup>9</sup> Special Assistant to the Board, Office of Board Members, Board of Governors
- Ms. Tevlin,<sup>10</sup> Senior Economist, Division of Research and Statistics, Board of Governors
- Mr. Ammer,<sup>10</sup> Senior Economist, Division of International Finance, Board of Governors
- Ms. Beechey, Economist, Division of Monetary Affairs, Board of Governors
- Ms. Dykes, Project Manager, Division of Monetary Affairs, Board of Governors
- Mr. Luecke, Section Chief, Division of Monetary Affairs, Board of Governors
- Ms. Beattie,<sup>9</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. Hughes,<sup>9</sup> Staff Assistant, Office of the Secretary, Board of Governors
- Mr. Barron, First Vice President, Federal Reserve Bank of Atlanta
- Mr. Fuhrer, Executive Vice President, Federal Reserve Bank of Boston
- Messrs. Altig, Angulo,<sup>9</sup> Rasche, Schweitzer, Sellon, and Weinberg, Senior Vice Presidents, Federal Reserve Banks of Atlanta, New York, St. Louis, Cleveland, Kansas City, and Richmond, respectively
- Messrs. Fernald and Fisher, and Ms. McLaughlin, Vice Presidents, Federal Reserve Banks of San Francisco, Chicago, and New York, respectively

The Manager of the System Open Market Account reported on recent de-

velopments in foreign exchange markets. There were no open market operations in foreign currencies for the System's account in the period since the previous meeting. The Manager also reported on developments in domestic financial markets and on System open market operations in government securities and federal agency obligations during the period since the previous meeting. By unanimous vote, the Committee ratified these transactions.

The information reviewed at the June meeting indicated that economic activity had remained soft in recent months. Manufacturing activity had deteriorated, business investment in equipment appeared to have moved down, and residential construction had continued its steep descent. Labor market conditions had weakened further, and consumer sentiment was at historical lows, but despite these developments, consumer spending appeared resilient. Core consumer price inflation had been stable over recent months, but headline inflation had remained elevated because of further substantial increases in food and energy prices.

Labor demand continued to weaken in April and May. Private payroll employment fell at a slower rate than earlier in the year, but the decline in jobs was again widespread, with the exception of nonbusiness services. As a result, aggregate hours of private production or nonsupervisory workers fell, on average, in April and May. The unemployment rate jumped from 5.0 percent in April to 5.5 percent in May and was now about a percentage point above its level of a year ago. The increase from April to May was accompanied by a rise in labor force participation, especially among young people.

Industrial production contracted in April and May at a slightly faster pace than in the first quarter. Manufacturing

output also fell in April and was unchanged in May; over the two months, factory production slowed across a broad range of industries. Production in the high-tech sector continued to expand but at only a modest rate. The factory utilization rate edged down further in April and May to a level below its first-quarter average and was well below its recent high in the third quarter of 2007.

The growth of real consumer spending appeared to have picked up moderately from its sluggish pace in the first quarter. Real outlays on goods other than motor vehicles increased at a robust pace, on average, in April and May. However, retail purchases of motor vehicles fell to a low level. More broadly, households' financial conditions appeared to have weakened in recent months. Real disposable personal income had been rising only slowly since last summer, restrained by the gradual deterioration in labor market conditions and sharp increases in food and energy prices. The ratio of household wealth to income had dropped sharply in the first quarter, reflecting substantial net declines in broad equity prices and further depreciation of house prices. Measures of consumer sentiment fell further in April and May; the May readings from the Reuters/University of Michigan Surveys of Consumers and the Conference Board Consumer Confidence Survey were near their low points reached during the early 1990s.

Activity in the housing sector remained very weak in April and May. Single-family housing starts posted further declines, leaving the pace of construction in this sector down about two-thirds from the peak in early 2006; starts of multifamily homes were a bit below their average over the last 10 years. Although production cuts in the single-family housing sector re-

sulted in continued reductions of inventories of unsold new homes, the slow pace of sales left the ratio of unsold new homes to sales at elevated levels not seen since the early 1980s. Sales of existing homes remained little changed through April at a low level. However, the index of pending sales agreements—an indicator of existing home sales in coming months—jumped in April to its highest reading in six months. Conditions in mortgage credit markets remained tight, particularly for nonprime borrowers and for those seeking nonconforming mortgages.

In the business sector, real spending on equipment and software appeared to move down a bit further in April and May following a slight decrease in the first quarter. Business outlays on transportation equipment continued to fall sharply. The data on shipments and orders of nondefense capital goods through May suggested that spending on high-tech equipment and software was expanding sluggishly, while outlays for other equipment remained weak. The slower pace of capital expenditures appeared consistent with a general deterioration of business conditions, including a deceleration of sales, a pessimistic tone across monthly surveys of business conditions, and tighter standards and terms on business credit. Real spending on nonresidential construction continued to rise in the first quarter, but at a substantially slower rate than over the previous two years. The architectural billing index plummeted recently, and vacancy rates for commercial properties ticked up.

Real nonfarm inventories excluding motor vehicles rose only slightly in the first quarter, as firms cut production to keep inventories aligned with the sluggish pace of sales. The ratio of book-value inventories to sales (excluding motor vehicles) ticked down in April

and had changed relatively little, on net, since the middle of 2007. Despite sharply lower sales of motor vehicles, the modest pace of production allowed inventories to fall further through May. Production at automakers was restrained by both weak demand and disruptions caused by labor disputes.

The U.S. international trade deficit widened in April, as a jump in imports outweighed a rise in exports. Most categories of goods imports rebounded in April from lower levels in March, especially petroleum products, the prices of which had moved sharply higher. Imports of non-oil industrial supplies, capital goods, and automotive products also surged in April, whereas imports of consumer goods expanded more slowly. The increase in exports was broad-based, with strong increases in exports of industrial supplies, capital and consumer goods, and automotive products.

Economic activity in advanced foreign economies appeared to have expanded moderately in the first quarter, but the pace of that activity varied markedly across economies. In the euro area and Japan, strong investment contributed to a sharp acceleration in output. Economic growth in the United Kingdom moderated because of a slowdown in real estate and business activities. Falling exports and inventories subtracted from Canadian output growth. Recent data pointed to broad softness across the advanced foreign economies in the second quarter, consistent with a weakening of consumer and business confidence. Indicators for emerging market economies pointed to continued solid growth in the first quarter, albeit at a slower pace than last year among Latin American economies. In particular, economic activity in Mexico slowed further in the first quarter, in the wake of weaker growth in the United States. In contrast, real output in China and

India appeared to have continued expanding at the rapid rates seen in 2007. Inflation stayed high, on balance, in all regions, as recent price increases for food and energy added to global inflationary pressures.

Headline consumer price inflation in the United States remained elevated in April and May, mostly because of large increases in food and energy prices. Excluding these categories, core prices rose at a relatively subdued rate in these two months. Average hourly earnings increased in April and May at a slower pace than in the first quarter, bringing the change over the 12 months ending in May below the pace over the previous 12 months. The employment cost index for hourly compensation rose moderately in the first quarter and at a similar rate to recent years.

At its April 29–30 meeting, the Federal Open Market Committee (FOMC) lowered its target for the federal funds rate 25 basis points, to 2 percent. In addition, the Board of Governors approved a decrease of 25 basis points in the discount rate, to  $2\frac{1}{4}$  percent. The Committee's statement noted that recent information indicated that economic activity remained weak; household and business spending had been subdued, and labor markets had softened further. Financial markets remained under considerable stress, and tight credit conditions and the deepening housing contraction were likely to weigh on economic growth over the next few quarters. Although readings on core inflation had improved somewhat, energy and other commodity prices had increased, and some indicators of inflation expectations had risen in recent months. The Committee expected inflation to moderate in coming quarters, reflecting a projected leveling-out of energy and other commodity prices and an easing of pressures on resource utili-

zation. Still, uncertainty about the inflation outlook remained high, and the Committee noted that it would be necessary to continue to monitor inflation developments closely. The Committee stated that the substantial easing of monetary policy to date, combined with ongoing measures to foster market liquidity, should help to promote moderate growth over time and to mitigate risks to economic activity. The Committee indicated that it would continue to monitor economic and financial developments and act as needed to promote sustainable economic growth and price stability.

The expected path of monetary policy moved down following the Committee's decision at its April meeting to reduce the target federal funds rate by 25 basis points. Although the decision had largely been anticipated by financial markets, investors had assigned some odds to an unchanged target rate. Subsequently, money market futures rates rose substantially, on net, as stronger-than-expected data on spending and on labor markets along with somewhat improved conditions in financial markets appeared to impart greater confidence about prospects for economic activity. Nominal Treasury yields also rose noticeably, and the Treasury yield curve flattened. Measures of short-term inflation compensation derived from yields on inflation-indexed Treasury securities increased over the intermeeting period, due in part to sharply higher prices for oil and agricultural commodities. Measures of longer-term inflation compensation remained around the middle of their recent elevated range. Some survey measures of households' expectations of near-term inflation rose sharply, while survey measures of longer-term expectations ranged from unchanged to slightly higher.

Conditions eased somewhat in some U.S. financial markets over the intermeeting period but nonetheless remained strained. Functioning of short-term funding markets showed some improvement; spreads in interbank funding markets generally declined, as did spreads on lower-rated commercial paper. However, liquidity in the market for interbank loans at maturities beyond three months remained thin, and the spreads quoted on those instruments were little changed. Demand for funds from the Term Auction Facility remained substantial, but stop-out rates relative to minimum bid rates declined considerably relative to prior auctions, likely in response to increased auction sizes. Depository institutions' use of primary credit borrowing increased, on balance, over the intermeeting period. Credit outstanding through the Primary Dealer Credit Facility declined significantly over the intermeeting period. Conditions in the market for Treasury repurchase agreements appeared to improve somewhat, but conditions were still poor for lower-quality collateral. Supported by sales and redemptions of Treasury securities from the System Open Market Account and exchanges under the Term Securities Lending Facility, yields on overnight Treasury repurchase agreements were around typical spreads to the effective federal funds rate during much of the intermeeting period, but "haircuts" applied by lenders on non-Treasury collateral remained elevated. Term Securities Lending Facility auctions held since the April FOMC meeting were generally undersubscribed.

In longer-term credit markets, yields on investment- and speculative-grade corporate bonds had risen significantly since the end of April but by slightly less than yields on comparable-maturity Treasury securities, implying a further

modest narrowing of credit spreads. Corporate bond issuance surged in May, as some nonfinancial firms reduced their reliance on short-term debt in favor of bond financing. Commercial paper outstanding declined, and business lending by banks decelerated, partly reflecting continued low issuance of leveraged loans as well as tighter credit standards and terms at banks. Over the intermeeting period, spreads of rates on conforming residential mortgages over comparable-maturity Treasury securities remained about flat. Spreads on jumbo mortgages, however, widened somewhat and credit availability for jumbo-mortgage borrowers continued to be tight. In the secondary market, issuance of mortgage-backed securities by government-sponsored enterprises was strong, but issuance of securities backed by nonconforming residential mortgages and commercial mortgages remained low. Broad stock prices were somewhat volatile but declined modestly, on net, over the intermeeting period. The surge in oil prices weighed on equity prices outside of the energy sector, and a more pessimistic outlook for future earnings in the financial sector caused stocks of financial institutions to decline significantly.

Conditions in the money markets of many major foreign economies remained strained, showing little improvement since late April despite ongoing activities of foreign central banks aimed at easing liquidity pressures in funding markets. Yields on sovereign debt in the advanced foreign economies moved up approximately in line with increases in comparable Treasury yields in the United States. The trade-weighted foreign exchange value of the dollar against major currencies rose.

M2 rose much more slowly in April and May than in the first quarter. The

deceleration seemed to reflect primarily an unwinding of heightened demand for the relative safety and liquidity of money market mutual funds that had boosted M2 in prior months.

In the forecast prepared for the meeting, the staff raised its projection for the growth of real gross domestic product (GDP) for 2008. The available indicators of spending, particularly those for consumption and business investment, suggested that economic activity in the first half of the year had been somewhat firmer than previously expected. The staff projection prepared for the meeting pointed to modest expansion in real GDP in the first half of 2008 followed by a slight slowdown in growth in the second half, when several factors were likely to restrain spending, including lower household wealth, slower real income growth due to sharply higher oil prices, and tight credit conditions. The pace of economic activity was projected to pick up in 2009 as those effects waned and weakness in housing construction abated. Despite this acceleration, the trajectory of economic growth anticipated through 2009 implied noticeable slack in resource utilization.

The staff's projection for price inflation in core personal consumption expenditures (PCE) for 2008 as a whole was unchanged; recent readings on core PCE inflation were better than anticipated and led the staff to lower its projection for the first half of the year. But some of the recent improvement was seen as reflecting transitory factors, and the forecast of core inflation for the second half of this year and next year was marked up to incorporate the likely pass-through of the recent jumps in the prices of energy and other commodities, and the reversal of these transitory factors. The further large increase in energy prices also prompted an upward revision of the forecast of headline PCE

inflation in the second half of 2008, and headline inflation was expected to exceed core inflation by a considerable margin this year. However, in view of a projected leveling-out of energy prices and the anticipated slack in resource utilization, headline inflation was expected to decline considerably in 2009 from its pace in the second half of 2008, and core inflation was forecasted to edge lower.

In conjunction with the FOMC meeting in June, all meeting participants (Federal Reserve Board members and Reserve Bank presidents) provided projections for economic growth, the unemployment rate, and inflation for the years 2008 through 2010. The projections are described in the Summary of Economic Projections, which is attached as an addendum to these minutes. A number of participants noted that, given the recent large adverse shocks to output and inflation, their projections even late in the forecast period did not fully reveal their perceptions of longer-run sustainable rates of economic growth and unemployment or the measured rates of inflation that would be consistent with price stability. In this context, participants discussed several possible refinements of the Committee's approach to projections that could provide a clearer indication of participants' views about these variables and agreed to consider this matter further.

In their discussion of the economic situation and outlook, FOMC participants noted that spending in recent months had evidently been less weak than anticipated, leading participants to revise up their assessment of economic growth in the first half of 2008. Nonetheless, most participants judged that the slightly firmer path of spending did not presage a near-term strengthening of the expansion. Economic activity

would probably continue to expand slowly over the next several quarters, restrained by a range of factors, including strains in financial markets and institutions and the resulting tightness of credit conditions; ongoing weakness in the housing sector; and the increases in energy and agricultural commodity prices. And, although the incoming data suggested reduced odds that these factors would cause an appreciable contraction of economic activity in the near term, participants continued to see significant downside risks to growth. At the same time, however, the outlook for inflation had deteriorated. Recent increases in energy and some other commodity prices would boost inflation sharply in coming months. A leveling-out of energy prices and continued slack in resource utilization were expected to lead inflation to moderate in 2009 and 2010. However, participants had become more concerned about upside risks to the inflation outlook—including the possibility that persistent advances in energy and food prices could spur increases in long-run inflation expectations.

Although financial market conditions generally appeared to have improved somewhat over the intermeeting period, most participants viewed markets as remaining under considerable stress. Some participants noted that the availability of the liquidity facilities that the Federal Reserve had introduced in recent months had probably bolstered the confidence of investors and lenders and thus was likely responsible for part of the improvement in market functioning. Term spreads in interbank funding markets had declined, but remained elevated by historical standards. The leveraged loan market had improved somewhat and corporate bond issuance had been strong. However, the equity prices of many investment and commer-

cial banks had declined over the intermeeting period, reflecting increased concern about asset quality and the outlook for profits. The deteriorating condition of some financial guarantors and mortgage insurers contributed to worries about banks. Investors remained chary of securitized products, such as mortgage credits not guaranteed by a government-sponsored enterprise or agency. A number of financial institutions had been successful in raising new capital, but reportedly on less favorable terms than before. Participants judged that many financial institutions would need to continue to recapitalize and reduce their leverage. Some anticipated that this process could well be protracted, and that financial intermediation consequently would be impeded for some time, holding back growth well into 2009. Overall, financial market conditions, while better in many respects, appeared to remain fragile, and participants judged that potential further adverse financial market developments still posed downside risks to economic activity.

Recent data pointed to more resilience in consumer spending in the second quarter than had been expected. However, most participants thought that much of the recent strength probably indicated only a more delayed slowing in consumer spending than had been expected rather than a more favorable trend. Falling wealth and real income, tightening credit conditions, rising energy prices, and sharply declining consumer sentiment were seen as likely to restrain consumer spending later this year, particularly after the effects of the fiscal stimulus waned. Lenders were exhibiting greater caution in extending credit to households, partly in response to actual and expected increases in delinquency rates on household credit. Participants reported that second mort-

gages, automobile loans, and home equity lines of credit were becoming harder to obtain, and some existing home equity lines were being cut, even for consumers with good credit scores. The possibilities that the decline in house prices would be more protracted than previously anticipated, that spillovers from the decline in housing wealth to consumption could be larger than expected, and that the household saving rate might rise more steeply than currently projected were seen as posing downside risks to consumption spending going forward.

Participants judged that the outlook for the housing market remained bleak, with falling prices, slow sales, high inventories of unsold homes, and further declines in construction activity over coming months. Although a few participants saw tentative signs that the housing market might be bottoming out in some parts of the country, most aggregate indicators of housing activity pointed to continued weakness. Also, mortgage rates had increased, and the equity prices of housing-related firms had fallen over the intermeeting period, after having stabilized earlier in the year, suggesting renewed pessimism among investors about prospects for the housing industry. Rising foreclosures were seen as likely to continue to add to downward pressure on house prices.

Business spending was expected to remain sluggish, as tight credit conditions, uncertainty about economic growth, and the rising costs of inputs—especially energy and raw materials—appeared to be making firms quite cautious and inclined to defer capital expenditures. Businesses had been able to raise a considerable volume of funds in bond markets of late, and profits and cash flow were still strong in the nonfinancial business sector. But some regional banks that had experienced sub-

stantial credit losses were expected to adopt a significantly more conservative lending posture, further limiting the availability of credit to small businesses. Although the available data indicated that spending on nonresidential construction projects had remained relatively robust in recent months, participants thought that this strength might have reflected projects initiated some time ago, when the economic outlook and credit conditions were more favorable, and they expected poor business sentiment and tighter credit to lead commercial construction to soften later this year and next year. Some anecdotal reports of recently delayed or canceled new construction projects supported this view.

Regarding economic activity in various business sectors, participants reported continued overall softness in manufacturing, especially in the housing-related and motor vehicle sectors. Flooding in the Midwest had disrupted transportation and damaged corn and soybean crops. However, production in the energy and steel sectors appeared to be strengthening, and industry contacts generally reported that demand for exported goods was buoyant. Labor markets in most regions continued to weaken gradually. Most participants anticipated persistent slack in labor markets, with the unemployment rate rising further through next year, before declining slightly in 2010.

The current account deficit had narrowed significantly on balance in recent quarters, and still-solid foreign growth was expected to contribute to a further narrowing of the real U.S. trade deficit in coming quarters. However, a few participants commented that this effect might fade over time, as they expected demand in foreign economies to slow.

Participants were concerned about the inflationary consequences of recent

increases in the prices of energy, food, and imports, and they expected headline inflation to rise in the very near term. However, core inflation had been stable of late, and participants anticipated that a leveling-out of energy prices and slack in labor and product markets would contribute to a moderation of inflation pressures over time. Reports on the ability of firms to pass cost increases on to customers were mixed, but some participants commented that the global nature of inflationary pressures could make imports more expensive and give firms greater scope to raise prices. Some participants noted that wage growth had been quite moderate, reinforcing a view that longer-term inflation expectations and labor cost pressures had remained fairly well contained. However, others commented that wages might accelerate with a lag only after inflation expectations had moved higher, and that it would be very costly to subsequently bring those expectations back down. Participants' views of the recent evidence on inflation expectations varied. Some noted that the increase was greatest for short-term survey measures of households' inflation expectations, which may be influenced disproportionately by consumers' perceptions of changes in the prices of food and gasoline; those participants judged that underlying inflation trends had not risen nearly as much and anticipated that such survey measures would reverse their recent increases as headline inflation moderated. However, others saw the signs of a rise in inflation expectations as more broad-based and were concerned that this development could signal an erosion of confidence in the Committee's commitment to price stability and, absent effective action by the Committee, could impart greater momentum to the inflation process. Participants agreed that

the possibilities of greater pass-through of cost increases into prices, higher long-run inflation expectations feeding into labor costs and other prices, and further increases in energy prices all posed upside risks to inflation that had intensified since the time of the April FOMC meeting.

Some participants noted that certain measures of the real federal funds rate, especially those using actual or forecasted headline inflation, were now negative, and very low by historical standards. In the view of these participants, the current stance of monetary policy was providing considerable support to aggregate demand and, if the negative real federal funds rate was maintained, it could well lead to higher trend inflation. In this view, a significant portion of the easing in monetary policy since last fall was aimed at providing insurance against the risk of an especially severe weakening in economic activity and, with downside risks having diminished somewhat, some firming in policy would be appropriate very soon, if not at this meeting. However, other participants observed that the high level of risk spreads and the restricted availability of credit suggested that overall financial conditions were not especially accommodative; indeed, borrowing costs for many households and businesses were higher than they had been last summer.

In the Committee's discussion of monetary policy for the intermeeting period, members generally agreed that the risks to growth had diminished somewhat since the time of the last FOMC meeting while the upside risks to inflation had increased. Nonetheless, the risks to growth remained tilted to the downside. Conditions in some financial markets had improved, but many financial institutions continued to experience significant credit losses and

balance sheet pressures, and in these circumstances credit availability was likely to remain constrained for some time. At the same time, however, the near-term outlook for inflation had deteriorated, and the risks that underlying inflation pressures could prove to be greater than anticipated appeared to have risen. Members commented that the continued strong increases in energy and other commodity prices would prompt a difficult adjustment process involving both lower growth and higher rates of inflation in the near term. Members were also concerned about the heightened potential in current circumstances for an upward drift in long-run inflation expectations. With increased upside risks to inflation and inflation expectations, members believed that the next change in the stance of policy could well be an increase in the funds rate; indeed, one member thought that policy should be firmed at this meeting. However, in the view of most members, the outlook for both economic activity and price pressures remained very uncertain, and thus the timing and magnitude of future policy actions was quite unclear. Against this backdrop, most members judged that an unchanged federal funds rate at this meeting represented an appropriate balancing of the risks to the economic outlook and was consistent, for now, with a policy path that would support an eventual decline in both inflation and unemployment. Nonetheless, members recognized that circumstances could change quickly and noted that they might need to respond promptly to incoming information about the evolution of risks.

At the conclusion of the discussion, the Committee voted to authorize and direct the Federal Reserve Bank of New York, until it was instructed otherwise, to execute transactions in the System

Account in accordance with the following domestic policy directive:

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining the federal funds rate at an average of around 2 percent.

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

The Federal Open Market Committee decided today to keep its target for the federal funds rate at 2 percent.

Recent information indicates that overall economic activity continues to expand, partly reflecting some firming in household spending. However, labor markets have softened further and financial markets remain under considerable stress. Tight credit conditions, the ongoing housing contraction, and the rise in energy prices are likely to weigh on economic growth over the next few quarters.

The Committee expects inflation to moderate later this year and next year. However, in light of the continued increases in the prices of energy and some other commodities and the elevated state of some indicators of inflation expectations, uncertainty about the inflation outlook remains high.

The substantial easing of monetary policy to date, combined with ongoing measures to foster market liquidity, should help to promote moderate growth over time. Although downside risks to growth remain, they appear to have diminished somewhat, and the upside risks to inflation and inflation expectations have increased. The Committee will continue to monitor economic and financial developments and will act as needed to promote sustainable economic growth and price stability.

Votes for this action: Messrs. Bernanke, Geithner, Kohn, Kroszner, and Mishkin, Ms. Pianalto, Messrs. Plosser, Stern, and Warsh. Votes against this action: Mr. Fisher.

Mr. Fisher dissented because he preferred an increase in the target federal

funds rate at this meeting. While the financial system was still frail and downside risks to growth remained, the risk that inflation would fail to moderate as expected by the Committee had increased substantially over the intermeeting period. Relatively strong demand for oil and other commodities abroad, as well as increased labor and other operating costs in the emerging economies, was boosting prices of globally traded goods and services. Mr. Fisher was especially concerned about behavioral changes among business operators that appeared to be accommodating inflationary pressures. In particular, firms increasingly appeared to be planning to pass through their higher input costs to final goods prices in order to protect their profit margins. Overall, Mr. Fisher viewed inflation expectations as becoming less well anchored. To help restrain inflation expectations and inflation, Mr. Fisher felt it would be appropriate for the Committee to tighten the stance of monetary policy.

In a joint session of the Federal Open Market Committee and the Board of Governors, meeting participants turned to a consideration of policy issues regarding investment banks and other primary securities dealers. Participants discussed the financial activities and condition of primary dealers as well as the objectives of, procedures for, and experience to date in administering the Primary Dealer Credit Facility (PDCF) and the Term Securities Lending Facility (TSLF). (The PDCF and the TSLF had been established in March in response to unusual and exigent conditions in financial markets.) In view of the continuing significant strains in financial markets, participants also discussed the possibility of extending the PDCF and the TSLF past year-end. In addition, they reviewed progress in negotiations with staff of the Securities

and Exchange Commission regarding a memorandum of understanding intended to govern arrangements for sharing information on broker-dealers and for cooperation in the supervision of primary dealers. Finally, participants exchanged views on longer-run issues regarding appropriate arrangements for supervision and regulation of investment banks and other securities dealers and for the access of such firms to central bank liquidity, as well as on possible measures to strengthen financial market functioning and thus enhance financial stability.

It was agreed that the next meeting of the Committee would be held on Tuesday, August 5, 2008.

The meeting adjourned at 1:15 p.m.

#### Notation Vote

By notation vote completed on May 20, 2008, the Committee unanimously approved the minutes of the FOMC meeting held on April 29–30, 2008.

Brian F. Madigan  
Secretary

#### Addendum: Summary of Economic Projections

In conjunction with the June 2008 FOMC meeting, the members of the Board of Governors and the presidents of the Federal Reserve Banks, all of whom participate in deliberations of the FOMC, provided projections for economic growth, unemployment, and inflation in 2008, 2009, and 2010. Projections were based on information available through the conclusion of the June meeting, on each participant's assumptions regarding a range of factors likely to affect economic outcomes, and on his or her assessment of appropriate monetary policy. "Appropriate

monetary policy" is defined as the future policy that, based on current information, is deemed most likely to foster outcomes for economic activity and inflation that best satisfy the participant's interpretation of the Federal Reserve's dual objectives of maximum employment and price stability.

FOMC participants generally expected that, over the remainder of this year, output would expand at a pace appreciably below its trend rate, owing primarily to continued weakness in housing markets, the substantial rise in energy prices in recent months, and the reduction in the availability of household and business credit resulting from continued strains in financial markets. As indicated in table 1 and figure 1, output growth further ahead was projected to pick up sufficiently to begin to reverse some of the increase in the unemployment rate by 2010. In light of the recent surge in the prices of oil and agricultural commodities, total inflation was expected to rise further in coming months and to be elevated for 2008 as a whole. However, many participants expected that persistent economic slack and a flattening out of energy and other commodity prices in line with futures market prices would cause overall inflation to decline noticeably in 2009 and 2010. Most participants judged that greater-than-normal uncertainty surrounded their projections for both output growth and inflation. A significant majority of participants viewed the risks to their forecasts for output growth as weighted to the downside, and a similar number saw the risks to the inflation outlook as skewed to the upside.

#### *The Outlook*

The central tendency of participants' projections for real GDP growth in 2008, at 1.0 percent to 1.6 percent, was

Table 1. Economic Projections of Federal Reserve Governors and Reserve Bank Presidents, June 2008  
Percent

Variable	2008	2009	2010
<b>Central tendency<sup>1</sup></b>			
Change in real GDP .....	1.0 to 1.6	2.0 to 2.8	2.5 to 3.0
<i>April projection</i> .....	0.3 to 1.2	2.0 to 2.8	2.6 to 3.1
Unemployment rate .....	5.5 to 5.7	5.3 to 5.8	5.0 to 5.6
<i>April projection</i> .....	5.5 to 5.7	5.2 to 5.7	4.9 to 5.5
PCE inflation .....	3.8 to 4.2	2.0 to 2.3	1.8 to 2.0
<i>April projection</i> .....	3.1 to 3.4	1.9 to 2.3	1.8 to 2.0
Core PCE inflation .....	2.2 to 2.4	2.0 to 2.2	1.8 to 2.0
<i>April projection</i> .....	2.2 to 2.4	1.9 to 2.1	1.7 to 1.9
<b>Range<sup>2</sup></b>			
Change in real GDP .....	0.9 to 1.8	1.9 to 3.0	2.0 to 3.5
<i>April projection</i> .....	0.0 to 1.5	1.8 to 3.0	2.0 to 3.4
Unemployment rate .....	5.5 to 5.8	5.2 to 6.1	5.0 to 5.8
<i>April projection</i> .....	5.3 to 6.0	5.2 to 6.3	4.8 to 5.9
PCE inflation .....	3.4 to 4.6	1.7 to 3.0	1.6 to 2.1
<i>April projection</i> .....	2.8 to 3.8	1.7 to 3.0	1.5 to 2.0
Core PCE inflation .....	2.0 to 2.5	1.8 to 2.3	1.5 to 2.0
<i>April projection</i> .....	1.9 to 2.5	1.7 to 2.2	1.3 to 2.0

NOTE: Projections of change in real gross domestic product (GDP) and of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average

civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy.

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

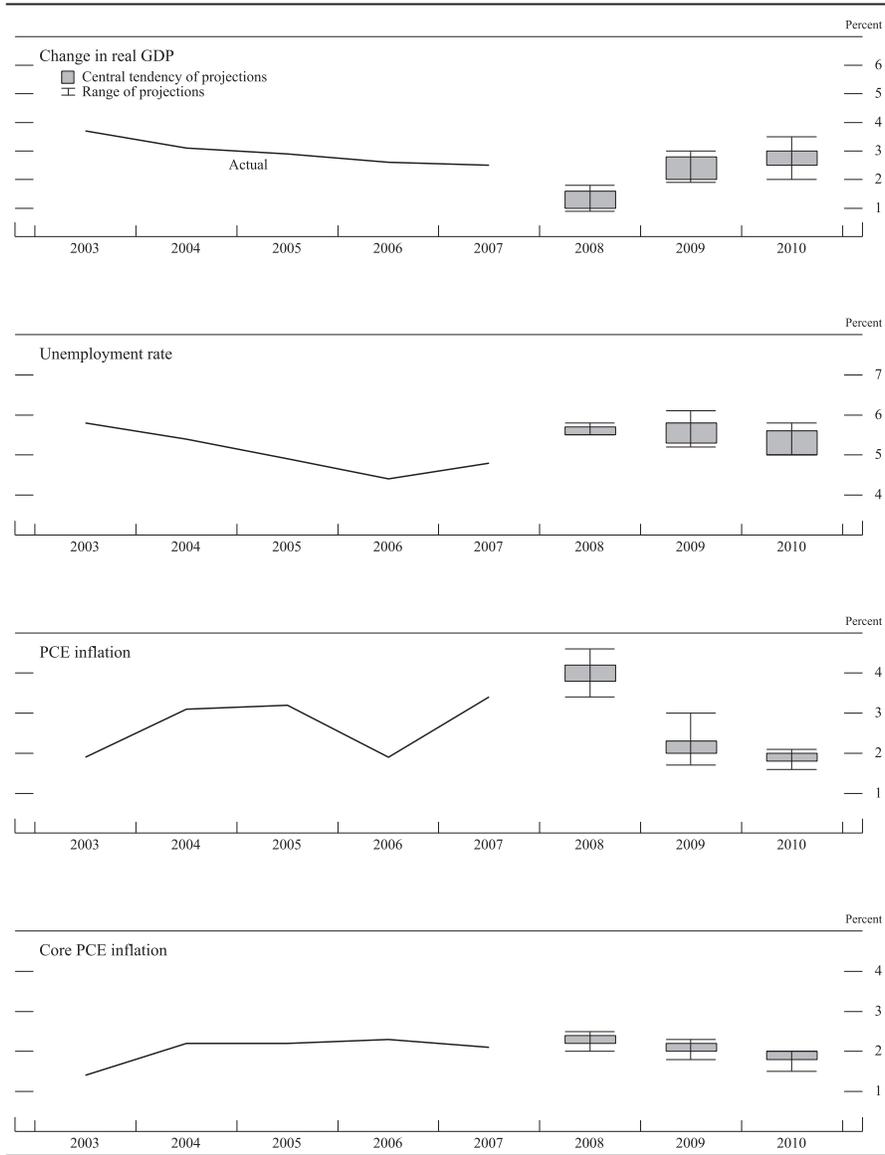
2. The range for a variable in a given year includes all participants' projections, from lowest to highest, for that variable in that year.

noticeably higher than the central tendency of the projections provided in conjunction with the April FOMC meeting, which was 0.3 percent to 1.2 percent. The upward revision to the 2008 outlook stemmed primarily from better-than-expected data on consumer and business spending received between the April and June FOMC meetings. Nonetheless, several participants noted that the recent firmness in consumer spending could well prove transitory and that the ongoing housing market correction, tight credit conditions, and elevated energy prices would damp domestic demand in the second half of this year. Still, the substantial easing of monetary policy since last year and the continued strength in exports should help to support economic growth; in addition, strains had eased somewhat in

some financial markets since April. Real GDP growth was expected to increase in 2009 as the adjustment in the housing sector ran its course, financial markets gradually resumed more-normal functioning, and the downward pressure on real incomes stemming from increases in energy and food prices in the first half of 2008 began to fade. In 2010, economic activity was projected to expand at or a little above participants' estimates of the rate of trend growth.

With output growth continuing to run below trend in the second half of 2008, most participants expected that the unemployment rate would move up somewhat over the remainder of this year. The central tendency of participants' projections for the average rate of unemployment in the fourth quarter of

Figure 1. Central Tendencies and Ranges of Economic Projections, 2008-10



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

2008 was 5.5 percent to 5.7 percent, unchanged from the central tendency of projections that were provided in con-

junction with the April FOMC meeting and consistent with some slack in resource utilization. The central tendency

of participants' projections was for the unemployment rate to stabilize in 2009 and to edge down in 2010 as output and employment growth pick up.

The surge in the prices of oil and agricultural commodities since April led participants to revise up noticeably their projections for total inflation in the near term. However, the central tendency of participants' projections for core PCE inflation in 2008 was 2.2 percent to 2.4 percent, unchanged from the central tendency in April, as lower-than-expected rates of core inflation over recent months offset the expectations of some pass-through of the recent surge in energy prices into core inflation over the next few months. Rates of both overall and core inflation were expected to decline over the next two years, reflecting a flattening out of the prices of oil and other commodities consistent with futures market prices, slack in resource utilization, and longer-term inflation expectations that were expected to remain generally well anchored.

The contour of participants' projections for output growth, unemployment, and inflation was importantly shaped by their judgments about the measured rates of inflation consistent with the Federal Reserve's dual mandate to promote maximum employment and price stability and about the time horizon over which policy should aim to attain those rates given current economic conditions. Most participants judged that it might take a substantial period of time for output and inflation to recover from the recent shocks, which had elevated inflation and damped economic activity. A number of participants projected that the rate of unemployment might remain slightly above its longer-run sustainable level even in 2010; total inflation in 2010 was also judged likely to continue to run a bit above levels that most par-

ticipants saw as consistent with the price stability objective of the Federal Reserve's dual mandate. Most participants saw further declines in both unemployment and inflation as likely in the period beyond the forecast horizon.

#### *Risks to the Outlook*

Most participants viewed the risks to their projections for GDP growth as weighted to the downside and the associated risks to their projections for the unemployment rate as tilted to the upside. The possibility that house prices could decline more steeply than anticipated, further reducing households' wealth, restricting their access to credit, and eroding the capital of lending institutions, continued to be perceived as a significant downside risk to the outlook for economic growth. Although financial markets had shown some further improvement since April, conditions in those markets remained strained; a number of participants also pointed to the risk that further improvement could be quite slow and subject to relapse. The potential for current tight credit conditions to exert an unexpectedly large restraint on household and business spending was also viewed as a significant downside risk to economic activity. An adverse feedback loop, in which weaker economic activity led to a further worsening of financial conditions, which in turn could damp economic growth even further, continued to be viewed as a worrisome possibility, though less so than in April. Indeed, some participants pointed to the apparent resilience of the U.S. economy in the face of recent financial distress and suggested that the adverse effects of financial developments on economic activity outside of the housing sector could prove to be more modest than anticipated.

Most participants viewed the risks to their inflation projections as weighted to the upside. Recent sharp increases in energy and food prices and the pass-through of dollar depreciation into import prices could boost inflation in the near term by more than currently anticipated. Although participants generally assumed that commodity prices will flatten out, roughly in line with the trajectory implied by futures prices, the fact that futures markets had persistently underpredicted commodity prices in recent experience was viewed as an upside risk to the outlook for inflation. Participants also saw a risk that inflation expectations could become less firmly anchored, particularly if the current elevated rates of headline inflation did not moderate as quickly as they expected.

Participants continued to view uncertainty about the outlook for economic activity as higher than normal, with a number pointing to uncertainty about the duration and effects of the ongoing financial strains on real activity. In addition, participants expressed noticeably more uncertainty about their inflation projections than they had in January and April, a shift in perception that they attributed importantly to increased uncertainty about the future course of energy and food prices and to greater uncertainty about the extent of pass-through of changes in those prices into core inflation. (Table 2 provides estimates of forecast uncertainty for real GDP growth, unemployment, and inflation since 1987.<sup>11</sup>)

11. The box "Forecast Uncertainty" at the end of this summary discusses the sources and interpretation of uncertainty in economic forecasts and explains the approach used to assess the uncertainty and risks attending participants' projections.

Table 2. Average Historical Projection Error Ranges  
Percentage points

Variable	2008	2009	2010
Change in real GDP <sup>1</sup> . . . .	±0.9	±1.3	±1.4
Unemployment rate <sup>1</sup> . . . . .	±0.3	±0.7	±1.0
Total consumer prices <sup>2</sup> . . .	±0.6	±1.0	±1.0

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

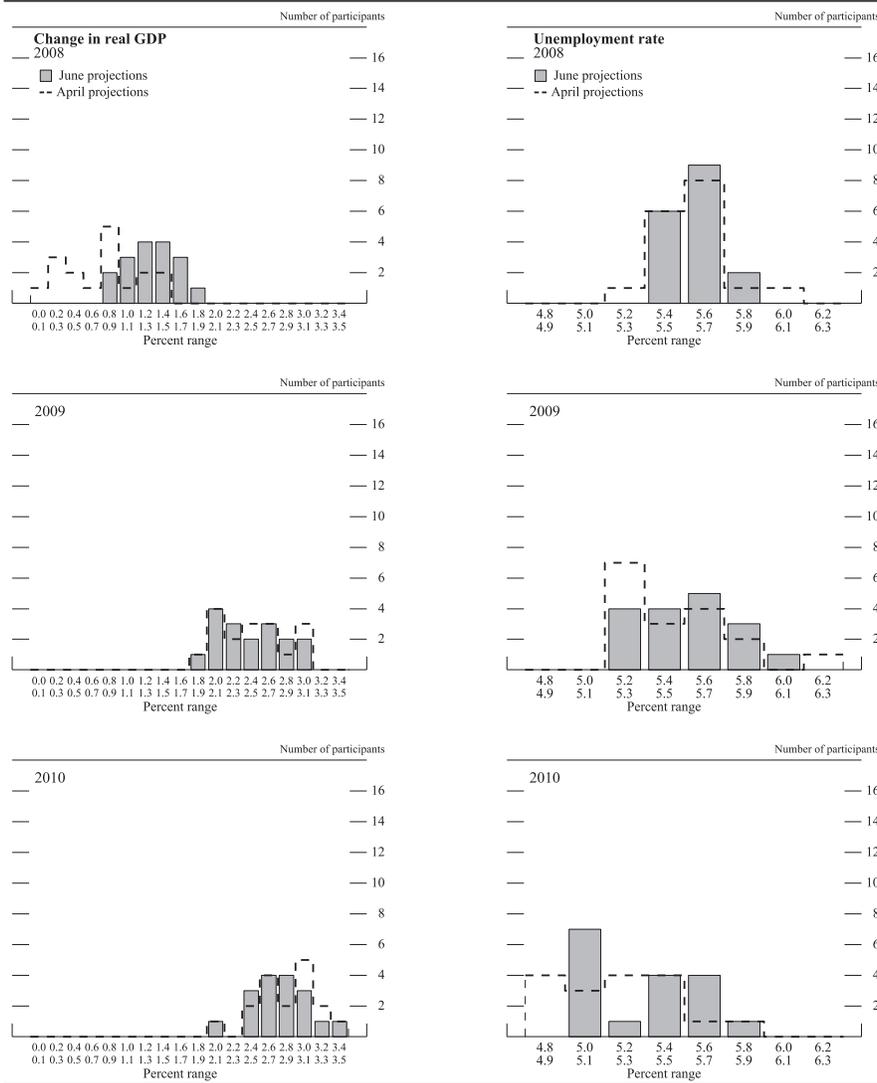
1. For definitions, refer to general note in table 1.

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

#### *Diversity of Participants' Views*

Figures 2.A and 2.B provide more detail on the diversity of participants' views regarding likely economic outcomes over the projection period. The dispersion of participants' projections for real GDP growth in 2008 was noticeably narrower than in the forecasts provided in April, reflecting primarily the accumulation of data about the actual performance of the economy in the first half of the year; their views about output growth in coming quarters and in 2009 continued to exhibit appreciable dispersion. The dispersion of participants' projections for real activity next year seemed largely to reflect differing assessments of the effects of adverse financial market conditions on economic growth, the speed with which credit conditions might improve, and the depth and duration of the correction in the housing market. Indeed, views differed notably on the pace at which

Figure 2.A. Distribution of Participants' Projections for the Change in Real GDP and for the Unemployment Rate, 2008-10

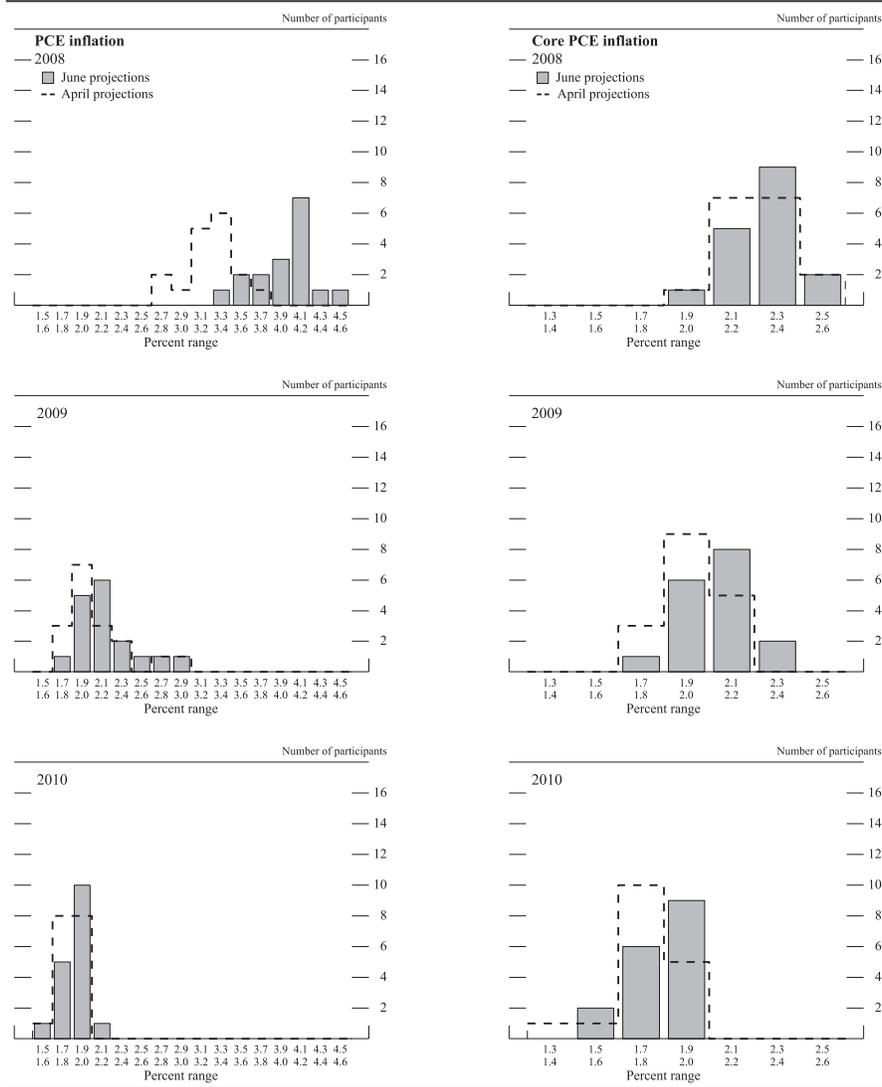


NOTE: Definitions of variables are in the general note to table 1.

output and employment would recover in 2009, with some participants expressing a concern that growth might be constrained by the persistence of financial strains over a considerable period.

The dispersion of participants' longer-term projections was also affected to some degree by differences in their judgments about the economy's trend growth rate and the unemployment rate

Figure 2.B. Distribution of Participants' Projections for PCE Inflation and for Core PCE Inflation, 2008-10



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

that would be consistent over time with maximum employment. The dispersion of the projections for PCE inflation in the near term reflected in large part differing views on the extent to which

cent increases in energy and food prices would pass through into higher consumer prices. In addition, participants held differing views on the degree to which inflation expectations were an-

## Forecast Uncertainty

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

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

past and the risks around the projections are broadly balanced, the numbers reported in table 2 would imply a probability of about 70 percent that actual GDP would expand 2.1 percent to 3.9 percent in the current year, 1.7 percent to 4.3 percent in the second year, and 1.6 percent to 4.4 percent in the third year. The corresponding 70 percent confidence intervals for overall inflation would be 1.4 percent to 2.6 percent in the current year and 1.0 percent to 3.0 percent in the second and third years.

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

chored and the role that expectations might play in the inflation process over the short and medium term. Participants' inflation projections further ahead were shaped by the views of the

rate of inflation consistent with the Federal Reserve's dual objectives and the time it would take to achieve these goals given current economic conditions and appropriate policy.

**Meeting Held on  
August 5, 2008**

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, August 5, 2008 at 8:30 a.m.

*Present:*

Mr. Bernanke, Chairman  
Mr. Geithner, Vice Chairman  
Ms. Duke  
Mr. Fisher  
Mr. Kohn  
Mr. Kroszner  
Mr. Mishkin  
Ms. Pianalto  
Mr. Plosser  
Mr. Stern  
Mr. Warsh

Messrs. Evans, Lacker, and Lockhart, and Ms. Yellen, Alternate Members of the Federal Open Market Committee

Messrs. Bullard, Hoenig, and Rosengren, Presidents of the Federal Reserve Banks of St. Louis, Kansas City, and Boston, respectively

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

Messrs. Connors, English, Kamin, Sniderman, and Wilcox, Associate Economists

Mr. Dudley, Manager, System Open Market Account

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

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

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

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

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

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

Mr. Luecke, Section Chief, Division of Monetary Affairs, Board of Governors

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

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

Mr. Connolly, First Vice President, Federal Reserve Bank of Boston

Messrs. Fuhrer and Judd, Executive Vice Presidents, Federal Reserve Banks of Boston and San Francisco, respectively

Messrs. Altig, Hakkio, Rasche, and Sullivan, Senior Vice Presidents, Federal Reserve Banks of Atlanta, Kansas City, St. Louis, and Chicago, respectively

Messrs. Danzig and Duca, Vice Presidents, Federal Reserve Banks of New York and Dallas, respectively

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

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

Mr. Sill, Economic Advisor, Federal Reserve Bank of Philadelphia

Mr. Del Negro, Officer, Federal Reserve Bank of New York

The Manager of the System Open Market Account reported on recent developments in foreign exchange markets. There were no open market operations in foreign currencies for the Sys-

tem's account in the period since the previous meeting. The Manager also reported on developments in domestic financial markets and on System open market operations in government securities and federal agency obligations during the period since the previous meeting. By unanimous vote, the Committee ratified these transactions.

The information reviewed at the August meeting indicated that the economy expanded at a moderate pace in the second quarter, but recent financial market developments highlighted some of the stresses that the economy faced going forward. Both consumer and business spending recorded gains in the second quarter, and net exports contributed importantly to the rise in real gross domestic product (GDP). However, residential construction continued to fall sharply, the labor market weakened further, and industrial production declined. Core consumer price inflation remained relatively stable, while headline inflation was elevated as a result of large increases in food and energy prices.

Labor demand continued to contract in July. Private nonfarm payroll employment fell in July at a pace only a bit less than the average monthly rate during the first six months of the year. By industry, the pattern of job losses was roughly similar to those earlier in the year, although July's report showed a smaller decline in construction than earlier. Nonbusiness services, which include health and education, remained the only notable source of net additions to employment. Both the average workweek and aggregate hours edged down in July. The unemployment rate rose in July and was about 1 percentage point above its level of a year earlier, while the labor force participation rate was about unchanged.

Industrial production declined in the second quarter after having been flat over the previous two quarters. Motor vehicle assemblies tumbled in the second quarter because of soft demand and the effects of strikes. Production of high-tech equipment continued to expand at a moderate pace; however, the available indicators of high-tech manufacturing activity pointed to slower production in the current quarter. The output of other manufacturing industries contracted, on balance, in the second quarter, and indicators of near-term production generally pointed to further declines, including a sizable retrenchment in the scheduled production of motor vehicles. The factory utilization rate held steady in June at a rate below its long-run average but was still well above its low rate from 2001 through 2002.

Real personal consumption expenditures (PCE) rose modestly in the second quarter after posting weak gains in the previous two quarters. However, real outlays for goods other than motor vehicles dropped noticeably in June after three months of robust gains. Sales of motor vehicles, which had begun to weaken earlier in the year, fell sharply in June and again in July. Tax rebates provided a notable, albeit temporary boost to income since the end of April, but real disposable income excluding rebates was essentially flat in the second quarter. The ratio of wealth to income likely declined again in the second quarter, as equity prices declined, on balance, and house prices continued to fall. Consumer sentiment rose a bit in July but remained at a depressed level.

Residential construction activity continued to descend rapidly but at a somewhat slower pace than during the second half of last year. Single-family housing starts fell further in June, leaving the pace of construction in this sec-

tor well below its December reading. Starts of multifamily homes jumped in June to a level well above the range of readings seen over the past two years. However, available information suggested that this increase could be traced to more-stringent building codes that took effect in New York City on July 1, which apparently led developers to move up some planned apartment projects. Even though cuts in new construction continued to trim the level of new home inventories, the months' supply of new homes remained quite high because of the ongoing reductions in the demand for new houses. Sales of existing single-family homes fell in June. Tight conditions in the mortgage credit markets continued to restrain housing demand, particularly for borrowers seeking nonconforming mortgages. House prices remained on a downward trajectory.

In the business sector, real spending on equipment and software declined in the second quarter as outlays on transportation equipment dropped sharply. Spending on computers and software rose at a moderate rate in the second quarter, while outlays on other equipment improved a bit last quarter after having declined in the preceding two quarters. Data through June continued to show a robust increase in nonresidential construction activity. However, vacancy rates for commercial properties ticked up in the first quarter, and the architectural billings index registered a string of weak readings from February to June.

Real nonfarm inventories excluding motor vehicles fell sharply in the second quarter. The ratio of book-value inventories to sales (excluding motor vehicles) ticked down again in May.

The U.S. international trade deficit narrowed in May, as a large increase in exports of goods and services more than

offset a moderate increase in imports. Most major categories of non-oil imports rose in May; imports of consumer goods increased rapidly. In contrast, the value of petroleum imports fell back despite higher prices, and imports of automotive products also fell. The increase in exports was supported by strong exports of industrial supplies, particularly petroleum products, and services.

Across the advanced foreign economies, information received since the last meeting pointed to subdued growth in the second quarter and increasing inflation pressures. Weak second-quarter data on industrial production and sentiment in the euro area as well as on consumer expenditures and exports in Japan suggested that the first-quarter strength in output growth was not sustained. Conditions worsened considerably in the United Kingdom, with a deepening slump in the housing sector. In all the major advanced foreign economies, rising food and fuel prices continued to drive overall inflation to recent highs, but core measures of inflation generally rose only modestly. Recent indicators for emerging market economies pointed to some slowing of growth in the second quarter. Real GDP growth in China moderated but remained strong. Incoming data suggested further slowing elsewhere in emerging Asia, and second-quarter activity appeared to have remained sluggish in Mexico. Headline inflation rose further in much of the developing world, largely owing to higher food and energy prices, and several countries continued to face upward pressure on core inflation as well.

Headline consumer price inflation in the United States stepped up in recent months, largely as a result of sizable increases in food and energy prices. Excluding these categories, core con-

sumer price inflation was elevated in June but, on balance, was running this year at about the same rate as last year. Some survey-based measures of year-ahead inflation expectations moved up sharply in recent months; longer-term inflation expectations were little changed recently but remained above their levels at the end of 2007. Excluding food and energy, sharp increases in the prices of products and services at earlier stages of processing continued to put upward pressures on business costs and consumer prices. Unit labor costs apparently continued to increase at a restrained pace during the second quarter, reflecting only moderate gains in worker compensation and relatively strong productivity performance, with little sign of higher overall inflation passing through to higher worker compensation.

At its June 24–25 meeting, the Federal Open Market Committee (FOMC) kept its target for the federal funds rate at 2 percent. The Committee's statement noted that recent information indicated that overall economic activity continued to expand, partly because of some firming in household spending. However, labor markets softened further and financial markets remained under considerable stress. Tight credit conditions, the ongoing housing contraction, and the rise in energy prices were likely to weigh on economic growth over the next few quarters. The Committee expected inflation to moderate later this year and next. However, in light of the continued increases in the prices of energy and some other commodities and the elevated state of some indicators of inflation expectations, uncertainty about the inflation outlook remained high. The Committee stated that the substantial easing of monetary policy to date, combined with ongoing measures to foster market liquidity,

should help promote moderate growth over time. Although downside risks to growth remained, they appeared to have diminished somewhat, and the upside risks to inflation and inflation expectations increased. The Committee indicated that it would continue to monitor economic and financial developments and would act as needed to promote sustainable economic growth and price stability.

The market's expected path of monetary policy moved down following the announcement of the Committee's decision at its June meeting to leave the target federal funds rate unchanged. Although the decision was largely anticipated, the policy statement was reportedly viewed by investors as placing more emphasis on the downside risks to growth than they had anticipated. Subsequently, the semiannual *Monetary Policy Report to the Congress* and the accompanying testimony also led investors to mark down the expected path for the federal funds rate, as did intensifying concerns about the health of financial institutions and the outlook for the housing-related government-sponsored enterprises (GSEs). Consistent with the revision in policy expectations, yields on short- and medium-term nominal Treasury coupon securities fell over the intermeeting period. Yields on long-term Treasury securities declined less than those on shorter-term instruments, and the yield curve steepened. Measures of shorter-horizon inflation compensation derived from yields on inflation-indexed Treasury securities dropped over the intermeeting period as energy prices reversed some of their earlier rise, while measures of longer-term inflation compensation rose slightly.

Functioning in the interbank funding markets remained strained over the intermeeting period. Spreads of the

London interbank offered rate, or Libor, over comparable-maturity overnight index swap rates were unchanged to slightly higher, and spreads on lower-rated nonfinancial and asset-backed commercial paper remained well above historical norms. Depository institutions' use of both overnight and term primary credit borrowing continued to be strong during the intermeeting period, peaking in late June amid quarter-end pressures. However, new extensions of credit through the Primary Dealer Credit Facility (PDCF) were negligible during July. On July 30, the Board of Governors and the FOMC announced enhancements to existing liquidity facilities, including extension of the PDCF and the Term Securities Lending Facility through January 30, 2009. Conditions in the market for Treasury repurchase agreements were fairly stable, although there was some deterioration of conditions in the market for agency collateral.

In longer-term credit markets, yields on both investment- and speculative-grade corporate bonds rose over the intermeeting period even though comparable-maturity Treasury yields declined slightly, which resulted in a widening of already elevated spreads. Corporate bond issuance slowed further, as did lending by banks to businesses and households, and issuance of leveraged loans remained very weak. Broad equity price indexes were volatile and declined modestly, on net, between the June and August FOMC meetings. Stock prices of financial firms fell sharply in mid-July but subsequently recouped most of those losses. Energy sector stocks significantly underperformed the broad indexes owing to recent declines in oil prices.

Uncertainties about the financial condition of Fannie Mae and Freddie Mac added to market worries about the

potential consequences of financial strains for the broader economy over the intermeeting period. On July 13, the Treasury Department proposed a plan to support the liquidity and solvency of the two GSEs, and the Board of Governors of the Federal Reserve System announced that the Federal Reserve Bank of New York was authorized to lend to the two institutions if necessary, reducing somewhat market concerns about the GSEs. Concerns eased further as Congress passed legislation, which was subsequently signed by the President, authorizing the Treasury to provide liquidity and capital to the GSEs. Over the intermeeting period, spreads of rates on conforming residential mortgages over those on comparable-maturity Treasury securities moved higher. Offer rates on 30-year jumbo mortgages also rose, and credit for nonconforming mortgages remained difficult to obtain. In the secondary market, issuance of mortgage-backed securities by GSEs appeared to have slowed in July from its strong second-quarter pace, while issuance of securities backed by nonconforming loans and of commercial mortgage-backed securities remained nil.

Pressures in the money markets of many major foreign economies eased slightly over the intermeeting period. Yields on sovereign debt in the advanced foreign economies fell, mainly because of declines in inflation compensation. The trade-weighted index of the dollar against the currencies of major trading partners rose a bit on net.

M2 expanded at a moderate pace in July, reversing the deceleration in May and June. The expansion was broad based, reflecting an acceleration in liquid deposits as well as renewed inflows to retail money market mutual funds and small time deposits.

In the forecast prepared for the meeting, the staff marked down its forecast of real GDP growth in the second half of 2008 and in 2009. Although the increase in real GDP in the second quarter was a bit faster than anticipated at the time of the June meeting, the labor market continued to weaken significantly, financial conditions remained unfavorable, consumer and business confidence was downbeat, and manufacturing activity was contracting. All told, the staff continued to expect that real GDP would rise at less than its potential rate through the first half of next year. Nonetheless, real GDP growth was anticipated to return to its potential rate in the second half of 2009 as housing activity leveled out and financial conditions became less restrictive. Core PCE price inflation was expected to pick up somewhat in the second half of this year, mostly as a result of the upward pressures from this year's run-ups in prices of energy and imports. Core inflation was then expected to edge down in 2009 as the impetus from prior increases in the prices of imports, energy, and other commodities abated and the margin of slack in resource use widened.

In their discussion of the economic situation and outlook, many FOMC participants noted that recent developments suggested that economic activity was likely to remain damped for several quarters. Although economic growth in the second quarter had apparently been boosted by fiscal stimulus, resilience in consumption spending even before tax rebates were distributed, and robust gains in exports, recent indicators pointed to a near-term deceleration in household spending and to softer export demand. Moreover, increasing concerns about financial institutions had contributed to a widening of some risk spreads and a further tightening of credit to

households and businesses. Growth in overall economic activity was generally expected to be weak during the remainder of 2008 before recovering modestly next year, and nearly all meeting participants saw continuing downside risks to growth. Recent readings on inflation had been high, but growth in unit labor costs had remained subdued and commodity prices had declined of late. Accordingly, most participants anticipated that inflation would moderate in coming quarters. However, participants also expressed significant concerns about the upside risks to inflation, particularly the risk that longer-term inflation expectations could become unmoored.

Many participants referred to the adverse financial sector developments that had occurred over the intermeeting period. Heightened investor apprehension about the viability of Fannie Mae and Freddie Mac had eased following legislative action, but pressures on these firms continued. Reflecting these strains, interest rates on residential mortgages had moved upward, a development that was seen as potentially exacerbating the contraction in the housing sector. Commercial banks had reported that terms and standards had been tightened on nearly all categories of loans. Declining mortgage asset values increased capital pressures on lenders exposed to real estate markets. While some financial institutions had strengthened their balance sheets with new capital issues, raising new capital had become increasingly difficult. Moreover, broad equity price indexes had declined and borrowing costs for nonfinancial firms had increased, including a recent rise in corporate bond yields across most risk categories. Many participants believed that these developments were likely to restrain aggregate demand and economic growth. Others, however, thought that

the extent of such adverse effects was likely to be limited, noting that bank lending had continued to grow at a moderate pace and that consumption and business capital spending had increased in the second quarter despite the tightening of credit terms.

While consumer spending had been bolstered temporarily by the effects of the tax rebates, retail sales had weakened during late spring and auto sales had dropped sharply in both June and July. The unemployment rate jumped during the intermeeting period, and participants generally anticipated that payroll employment would decline further in coming months. For example, automotive parts suppliers in one District had reported plans for laying off workers, idling production, and closing several plants. Lower equity prices and the ongoing deterioration in house prices had reduced household wealth significantly, while real incomes had been diminished by earlier increases in the prices of food and energy. All of these factors—in conjunction with tightened access to auto loans, home equity lines of credit, and other consumer loans—were viewed as pointing towards weak growth in personal consumption expenditures during the second half of 2008.

The weaker outlook for consumer demand, along with tighter credit conditions for businesses, was expected to weigh on business spending going forward. Moreover, some signs of weakness in the commercial real estate sector were seen as suggesting a slower pace of investment in nonresidential structures over coming quarters, although that deceleration might be gradual due to the lags in the planning and execution of such projects. However, the elevated level of energy prices was boosting investment in the oil-producing industry.

Growth in exports had provided substantial impetus to overall demand in the second quarter. However, many participants observed that decelerating activity in some foreign economies would tend to dampen export gains going forward. Indeed, recent indications of a slowing global economy may have contributed to the marked declines in the prices of oil and some other commodities over the intermeeting period.

Participants pointed to potential interactions between financial stresses and the housing market contraction as the primary source of continuing downside risks to growth. Many participants noted that the financial system remained fragile, with some expressing continued concern about the possibility of an adverse feedback loop in which tighter conditions in the mortgage market would contribute to further declines in the housing sector and additional losses for lenders, leading to further tightening of lending terms and standards. In contrast, several other participants suggested that risks to the financial system had receded, partly as a result of the implementation by the Federal Reserve of special liquidity facilities, and that prevailing credit conditions were broadly consistent with the typical patterns observed during periods of weak growth or recession.

Headline inflation was generally expected to moderate in coming quarters, reflecting importantly an anticipated leveling-out of prices for energy and other commodities. Although measures of core inflation might well edge up later this year, given the pass-through to final goods prices of earlier increases in the prices of energy and other inputs, most participants anticipated that core inflation would edge back down during 2009. Some participants reported that firms were increasingly using various pricing strategies—such as escalation

clauses or the imposition of fuel surcharges—to pass higher costs on to their customers, who were apparently becoming less resistant to such price adjustments. However, one participant mentioned the difficult pricing decisions of manufacturers who face a combination of elevated input costs along with weakening demand for their products. And a number of participants noted that the outlook for slack in resource utilization should tend to limit the extent of pass-through, contain the degree of inflation spillover to goods and services without high commodity content, and reinforce the anticipated moderation in inflation.

Participants expressed significant concerns about the upside risks to inflation, especially the risk that persistently high headline inflation could result in an unmooring of long-run inflation expectations. Some viewed the upside risks to inflation as having diminished modestly over the intermeeting period, mainly as a result of the drop in the prices of oil and some other commodities as well as the greater likelihood of persistent economic slack. However, others viewed these risks as having increased, particularly in light of continued elevated readings on headline inflation, the low level of the real federal funds rate, anecdotal information suggesting that firms were having more success in passing higher costs on to their customers, and some signs of an upward drift over recent months in investors' expectations and uncertainty regarding inflation over the longer run; moreover, the recent decline in energy prices might well be reversed in coming months. A number of participants worried about the possibility that core inflation might fail to moderate next year unless the stance of monetary policy was tightened sooner than currently anticipated by financial markets.

In the Committee's discussion of monetary policy for the intermeeting period, members agreed that labor markets had softened further, that financial markets remained under considerable stress, and that these factors—in conjunction with still-elevated energy prices and the ongoing housing contraction—would likely weigh on economic growth in coming quarters. In addition, members saw continuing downside risks to this outlook, particularly reflecting possible further deterioration in financial conditions. Members generally anticipated that inflation would moderate; however, they emphasized the risks to the inflation outlook posed by persistent high readings on headline inflation and a possible unmooring of inflation expectations. Against this backdrop, nearly all members judged that leaving the federal funds rate unchanged at this meeting was appropriate and would most effectively promote progress toward the Committee's dual objectives of maximum employment and price stability. Most members did not see the current stance of policy as particularly accommodative, given that many households and businesses were facing elevated borrowing costs and reduced credit availability due to the effects of financial market strains as well as macroeconomic risks. Although members generally anticipated that the next policy move would likely be a tightening, the timing and extent of any change in policy stance would depend on evolving economic and financial developments and the implications for the outlook for economic growth and inflation.

At the conclusion of the discussion, the Committee voted to authorize and direct the Federal Reserve Bank of New York, until it was instructed otherwise, to execute transactions in the System

Account in accordance with the following domestic policy directive:

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining the federal funds rate at an average of around 2 percent.

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

The Federal Open Market Committee decided today to keep its target for the federal funds rate at 2 percent.

Economic activity expanded in the second quarter, partly reflecting growth in consumer spending and exports. However, labor markets have softened further and financial markets remain under considerable stress. Tight credit conditions, the ongoing housing contraction, and elevated energy prices are likely to weigh on economic growth over the next few quarters. Over time, the substantial easing of monetary policy, combined with ongoing measures to foster market liquidity, should help to promote moderate economic growth.

Inflation has been high, spurred by the earlier increases in the prices of energy and some other commodities, and some indicators of inflation expectations have been elevated. The Committee expects inflation to moderate later this year and next year, but the inflation outlook remains highly uncertain.

Although downside risks to growth remain, the upside risks to inflation are also of significant concern to the Committee. The Committee will continue to monitor economic and financial developments and will act as needed to promote sustainable economic growth and price stability.

Votes for this action: Messrs. Bernanke and Geithner, Ms. Duke, Messrs. Kohn, Kroszner, and Mishkin, Ms. Pianalto, Messrs. Plosser, Stern, and Warsh.  
Votes against this action: Mr. Fisher.

Mr. Fisher dissented because he favored an increase in the target federal funds rate to help restrain inflation and

inflation expectations, which were at risk of drifting higher. While the financial system remained fragile and economic growth was sluggish and could weaken further, he saw a greater risk to the economy from upward pressures on inflation. In his view, businesses had become more inclined to raise prices to pass on the higher costs of imported goods and higher energy costs, the latter of which were well above their levels of late 2007. Accordingly, he supported a policy tightening at this meeting.

It was agreed that the next meeting of the Committee would be held on Tuesday, September 16, 2008.

The meeting adjourned at 1:50 p.m.

### Conference Call

On July 24, 2008, the Federal Open Market Committee met in a joint session with the Board of Governors to consider several proposals to extend or enhance Federal Reserve System liquidity facilities. In light of continued significant stresses in financial markets and the experience to date with the Term Auction Facility (TAF), the Term Securities Lending Facility (TSLF), and the Primary Dealer Lending Facility (PDCF), the staff proposed modifications to these programs. The modifications included auctioning options on up to an additional \$50 billion of TSLF loans and lengthening the term to maturity of all loans made under the TAF to 84 days. Contingent upon Board approval of the change to TAF loans, the Committee was asked to consider an expansion of the existing currency swap arrangement with the European Central Bank to facilitate a similar change in the term of dollar credits auctioned by the ECB. Finally, policymakers were asked to vote on extending the availability of the TSLF and PDCF past the

year-end, a topic that had been discussed on a preliminary basis at the joint Board/FOMC meeting on June 25, 2008.

In the discussion, meeting participants exchanged views on issues entailed in administering the TAF and term primary discount window credit. Issues regarding credit risk and collateral requirements received particular attention.

Some participants raised questions about the net benefit of approving and announcing the proposed changes at this time, asking, for example, whether such an announcement could suggest that the Federal Reserve saw financial markets as more fragile than expected or whether adjustments to the liquidity facilities could cause market analysts to infer that the System intended to keep the facilities in place permanently. Most participants expressed general support for the proposals as improving the System's tools for supporting market liquidity. However, there was considerable sentiment for altering the TAF proposal to allow for both 28- and 84-day credits, and the Chairman directed the staff to confer, to consult further with policymakers, and to revise the proposal accordingly for notation votes in the near future by the Board and the FOMC.

At this meeting, the Committee unanimously approved the following resolution:

*TSLF Extension Authorization*

The FOMC extends until January 30, 2009, its authorizations for the Federal Reserve Bank of New York to engage in transactions with primary dealers through the Term Securities Lending Facility, subject to the same collateral, interest rate and other conditions previously established by the Committee.

With Mr. Plosser dissenting, the Committee voted to approve the resolution below. Mr. Plosser dissented because he viewed the net benefit of the TSLF options as being insufficient to justify adding them to the support already being provided to market liquidity.

*TSLF Options Authorization*

In addition to the current authorizations granted to the Federal Reserve Bank of New York to engage in term securities lending transactions, the Federal Open Market Committee authorizes the Federal Reserve Bank of New York to offer options on up to \$50 billion in additional draws on the Facility, subject to the other terms and conditions previously established for the Facility.

Mr. Lockhart voted as alternate member at this meeting.

*Notation Votes*

By notation vote completed on July 14, 2008, the Committee unanimously approved the minutes of the FOMC meeting held on June 24–25, 2008.

By notation vote completed on July 29, 2008, the Committee unanimously approved the following resolution:

*Swap Authorization*

The Federal Open Market Committee directs the Federal Reserve Bank of New York to increase the amount available from the System Open Market Account under the existing reciprocal currency arrangement (“swap” arrangement) with the European Central Bank to an amount not to exceed \$55 billion. Within that aggregate limit, draws of up to \$25 billion are hereby authorized. The swap arrangement continues to be authorized through January 30, 2009, unless extended by the Federal Open Market Committee.

Brian F. Madigan  
Secretary

## Meeting Held on September 16, 2008

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, September 16, 2008 at 8:30 a.m.

### *Present:*

- Mr. Bernanke, Chairman
- Ms. Duke
- Mr. Fisher
- Mr. Kohn
- Mr. Kroszner
- Ms. Pianalto
- Mr. Plosser
- Mr. Stern
- Mr. Warsh
- Ms. Cumming, Messrs. Evans, Lacker, and Lockhart, and Ms. Yellen, Alternate Members of the Federal Open Market Committee
- Messrs. Bullard, Hoenig, and Rosengren, Presidents of the Federal Reserve Banks of St. Louis, Kansas City, and Boston, respectively
- Mr. Madigan, Secretary and Economist
- Ms. Danker, Deputy Secretary
- Mr. Skidmore, Assistant Secretary
- Ms. Smith, Assistant Secretary
- Mr. Alvarez, General Counsel
- Mr. Sheets, Economist
- Mr. Stockton, Economist
- Messrs. Connors, English, Kamin, Rolnick, Rosenblum, Slifman, Tracy, and Wilcox, Associate Economists
- Mr. Dudley, Manager, System Open Market Account
- Mr. Cole, Director, Division of Banking Supervision and Regulation, Board of Governors
- Mr. Blanchard, Assistant to the Board, Office of Board Members, Board of Governors
- Mr. Clouse, Deputy Director, Division of Monetary Affairs, Board of Governors
- Mr. Parkinson, Deputy Director, Division of Research and Statistics, Board of Governors
- Mr. Struckmeyer, Deputy Staff Director, Office of Staff Director for Management, Board of Governors
- Mr. Gagnon, Visiting Associate Director, Division of Monetary Affairs, Board of Governors
- Messrs. Reifschneider and Wascher, Associate Directors, Division of Research and Statistics, Board of Governors
- Mr. Oliner, Senior Adviser, Division of Research and Statistics, Board of Governors
- Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors
- Mr. Luecke, Section Chief, Division of Monetary Affairs, Board of Governors
- Mr. Carlson, Economist, Division of Monetary Affairs, Board of Governors
- Ms. Low, Open Market Secretariat Specialist, Division of Monetary Affairs, Board of Governors
- Mr. Moore, First Vice President, Federal Reserve Bank of San Francisco
- Mr. Judd, Executive Vice President, Federal Reserve Bank of San Francisco
- Mr. Altig, Ms. Baum, Messrs. Rasche, Schweitzer, Sellon, and Tootell, Senior Vice Presidents, Federal Reserve Banks of Atlanta, New York, St. Louis, Cleveland, Kansas City, and Boston, respectively
- Mr. Krane, Vice President, Federal Reserve Bank of Chicago
- Mr. Chatterjee, Senior Economic Adviser, Federal Reserve Bank of Philadelphia
- Mr. Wolman, Senior Economist, Federal Reserve Bank of Richmond

The Manager of the System Open Market Account reported on recent developments in foreign exchange markets. There were no open market operations in foreign currencies for the System's account in the period since the previous meeting. The Manager also reported on developments in domestic financial markets and on System open market operations in government securities and federal agency obligations during the period since the previous meeting. By unanimous vote, the Committee ratified these transactions.

In light of severe stresses in dollar funding markets, the Committee considered a proposal intended to provide the flexibility necessary to respond promptly to requests from foreign central banks to engage in temporary reciprocal currency ("swap") arrangements to be used in supporting dollar liquidity in their jurisdictions. After the discussion, the Committee voted unanimously to authorize its Foreign Currency Subcommittee to direct the Federal Reserve Bank of New York as needed to expand existing swap arrangements and to enter into new arrangements with foreign central banks to address strains in money markets. This authority extends through January 30, 2009.

The information reviewed at the September meeting indicated that economic activity decelerated considerably in recent months. The labor market deteriorated further in August as private payrolls declined and the unemployment rate moved markedly higher. Industrial output was little changed in July, but fell sharply in August. Consumer spending weakened noticeably in recent months. Meanwhile, residential investment continued to decline steeply through midyear. In contrast, business investment in equipment and structures generally held up through July. On the inflation front, overall consumer prices

rose rapidly for a third straight month in July but then edged down in August, because of a sharp drop in energy prices. Core consumer price inflation remained elevated in July and eased somewhat in August.

The labor market continued to weaken. According to the August employment report, private payroll employment fell by a bit more than the average seen earlier this year. Most major industry groups shed jobs; manufacturing posted a particularly noticeable loss. Job losses in the construction industry diminished over July and August despite the ongoing contraction in residential investment. Hiring in non-business services, which include the education and health industries, and in natural resources and mining increased in line with recent trends. The average workweek held steady and aggregate hours edged lower. The unemployment rate jumped 0.4 percentage point, to 6.1 percent, in August, while the labor force participation rate held steady.

Industrial production fell sharply in August after edging up in July. Motor vehicle assemblies dropped in August as automakers scaled back production following a sharp decline in vehicle sales in July. The output of high-tech equipment rose at a moderate rate in the first half of the year, but indicators of production gains in the high-tech sector pointed toward relatively subdued growth in the third quarter. The output of other manufacturing sectors declined for a third consecutive month in August, and indicators of near-term production suggested that the industrial sector was likely to remain soft over the next few months. For most major industry groups, factory utilization rates in August remained below their long-run averages.

Real personal consumption expenditures (PCE) turned down in June and

declined more noticeably in July; over the two months, outlays for motor vehicles dropped markedly and spending on other goods weakened substantially. The recent weakness in consumer spending on goods excluding motor vehicles contrasted sharply with solid growth in the spring. Outlays for services were reported to have increased modestly in June and July. Total nominal retail sales decreased in August. Real disposable income was boosted significantly by the tax rebates in the second quarter; excluding the temporary rebates, real disposable income fell in that quarter and continued to move lower in July. Early September readings on consumer sentiment rose from the low levels recorded over the past several months.

Residential construction activity continued to decline steeply through mid-year. In July, both single-family housing starts and permit issuance fell further. In the multifamily sector, starts dropped back in July to a rate more in line with its historical range. June's spike in multifamily starts was related to more-stringent building codes that took effect in New York City on July 1, which apparently led developers to pull forward the start date of some planned apartment projects. Recent cutbacks in new residential construction reduced the level of new home inventories, and the relative stability in sales of new homes allowed those inventory reductions to begin to bring down the months' supply of new homes for sale. Even so, the months' supply of new homes for sale remained extremely elevated relative to the level that prevailed before the downturn in the housing market. Sales of existing single-family homes were relatively flat since the end of last year. Tight conditions in mortgage markets over the summer continued to restrain housing demand,

especially for borrowers seeking non-conforming mortgages. Several indexes indicated that house prices had declined substantially over the past 12 months, and these prices appeared to remain on a downward trajectory.

In the business sector, investment in equipment and software fell in the second quarter, largely reflecting a sharp drop in spending on motor vehicles. In contrast, growth of real outlays for non-transportation equipment posted a moderate gain. The data on nominal orders and shipments of nondefense capital goods excluding aircraft rose substantially in July, although some of the gain in nominal shipments may have reflected unusually large price increases. Moreover, as in previous months, orders and shipments were likely supported in July by increased foreign demand. Real nonresidential investment increased at a robust rate in the second quarter; however, nominal expenditures declined in July, and forward-looking indicators remained downbeat. Vacancy rates for commercial properties moved higher in the first half of the year and the architectural billings index continued to register weak readings.

Real nonfarm inventories excluding motor vehicles fell in the second quarter. The book value of manufacturing and trade inventories (excluding motor vehicles) stepped up modestly in July from the second-quarter level, but the ratio of these inventories to sales held steady.

The U.S. international trade deficit widened in July, as a surge in the value of imports of goods and services more than offset strong growth in exports. Imports in July were led by a rapid increase in imports of oil, reflecting both higher volumes and higher prices, and were supported by a rise in imports of industrial supplies, capital goods, and services. The strength in exports was

broadly based but benefited in particular from robust exports of automotive products.

Economic indicators pointed to a marked deceleration of economic activity in the advanced foreign economies. In the second quarter, gross domestic product (GDP) was flat in Canada and the United Kingdom and fell in both Japan and the euro area. In July, employment continued to weaken in Japan, and retail sales fell in the euro area. Headline inflation in the major advanced foreign economies stayed elevated. Data received over the intermeeting period showed a further slowing of growth in emerging market economies. For Mexico, anemic growth in the second quarter followed a slight contraction in the first. In Asia, output decelerated significantly in the second quarter, as growth moderated in China and weakened more sharply in several other economies. Headline inflation rose in some developing countries but fell in others.

Headline consumer prices in the United States declined slightly in August after having risen rapidly during the preceding three months. Energy prices dropped steeply, and the rate of increase in food prices moderated somewhat. Core consumer prices rose a bit more slowly in August than they had in June and July. Excluding food and energy, producer prices rose modestly in August, although prices for capital goods other than motor vehicles and high-tech equipment posted a large increase. During recent months, some cost pressures eased as the prices of crude oil and other commodities declined and non-oil import prices decelerated. Some measures of inflation expectations were down notably over the intermeeting period. Measures of hourly labor compensation continued to

increase moderately with no sign of acceleration.

At its August meeting, the Federal Open Market Committee (FOMC) kept the target federal funds rate unchanged at 2 percent. The Committee's statement noted that economic activity expanded in the second quarter, partly reflecting growth in consumer spending and exports. However, labor markets had softened further and financial markets remained under considerable stress. Tight credit conditions, the ongoing housing contraction, and elevated energy prices were likely to weigh on economic growth over the next few quarters. The Committee stated that, over time, the substantial easing of monetary policy, combined with ongoing measures to foster market liquidity, should help to promote moderate economic growth. Inflation had been high, spurred by the earlier increases in the prices of energy and some other commodities, and some indicators of inflation expectations had been elevated. The Committee expected inflation to moderate later this year and next year, but the inflation outlook remained highly uncertain. Although downside risks to growth remained, the upside risks to inflation were also of significant concern to the Committee. The Committee indicated that it would continue to monitor economic and financial developments and would act as needed to promote sustainable economic growth and price stability.

Over the intermeeting period, investors marked down considerably their expectations for the path of monetary policy. Policy expectations were largely unaffected by the outcome of the August FOMC meeting, as the Committee's decision to leave the target federal funds rate unchanged was broadly anticipated and the accompanying statement was reportedly in line with inves-

tor expectations. Subsequently, the expected future path of monetary policy dropped amid increasing concerns about the health of financial institutions. The market's expectation for the onset of policy tightening was also pushed back as labor market conditions weakened and oil prices declined further, developments that were seen as tempering inflation pressures. Yields on nominal Treasury coupon securities declined over the intermeeting period while yields on inflation-indexed Treasury securities were roughly unchanged, which left inflation compensation noticeably lower. The decrease in inflation compensation was most pronounced at shorter horizons, likely reflecting the drop in oil prices.

Conditions in short-term funding markets remained strained for most of the intermeeting period and deteriorated considerably just before the FOMC meeting. The spreads of London interbank offered rates, or Libor, over comparable-maturity overnight index swap rates, especially those beyond the one-month horizon, moved up from already-high levels. In the commercial paper market, spreads on lower-rated nonfinancial and asset-backed commercial paper fluctuated in an elevated range, as did spreads on financial paper. Depository institutions continued to bid aggressively for 28-day funds at the Term Auction Facility (TAF) during the intermeeting period, and demand for funds was strong at both of the 84-day TAF auctions. The amount of overnight primary credit outstanding was about unchanged at a high level, while term primary credit continued to rise. No credit was extended through the Primary Dealer Credit Facility until the final week of the intermeeting period. Conditions in markets for repurchase agreements, or repos, against some types of collateral deteriorated over the

intermeeting period, and liquidity in non-Treasury, nonagency term repo markets remained poor.

In longer-term credit markets, yields on investment-grade corporate bonds were not much changed, but yields on speculative-grade bonds rose somewhat. Risk spreads on corporate bonds jumped, as comparable-maturity Treasury yields dropped; most of the increase in risk spreads occurred late in the intermeeting period. Corporate bond issuance moderated a bit further in August, while growth of bank lending to businesses was tepid. Broad equity indexes declined over the intermeeting period. Financial sector equity indexes were volatile and ended the period down sharply.

Liquidity conditions in the money markets of major foreign economies deteriorated over the intermeeting period. Sovereign bond yields moved down, mainly reflecting declines in inflation compensation. On a trade-weighted basis, the dollar rose against the currencies of our major trading partners.

M2 contracted slightly in August following a generally weak performance over the previous few months. The August data showed a considerable reallocation among the components of M2. Liquid deposits and retail money funds fell while small time deposits surged as some banks and thrifts bid aggressively for these deposits.

On September 7, the Treasury Department and the Federal Housing Finance Agency announced that Fannie Mae and Freddie Mac had been placed into conservatorship and that Treasury would establish a backstop lending facility for the government-sponsored enterprises (GSEs), purchase preferred stock in the GSEs as necessary to ensure that they maintain a positive net worth, and initiate a program to

purchase mortgage-backed securities (MBS). Following the announcement, spreads on Fannie Mae and Freddie Mac debt and on agency MBS narrowed, while share prices for their common and preferred stock fell. Auctions of GSE debt following the conservatorship announcement reportedly attracted heavy demand, but market participants indicated that liquidity in the secondary market for GSE debt remained somewhat lower than normal. Before the conservatorship announcement, interest rates on 30-year fixed-rate mortgages had declined less than those on comparable-maturity Treasury securities, leaving mortgage spreads at the top of their range of the past two decades. Following the Treasury announcement, rates and spreads on new conforming fixed-rate mortgages dropped sharply.

In the days immediately before the FOMC meeting, Lehman Brothers Holdings filed for bankruptcy, Bank of America announced that it would acquire Merrill Lynch, and market concerns about the health of other financial institutions increased. To address potential liquidity pressures in financial markets associated with these developments, the Federal Reserve announced several additional initiatives, including an expansion of collateral eligible for the Primary Dealer Credit Facility and the Term Securities Lending Facility (TSLF), increases in the size and frequency of TSLF auctions, and a temporary relaxation of the limitations on broker-dealers' access to funding from affiliated depository institutions. In addition, a consortium of 10 major banks announced the creation of a liquidity pool from which participants could draw collateralized loans. Despite these enhanced liquidity measures, short-term funding markets remained severely strained, reflecting investors' heightened concerns about the financial con-

dition of other large financial firms, including American International Group, a prominent insurance and financial services company. To further support market liquidity and to help keep the federal funds rate near its target, the Federal Reserve conducted very large reserve-adding open market operations the day before and the morning of the FOMC meeting. Market expectations for the path of monetary policy moved down sharply. Yields on nominal Treasury securities dropped steeply, and credit spreads on corporate bonds widened significantly. Equity markets were volatile and equity prices dropped considerably.

In the forecast prepared for the meeting, the staff left its projection for real GDP growth in the second half of 2008 little changed from the previous meeting, but it marked down its forecast for 2009 slightly. Real GDP was estimated to have increased at a solid pace in the second quarter; however, the available indicators pointed to a sharp deceleration in economic activity in the third quarter. Consumer spending softened appreciably in recent months, and housing construction remained on a steep downtrend. Some of the weakness in the household sector appeared to reflect the ongoing deterioration in the labor market, but the effects of the earlier run-up in oil prices, weakened balance sheets, and restrictive financial conditions also likely put the finances of many households and businesses under pressure. The staff continued to expect that real GDP would advance slowly in the fourth quarter of 2008 and at a faster rate in 2009, but still less than that of its potential. Real GDP growth was expected to pick up to slightly above the rate of potential growth in 2010, as the restraint on household and business spending associated with financial market turmoil gradually eases

and the contraction in the housing sector comes to an end. The staff's outlook for both core and overall PCE inflation over the next two years also changed little. The staff continued to project that core inflation would edge lower in 2009 and 2010 as the prices of imports, energy, and other commodities decelerate and the margin of resource slack remains relatively wide.

In their discussion of the economic situation and outlook, FOMC participants noted that financial market strains had intensified in the days before the meeting and that these strains could potentially weigh further on economic activity. Participants agreed that economic growth was likely to be sluggish in the second half of 2008. Several participants had marked down their near-term outlook for economic activity and some judged that downside risks had increased, but most continued to expect a gradual recovery in 2009. Despite concern that recent high inflation readings suggested that price pressures could persist, participants generally thought that the outlook for inflation had improved, mainly reflecting the recent declines in the prices of oil and other commodities, the stronger foreign exchange value of the dollar, and the weakening of the labor market.

Participants noted that stresses on financial markets and institutions had increased. The announcement of government support for Fannie Mae and Freddie Mac appeared to have had a positive impact on financial markets, most importantly on the primary and secondary markets for residential mortgages. However, the bankruptcy of Lehman Brothers and market concerns about other financial institutions were causing a wide variety of financial firms to experience increasing difficulty in obtaining funding and raising capital, a development that was likely to lead to

a further tightening of credit availability to households and firms. Meeting participants were highly uncertain about future financial developments and their implications for the broader economy. There was agreement that the liquidity facilities established by the Federal Reserve over the past year had been helpful in ameliorating strains in financial markets, but it was also noted that the capital of banks and other financial institutions would need to be bolstered in order to strengthen the functioning of the financial system and ease constraints on credit.

Strains on the financial system, and their interactions with housing developments and the real economy more broadly, continued to restrain aggregate demand and pose substantial downside risks to the expected path for economic activity. The fall in employment in August highlighted concerns that an adverse dynamic was taking hold, in which economic weakness increased financial firms' losses, leading to tighter credit conditions and thus causing a further softening in economic activity. However, some participants cited indications that the pace of decline in house prices might begin to slow in coming months, which would serve to limit the strains on lenders. Mortgage rates had fallen after action on the GSEs, inventories of houses for sale had fallen, and reports from contacts in some parts of the nation suggested a possible bottoming of the housing sector might not be far off, although the differences in the prospects for housing across states and regions seemed to be large. All in all, the contraction in the housing sector and the adverse implications for the performance of mortgage-related financial assets continued to represent a drag on economic performance.

Recent readings on consumer spending had been weak despite the tax

rebates, which were mostly paid out by mid-July; these indicators suggested that consumption may remain soft as the effects of the stimulus fade over the near term. Falling real estate prices were likely to continue to reduce household wealth, and the eroding quality of consumer loans had the potential to lead to a further tightening of credit conditions. Many participants worried that the deterioration in labor market conditions over the summer would damp the growth of income and depress consumer confidence, further holding back consumption.

Business spending had held up well over the summer, and inventories appeared to be well managed. However, reports from business contacts suggested that new commercial real estate projects were difficult to finance. With credit conditions generally tight and economic prospects relatively uncertain, investment spending was likely to be on the soft side going forward.

Foreign economic growth had slowed in recent months and the dollar had risen broadly; both of these developments suggested that the contributions to U.S. GDP growth from net exports would likely be less strong than it had been of late. Some participants noted that financial strains were increasing in many foreign countries. However, a beneficial side effect of the global slowdown was the falling prices of oil and other commodities, which would help to bolster real incomes of U.S. households.

Participants generally were somewhat more confident about the outlook for some moderation in inflation over the forecast horizon. Recent substantial declines in the prices of oil and other commodities should help to contain broader price pressures in coming quarters. In addition, the effects of the stronger dollar on import prices along

with increased economic slack would tend to damp inflation. Various measures of inflation expectations had declined since the last meeting, and nominal wage increases had continued to be moderate. Indeed, with solid growth in productivity, unit labor costs had been well contained. Still, reports from business contacts suggested that firms were continuing to attempt to pass through to their customers previous increases in the costs of energy and other raw materials and would resist reversing previous price increases. Participants noted that recent readings on core and headline inflation had been elevated, and they expressed concern that high inflation might become embedded in expectations and retain considerable momentum.

Members agreed that keeping the federal funds rate unchanged at this meeting was appropriate. The current low real federal funds rate appeared necessary to provide adequate counterweight to the restraining effects of tight credit conditions and of continued declines in the housing market on spending and output. Committee members generally saw the current stance of monetary policy as consistent with a gradual strengthening of economic growth beginning next year, although they recognized that recent financial developments had boosted the downside risks to the economic outlook. Inflation risks appeared to have diminished in response to the declines in the prices of energy and other commodities, the recent strengthening of the dollar, and the outlook for somewhat greater economic slack, and Committee members were a bit more optimistic that inflation would moderate in coming quarters. However, the possibility that core inflation would not moderate as anticipated was still a significant concern. With substantial downside risks to

growth and persisting upside risks to inflation, members judged that leaving the federal funds rate unchanged at this time suitably balanced the risks to the outlook. Some members emphasized that if intensifying financial strains led to a significant worsening of the growth outlook, a policy response could be required; however, such a response was not called for at this meeting. Indeed, it was noted that, with elevated inflation still a concern and growth expected to pick up next year if financial strains diminish, the Committee should also remain prepared to reverse the policy easing put in place over the past year in a timely fashion.

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

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining the federal funds rate at an average of around 2 percent.

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

The Federal Open Market Committee decided today to keep its target for the federal funds rate at 2 percent.

Strains in financial markets have increased significantly and labor markets have weakened further. Economic growth appears to have slowed recently, partly reflecting a softening of household spending. Tight credit conditions, the ongoing housing contraction, and some slowing in export growth are likely to weigh on economic growth over the next few quarters. Over time, the substantial easing of monetary policy, com-

bined with ongoing measures to foster market liquidity, should help to promote moderate economic growth.

Inflation has been high, spurred by the earlier increases in the prices of energy and some other commodities. The Committee expects inflation to moderate later this year and next year, but the inflation outlook remains highly uncertain.

The downside risks to growth and the upside risks to inflation are both of significant concern to the Committee. The Committee will monitor economic and financial developments carefully and will act as needed to promote sustainable economic growth and price stability.

Votes for this action: Mr. Bernanke, Mses. Cumming and Duke, Messrs. Fisher, Kohn, and Kroszner, Ms. Pianalto, Messrs. Plosser, Stern, and Warsh.  
Votes against this action: None. Ms. Cumming voted as the alternate for Mr. Geithner.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, October 28–29, 2008.

The meeting adjourned at 12:30 p.m.

#### Notation Vote

By notation vote completed on August 25, 2008, the Committee unanimously approved the minutes of the FOMC meeting held on August 5, 2008.

Brian F. Madigan  
Secretary

#### Meeting Held on October 28–29, 2008

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, October 28, 2008 at 2:00 p.m. and continued on Wednesday, October 29, 2008 at 9:00 a.m.

#### *Present:*

Mr. Bernanke, Chairman  
Mr. Geithner, Vice Chairman

- Ms. Duke  
 Mr. Fisher  
 Mr. Kohn  
 Mr. Kroszner  
 Ms. Pianalto  
 Mr. Plosser  
 Mr. Stern  
 Mr. Warsh
- Ms. Cumming, Messrs. Evans, Lacker, and Lockhart, and Ms. Yellen, Alternate Members of the Federal Open Market Committee
- Messrs. Bullard, Hoenig, and Rosengren, Presidents of the Federal Reserve Banks of St. Louis, Kansas City, and Boston, respectively
- Mr. Madigan, Secretary and Economist  
 Ms. Danker, Deputy Secretary  
 Mr. Skidmore, Assistant Secretary  
 Ms. Smith, Assistant Secretary  
 Mr. Alvarez, General Counsel  
 Mr. Baxter, Deputy General Counsel  
 Mr. Sheets, Economist  
 Mr. Stockton, Economist
- Messrs. Connors, English, and Kamin, Ms. Mester, Messrs. Rosenblum, Slifman, Sniderman, and Wilcox, Associate Economists
- Mr. Dudley, Manager, System Open Market Account
- Ms. Bailey, Deputy Director, Division of Banking Supervision and Regulation, Board of Governors
- Mr. Clouse, Deputy Director, Division of Monetary Affairs, Board of Governors
- Mr. Struckmeyer,<sup>12</sup> Deputy Staff Director, Office of Staff Director for Management, Board of Governors
- Mr. Blanchard, Assistant to the Board, Office of Board Members, Board of Governors
- Messrs. Reifschneider and Wascher, Associate Directors, Division of Research and Statistics, Board of Governors
- Messrs. Levin and Nelson, Associate Directors, Division of Monetary Affairs, Board of Governors
- Ms. Kole, Assistant Director, Division of International Finance, Board of Governors
- Mr. McCarthy, Visiting Reserve Bank Officer, Division of Monetary Affairs, Board of Governors
- Mr. Oliner, Senior Adviser, Division of Research and Statistics, Board of Governors
- Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors
- Messrs. Bassett and Luecke, Section Chiefs, Division of Monetary Affairs, Board of Governors
- Mr. Morin, Senior Economist, Division of Research and Statistics, Board of Governors
- Ms. Low, Open Market Secretariat Specialist, Division of Monetary Affairs, Board of Governors
- Mr. Moore, First Vice President, Federal Reserve Bank of Cleveland
- Mr. Fuhrer, Executive Vice President, Federal Reserve Bank of Boston
- Messrs. Altig and McAndrews, Ms. Mosser, Messrs. Rasche, Sullivan, and Williams, Senior Vice Presidents, Federal Reserve Banks of Atlanta, New York, New York, St. Louis, Chicago, and San Francisco, respectively
- Messrs. Clark and Hornstein, Vice Presidents, Federal Reserve Banks of Kansas City and Richmond, respectively
- Mr. Weber, Senior Research Officer, Federal Reserve Bank of Minneapolis

The Manager of the System Open Market Account reported on recent developments in foreign exchange markets. There were no open market operations in foreign currencies for the Sys-

12. Attended Wednesday's session only.

tem's account in the period since the previous meeting. The Manager also reported on developments in domestic financial markets and on System open market operations in government securities and federal agency obligations during the period since the previous meeting. By unanimous vote, the Committee ratified these transactions.

In the discussion of System open market operations over the period, it was noted that reserve management had become more complex as a result of the large provision of reserves associated with the recent expansion of the Federal Reserve's liquidity facilities; in particular, the effective federal funds rate had been persistently below the FOMC's target. While the payment of interest on reserves seemed to be helpful in mitigating downward pressure on the funds rate, a number of institutions evidently were willing to sell funds at interest rates below that paid on excess reserve balances. Anecdotal reports suggested that this was particularly the case for those institutions that are not eligible to receive interest on the balances they maintain at the Federal Reserve. Going forward, however, the interest rate on excess reserve balances could be adjusted, and it might establish a more effective floor on the federal funds rate over time as more depository institutions revise their strategies in the federal funds market in light of the payment of interest on reserves.

In view of a further widening in financial market strains internationally, the Committee considered proposals to establish temporary reciprocal currency ("swap") arrangements with several additional foreign central banks. Members unanimously approved the following resolution, which effectively permitted the Foreign Currency Subcommittee to establish a swap line with the Reserve Bank of New Zealand.

The FOMC amends paragraph 1.A. of the Authorization for Foreign Currency Operations to include the New Zealand dollar in the list of foreign currencies in which the Federal Reserve Bank of New York may transact for the System Open Market Account.

Meeting participants also discussed a proposal to set up temporary liquidity-related swap arrangements with the central banks of Mexico, Brazil, Korea, and Singapore. In their remarks, participants focused on the outlook for complementarity between these swaps and the new short-term liquidity facility that the International Monetary Fund was considering; on the governance and structure of the swap lines; and on the particular countries included. Several participants pointed to the international reserves held by the countries and the importance of ensuring that these temporary swap lines, like the others that had been established during this period, be used only for the purposes intended. On balance, the Committee concluded that in current circumstances the swap arrangements with these four large and systemically important economies were appropriate, and it unanimously approved the following resolutions.

The FOMC directs the Federal Reserve Bank of New York to establish and maintain a reciprocal currency arrangement ("swap arrangement") for the System Open Market Account with each of (i) the Banco Central do Brasil, (ii) the Bank of Korea, (iii) the Banco de Mexico, and (iv) the Monetary Authority of Singapore. Each such swap arrangement would be for an aggregate amount not to exceed \$30 billion. Drawings under the arrangement require approval. Unless extended by the Committee, each such swap arrangement shall expire on April 30, 2009.

The FOMC amends paragraph 1.A. of the Authorization for Foreign Currency Operations to include the Brazilian real, the Korean won, and the Singapore dollar in the list of foreign currencies in which the Fed-

eral Reserve Bank of New York may transact for the System Open Market Account.

The FOMC delegates to the Foreign Currency Subcommittee the authority to approve individual drawing requests of up to \$5 billion under each of the aforementioned swap arrangements with the Banco Central do Brasil, the Bank of Korea, the Banco de Mexico, and the Monetary Authority of Singapore.

A number of adverse financial developments influenced economic and financial market conditions over the intermeeting period. Lehman Brothers Holdings had filed for bankruptcy the day before the meeting of the Committee in September. In large part because of losses on Lehman debt, the net asset value of a major money market mutual fund fell below \$1 per share, spurring a substantial outflow from money market mutual funds and straining their liquidity. The rapid deterioration of American International Group, Inc. (AIG), and Wachovia Corporation, along with the closing of Washington Mutual, led to intensified market concerns about the condition of financial institutions. In this environment, investors pulled back from risk-taking, funding markets for terms beyond overnight largely ceased to function at times, credit risk spreads rose sharply, and equity prices registered steep declines.

The information reviewed at the October meeting indicated that economic conditions deteriorated in recent months. The labor market weakened further in September as private payrolls fell at a faster pace than earlier in the year and the unemployment rate remained above 6 percent. Industrial production fell in September, although much of the drop was related to effects of recent hurricanes and a strike at an aircraft manufacturer. Consumer spending declined, reflecting stagnant real income, tighter credit, declining wealth, and concerns about economic condi-

tions. The housing market remained weak, with construction activity, new home sales, and home prices falling further. Business spending on equipment and software appeared to have declined again in the third quarter, and indicators of investment in structures weakened. Economic activity in many foreign economies slowed in recent months. Headline consumer inflation measures, pulled down by declines in consumer energy prices, moderated in August and September. Core consumer inflation measures also eased somewhat in these two months.

The labor market continued to weaken. According to the September labor market report, the unemployment rate remained at 6.1 percent, but private payroll employment fell faster than the average pace earlier in the year. Most major industry groups shed jobs. The manufacturing, construction, and temporary help industries continued to experience sizable losses in employment; meanwhile, retail trade and financial services registered larger declines than earlier in the year. Nonbusiness services added jobs, but at the slowest rate of the year. The average workweek and aggregate hours declined in September, and weekly unemployment insurance claims continued to rise in October.

Industrial production dropped sharply in September. Although much of the decline was due to the effects of the recent hurricanes and a strike at an aircraft manufacturer, most major industries experienced slow or declining output in recent months. Motor vehicle assemblies were unchanged in the third quarter at a low level. The pace of high-tech equipment production slowed in the third quarter relative to its rate in the first half of the year, reportedly in part because tight credit conditions were restraining demand. Available in-

formation suggested that demand and production in this sector were likely to remain relatively subdued over the coming months. The output of other manufacturing sectors declined in the third quarter. While standard indicators of near-term production suggested factory output would decline further over the next few months, the recovery of production in industries affected by the hurricanes was expected to offset these declines to a degree. The factory utilization rate fell in September to well below its long-run average.

Real personal consumption expenditures (PCE) apparently declined in September for the fourth consecutive month. Motor vehicle sales fell back to their very low July pace, and preliminary reports indicated that the slump continued into October, as tighter credit conditions were restraining demand. Purchases of goods other than motor vehicles were estimated to have fallen noticeably. Real outlays on services other than energy increased only modestly in July and August. Real disposable income, excluding the effects of tax rebates and the emergency unemployment benefits, was little changed in July and August from the second-quarter average. Measures of consumer sentiment dropped in October to near or below their low levels of midyear, with the Conference Board measure exceptionally low.

Residential construction activity continued to decline steeply through the third quarter. In September, both single-family housing starts and permit issuance fell. In the multifamily sector, starts edged up in September but remained toward the lower end of their two-year range. New home sales in August and September were at a pace well below that of the first half of the year. Although the cutbacks in homebuilding had reduced the inventory of

unsold houses, the slower rate of sales kept the months' supply of new homes very elevated relative to the level that had prevailed before the downturn in the housing market. Sales of existing single-family homes in September were somewhat higher than they had been earlier in the year, likely supported by increases in foreclosure-related sales. Tight conditions in mortgage markets continued to restrain housing demand, especially for borrowers needing nonconforming mortgages. Several indexes indicated that house prices declined substantially over the 12 months through August.

In the business sector, investment in equipment and software appeared to weaken further in the third quarter. Nominal shipments of nondefense capital goods excluding aircraft were flat in the third quarter, while orders for those goods declined. Demand for high-tech equipment appeared to have softened considerably, and spending on non-high-tech, non-transportation equipment was estimated to have fallen. Transportation equipment investment was held down in the third quarter by falling sales for medium and heavy trucks and by a strike-induced drop in aircraft deliveries in September. Nominal expenditures on nonresidential structures declined for the second consecutive month in August. Forward-looking indicators turned more downbeat: Vacancy rates for commercial properties rose further, property values declined, and the architectural billings index fell in September. Furthermore, the latest Senior Loan Officer Opinion Survey on Bank Lending Practices indicated that banks tightened lending standards for commercial real estate loans over the past three months.

The book-value data for manufacturing and trade inventories suggested that the real value of inventories continued

to decline over the summer through August, but a number of indicators suggested that stocks in some industries remained above desired levels. The days' supply of light motor vehicles at dealers had risen, on balance, through the year and was rather high in September. The ratio of book-value inventories to sales in the manufacturing and trade sectors, excluding motor vehicles, rose in August, particularly in a number of durable goods sectors. In addition, the index of customers' inventories in the Institute of Supply Management's manufacturing survey indicated that inventories remained above desired levels.

The U.S. international trade deficit narrowed in August, with a decline in the value of imports more than offsetting a fall in the value of exports of goods and services. A drop in the value of petroleum imports, which reflected both lower volumes and a decrease in prices, exceeded an increase in non-oil imports that was driven by a rise in imports of consumer goods and industrial supplies. Exports of automotive products fell sharply in August after a surge in July, and exports of consumer goods, industrial supplies, and services moved down after strong increases in previous months. Aircraft exports surged, but sales of other capital goods declined.

The data for the advanced foreign economies during the intermeeting period generally suggested that economic activity was weakening further, and confidence indicators in these areas declined as the financial crisis worsened. Labor market conditions deteriorated in these economies, with the exception of Canada. Real gross domestic product (GDP) fell in the United Kingdom in the third quarter. Headline inflation continued to be elevated in many economies, but the most recent consumer price indexes for Japan and

for the euro area suggested some deceleration in prices.

In emerging market economies, data received over the intermeeting period showed a continued slowing of real activity. Real GDP growth in China moved down in the third quarter. Industrial production contracted in recent months for many countries. External balances deteriorated significantly in many emerging market economies as exports to advanced economies slowed. Headline inflation in emerging market economies eased, reflecting falling oil and food prices.

Headline consumer prices in the United States were estimated to have risen only modestly in September, extending the recent moderation of overall inflation following the rapid increases earlier in the year. Consumer energy prices fell for the second consecutive month, while retail food prices continued to climb at a rapid pace, boosted by the substantial run-up in farm commodity prices through midyear. Core consumer price inflation rose somewhat during the third quarter, reflecting the pass-through of previous increases in the costs of energy and materials and import prices. Those upward price pressures diminished recently: Prices of oil and other commodities fell sharply over the intermeeting period, and non-oil import prices as well as producer prices of intermediate materials excluding food and energy declined in September. Some survey measures of inflation expectations declined during the period. Available measures of hourly labor compensation increased at about the same moderate pace as over the past several years.

At its September meeting, the Federal Open Market Committee (FOMC) kept the target federal funds rate unchanged at 2 percent. The Committee's statement noted that strains in financial

markets had increased significantly and that labor markets had weakened further. Economic growth appeared to have slowed recently, which partly reflected a softening of household spending. Tight credit conditions, the ongoing housing contraction, and some slowing in export growth were likely to weigh on economic growth over the next few quarters. The Committee stated that, over time, the substantial easing of monetary policy, combined with ongoing measures to foster market liquidity, should help promote moderate economic growth. Inflation had been high, spurred by the earlier increases in the prices of energy and some other commodities. The Committee expected inflation to moderate later this year and next year, but the inflation outlook remained highly uncertain. The downside risks to growth and the upside risks to inflation were both of significant concern to the Committee. The Committee indicated that it would continue to monitor economic and financial developments carefully and would act as needed to promote sustainable economic growth and price stability.

Over the intermeeting period, market participants marked down their expectations for the path of the federal funds rate for the next two years. The Committee's decision to leave the target federal funds rate unchanged at the September FOMC meeting led some investors to scale back expectations for policy easing over the next year. Subsequently, however, market expectations reversed in response to the heightened financial turmoil and to generally weaker-than-expected economic data. The Committee's decision to reduce the target federal funds rate 50 basis points as part of a coordinated action with other central banks on October 8, along with the accompanying statement, led investors to mark down further the

expected path for the federal funds rate. Yields on short-term nominal Treasury coupon securities declined over the intermeeting period, reportedly as a result of substantial flight-to-quality flows and heightened demand for liquidity. In contrast, higher term premiums and expectations of increases in the supply of Treasury securities associated with the Emergency Economic Stabilization Act and other initiatives seemed to put upward pressure on longer-term nominal Treasury yields. Yields on longer-term inflation-indexed Treasury securities, which are relatively illiquid, rose more sharply than did those on nominal securities. Measures of inflation compensation based on differences between nominal and inflation-indexed Treasury yields were quite volatile over the intermeeting period and, because of shifting liquidity premiums, likely provided less information than usual concerning inflation expectations or inflation uncertainty.

In the wake of the failures or near failures of several large financial institutions, short-term funding markets came under significant additional pressure over the intermeeting period, and the Federal Reserve and other central banks took a number of actions to provide liquidity and improve market functioning. In the overnight federal funds market, financial institutions became more selective about the counterparties with whom they were willing to trade. The overnight London interbank offered rate (Libor) rose substantially, and the spread of term Libor rates over comparable-maturity overnight index swap (OIS) rates rose sharply from already-high levels. The demand for commercial paper declined as prime money market mutual funds experienced large net outflows after the net asset value of one such fund fell below \$1 per share. As a consequence, risk spreads on com-

mercial paper rose considerably and were very volatile. Amid strong flows into government-only money market mutual funds, the demand for short-dated Treasury bills rose, and these securities traded with very low yields despite sizable new issuance during the period. The market for repurchase agreements (repos) also experienced significant dislocations during the intermeeting period. Partly because of high demand for Treasury securities, the overnight repo rate for Treasury general collateral was near zero for much of the period, and failures to deliver Treasury securities reached record highs. Repo rates on agency collateral also were volatile, and liquidity in non-Treasury, non-agency repo markets was poor. Conditions in short-term funding markets improved somewhat following the announcements of a U.S. government guarantee of certain liabilities of U.S. banking organizations and similar actions by foreign authorities, the expansion of swap arrangements between the Federal Reserve and other central banks, and a number of initiatives by the Federal Reserve and the Treasury to address the pressures on money market mutual funds and the commercial paper market.

In longer-term credit markets, yields and spreads on investment-grade and speculative-grade corporate bonds increased, while indexes of credit default swap (CDS) spreads for investment-grade financial and nonfinancial firms reached unprecedented levels. Liquidity in the corporate bond and CDS markets was strained. Issuance of investment-grade corporate bonds was moderate in September and October, while there was little issuance of speculative-grade bonds. Commercial and industrial loans continued to expand rapidly in early October, as firms drew on existing bank lines of credit. However, conditions

deteriorated in the secondary market for syndicated leveraged loans, with prices falling to new lows and bid-asked spreads widening notably. Broad equity price indexes declined sharply over the intermeeting period, and option-implied volatility on the S&P 500 index rose well above its previous record high. The Senior Loan Officer Opinion Survey pointed to further tightening of terms and standards for consumer loans. Consumer credit increased at its slowest pace in more than 15 years during the three months ending in August. Conditions in the municipal bond market were also poor over much of the intermeeting period.

The strains from the banking and credit crisis intensified and took on a more global aspect over the intermeeting period. This development and the related erosion of the economic outlook and reduction in inflationary pressures led many central banks to reduce their policy rates, including in the internationally coordinated action announced on October 8. Liquidity conditions in the money markets of major foreign economies deteriorated further. Spreads between term Libor and OIS rates in euros and sterling rose from already-elevated levels, although by less than in dollars. Sovereign bond yields in the advanced foreign economies were volatile; nominal yield curves in many countries steepened on net. Equity market indexes fell sharply in the advanced economies as well as in emerging market economies, which until recently had not been hit as hard by the financial turmoil. The dollar appreciated against most currencies, with the prominent exception of the Japanese yen.

In the United States, M2 accelerated sharply in September, and it appeared to be on pace for another large increase in October, apparently reflecting a heightened preference by households and

firms for safe assets. Liquid deposits expanded strongly in September, but leveled off in early October. Small time deposits increased briskly in September and early October as banks and thrifts reportedly continued to bid aggressively for these deposits. Retail money funds, which were little changed in September, experienced significant net inflows in early October. In contrast, institutional money funds, which are not included in M2, experienced substantial outflows during this period.

In response to the extraordinary stresses in financial markets, the Federal Reserve together with other U.S. government agencies and many foreign central banks and governments implemented a number of unprecedented policy initiatives during the intermeeting period. Early in the period, the condition of AIG, a large complex financial institution, deteriorated rapidly. In view of the likely systemic implications and the potential for significant adverse effects on the economy of a disorderly failure of AIG, the Federal Reserve Board on September 16, with the support of the Treasury, authorized the Federal Reserve Bank of New York to lend up to \$85 billion to the firm to assist it in meeting its obligations and to facilitate the orderly sale of some of its businesses. On October 8, the Federal Reserve announced a supplemental liquidity arrangement for AIG.

The Federal Reserve Board also approved a number of new facilities to address strains in short-term funding markets. On September 19, it announced the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF), which extends nonrecourse loans at the primary credit rate to U.S. depository institutions and bank holding companies to finance the purchase of high-quality asset-backed commercial paper (ABCP)

from money market mutual funds. On October 7, the Board announced the creation of the Commercial Paper Funding Facility (CPFF), which provides a liquidity backstop to U.S. issuers of highly rated commercial paper through a special-purpose vehicle that purchases three-month unsecured commercial paper and ABCP directly from eligible issuers. On October 21, it publicized the creation of the Money Market Investor Funding Facility (MMIFF), under which the Federal Reserve Bank of New York will provide funding to a series of special-purpose vehicles to facilitate an industry-supported initiative to finance the purchase of certain highly rated certificates of deposit, bank notes, and commercial paper from U.S. money market mutual funds. The AMLF, CPFF, and MMIFF were intended to improve the liquidity in short-term debt markets and ease the strains in credit markets more broadly.

In addition, to address the sizable demand for dollar funding in foreign jurisdictions, the FOMC authorized the expansion of its existing swap lines with the European Central Bank and Swiss National Bank; by the end of the intermeeting period, the formal quantity limits on these lines had been eliminated. The quantity limits were also lifted on new swap lines set up with the Bank of Japan and the Bank of England. The FOMC authorized new swap lines with five other central banks during the period. In domestic markets, the Federal Reserve raised the regular auction amounts of the 28- and 84-day maturity Term Auction Facility (TAF) auctions to \$150 billion each. Also, the Federal Reserve announced two forward TAF auctions for \$150 billion each, to be conducted in November to provide funding over year-end. In total, up to \$900 billion of TAF credit over year-end was authorized.

Despite the substantial provision of liquidity by the Federal Reserve and other central banks, functioning in many credit markets remained very poor, a situation that reflected market participants' uncertainty about their liquidity needs and their future access to funding as well as concerns about the health of many financial institutions. To strengthen confidence in U.S. financial institutions, the Treasury, the Federal Reserve, and the Federal Deposit Insurance Corporation (FDIC) issued a joint statement on October 14, which included several elements. First, the Treasury announced a voluntary capital purchase plan under which eligible financial institutions could sell preferred shares to the U.S. government. Second, the FDIC provided a temporary guarantee of the senior unsecured debt of all FDIC-insured institutions and their holding companies, as well as all balances in non-interest-bearing transaction deposit accounts. The statement included notice that nine major financial institutions had agreed to participate in both the capital purchase program and the FDIC guarantee program. Third, the Federal Reserve announced details of the CPFF, which was scheduled to begin on October 27. After this joint statement and the announcements of similar programs in a number of other countries, financial market pressures appeared to ease somewhat, though conditions remained strained.

The expansion of existing liquidity facilities as well as the creation of new facilities contributed to a notable increase in the size of the Federal Reserve's balance sheet. The amount of primary credit outstanding rose considerably over the intermeeting period, with both foreign and domestic depository institutions making use of the discount window. TAF credit outstanding more than doubled over the period.

Credit extended through the Primary Dealer Credit Facility rose rapidly ahead of quarter-end; although it subsided subsequently, the amount of credit outstanding remained well above the levels seen before mid-September. The Term Securities Lending Facility (TSLF) auctions conducted over the intermeeting period had very high demand; in addition, dealers exercised most of the options for TSLF loans spanning the September quarter-end.

Two initiatives were introduced over the intermeeting period to help manage the expansion of the balance sheet and promote control of the federal funds rate. First, on September 17, the Treasury announced a temporary Supplementary Financing Program at the request of the Federal Reserve. Under this program, the Treasury issued short-term bills over and above its regular borrowing program, with the proceeds deposited at the Federal Reserve. This facility helped offset the provision of reserves to the banking system through the various liquidity facilities. Second, employing authority granted under the Emergency Economic Stabilization Act, the Federal Reserve Board announced on October 6 that it would pay interest on required and excess reserve balances beginning on October 9. The payment of interest on excess reserve balances was intended to assist in maintaining the federal funds rate close to the target set by the Committee. Initially, the interest rate on required reserves was set at the average target federal funds rate over each reserve maintenance period less 10 basis points, while the rate on excess reserves was set at the lowest target federal funds rate over each reserve maintenance period less 75 basis points. On October 22, the rate on excess reserves was adjusted to be the lowest target federal funds rate dur-

ing the maintenance period less 35 basis points.

In the forecast prepared for the meeting, the staff lowered its projection for economic activity in the second half of 2008 as well as in 2009 and 2010. Real GDP appeared to have declined in the third quarter, and the few available indicators that reflected conditions following the intensification of the financial market turmoil in mid-September pointed to another decline in the fourth quarter. The declines in stock-market wealth, low levels of consumer sentiment, weakened household balance sheets, and restrictive credit conditions were likely to hinder household spending over the near term. Business expenditures also probably would be held back by a weaker sales outlook and tighter credit conditions. The staff expected that real GDP would continue to contract somewhat in the first half of 2009 and then rise in the second half, with the result that real GDP would be about unchanged for the year. Although futures markets pointed to a lower trajectory for oil prices than at the time of the September meeting, real activity was expected to be restrained by further contraction in residential investment, reduced household wealth, continued tight credit conditions, and a deterioration of foreign economic performance. In 2010, real GDP growth was expected to pick up to near the rate of potential growth, as the restraints on household and business spending from the financial market tensions were anticipated to begin to ease and the contraction in the housing market to come to an end. With growth below its potential rate for an extended period, the unemployment rate was expected to rise significantly through early 2010. The staff reduced its forecast for both core and overall PCE inflation, as the disinflationary effects of the receding cost pressures of

energy, materials, and import prices and of resource slack were expected to be greater than at the time of the September FOMC meeting. Core inflation was projected to slow considerably in 2009 and then to edge down further in 2010.

In conjunction with this FOMC meeting, all participants—that is, Federal Reserve Board members and Reserve Bank presidents—provided annual projections for economic growth, the unemployment rate, and inflation for the period 2008 through 2011. The projections are described in the Summary of Economic Projections, which is attached as an addendum to these minutes.

In their discussion of the economic situation and outlook, FOMC meeting participants indicated that the worsening financial situation, the slowdown in growth abroad, and incoming information on economic activity had led them to mark down significantly their outlook for growth. While economic activity had evidently already been slowing over the summer, the turmoil in recent weeks had apparently resulted in tighter financial conditions and greater uncertainty among businesses and households about economic prospects, further limiting their ability and willingness to make significant spending commitments. Recent measures of business and consumer sentiment had fallen to historical lows. Participants generally expected the economy to contract moderately in the second half of 2008 and the first half of 2009, and agreed that the downside risks to growth had increased. While some expected an improving financial situation to contribute to a recovery in growth by mid-2009, others judged that the period of economic weakness could persist for some time. Several participants indicated that they expected some fiscal stimulus in coming quarters, but they were uncer-

tain about the extent and duration of the resulting support to economic activity. Participants agreed that in coming quarters inflation was likely to move down to levels consistent with price stability, reflecting the recent declines in the prices of energy and other commodities, the appreciation of the dollar, and the expected widening of margins of resource slack. Indeed, some saw a risk that over time inflation could fall below levels consistent with the Federal Reserve's dual objectives of price stability and maximum employment.

Participants noted that financial conditions had worsened significantly over the intermeeting period. The failure or near failure of a number of major financial institutions had deepened market concerns about counterparty credit risk and liquidity risk. As a result, financial intermediaries had cut back on lending to some counterparties, particularly for terms beyond overnight, and in general were conserving liquidity and capital. Moreover, risk aversion of investors increased, driving credit spreads sharply higher. Survey results and anecdotal information also suggested that credit conditions had tightened significantly further for businesses and households. Equity prices had varied widely and were substantially lower, on net. Participants saw the potential for financial strains to intensify if some investors, such as hedge funds, found it necessary to sell assets and as lending institutions built reserves against losses. Participants were concerned that the negative spiral in which financial strains lead to weaker spending, which in turn leads to higher loan losses and a further deterioration in financial conditions, could persist for a while longer. While the global efforts to recapitalize banks and guarantee deposits had helped stabilize the situation, risk spreads remained higher, asset prices lower, and credit conditions

tighter than prior to the recent disruptions. Moreover, some participants noted that the specifics and effectiveness of some government programs to support financial markets and institutions remained unclear.

Participants indicated that the increase in financial turmoil had already had an impact on business decisions. Reports from contacts in many parts of the country suggested that the weaker and less certain economic outlook was leading businesses to cancel capital and other discretionary expenditures and lay off workers. Several participants noted that even businesses that had previously been largely unaffected by the financial turbulence were now experiencing difficulties obtaining new credit, and some businesses were said to be drawing down lines of credit preemptively rather than risk the lines becoming unavailable. Contacts indicated that fewer commercial real estate construction projects were being undertaken. Residential construction activity remained extremely subdued, with the stock of unsold homes still very elevated.

Meeting participants noted that real consumer spending had been weakening through the summer, responding to lower employment and tighter credit. Moreover, households, like businesses, were reportedly reacting to the shifting economic circumstances in recent weeks by cutting expenditures further. Spending on consumer durables, such as automobiles, and discretionary items had been particularly hard hit, and retailers anticipated very weak holiday spending.

Participants noted that the financial turmoil had increasingly become an international phenomenon, leading to a marked deterioration in global growth prospects. While advanced foreign economies had already shown signs of slowing, they had been significantly

affected by the worsening of financial strains over the intermeeting period. Moreover, a number of emerging market economies, which had heretofore been less influenced by the financial developments in industrial countries, had in recent weeks been significantly affected, as the increasing strains in financial markets led global investors to pull back from exposures to such economies. As a result, interest rates on emerging market debt had shot up and prices of emerging market equity had dropped sharply. Participants saw the stronger dollar and weaker growth abroad as likely to restrain future growth in U.S. exports.

Participants agreed that inflation was likely to diminish materially in coming quarters. Commodity prices had fallen sharply, the dollar had strengthened notably, and considerable economic slack was anticipated. Moreover, some survey measures of inflation expectations had declined as had those derived from inflation-linked Treasury securities, although recent movements in the latter measures were likely influenced in part by increases in the premiums required to hold the relatively illiquid inflation-indexed securities. Some participants indicated that their business contacts had reported reduced pricing power and lower markups. Against this backdrop, participants generally expected inflation to decline to levels consistent with price stability. A few participants noted that disruptions to the credit intermediation process and the inefficiencies associated with shifts of resources among economic sectors could be expected to reduce aggregate supply as well as restrain aggregate demand; as a consequence, such factors could limit the effect of slower output growth on rates of resource slack and inflation. Others, though, saw a risk that if resource utilization remained weak

for some time, inflation could fall below levels consistent with the Federal Reserve's dual mandate for promoting price stability and maximum employment, a development that would pose important policy challenges in light of the already-low level of the Committee's federal funds rate target.

Participants discussed a number of issues relating to broader monetary policy strategy. Over the past year, the Federal Reserve's response to the financial turbulence had encompassed substantial monetary policy easing, the provision of large volumes of liquidity through standard and extraordinary means, and facilitating the resolution of troubled, systemically important financial institutions. Participants judged that the policy actions had been helpful and well calibrated to their assessment of the developing situation. Several participants observed that it would be crucial for such policy actions to be unwound appropriately as the financial situation normalized. However, participants also observed that unfolding economic developments could require the FOMC to further lower its target for the federal funds rate in the future and to review the adequacy of its liquidity facilities.

In the discussion of monetary policy for the intermeeting period, Committee members agreed that significant easing in policy was warranted at this meeting in view of the marked deterioration in the economic outlook and anticipated reduction in inflation pressures. The recent substantial tightening in financial conditions, the sharp downshift in spending here and abroad, and the rapid abatement of upside inflation risks all suggested that a forceful policy response would be appropriate. Some members were concerned that the effectiveness of cuts in the target federal funds rate may have been diminished

by the financial dislocations, suggesting that further policy action might have limited efficacy in promoting a recovery in economic growth. And some also noted that the Committee had limited room to lower its federal funds rate target further and should therefore consider moving slowly. However, others maintained that the possibility of reduced policy effectiveness and the limited scope for reducing the target further were reasons for a more aggressive policy adjustment; an easing of policy should contribute to a beneficial reduction in some borrowing costs, even if a given rate reduction currently would elicit a smaller effect than in more typical circumstances, and more aggressive easing should reduce the odds of a deflationary outcome. Members also saw the substantial downside risks to growth as supporting a relatively large policy move at this meeting, though even after today's 50 basis point action, the Committee judged that downside risks to growth would remain. Members anticipated that economic data over the upcoming intermeeting period would show significant weakness in economic activity, and some suggested that additional policy easing could well be appropriate at future meetings. In any event, the Committee agreed that it would take whatever steps were necessary to support the recovery of the economy.

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

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the

immediate future seeks conditions in reserve markets consistent with reducing the federal funds rate to an average of around 1 percent.

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

The Federal Open Market Committee decided today to lower its target for the federal funds rate 50 basis points to 1 percent.

The pace of economic activity appears to have slowed markedly, owing importantly to a decline in consumer expenditures. Business equipment spending and industrial production have weakened in recent months, and slowing economic activity in many foreign economies is damping the prospects for U.S. exports. Moreover, the intensification of financial market turmoil is likely to exert additional restraint on spending, partly by further reducing the ability of households and businesses to obtain credit.

In light of the declines in the prices of energy and other commodities and the weaker prospects for economic activity, the Committee expects inflation to moderate in coming quarters to levels consistent with price stability.

Recent policy actions, including today's rate reduction, coordinated interest rate cuts by central banks, extraordinary liquidity measures, and official steps to strengthen financial systems, should help over time to improve credit conditions and promote a return to moderate economic growth. Nevertheless, downside risks to growth remain. The Committee will monitor economic and financial developments carefully and will act as needed to promote sustainable economic growth and price stability.

Votes for this action: Messrs. Bernanke and Geithner, Ms. Duke, Messrs. Fisher, Kohn, and Kroszner, Ms. Pianalto, Messrs. Plosser, Stern, and Warsh.  
Votes against this action: None.

It was agreed that the next meeting of the Committee would be held on Tuesday, December 16, 2008.

The meeting adjourned at 11:45 a.m.

## Conference Calls

On September 29, 2008, the Committee met by conference call to review recent

developments and to consider changes to swap arrangements with foreign central banks. Amid signs of growing strains in money markets, the discussion focused on recent Federal Reserve actions and on potential expansions in official liquidity facilities. In light of severe pressures in dollar funding markets abroad, the Committee unanimously approved both extending the liquidity-related swap arrangements with foreign central banks an additional three months, through April 30, 2009, and increasing substantially the sizes of those existing arrangements. The enlarged facilities would support the provision of U.S. dollar liquidity in amounts of up to \$30 billion by the Bank of Canada, \$80 billion by the Bank of England, \$120 billion by the Bank of Japan, \$15 billion by Danmarks Nationalbank, \$240 billion by the European Central Bank, \$15 billion by the Norges Bank, \$30 billion by the Reserve Bank of Australia, \$30 billion by Sveriges Riksbank, and \$60 billion by the Swiss National Bank. In addition, the Committee was briefed on plans for implementation of a provision in pending legislation that would allow the Federal Reserve to begin immediately to pay interest on reserves held by depository institutions, and on the proposed acquisition of Wachovia by Citigroup.

On October 7, 2008, the Committee again met by conference call. Stresses in financial markets had continued to increase: Interest-rate spreads in interbank funding markets had widened markedly, corporate and municipal bond yields had risen, and equity prices had dropped sharply. For the first time in many years, the net asset value of a major money market fund had fallen below \$1 per share; this event sparked a flight out of prime money market funds and caused a severe impairment of the

functioning of the commercial paper market. Since the September 16 FOMC meeting, indicators of economic activity in both the United States and in major foreign countries had come in weaker than expected. In the United States, automobile sales, capital goods shipments, and private payrolls had fallen notably. Elsewhere, indicators of economic activity and sentiment had deteriorated in a broad range of important foreign economies. Prices of crude oil and other commodities had dropped substantially, and some measures of inflation expectations had declined. Participants agreed that downside risks to economic growth had increased and upside risks to inflation had diminished. Participants discussed the considerable expansion of Federal Reserve liquidity in recent months. Most agreed that these actions to provide liquidity had had a beneficial impact. Nonetheless, financial conditions were exerting considerable restraint on economic activity.

All members judged that a significant easing in policy at this time was appropriate to foster moderate economic growth and to reduce the downside risks to economic activity. Members also welcomed the opportunity to coordinate this policy action with similar measures by the Bank of Canada, the Bank of England, the European Central Bank, Sveriges Riksbank, and the Swiss National Bank. By showing that policymakers around the globe were working closely together, had a similar view of global economic conditions, and were willing to take strong actions to address those conditions, coordinated action could help to bolster consumer and business confidence and so yield greater economic benefits than unilateral action.

At the conclusion of the discussion, the Committee voted to authorize and direct the Federal Reserve Bank of New York, until it was instructed otherwise,

to execute transactions in the System Account in accordance with the following domestic policy directive:

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with reducing the federal funds rate to an average of around 1½ percent.

The vote encompassed approval of the statement below:

The Federal Open Market Committee has decided to lower its target for the federal funds rate 50 basis points to 1½ percent. The Committee took this action in light of evidence pointing to a weakening of economic activity and a reduction in inflationary pressures.

Incoming economic data suggest that the pace of economic activity has slowed markedly in recent months. Moreover, the intensification of financial market turmoil is likely to exert additional restraint on spending, partly by further reducing the ability of households and businesses to obtain credit. Inflation has been high, but the Committee believes that the decline in energy and other commodity prices and the weaker prospects for economic activity have reduced the upside risks to inflation.

The Committee will monitor economic and financial developments carefully and will act as needed to promote sustainable economic growth and price stability.

Votes for this action: Messrs. Bernanke and Geithner, Ms. Duke, Messrs. Fisher, Kohn, and Kroszner, Ms. Pianalto, Messrs. Plosser, Stern, and Warsh.  
Votes against this action: None.

#### Notation Votes

By notation vote completed September 21, 2008 the Committee unanimously approved the following resolution:

The FOMC amends paragraph 1.A. of the Authorization for Foreign Currency Operations to include Australian dollars in the list of foreign currencies in which the Federal

Reserve Bank of New York may transact for the System Open Market Account.

By notation vote completed on October 6, 2008, the Committee unanimously approved the minutes of the FOMC meeting held on September 16, 2008.

By notation vote completed October 11, 2008 the Committee unanimously approved the following resolution:

The Federal Open Market Committee authorizes the Federal Reserve Bank of New York (FRBNY) to increase the amounts available from the System Open Market Account under the existing reciprocal currency arrangements (“swap” arrangements) with the Bank of England, the European Central Bank, the Bank of Japan, and the Swiss National Bank to meet the amounts requested by those central banks in connection with their fixed-rate tender auctions. The FRBNY must report to the Committee each time the aggregate draws by one of these central banks increases the level outstanding for that bank by an increment of \$200 billion over the level outstanding on October 10, 2008.

Brian F. Madigan  
Secretary

#### Addendum: Summary of Economic Projections

In conjunction with the October 28–29, 2008 FOMC meeting, the members of the Board of Governors and the presidents of the Federal Reserve Banks, all of whom participate in deliberations of the FOMC, provided projections for economic growth, unemployment, and inflation in 2008, 2009, 2010, and 2011. Projections were based on information available through the conclusion of the meeting, on each participant’s assumptions regarding a range of factors likely to affect economic outcomes, and on his or her assessment of appropriate monetary policy. “Appropriate monetary policy” is defined as the future policy that,

Table 1. Economic Projections of Federal Reserve Governors and Reserve Bank Presidents, October 2008  
Percent

Variable	2008	2009	2010	2011
<b>Central tendency<sup>1</sup></b>				
Change in real GDP .....	0.0 to 0.3	-0.2 to 1.1	2.3 to 3.2	2.8 to 3.6
<i>June projection</i> .....	1.0 to 1.6	2.0 to 2.8	2.5 to 3.0	n/a
Unemployment rate .....	6.3 to 6.5	7.1 to 7.6	6.5 to 7.3	5.5 to 6.6
<i>June projection</i> .....	5.5 to 5.7	5.3 to 5.8	5.0 to 5.6	n/a
PCE inflation .....	2.8 to 3.1	1.3 to 2.0	1.4 to 1.8	1.4 to 1.7
<i>June projection</i> .....	3.8 to 4.2	2.0 to 2.3	1.8 to 2.0	n/a
Core PCE inflation .....	2.3 to 2.5	1.5 to 2.0	1.3 to 1.8	1.3 to 1.7
<i>June projection</i> .....	2.2 to 2.4	2.0 to 2.2	1.8 to 2.0	n/a
<b>Range<sup>2</sup></b>				
Change in real GDP .....	-0.3 to 0.5	-1.0 to 1.8	1.5 to 4.5	2.0 to 5.0
<i>June projection</i> .....	0.9 to 1.8	1.9 to 3.0	2.0 to 3.5	n/a
Unemployment rate .....	6.3 to 6.6	6.6 to 8.0	5.5 to 8.0	4.9 to 7.3
<i>June projection</i> .....	5.5 to 5.8	5.2 to 6.1	5.0 to 5.8	n/a
PCE inflation .....	2.7 to 3.6	1.0 to 2.2	1.1 to 1.9	0.8 to 1.8
<i>June projection</i> .....	3.4 to 4.6	1.7 to 3.0	1.6 to 2.1	n/a
Core PCE inflation .....	2.1 to 2.5	1.3 to 2.1	1.1 to 1.9	0.8 to 1.8
<i>June projection</i> .....	2.0 to 2.5	1.8 to 2.3	1.5 to 2.0	n/a

NOTE: Projections of change in real gross domestic product (GDP) and of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average

civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy.

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

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

based on current information, is deemed most likely to foster outcomes for economic activity and inflation that best satisfy the participant's interpretation of the Federal Reserve's dual objectives of maximum employment and price stability.

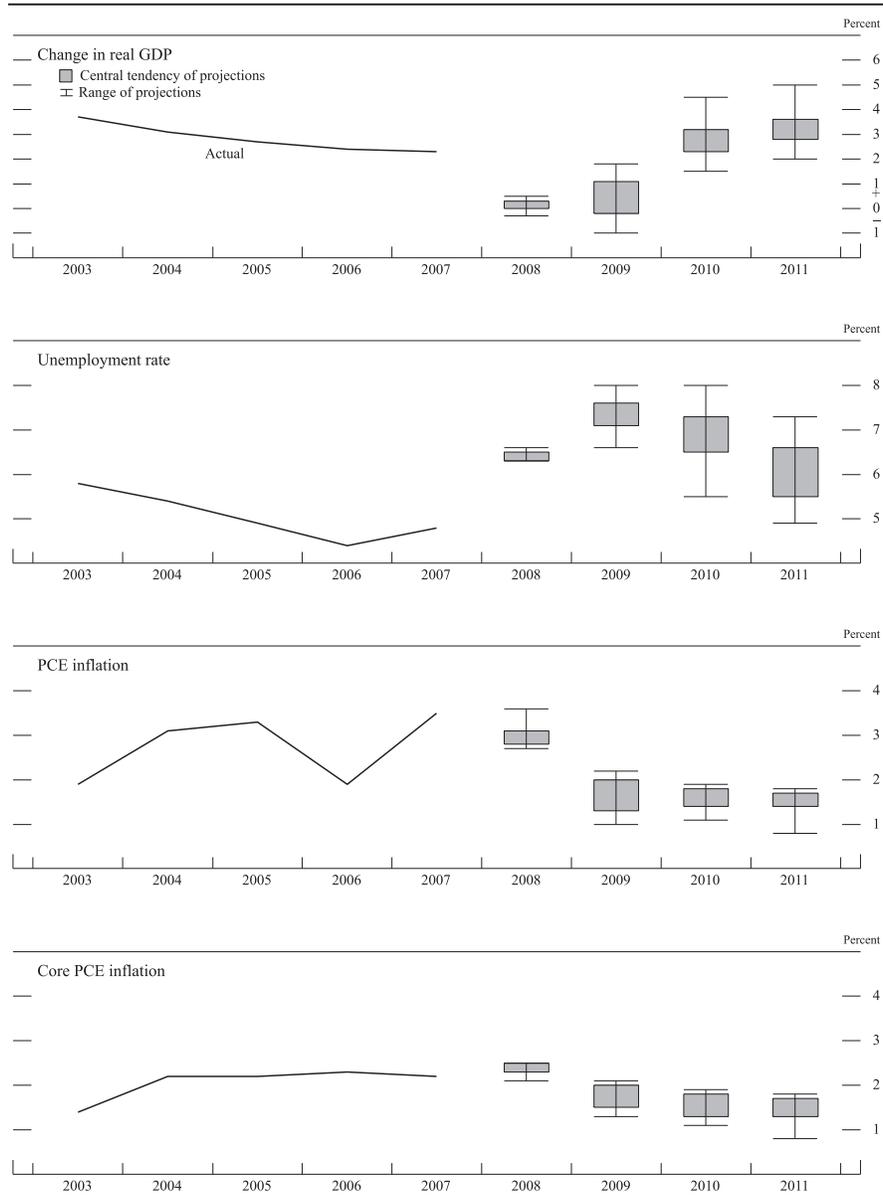
Given the recent intensification and broadening of the global financial crisis, FOMC participants viewed the outlook for economic growth and employment as having worsened significantly since June. As indicated in Table 1 and depicted in Figure 1, participants expected that real GDP growth would remain very weak next year and that the subsequent pace of recovery would be quite slow; they also anticipated that the unemployment rate would increase substantially further. In view of the recent sharp declines in the prices of energy

and other commodities and the widening slack in resource utilization, participants expected that inflation would drop markedly in coming quarters. Participants generally judged that the degree of uncertainty surrounding their projections for both economic activity and inflation was greater than historical norms. Most participants viewed the risks to the growth outlook as skewed to the downside, and nearly all of them saw the risks to the inflation outlook as either balanced or tilted to the downside.

#### *The Outlook*

Participants' projections for real GDP growth in 2008 had a central tendency of 0 to 0.3 percent, compared with the central tendency of 1 to 1.6 percent for

Figure 1. Central Tendencies and Ranges of Economic Projections, 2008-11



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

the growth projections that were made last June. The downward revisions in their growth forecasts for the year as a whole were due almost entirely to substantial shifts in their views of second-half growth. A number of participants

noted that incoming data on consumer spending and employment had been weaker than expected during the summer, even prior to the intensification of the financial crisis. Many participants highlighted the recent decline in consumer confidence and the extent to which households were swiftly curbing their outlays in response to large losses in stock-market and housing wealth and deterioration in labor market conditions. Severe dislocations in credit markets were also seen as weighing heavily on consumer spending and business investment.

Participants' growth projections had a central tendency of -0.2 to 1.1 percent for 2009, 2.3 to 3.2 percent for 2010, and 2.8 to 3.6 percent for 2011, as most participants expected that the near-term weakness in economic activity would continue into next year and that the subsequent recovery would be relatively gradual. Growth in 2009 was likely to be restrained by persistent credit market strains and ongoing adjustments in the housing sector, as well as by weak fundamentals for household and business spending. Indeed, many participants anticipated that financial market stresses would recede only slowly, notwithstanding the extraordinary measures that had been taken to enhance liquidity and stabilize financial markets and institutions. Participants also noted that demand for exports was likely to be damped in coming quarters by the significantly weaker economic outlook for many U.S. trading partners. Participants expected that more robust economic expansion would resume in 2010, and most anticipated that growth would rise further in 2011 to a pace that would temporarily exceed its longer-run sustainable rate and hence would help reduce the degree of slack in resource utilization.

Participants anticipated that labor market conditions would continue to deteriorate over the coming year. Their projections for the unemployment rate during the fourth quarter of this year had a central tendency of 6.3 to 6.5 percent, an upward shift of more than  $\frac{1}{2}$  percentage point from their June projections and a further rise from September's unemployment rate of 6.1 percent—which was the latest available figure at the time of the FOMC meeting. Looking further ahead, the central tendency of participants' unemployment rate projections was 7.1 to 7.6 percent for 2009, 6.5 to 7.3 percent for 2010, and 5.5 to 6.6 percent for 2011. Most participants judged that the unemployment rate in 2011 would still be above its longer-run sustainable level and hence would be likely to decline further in the period beyond the forecast horizon.

The central tendency of participants' projections for total PCE inflation in 2008 declined to 2.8 to 3.1 percent, about a percentage point lower than the central tendency of their projections last June. Participants noted that this downward revision in the near-term inflation outlook mainly reflected the recent sharp decline in the prices of energy and other commodities, apparently triggered by the global slowdown in economic activity. Most participants also marked down their forecasts for inflation beyond 2008, reflecting their expectations of widening resource slack over coming quarters as well as gradual pass-through of the drop in the prices of energy and raw materials. The central tendency of participants' projections for total PCE inflation was 1.3 to 2 percent for 2009, 1.4 to 1.8 percent for 2010, and 1.4 to 1.7 percent for 2011. Participants generally projected that inflation at the end of the projection period would be close to or a bit below their

assessments of the measured rates of inflation consistent with the Federal Reserve's dual mandate for promoting price stability and maximum employment.

#### *Risks to the Outlook*

Participants continued to view uncertainty about the outlook for economic activity as higher than normal.<sup>13</sup> The risks to their projections for GDP growth were judged as being skewed to the downside and the associated risks to their projections for the unemployment rate were tilted to the upside. Participants emphasized the considerable degree of uncertainty about the future course of the financial crisis and its impact on the real economy. Previous episodes of financial market turmoil might not provide much information about the likely trajectory going forward, given the severity of the current crisis and the extraordinary government measures that had been taken. Several participants highlighted the risk of a persistent negative feedback loop between credit markets and economic activity, while others referred to the possibility that financial market functioning might normalize more rapidly and hence that the adverse effects of the crisis might be somewhat smaller than anticipated in their modal outlook. Some participants noted that further monetary policy easing could eventually become constrained by the lower bound of zero on nominal interest rates, in which case an elevated degree of

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

Table 2. Average Historical Projection Error Ranges  
Percentage points

Variable	2008	2009	2010	2011
Change in real GDP <sup>1</sup> . . . .	±0.6	±1.3	±1.4	±1.4
Unemployment rate <sup>1</sup> . . . . .	±0.2	±0.6	±0.9	±1.0
Total consumer prices <sup>2</sup> . . . .	±0.3	±1.0	±1.0	±1.0

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

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

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

uncertainty might be associated with gauging the magnitude and stimulative effects of other policy tools such as quantitative easing.

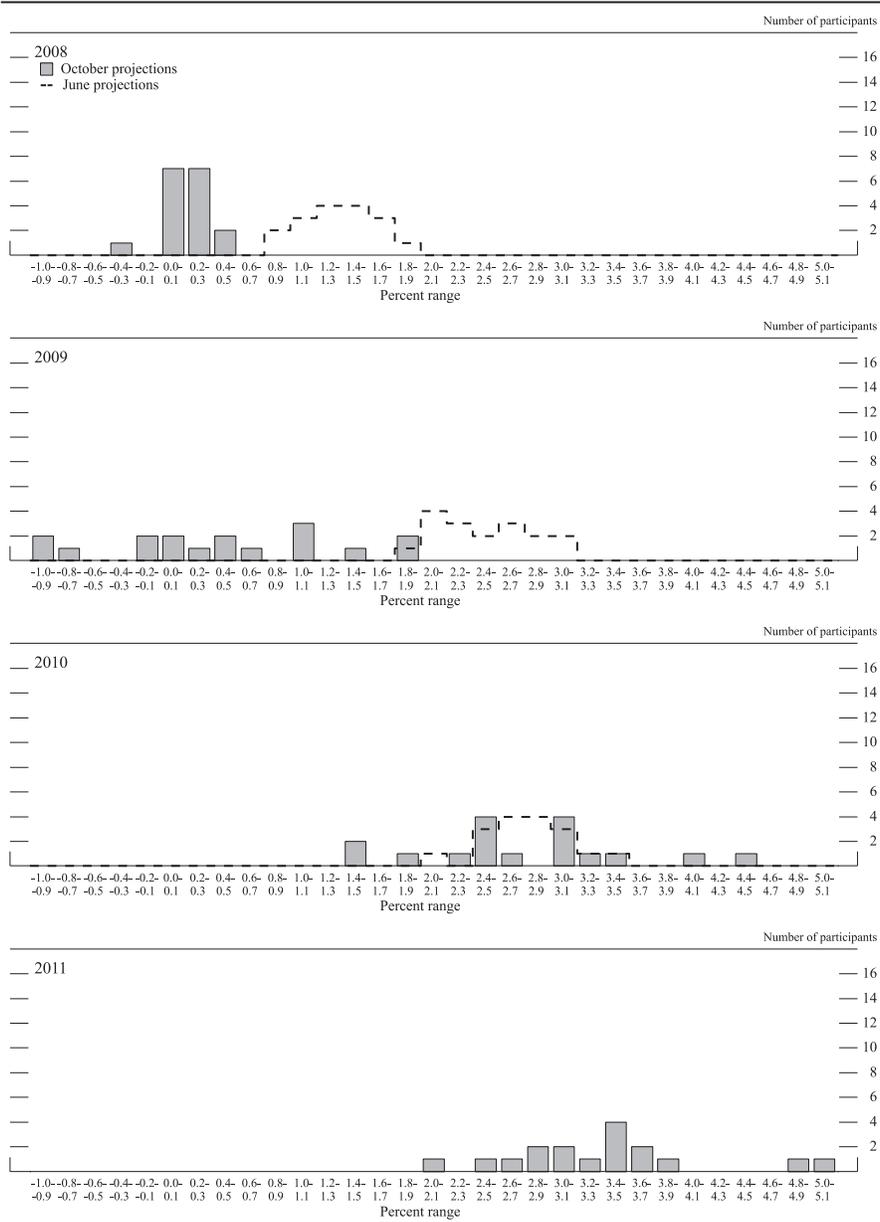
As in June, most participants continued to view the uncertainty surrounding their inflation projections as higher than historical norms. The majority of participants judged the risks to the inflation outlook as roughly balanced, and a number of others viewed these risks as skewed to the downside—a marked shift from June, when the risks to inflation were generally seen as tilted to the upside. Many participants noted that their assessments regarding the downside risks to inflation were linked to their judgments regarding the magnitude of downside risks to economic activity. Some participants also noted that heightened volatility of prices for energy and other commodities was contributing to the elevated degree of uncertainty regarding the inflation outlook.

*Diversity of Views*

Figures 2.A and 2.B provide further detail on the diversity of participants' views regarding likely outcomes for real GDP growth and the unemployment rate, respectively. For both variables, the dispersion of participants' projections for 2008 was noticeably narrower than in the forecasts provided in June, mainly due to the accumulation of incoming data regarding the performance of the economy to date. In contrast, participants' projections for 2009 and 2010 exhibited substantially greater dispersion than in June, mainly reflecting the diversity of views regarding the duration of the financial crisis and the magnitude and persistence of its impact on the real economy. The dispersion in participants' projections was also affected to some degree by differences in their estimates of the longer-run rates of output growth and unemployment to which the economy would converge under appropriate policy and in the absence of any further shocks.

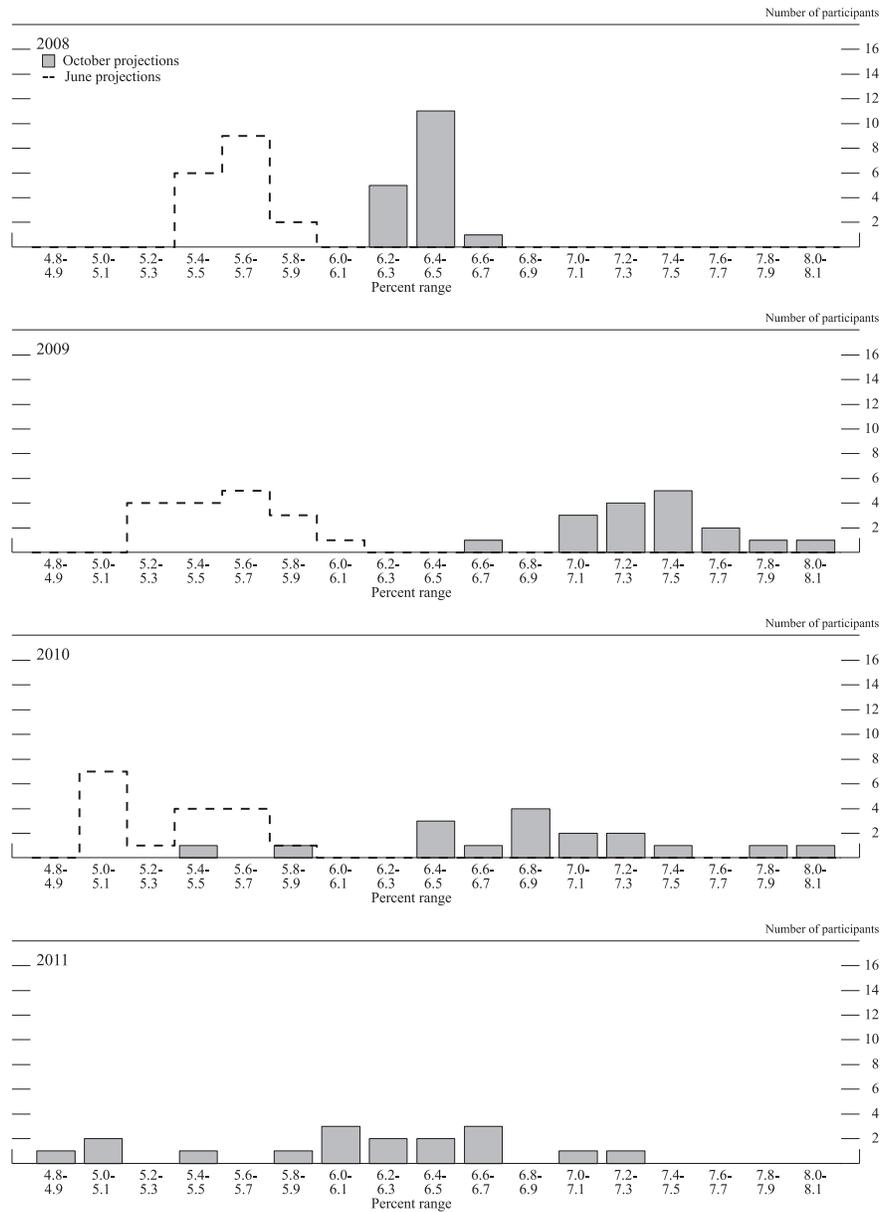
Figures 2.C and 2.D provide corresponding information regarding the diversity of participants' views regarding the inflation outlook. The dispersion in participants' projections for 2009 and 2010 was substantially greater than in June, primarily reflecting differences in their views about how much slack in resource utilization was likely to develop and about the extent to which that slack would place downward pressure on increases in wages and prices. Some participants indicated that their inflation projections for 2011 were roughly in line with their assessments of the measured rate of inflation consistent with the Federal Reserve's dual mandate for promoting price stability and maximum employment; other participants anticipated that inflation in 2011 would be a bit below their assessments of the mandate-consistent inflation rate, mainly reflecting the lagged effects of weak economic activity and the relatively sluggish pace of recovery.

Figure 2.A. Distribution of Participants' Projections for the Change in Real GDP, 2008-11



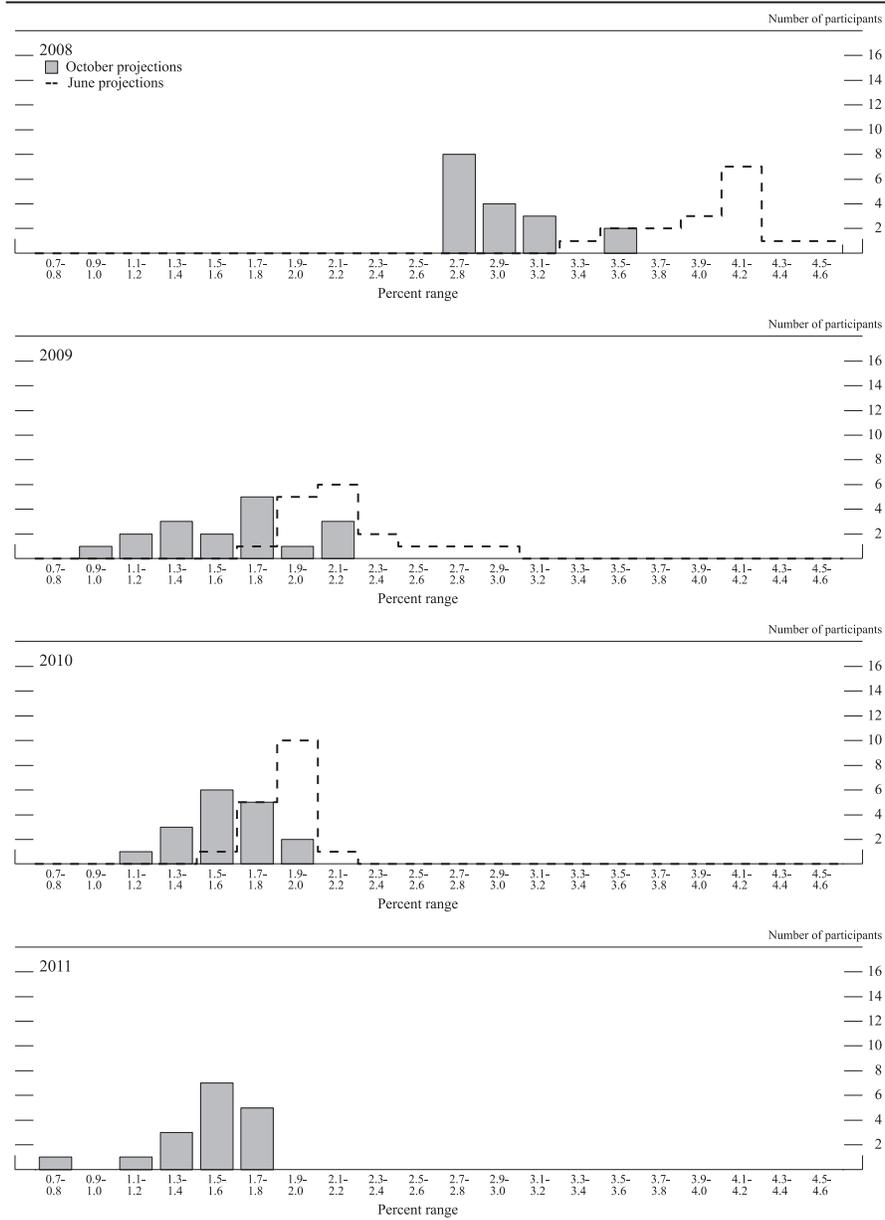
NOTE: Definitions of variables are in the general note to table 1.

Figure 2.B. Distribution of Participants' Projections for the Unemployment Rate, 2008-11



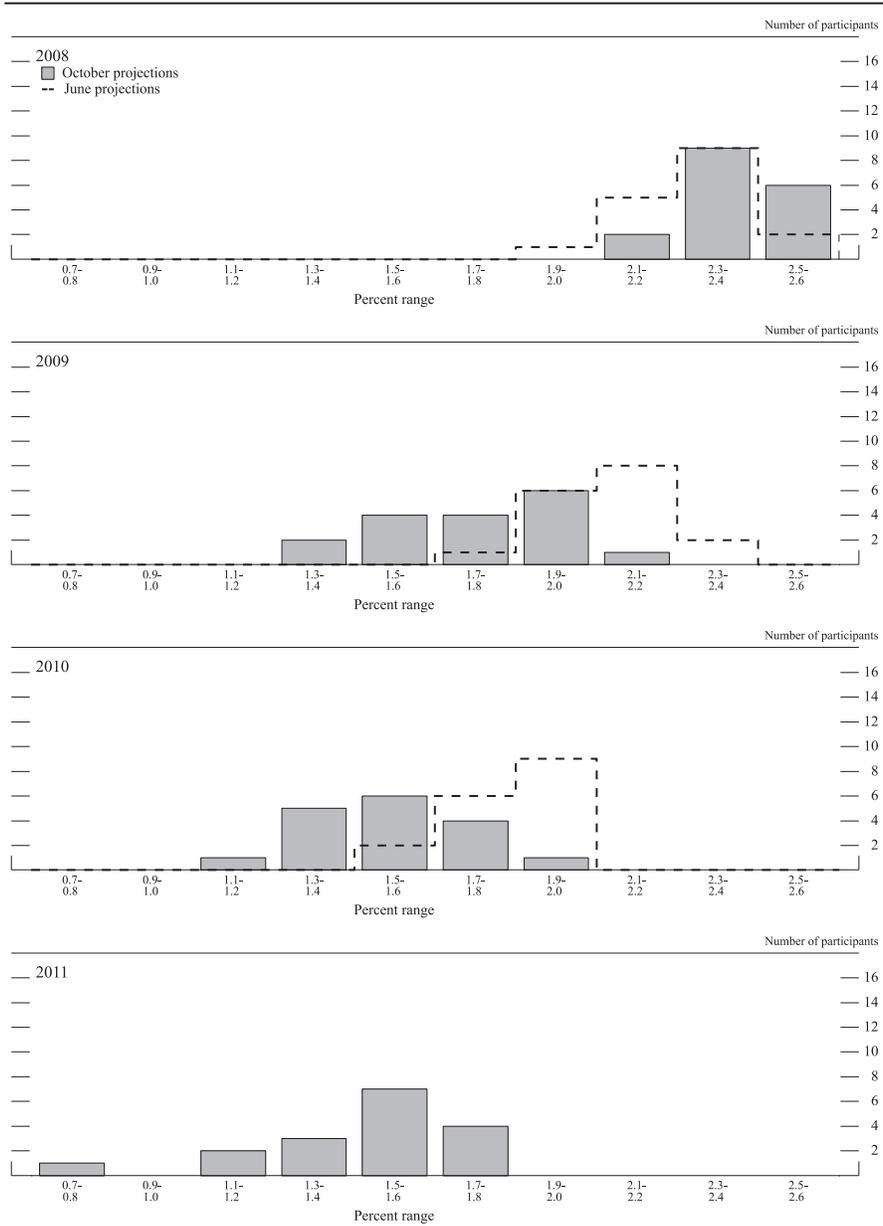
NOTE: Definitions of variables are in the general note to table 1.

Figure 2.C. Distribution of Participants' Projections for PCE Inflation, 2008-11



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

Figure 2.D. Distribution of Participants' Projections for Core PCE Inflation, 2008-11



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

## Forecast Uncertainty

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

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

jections are broadly balanced, the numbers reported in table 2 would imply a probability of about 70 percent that actual GDP would expand between 2.4 percent to 3.6 percent in the current year, 1.7 percent to 4.3 percent in the second year, and 1.6 percent to 4.4 percent in the third and fourth years. The corresponding 70 percent confidence intervals for overall inflation would be 1.7 percent to 2.3 percent in the current year and 1.0 percent to 3.0 percent in the second, third, and fourth years.

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

**Meeting Held on  
December 15–16, 2008**

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Monday, December 15, 2008 at 2:00 p.m. and continued on Tuesday, December 16, 2008 at 9:00 a.m.

*Present:*

Mr. Bernanke, Chairman  
Ms. Duke  
Mr. Fisher  
Mr. Kohn  
Mr. Kroszner  
Ms. Pianalto  
Mr. Plosser  
Mr. Stern  
Mr. Warsh

Ms. Cumming, Messrs. Evans, Lacker, and Lockhart, and Ms. Yellen, Alternate Members of the Federal Open Market Committee

Messrs. Bullard, Hoenig, and Rosengren, Presidents of the Federal Reserve Banks of St. Louis, Kansas City, and Boston, respectively

Mr. Madigan, Secretary and Economist  
Ms. Danker, Deputy Secretary  
Mr. Skidmore, Assistant Secretary  
Ms. Smith, Assistant Secretary  
Mr. Alvarez, General Counsel  
Mr. Ashton,<sup>14</sup> Assistant General Counsel

Mr. Sheets, Economist  
Mr. Stockton, Economist

Messrs. Connors, English, and Kamin, Ms. Mester, Messrs. Rolnick, Rosenblum, Slifman, and Wilcox, Associate Economists

Mr. Dudley, Manager, System Open Market Account

Mr. Cole, Director, Division of Banking Supervision and Regulation, Board of Governors

Ms. Johnson,<sup>15</sup> Secretary, Office of the Secretary, Board of Governors

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

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

Messrs. Clouse and Parkinson,<sup>14</sup> Deputy Directors, Divisions of Monetary Affairs and Research and Statistics, respectively, Board of Governors

Mr. Frierson,<sup>15</sup> Deputy Secretary, Office of the Secretary, Board of Governors

Messrs. Leahy,<sup>15</sup> Nelson,<sup>16</sup> Reifschneider, and Wascher, Associate Directors, Divisions of International Finance, Monetary Affairs, Research and Statistics, and Research and Statistics, respectively, Board of Governors

Mr. Gagnon,<sup>15</sup> Visiting Associate Director, Division of Monetary Affairs, Board of Governors

Ms. Shanks,<sup>15</sup> Associate Secretary, Office of the Secretary, Board of Governors

Messrs. Perli and Reeve, Deputy Associate Directors, Divisions of Monetary Affairs and International Finance, respectively, Board of Governors

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

Ms. Goldberg,<sup>15</sup> Visiting Reserve Bank Officer, Division of International Finance, Board of Governors

14. Attended Tuesday's session.

15. Attended the portion of the meeting relating to the zero lower bound on nominal interest rates.

16. Attended the meeting through the discussion of the zero lower bound on nominal interest rates.

- Mr. Zakrajsek,<sup>15</sup> Assistant Director, Division of Monetary Affairs, Board of Governors
- Messrs. Meyer<sup>15</sup> and Oliner, Senior Advisers, Divisions of Monetary Affairs and Research and Statistics, respectively, Board of Governors
- Mr. Small, Project Manager, Division of Monetary Affairs, Board of Governors
- Messrs. Ahmed and Luecke, Section Chiefs, Divisions of International Finance and Monetary Affairs, respectively, Board of Governors
- Ms. Aaronson, Senior Economist, Division of Research and Statistics, Board of Governors
- Messrs. Gapen and McCabe,<sup>15</sup> Economists, Divisions of Monetary Affairs and Research and Statistics, respectively, Board of Governors
- Ms. Beattie,<sup>15</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. Werkema, First Vice President, Federal Reserve Bank of Chicago
- Mr. Fuhrer, Executive Vice President, Federal Reserve Bank of Boston
- Messrs. Altig, Hilton, Potter, Rasche, Rudebusch, Schweitzer, Sellon, Sullivan, and Weinberg, Senior Vice Presidents, Federal Reserve Banks of Atlanta, New York, New York, St. Louis, San Francisco, Cleveland, Kansas City, Chicago, and Richmond, respectively
- Mr. Burke,<sup>15</sup> Assistant Vice President, Federal Reserve Bank of New York
- Mr. Eggertsson,<sup>15</sup> Senior Economist, Federal Reserve Bank of New York

The Manager of the System Open Market Account reported on recent developments in foreign exchange markets. There were no open market operations in foreign currencies for the System's account in the period since the previous meeting. The Manager also reported on developments in domestic financial markets and on System open market operations in government securities and federal agency obligations during the period since the previous meeting. By unanimous vote, the Committee ratified these transactions.

The information reviewed at the December meeting pointed to a significant contraction in economic activity in the fourth quarter. Conditions in the labor market deteriorated considerably in recent months as most major industry groups shed jobs. Private payrolls continued to fall at a faster pace than earlier in the year, and the unemployment rate rose to 6.7 percent. Industrial production, excluding special hurricane- and strike-related effects, fell further in November, and consumer spending declined across a broad range of spending categories over recent months. The housing market weakened again as construction activity, new home sales, and home prices declined further. In the business sector, investment in equipment and software appeared to continue to contract. Financial markets saw a further pullback in risk-taking, spurred in part by the more pessimistic outlook for economic activity; this situation led to lower equity prices, higher risk spreads, and tighter constraints in credit markets, all of which intensified the decline in real activity. On the inflation front, headline consumer prices declined in recent months, as energy prices continued to fall and consumer food price increases moderated.

The labor market continued to worsen. According to the November

employment report, payroll employment fell at a rapid pace over the preceding three months, with substantial losses across a wide range of industry groups, including manufacturing, construction, retail, financial activities, and business services. Indicators of hiring plans also dropped steeply in November, and other labor market indicators suggested that jobs remained in short supply. The unemployment rate climbed to 6.7 percent in November, while the labor force participation rate fell after remaining steady for much of the year. New claims for unemployment insurance rose sharply through early December.

Industrial production, excluding special hurricane- and strike-related effects, fell markedly in November after sizable declines in the preceding two months. The recent contraction in industrial output was broadly based. The steep pace of decline in the production of consumer goods reflected not only cutbacks in motor vehicle assemblies but also drops in the output of other goods, such as appliances, furniture, and products related to home improvement. The production of business equipment was held down by declines in the output of both industrial and high-tech equipment. The output of construction supplies extended its decline after a brief pause in the middle of the year, and the contraction in the production of materials intensified. In particular, steel production plummeted, and the output of organic chemicals contracted noticeably. For most major industry groups, factory utilization rates declined relative to their levels in July and remained below their long-run averages. Available forward-looking indicators pointed to a significant downturn in manufacturing output in coming months.

Real personal consumption expenditures (PCE) fell for the fifth straight

month in October, with the slowdown evident in nearly all broad spending categories. Sales of light motor vehicles, which slumped in October, fell further in November, but the available information on retail sales suggested a small increase in real outlays for other consumer goods. The annualized three-month change in spending on services in October was just one-third of the rate registered in the first half of 2008. Preliminary data for October and November suggested that overall fourth-quarter real spending would receive a modest boost from recent price declines for gasoline. Real incomes were also boosted by the reversal in energy prices, though the negative wealth effects of continued declines in equity and house prices likely offset this somewhat. Measures of consumer sentiment released in November and December remained low, and available evidence suggested further tightening in consumer credit conditions in recent months.

Real construction activity continued to decline in November. Single-family housing starts and permit issuance fell further. In the multifamily sector, starts dropped sharply in November while permit issuance remained on a down-trend. Housing demand remained weak, and although the number of unsold new single-family homes continued to move lower, inventories remained elevated relative to the current pace of sales. Sales of existing single-family homes changed little, although a drop in pending home sales in October pointed to further declines in the near term. The comparative strength of existing home sales appeared to be attributable partly to increases in foreclosure-related and other distressed sales. Financing conditions for prime borrowers appeared to ease slightly after the Federal Reserve's announcement that it would purchase agency debt and agency mortgage-

backed securities (MBS) to support mortgage financing, while the market for nonconforming loans remained impaired. Several indexes indicated that house prices continued to decline substantially.

In the business sector, investment in equipment and software appeared to be contracting at a faster rate in the fourth quarter than during the third quarter. While the decline in the previous quarter was concentrated in computers and transportation equipment, declines in spending in the fourth quarter were more widespread. Shipments of nondefense capital goods excluding aircraft fell in October, and orders continued to decline sharply. Investment demand seemed to be weighed down by weak fundamentals and increased uncertainty about the state of the economy, while prospects for future investment activity reflected in surveys of business conditions and sentiment worsened in recent months. In addition, credit conditions remained tight. Real nonresidential investment declined in the third quarter after nearly three years of robust expansion, and nominal expenditures edged down further in October. Vacancy rates rose and property values fell in the first three quarters of the year.

Real nonfarm inventories (excluding motor vehicles), which had dropped noticeably in the second quarter, fell again in the third quarter. The book value of manufacturing and wholesale trade inventories (excluding motor vehicles) showed a further drawdown in October. However, the ratio of these inventories to sales increased noticeably in September and October. The purchasing managers survey for November indicated that many purchasing agents saw their customers' inventories as too high.

The U.S. international trade deficit widened in October, as a fall in imports

was more than offset by a significant decline in exports. Much of the decline in exports was the result of drops in agricultural goods and industrial supplies, which largely reflected a decrease in the prices of these goods. The decline in imports was led by lower imports of non-oil industrial supplies, capital goods, and automotive products, although these declines were partly offset by an increase in the value of oil imports.

Economic activity in most advanced foreign economies contracted in the third quarter, driven by sharp declines in investment and by significant negative contributions of net exports, as the global recession took hold more strongly. Incoming data pointed to an even weaker pace of activity in the fourth quarter. In Canada, however, real gross domestic product (GDP) increased at a faster-than-expected pace in the third quarter, though consumption and investment continued to soften. In the euro area and the United Kingdom, purchasing managers indexes fell in November to levels associated with severe contractions in economic activity. Labor market conditions in the advanced economies deteriorated further, with most countries experiencing rising unemployment rates. In Japan, real GDP fell in the third quarter as domestic demand declined and private investment fell for the second consecutive quarter. After peaking in the third quarter, consumer price inflation moderated in all advanced foreign economies, primarily as a result of falling energy and food prices. Economic activity in most emerging market economies decelerated sharply in the third quarter, though a surge in agricultural output helped to support activity in Mexico, and the Brazilian economy continued to expand rapidly. In Asia, output decelerated significantly, as the

pace of real activity moderated in China and several other economies saw declines in real GDP. Recent readings on production, sales, and exports suggest that emerging market economies weakened further in the current quarter. Headline inflation generally declined across emerging market economies, primarily because of lower food and energy prices and, in some cases, weaker economic activity.

In the United States, headline consumer prices declined in recent months while core consumer price inflation slowed further. With energy prices falling sharply and the rate of increase in food prices moderating, headline PCE prices fell in October, and data from the consumer price index (CPI) indicated that the decline extended into November. Core PCE prices were unchanged in October, and based on the CPI, appeared to have been unchanged again in November. The recent slowing in core consumer price inflation was widespread and likely reflected not only the weak pace of economic activity but also the easing of some earlier cost pressures as the prices of crude oil, gasoline, and other commodities declined. Excluding food and energy, producer prices rose modestly again in November, as prices at earlier stages of processing continued to retreat for the third consecutive month. Measures of inflation expectations continued to fall or hold steady during the intermeeting period. Measures of nominal hourly labor compensation continued to increase moderately in the third quarter.

At its October 28–29 meeting, the Federal Open Market Committee (FOMC) lowered its target for the federal funds rate 50 basis points to 1 percent. The Committee’s statement noted that economic activity appeared to have slowed markedly, due importantly to a decline in consumer expenditures. Busi-

ness equipment spending and industrial production had weakened in recent months, and slowing economic activity in many foreign economies was dampening the prospects for U.S. exports. Moreover, the intensification of financial market turmoil was likely to exert additional restraint on spending, partly by further reducing the ability of households and businesses to obtain credit. The Committee noted that, in light of the declines in the prices of energy and other commodities and the weaker prospects for economic activity, it expected inflation to moderate in coming quarters to levels consistent with price stability. The Committee also noted that recent policy actions, including the rate reduction that was approved at the October 28-29 meeting, coordinated interest rate cuts by central banks, extraordinary liquidity measures, and official steps to strengthen financial systems, should help over time to improve credit conditions and promote a return to moderate economic growth. Nevertheless, downside risks to economic activity remained and the Committee indicated that it would monitor economic and financial developments carefully and act as needed to promote sustainable economic growth and price stability.

Over the intermeeting period, investors marked down their expectations for the path of monetary policy. Policy expectations were largely unaffected by the outcome of the October 28-29 FOMC meeting, as the Committee’s decision to reduce the target federal funds rate was broadly anticipated and the accompanying statement was reportedly in line with investor expectations. Subsequently, however, the expected future path of monetary policy dropped amid data releases that suggested a weaker outlook for economic activity and lower inflation than had been anticipated, along with continued

strains in financial markets that weighed on investor sentiment. Yields on nominal Treasury coupon securities declined significantly over the intermeeting period in response to safe-haven demands as well as the downward revisions in the economic outlook and the expected policy path. Meanwhile, yields on inflation-indexed Treasury securities declined by smaller amounts, leaving inflation compensation lower. Although the decline in inflation compensation occurred amid sharp decreases in inflation measures and energy prices, it was likely amplified by increased investor preference for the greater liquidity of nominal Treasury securities relative to that of inflation-protected Treasury securities.

Conditions in short-term funding markets remained strained for most of the intermeeting period, though some signs of improvement were evident. The spreads of London interbank offered rates, or Libor, over comparable-maturity overnight index swap rates declined noticeably across most maturities early in the intermeeting period; however, some of this decline was reversed once maturities began to lengthen past year-end. Trading in longer-term interbank funding markets reportedly remained thin. Credit outstanding under the Federal Reserve's Term Auction Facility (TAF) increased to about \$448 billion because of expanded auction sizes. Recent auctions for both 28-day and 84-day credit from the TAF were undersubscribed, and bidding for the two forward TAF auctions during the intermeeting period was very light. Meanwhile, primary credit outstanding remained high, although it had declined somewhat in recent weeks. Use of the Primary Dealer Credit Facility dropped significantly. A number of the Term Securities Lending Facility (TSLF) auctions were oversubscribed,

as was the auction of options for 13-day Schedule 2 TSLF loans straddling the end of the year.

Conditions in markets for repurchase agreements, or repos, arranged using certain types of collateral deteriorated over the intermeeting period, and liquidity for repos backed by non-Treasury, non-agency collateral remained poor. Amid high demand for safe investments, the overnight Treasury general collateral (GC) repo rate remained very low and fell to around zero late in the intermeeting period. Still, failures to deliver in the Treasury market declined substantially from the levels reached in October and overnight securities lending from the System Open Market Account portfolio fell sharply. Heavy demand for safe instruments was also apparent in the Treasury bill market, where yields turned negative at times. During the intermeeting period, the Treasury announced that it would not roll over bills related to the Supplementary Financing Program in order to preserve flexibility in the conduct of debt management policy, and uncertainty about supply reportedly exacerbated poor liquidity conditions in the bill market. Despite the decline in spreads of agency and mortgage-backed repo rates over Treasury GC rates later in the period, strains in these markets remained evident, with bid-asked spreads and haircuts very elevated.

In contrast, conditions in the commercial paper (CP) market improved over the intermeeting period, likely as a reflection of recent measures taken in support of this market. Spreads on 30-day A1/P1 and asset-backed commercial paper (ABCP) continued to narrow after the Commercial Paper Funding Facility (CPFF) became operational on October 27, although spreads subsequently reversed a portion of the declines as maturities crossed over

year-end. In contrast, spreads on commercial paper not eligible for purchase under the CPFF remained elevated. The dollar amounts of unsecured financial CP and ABCP outstanding rebounded from their October lows, though issuance into the CPFF more than accounted for this increase. Credit outstanding under the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility fell by more than half over the intermeeting period. The Money Market Investor Funding Facility program registered no activity.

As financial market conditions worsened over the intermeeting period, investors seemed to become more concerned about the likelihood of a deep and prolonged recession. In addition, the Treasury Department's announcement that funds from the Troubled Asset Relief Program would not be used to purchase securities backed by mortgage-related and other assets appeared to prompt negative price reactions in several financial markets. Stock prices of financial corporations fell considerably, while broad equity indexes declined, on net, amid high volatility. Yields on investment-grade bonds moved lower, but risk spreads on these instruments over comparable-maturity Treasury securities widened substantially as yields on Treasury securities fell more. Yields and risk spreads on speculative-grade bonds soared, and credit default swap spreads on speculative-grade, as well as investment-grade, corporate bonds widened further. Gross issuance of bonds by nonfinancial investment-grade companies continued at a solid pace, but issuance of speculative-grade bonds remained at zero. Issuance of leveraged syndicated loans was also extremely weak. Strains were evident in a number of other financial markets as well. The functioning of Treasury markets remained

impaired, and premiums for the on-the-run ten-year nominal Treasury security rose from levels that were already elevated. The market for commercial mortgage-backed securities experienced a particularly pronounced selloff.

Reflecting investor concerns about the conditions of financial institutions, spreads on credit default swaps for U.S. banks widened sharply, and those for insurance companies remained elevated. To support market stability, the U.S. government on November 23 entered into an agreement with Citigroup to provide a package of capital, guarantees, and liquidity access. In other developments, banking organizations began to take advantage of the Federal Deposit Insurance Corporation's (FDIC) Temporary Liquidity Guarantee Program; eleven institutions issued bonds under the program.

In view of the tightening of credit conditions for consumers and small businesses, the Federal Reserve announced on November 25 the creation of the Term Asset-Backed Securities Loan Facility to support the markets for asset-backed securities collateralized by student loans, auto loans, credit card loans, and loans guaranteed by the Small Business Administration. The facility, developed jointly with the Treasury, was expected to be operational by February 2009, and discussions with market participants about operational details of this facility were ongoing.

The Federal Reserve also announced on November 25 that, to help reduce the cost and increase the availability of residential mortgage credit, it would initiate a program to purchase up to \$100 billion in direct obligations of housing-related government-sponsored enterprises (GSEs) and up to \$500 billion in MBS backed by Fannie Mae, Freddie Mac, and Ginnie Mae. Agency

debt spreads, which had widened early in the period, narrowed somewhat after the announcement. Subsequent purchases of agency debt by the Open Market Desk at the Federal Reserve Bank of New York led to a further reduction in agency spreads. Likely reflecting in part these developments, conditions in the primary residential mortgage market improved. The interest rate on 30-year fixed-rate conforming mortgages declined, which prompted a noticeable increase in mortgage refinancing.

M2 expanded at a considerably slower rate in November than October. Retail money funds contracted after a surge in October that reflected safe-haven inflows to Treasury-only funds. Small time deposits increased somewhat more slowly than in October, although the rate of expansion remained quite rapid as banks continued to bid aggressively for these deposits. Flows into demand deposits covered by the FDIC's new temporary guarantee program were significant and apparently reflected shifts out of savings accounts as well as redirection of funds by banks' customers away from other money market instruments. Currency continued its strong increase, apparently boosted by solid foreign demand for U.S. banknotes.

Liquidity conditions in the money markets of major foreign economies improved but remained strained over the intermeeting period. Movements in stock prices were mixed in the advanced foreign economies, although equity prices generally rose in emerging market economies. In response to evidence of a slowdown in economic activity and a rapid waning of inflationary pressures, central banks around the world eased policy sharply. Sovereign bond yields fell, reflecting prospects for lower inflation and lower policy rates

for an extended period. The dollar declined on balance against the currencies of major U.S. trading partners.

In the forecast prepared for the meeting, the staff revised down sharply its outlook for economic activity in 2009 but continued to project a moderate recovery in 2010. Real GDP appeared likely to decline substantially in the fourth quarter of 2008 as conditions in the labor market deteriorated more steeply than previously anticipated; the decline in industrial production intensified; consumer and business spending appeared to weaken; and financial conditions, on balance, continued to tighten. Rising unemployment, the declines in stock market wealth, low levels of consumer sentiment, weakened household balance sheets, and restrictive credit conditions were likely to continue to hinder household spending over the near term. Homebuilding was expected to contract further. Business expenditures were also likely to be held back by a weaker sales outlook and tighter credit conditions. Oil prices, which dropped significantly during the intermeeting period, were assumed to rise over the next two years in line with the path indicated by futures market prices, but to remain below the levels of October 2008. All told, real GDP was expected to fall much more sharply in the first half of 2009 than previously anticipated, before slowly recovering over the remainder of the year as the stimulus from monetary and assumed fiscal policy actions gained traction and the turmoil in the financial system began to recede. Real GDP was projected to decline for 2009 as a whole and to rise at a pace slightly above the rate of potential growth in 2010. Amid the weaker outlook for economic activity over the next year, the unemployment rate was likely to rise significantly into 2010, to a level higher than pro-

jected at the time of the October 28–29 FOMC meeting. The disinflationary effects of increased slack in resource utilization, diminished pressures from energy and materials prices, declines in import prices, and further moderate reductions in inflation expectations caused the staff to reduce its forecast for both core and overall PCE inflation. Core inflation was projected to slow considerably in 2009 and then to edge down further in 2010.

In their discussion of the economic situation and outlook, all meeting participants agreed that the economic downturn had intensified over the fall. Although some financial markets exhibited signs of improved functioning, financial conditions generally remained very strained. Credit conditions continued to tighten for both households and businesses, and ongoing declines in equity prices further reduced household wealth. Conditions in the housing market weakened again and house prices declined further. Against this backdrop, measures of business and consumer confidence fell to new lows, and private spending continued to contract. Employment and production indicators weakened further as businesses responded very rapidly to the fall-off in demand. Participants expected economic activity to contract sharply in the fourth quarter of 2008 and in early 2009. Most projected that the economy would begin to recover slowly in the second half of 2009, aided by substantial monetary policy easing and by anticipated fiscal stimulus. Meeting participants generally agreed that the uncertainty surrounding the outlook was considerable and that downside risks to even this weak trajectory for economic activity were a serious concern. Indeed, the severe ongoing financial market strains, the large reductions in household wealth, and the global

nature of the economic slowdown were seen by some participants as suggesting the distinct possibility of a prolonged contraction, although that was not judged to be the most likely outcome. Inflation pressures had diminished appreciably as energy and other commodity prices dropped and economic activity slumped. Looking forward, participants agreed that inflationary pressures looked set to moderate further in coming quarters, reflecting recent declines in commodity prices and rising slack in resource markets, and several saw risks that inflation could drop for a time below rates they viewed as most consistent over time with the Federal Reserve’s dual mandate for maximum employment and price stability.

Meeting participants observed that financial strains continued to exert a powerful drag on economic activity and that the adverse feedback loop between financial conditions and economic performance had intensified. Although improvements were evident in some markets, particularly those for highly rated commercial paper and for interbank funds, financial markets generally remained under severe stress. Equity prices continued to drop amid high volatility, further reducing household wealth. Rising risk spreads kept the cost of issuing corporate bonds at a high level—especially for lower-rated firms—even though Treasury yields had declined sharply since the October 28–29 meeting. Securitization markets, which over recent years had been an important channel in credit intermediation, remained largely dysfunctional, with the exception of those for mortgages guaranteed by the GSEs. The sharp drops and unusual volatility in the prices of many financial assets since the beginning of the fourth quarter were likely to cause more losses for financial institutions, and a number of partici-

pants noted that loan delinquencies were increasing significantly in the consumer sector, adding to pressures on banks' balance sheets and reinforcing banks' cautious lending stance. As a consequence, credit conditions for both businesses and households had tightened further, with banks generally adopting stricter lending standards and declining to renew or paring back existing credit lines.

Participants observed that the effects of the financial turmoil, increased uncertainty, and drops in confidence and demand were becoming increasingly evident in the business sector. Business contacts across the country expected considerable near-term weakness in sales and declining pricing power. Some meeting participants reported especially sharp drops in new orders in their Districts. Even sectors that had performed relatively well until recently, such as mining and drilling, were experiencing reduced activity, mostly due to the decline in commodity prices. Agricultural activity was also showing signs of weakness. Business sentiment had deteriorated sharply since September, likely contributing to steep drops in employment and production. Participants anticipated that, with the deteriorating economic outlook and tightening of credit conditions, capital expenditures were likely to be soft in coming quarters.

Many participants noted that the decline in household wealth resulting from large drops in equity and house prices, together with tighter credit conditions, rapidly increasing unemployment, and deteriorating consumer sentiment, was contributing to a sharp contraction in consumer spending. Some participants pointed out that reduced consumer wealth and concerns about employment could lead to a further increase in saving, which, although

desirable in the longer term, could put additional downward pressure on consumer spending in coming quarters. The latest housing data suggested a continued substantial contraction in that sector. The recent decline in mortgage rates had sparked some refinancing and purchase activity, but the extent of the longer-term impact of lower rates on housing demand remained uncertain.

Meeting participants noted that economic conditions had deteriorated substantially in recent months in both advanced and emerging market economies. As a consequence, demand for U.S. exports had weakened, held back also by the strengthening of the dollar since the summer. Going forward, global demand was expected to remain weak, and thus growth in exports was unlikely to provide much support for U.S. activity. However, the weakness in the global economy was contributing to lower prices of energy and other commodities, which should boost real incomes and provide modest support to household spending.

Participants agreed that falling prices for energy and other commodities and diminished economic activity had resulted in an appreciable reduction in inflationary pressures. Those pressures were seen as likely to continue to abate because of the emergence of substantial slack in resource utilization and diminishing pricing power. Participants were uncertain about the extent to which inflation would fall. Some saw inflation leveling out near desired levels, while others expressed concern that inflation might decline below levels consistent with price stability in the medium term. Participants generally agreed that inflation expectations were an important determinant of future price dynamics. Some noted that those expectations, especially at longer horizons, appeared well anchored. However, some survey

evidence suggested that firms expected prices to continue to decline as they had over the previous few months. Several participants observed that monitoring measures of inflation expectations for signs of disinflationary dynamics would be especially important going forward.

In a joint session of the Federal Open Market Committee and the Board of Governors, meeting participants discussed extensively how in current circumstances the Committee could best support the resumption of sustainable economic growth and promote the maintenance of price stability over the medium term. Participants noted that very low levels of the federal funds rate had the potential to help buoy aggregate demand and economic activity, but they also had potential costs in terms of the functioning of certain financial markets and some financial institutions. Most participants judged that the benefits in terms of support for the overall economy of federal funds rates close to, but slightly above, zero probably outweighed the adverse effects. With the federal funds rate already trading at very low levels as a result of the large volume of excess reserves associated with the Federal Reserve's liquidity operations, participants agreed that the Committee would need to focus on other tools to impart additional monetary stimulus to the economy in the near term. One broad class of such tools was the use of FOMC communication with the public to provide more information regarding future policy intentions. In particular, participants judged that communicating the Committee's expectation that short-term interest rates were likely to stay exceptionally low for some time could be useful because it could lead to pricing of longer-term interest rates consistent with the path of monetary policy that policymakers saw as most likely. Participants emphasized

the importance of explicitly conditioning communication regarding future policy on the evolution of the economic outlook. Another possible form of communication that participants discussed was a more explicit indication of their views on what longer-run rate of inflation would best promote their goals of maximum employment and price stability. The added clarity in that regard might help forestall the development of expectations that inflation would decline below desired levels, and hence keep real interest rates low and support aggregate demand.

Meeting participants also discussed how best to employ the Federal Reserve's balance sheet to promote monetary policy goals. The Federal Reserve had already adopted a series of programs that were providing liquidity support to a range of institutions and markets, and participants generally agreed that a continued focus on the quantity and the composition of Federal Reserve assets would be necessary and desirable. Specifically, participants discussed the merits of purchasing large quantities of longer-term securities such as agency debt, agency mortgage-backed securities, and Treasury securities. The available evidence indicated that such purchases would reduce yields on those instruments, and lower yields on those securities would tend to reduce borrowing costs for a range of private borrowers, although participants were uncertain as to the likely size of such effects. Participants also generally believed that the special liquidity and lending facilities implemented or announced recently would support the availability of credit to businesses and households and thus help sustain economic activity. Many participants thought that the Federal Reserve should continue to consider whether expanding some of the existing facilities and creat-

ing new facilities could be helpful. Participants emphasized that the ultimate objective of special lending facilities and asset purchases was to support overall market functioning, financial intermediation, and economic growth. Participants acknowledged that the effective federal funds rate probably would need to remain very low for some time. However, they also recognized that, as economic activity recovered and financial conditions normalized, the use of certain policy tools would need to be scaled back, the size of the balance sheet and level of excess reserves would need to be reduced, and the Committee's policy framework would return to focus on the level of the federal funds rate.

A number of participants observed that, under the approach of conducting monetary policy by acquiring a variety of assets as needed to address financial and macroeconomic strains, the quantity of excess reserves and the size of the Federal Reserve's balance sheet would be determined by the Federal Reserve's asset purchases and the usage of its lending facilities. It was likely that, during the period of financial turmoil, the size of the Federal Reserve's balance sheet would need to be maintained at a high level. Participants discussed the potential advantages and disadvantages of setting quantitative targets for bank reserves or the monetary base. Some were of the view that quantitative targets for an increasing reserve base could be effective in preventing deflationary dynamics and useful in communicating to the public the Committee's determination to take the steps needed to avoid such an outcome. Several other participants, however, noted that increases in excess reserves or the monetary base, by themselves, might not have a significant stimulative effect on the economy or prices because

the normal bank intermediation mechanism appeared to be impaired, and banks may not be willing to lend their excess reserves. Conversely, a decline in excess reserves or the monetary base would not necessarily be contractionary if it occurred in the context of improving financial market conditions. A few of those who supported quantitative base or reserve targets did so because they saw them as helping to coordinate the actions of the Board of Governors, which is responsible for authorizing most special liquidity and lending facilities, and the Committee, which is responsible for open market operations. Most participants, however, were of the view that such coordination would best be achieved by continued close cooperation and consultation between the Committee and the Board. Going forward, consideration will be given to whether various quantitative measures would be useful in calibrating and communicating the stance of monetary policy.

In the discussion of monetary policy for the intermeeting period, Committee members recognized that the large volume of excess reserves had already resulted in federal funds rates significantly below the target federal funds rate and the interest rate on excess reserves. They agreed that maintaining a low level of short-term interest rates and relying on the use of balance sheet policies and communications about monetary policy would be effective and appropriate in light of the sharp deterioration of the economic outlook and the appreciable easing of inflationary pressures. Maintaining that level of the federal funds rate implied a substantial further reduction in the target federal funds rate. Even with the additional use of nontraditional policies, the economic outlook would remain weak for a time and the downside risks to economic

activity would be substantial. Moreover, inflation would continue to fall, reflecting both the drop in commodity prices that had already occurred and the buildup of economic slack; indeed some members saw significant risks that inflation could decline and persist for a time at uncomfortably low levels.

Members debated how best to communicate their decisions regarding monetary policy actions. Since the large amount of excess reserves in the system would limit the Federal Reserve's control over the federal funds rate, several members thought that it might be preferable not to set a specific target for the federal funds rate. Indeed, those members felt that lack of an explicit target could be helpful, in that it would focus attention on the shift in the policy framework from targeting the federal funds rate to the use of balance sheet policies and communications about monetary policy as a way of providing further monetary stimulus. A few members stressed that the absence of an explicit federal funds rate target would give banks added flexibility in pricing loans and deposits in the current environment of unusually low interest rates. However, other members noted that not announcing a target might confuse market participants and lead investors to believe that the Federal Reserve was unable to control the federal funds rate when it could, in fact, still influence the effective federal funds rate through adjustments of the interest rate on excess reserves and the primary credit rate. The members decided that it would be preferable for the Committee to communicate explicitly that it wanted federal funds to trade at very low rates; accordingly, the Committee decided to announce a target range for the federal funds rate of 0 to  $\frac{1}{4}$  percent. Members also agreed that the statement should indicate that weak economic conditions

were likely to warrant exceptionally low levels of the federal funds rate for some time. The members emphasized that their expectation about the path of the federal funds rate was conditioned on their view of the likely path of economic activity.

Members also discussed how best to communicate the focus of the Federal Reserve's policy going forward. Members agreed that the statement should indicate that all available tools would be employed to promote the resumption of sustainable economic growth and to preserve price stability. They also agreed that the statement should note that it was the Committee's intention to sustain the size of the Federal Reserve's balance sheet at a high level through open market operations and other measures to support financial markets and stimulate the economy. In addition to the already-announced asset purchases and liquidity programs, members concurred that the statement should indicate that the Committee stands ready to expand purchases of agency debt and agency mortgage-backed securities, and that it is evaluating the potential benefits of purchasing longer-term Treasury securities.

In light of the use of additional tools for implementing monetary policy, the Committee revised the form of the directive to the Open Market Desk of the Federal Reserve Bank of New York. In addition to specifying that it now seeks conditions in reserve markets consistent with federal funds trading in a range of 0 to  $\frac{1}{4}$  percent, the Committee instructed the Desk to purchase up to \$100 billion in housing-related GSE debt and up to \$500 billion in agency-guaranteed MBS by the end of the second quarter of 2009. Members agreed that they should not specify the precise timing of these purchases, but that they should leave discretion to the Desk to

intervene depending on market and broader economic conditions. The directive also noted that the Manager of the System Open Market Account and the Secretary of the FOMC would keep the Committee informed of developments regarding the System's balance sheet that could affect the attainment of the Committee's statutory objectives. At the conclusion of the discussion, the Committee voted to authorize and direct the Federal Reserve Bank of New York, until it was instructed otherwise, to execute transactions in the System Account in accordance with the following domestic policy directive:

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range of 0 to  $\frac{1}{4}$  percent. The Committee directs the Desk to purchase GSE debt and agency-guaranteed MBS during the intermeeting period with the aim of providing support to the mortgage and housing markets. The timing and pace of these purchases should depend on conditions in the markets for such securities and on a broader assessment of conditions in primary mortgage markets and the housing sector. By the end of the second quarter of next year, the Desk is expected to purchase up to \$100 billion in housing-related GSE debt and up to \$500 billion in agency-guaranteed MBS. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

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

The Federal Open Market Committee decided today to establish a target range for the federal funds rate of 0 to  $\frac{1}{4}$  percent.

Since the Committee's last meeting, labor market conditions have deteriorated, and the

available data indicate that consumer spending, business investment, and industrial production have declined. Financial markets remain quite strained and credit conditions tight. Overall, the outlook for economic activity has weakened further.

Meanwhile, inflationary pressures have diminished appreciably. In light of the declines in the prices of energy and other commodities and the weaker prospects for economic activity, the Committee expects inflation to moderate further in coming quarters.

The Federal Reserve will employ all available tools to promote the resumption of sustainable economic growth and to preserve price stability. In particular, the Committee anticipates that weak economic conditions are likely to warrant exceptionally low levels of the federal funds rate for some time.

The focus of the Committee's policy going forward will be to support the functioning of financial markets and stimulate the economy through open market operations and other measures that sustain the size of the Federal Reserve's balance sheet at a high level. As previously announced, over the next few quarters the Federal Reserve will purchase large quantities of agency debt and mortgage-backed securities to provide support to the mortgage and housing markets, and it stands ready to expand its purchases of agency debt and mortgage-backed securities as conditions warrant. The Committee is also evaluating the potential benefits of purchasing longer-term Treasury securities. Early next year, the Federal Reserve will also implement the Term Asset-Backed Securities Loan Facility to facilitate the extension of credit to households and small businesses. The Federal Reserve will continue to consider ways of using its balance sheet to further support credit markets and economic activity.

Votes for this action: Mr. Bernanke, Ms. Cumming and Duke, Messrs. Fisher, Kohn, and Kroszner, Ms. Pianalto, Messrs. Plosser, Stern, and Warsh.  
Votes against this action: None. Ms. Cumming voted as the alternate for Mr. Geithner.

The Committee also continued its discussion of possible refinements to the Committee's approach to projec-

tions that could provide additional information about participants' views of longer-run sustainable rates of economic growth and unemployment and the measured rates of inflation that would be consistent with price stability, but it made no decisions regarding these issues. Finally, staff briefed the Committee on the progress of plans for implementing the Federal Reserve's Term Asset-Backed Securities Loan Facility, which had initially been announced on November 25, 2008.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, January 27–28, 2009.

The meeting adjourned at 3:00 p.m. on December 16, 2008.

#### Notation Votes

By notation vote completed on November 18, 2008, the Committee unanimously approved the minutes of the FOMC meeting held on October 28–29, 2008.

By notation vote completed on November 26, 2008, the Committee unanimously approved the extension until April 30, 2009, of its authorization for the Federal Reserve Bank of New York to engage in transactions with primary dealers through the Term Securities Lending Facility, subject to the same collateral, interest rate, and other conditions previously established by the Committee.

Brian F. Madigan  
Secretary



## Litigation

During 2008, the Board of Governors was a party in seven lawsuits or appeals filed that year and in four other cases pending from previous years, for a total of eleven cases. In 2007, the Board had been a party in a total of eight cases. As of December 31, 2008, seven cases were pending.

*Murray v. Board of Governors*, No. 08-cv-15147 (E.D. Michigan, filed December 15, 2008), is a challenge to the constitutionality of federal expenditures relating to American International Group (AIG).

*Bumgarner v. Paulson, Bernanke, et al.*, No. 08-cv-5245 (D. New Jersey, amended complaint filed November 21, 2008), challenges the implementation of the Economic Emergency Stabilization Act of 2008.

*Bloomberg, L.P. v. Board of Governors*, No. 08-cv-9595 (S.D. New York, filed November 7, 2008), is a case brought under the Freedom of Information Act.

*Cobble v. Bernanke*, No. 3:08-cv-516-S (W.D. Kentucky, filed September 29, 2008), was a petition and request for injunction barring congressional consideration of federal legislation regarding the credit crisis. On October 6, 2008, the district court denied the injunction, and on November 21, 2008, the court dismissed the action.

*Schulz v. United States Federal Reserve System*, No. 1:08-cv-991 (N.D. New York, filed September 18, 2008), is an action relating to the Federal Reserve's loan to American International Group. On September 25, 2008, the district court denied plaintiff's request for a temporary restraining order

and preliminary injunction. On September 30, 2008, the plaintiff appealed the district court's order to the United States Court of Appeals for the Second Circuit (No. 08-4810).

*Smith v. Bernanke*, No. 08-6353 (U.S. Supreme Court, filed September 3, 2008), was a petition for certiorari seeking review of the Sixth Circuit's affirmation of the dismissal of plaintiff's complaint relating to his concerns about the closure of his bank account. On October 23, 2008, the petition for certiorari was denied.

*Jones v. Greenspan*, No. 08-5092 (D.C. Circuit, filed April 21, 2008), is an appeal of district court orders in an employment discrimination case granting the Board's motions for summary judgment and dismissal of the plaintiff's claims (see 402 F. Supp. 2d 294, 445 F. Supp. 2d 52, and 493 F. Supp. 2d 18).

*Interactive Media Entertainment and Gaming Association, Inc. v. Federal Reserve System*, No. 07-2625 (D. New Jersey, filed June 5, 2007), was an action challenging the implementation of the Unlawful Internet Gambling Enforcement Act of 2006. On March 5, 2008, the court granted the government's motion to dismiss the action.

*Chandler v. Bernanke*, No. 06-2082 (D. District of Columbia, filed December 6, 2006), is an employment discrimination action.

*Barnes v. Greenspan*, No. 04-CV-1989 (CKK) (D. District of Columbia, filed November 15, 2004), was a case under the Age Discrimination in Employment Act. The case was dismissed by stipulation of the parties on November 5, 2008.

*Artis v. Greenspan*, No. 01-0400 (D. District of Columbia, filed February 22, 2001), is an employment discrimination action. An identical action, No. 99-2073 (EGS) (D. District of Columbia, filed August 3, 1999), was consolidated with this action on August 15, 2001. On January 31, 2007, the District Court granted the Board's renewed motion to dismiss the action. 474 F. Supp. 2d 16. The plaintiffs' motion to alter or amend judgment is pending. ■