Minutes of the Federal Open Market Committee January 29–30, 2019

A joint meeting of the Federal Open Market Committee and the Board of Governors was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, January 29, 2019, at 10:00 a.m. and continued on Wednesday, January 30, 2019, at 9:00 a.m.¹

PRESENT:

Jerome H. Powell, Chairman
John C. Williams, Vice Chairman
Michelle W. Bowman
Lael Brainard
James Bullard
Richard H. Clarida
Charles L. Evans
Esther L. George
Randal K. Quarles
Eric Rosengren

- Patrick Harker, Robert S. Kaplan, Neel Kashkari, Loretta J. Mester, and Michael Strine, Alternate Members of the Federal Open Market Committee
- Thomas I. Barkin, Raphael W. Bostic, and Mary C. Daly, Presidents of the Federal Reserve Banks of Richmond, Atlanta, and San Francisco, respectively

James A. Clouse, Secretary
Matthew M. Luecke, Deputy Secretary
David W. Skidmore, Assistant Secretary
Michelle A. Smith, Assistant Secretary
Mark E. Van Der Weide, General Counsel
Michael Held, Deputy General Counsel
Steven B. Kamin, Economist
Thomas Laubach, Economist
Stacey Tevlin, Economist

Thomas A. Connors, Rochelle M. Edge, Beverly Hirtle, Daniel G. Sullivan, Christopher J. Waller, William Wascher, Jonathan L. Willis, and Beth Anne Wilson, Associate Economists

Simon Potter, Manager, System Open Market Account

- Lorie K. Logan, Deputy Manager, System Open Market Account
- Ann E. Misback, Secretary, Office of the Secretary, Board of Governors
- Matthew J. Eichner,² Director, Division of Reserve Bank Operations and Payment Systems, Board of Governors; Andreas Lehnert, Director, Division of Financial Stability, Board of Governors
- Jennifer J. Burns, Deputy Director, Division of Supervision and Regulation, Board of Governors; Michael T. Kiley, Deputy Director, Division of Financial Stability, Board of Governors; Trevor A. Reeve, Deputy Director, Division of Monetary Affairs, Board of Governors
- Jon Faust, Senior Special Adviser to the Chairman, Office of Board Members, Board of Governors
- Antulio N. Bomfim, Special Adviser to the Chairman, Office of Board Members, Board of Governors
- Brian M. Doyle, Joseph W. Gruber, Ellen E. Meade, and John M. Roberts, Special Advisers to the Board, Office of Board Members, Board of Governors
- Linda Robertson, Assistant to the Board, Office of Board Members, Board of Governors
- Christopher J. Erceg, Senior Associate Director, Division of International Finance, Board of Governors; David E. Lebow and Michael G. Palumbo, Senior Associate Directors, Division of Research and Statistics, Board of Governors
- Edward Nelson and Robert J. Tetlow, Senior Advisers, Division of Monetary Affairs, Board of Governors; Jeremy B. Rudd, Senior Adviser, Division of Research and Statistics, Board of Governors

¹ The Federal Open Market Committee is referenced as the "FOMC" and the "Committee" in these minutes.

² Attended through the discussion of the long-run monetary policy implementation frameworks.

- Marnie Gillis DeBoer,² Associate Director, Division of Monetary Affairs, Board of Governors
- Jeffrey D. Walker, Deputy Associate Director, Division of Reserve Bank Operations and Payment Systems, Board of Governors
- Eric C. Engstrom, Deputy Associate Director, Division of Monetary Affairs, and Adviser, Division of Research and Statistics, Board of Governors
- Glenn Follette and Norman J. Morin, Assistant Directors, Division of Research and Statistics, Board of Governors; Christopher J. Gust, Laura Lipscomb,² and Zeynep Senyuz,² Assistant Directors, Division of Monetary Affairs, Board of Governors
- Dana L. Burnett, Michele Cavallo,² and Dan Li, Section Chiefs, Division of Monetary Affairs, Board of Governors
- Sean Savage, Senior Project Manager, Division of Monetary Affairs, Board of Governors
- David H. Small, Project Manager, Division of Monetary Affairs, Board of Governors
- Kurt F. Lewis, Principal Economist, Division of Monetary Affairs, Board of Governors; Christopher L. Smith, Principal Economist, Division of Research and Statistics, Board of Governors
- Ayelen Banegas, Senior Economist, Division of Monetary Affairs, Board of Governors
- Luke Pettit,² Senior Financial Institution and Policy Analyst, Division of Monetary Affairs, Board of Governors
- Pon Sagnanert, Financial Analyst, Division of Monetary Affairs, Board of Governors
- Yvette McKnight,³ Staff Assistant, Office of the Secretary, Board of Governors

- Meredith Black, First Vice President, Federal Reserve Bank of Dallas
- David Altig and Sylvain Leduc, Executive Vice Presidents, Federal Reserve Banks of Atlanta and San Francisco, respectively
- Bruce Fallick, Marc Giannoni, Susan McLaughlin,²
 Anna Nordstrom,² Angela O'Connor,² Keith Sill,
 and Mark L.J. Wright, Senior Vice Presidents,
 Federal Reserve Banks of Cleveland, Dallas, New
 York, New York, New York, Philadelphia, and
 Minneapolis, respectively
- Roc Armenter,² Kathryn B. Chen,² Joe Peek, Alexander L. Wolman, and Patricia Zobel,² Vice Presidents, Federal Reserve Banks of Philadelphia, New York, Boston, Richmond, and New York, respectively
- Samuel Schulhofer-Wohl, Senior Economist and Research Advisor, Federal Reserve Bank of Chicago

Annual Organizational Matters⁴

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, 2019, had been received and that these individuals had executed their oaths of office.

The elected members and alternate members were as follows:

John C. Williams, President of the Federal Reserve Bank of New York, with Michael Strine, First Vice President of the Federal Reserve Bank of New York, as alternate

Eric Rosengren, President of the Federal Reserve Bank of Boston, with Patrick Harker, President of the Federal Reserve Bank of Philadelphia, as alternate

Charles L. Evans, President of the Federal Reserve Bank of Chicago, with Loretta J. Mester, President of the Federal Reserve Bank of Cleveland, as alternate

James Bullard, President of the Federal Reserve Bank of St. Louis, with Robert S. Kaplan, President of the Federal Reserve Bank of Dallas, as alternate

³ Attended Tuesday session only.

⁴ Committee organizational documents are available at https://www.federalreserve.gov/monetarypolicy/rules_authorizations.htm.

Esther L. George, President of the Federal Reserve Bank of Kansas City, with Neel Kashkari, President of the Federal Reserve Bank of Minneapolis, as alternate

By unanimous vote, the following officers of the Committee were selected to serve until the selection of their successors at the first regularly scheduled meeting of the Committee in 2020:

Jerome H. Powell John C. Williams James A. Clouse Matthew M. Luecke David W. Skidmore Michelle A. Smith

Michael Held Richard M. Ashton Steven B. Kamin Thomas Laubach

Stacey Tevlin

Mark E. Van Der Weide

Thomas A. Connors Rochelle M. Edge Eric M. Engen Beverly Hirtle Daniel G. Sullivan Geoffrey Tootell Christopher J. Waller William Wascher Ionathan L. Willis

Beth Anne Wilson

Chairman Vice Chairman Secretary

Deputy Secretary Assistant Secretary Assistant Secretary General Counsel

Deputy General Counsel Assistant General Counsel

Economist Economist Economist

Associate Economists

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

By unanimous vote, the Committee selected Simon Potter and Lorie K. Logan to serve at the pleasure of the Committee as manager and deputy manager of the SOMA, respectively, on the understanding that these selections were subject to their being satisfactory to the Federal Reserve Bank of New York.

Secretary's note: Advice subsequently was received that the manager and deputy manager selections indicated above were satisfactory to the Federal Reserve Bank of New York.

By unanimous vote, the Committee approved the Authorization for Domestic Open Market Operations with a revision that makes clear that small value tests for rollovers and maturities are included in the \$5 billion limit of the operational readiness testing program. The

Guidelines for the Conduct of System Open Market Operations in Federal-Agency Issues remained suspended.

AUTHORIZATION FOR DOMESTIC OPEN MARKET OPERATIONS

(As amended effective January 29, 2019)

OPEN MARKET TRANSACTIONS

- 1. The Federal Open Market Committee (the "Committee") authorizes and directs the Federal Reserve Bank selected by the Committee to execute open market transactions (the "Selected Bank"), to the extent necessary to carry out the most recent domestic policy directive adopted by the Committee:
 - A. To buy or sell in the open market securities that are direct obligations of, or fully guaranteed as to principal and interest by, the United States, and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States, that are eligible for purchase or sale under Section 14(b) of the Federal Reserve Act ("Eligible Securities") for the System Open Market Account ("SOMA"):
 - i. As an outright operation with securities dealers and foreign and international accounts maintained at the Selected Bank: on a same-day or deferred delivery basis (including such transactions as are commonly referred to as dollar rolls and coupon swaps) at market prices; or
 - ii. As a temporary operation: on a same-day or deferred delivery basis, to purchase such Eligible Securities subject to an agreement to resell ("repo transactions") or to sell such Eligible Securities subject to an agreement to repurchase ("reverse repo transactions") for a term of 65 business days or less, at rates that, unless otherwise authorized by the Committee, are determined by competitive bidding, after applying reasonable limitations on the volume of agreements with individual counterparties;
 - B. To allow Eligible Securities in the SOMA to mature without replacement;
 - C. To exchange, at market prices, in connection with a Treasury auction, maturing Eligible Securities in the SOMA with the Treasury, in the case of Eligible Securities that are direct obligations of the United States or that are fully guaranteed as to principal and interest by the United States; and

D. To exchange, at market prices, maturing Eligible Securities in the SOMA with an agency of the United States, in the case of Eligible Securities that are direct obligations of that agency or that are fully guaranteed as to principal and interest by that agency.

SECURITIES LENDING

- 2. In order to ensure the effective conduct of open market operations, the Committee authorizes the Selected Bank to operate a program to lend Eligible Securities held in the SOMA to dealers on an overnight basis (except that the Selected Bank may lend Eligible Securities for longer than an overnight term to accommodate weekend, holiday, and similar trading conventions).
 - A. Such securities lending must be:
 - i. At rates determined by competitive bidding;
 - ii. At a minimum lending fee consistent with the objectives of the program;
 - iii. Subject to reasonable limitations on the total amount of a specific issue of Eligible Securities that may be auctioned; and
 - iv. Subject to reasonable limitations on the amount of Eligible Securities that each borrower may borrow.
 - B. The Selected Bank may:
 - i. Reject bids that, as determined in its sole discretion, could facilitate a bidder's ability to control a single issue;
 - ii. Accept Treasury securities or cash as collateral for any loan of securities authorized in this paragraph 2; and
 - iii. Accept agency securities as collateral only for a loan of agency securities authorized in this paragraph 2.

OPERATIONAL READINESS TESTING

- 3. The Committee authorizes the Selected Bank to undertake transactions of the type described in paragraphs 1 and 2 from time to time for the purpose of testing operational readiness, subject to the following limitations:
 - A. All transactions authorized in this paragraph 3 shall be conducted with prior notice to the Committee;

- B. The aggregate par value of the transactions authorized in this paragraph 3 that are of the type described in paragraph 1.A.i, 1.B, 1.C and 1.D shall not exceed \$5 billion per calendar year; and
- C. The outstanding amount of the transactions described in paragraphs 1.A.ii and 2 shall not exceed \$5 billion at any given time.

TRANSACTIONS WITH CUSTOMER ACCOUNTS

- 4. In order to ensure the effective conduct of open market operations, while assisting in the provision of short-term investments or other authorized services for foreign central bank and international accounts maintained at a Federal Reserve Bank (the "Foreign Accounts") and accounts maintained at a Federal Reserve Bank as fiscal agent of the United States pursuant to section 15 of the Federal Reserve Act (together with the Foreign Accounts, the "Customer Accounts"), the Committee authorizes the following when undertaken on terms comparable to those available in the open market:
 - A. The Selected Bank, for the SOMA, to undertake reverse repo transactions in Eligible Securities held in the SOMA with the Customer Accounts for a term of 65 business days or less; and
 - B. Any Federal Reserve Bank that maintains Customer Accounts, for any such Customer Account, when appropriate and subject to all other necessary authorization and approvals, to:
 - i. Undertake repo transactions in Eligible Securities with dealers with a corresponding reverse repo transaction in such Eligible Securities with the Customer Accounts; and
 - ii. Undertake intra-day repo transactions in Eligible Securities with Foreign Accounts.

Transactions undertaken with Customer Accounts under the provisions of this paragraph 4 may provide for a service fee when appropriate. Transactions undertaken with Customer Accounts are also subject to the authorization or approval of other entities, including the Board of Governors of the Federal Reserve System and, when involving accounts maintained at a Federal Reserve Bank as fiscal agent of the United States, the United States Department of the Treasury.

ADDITIONAL MATTERS

- 5. The Committee authorizes the Chairman of the Committee, in fostering the Committee's objectives during any period between meetings of the Committee, to instruct the Selected Bank to act on behalf of the Committee to:
 - A. Adjust somewhat in exceptional circumstances the stance of monetary policy and to take actions that may result in material changes in the composition and size of the assets in the SOMA; or
 - B. Undertake transactions with respect to Eligible Securities in order to appropriately address temporary disruptions of an operational or highly unusual nature in U.S. dollar funding markets.

Any such adjustment described in subparagraph A of this paragraph 5 shall be made in the context of the Committee's discussion and decision about the stance of policy at its most recent meeting and the Committee's long-run objectives to foster maximum employment and price stability, and shall be based on economic, financial, and monetary developments since the most recent meeting of the Committee. The Chairman, whenever feasible, will consult with the Committee before making any instruction under this paragraph 5.

The Committee voted unanimously to reaffirm without revision the Authorization for Foreign Currency Operations and the Foreign Currency Directive as shown below.

AUTHORIZATION FOR FOREIGN CURRENCY OPERATIONS

(As reaffirmed effective January 29, 2019)

IN GENERAL

- 1. The Federal Open Market Committee (the "Committee") authorizes the Federal Reserve Bank selected by the Committee (the "Selected Bank") to execute open market transactions for the System Open Market Account as provided in this Authorization, to the extent necessary to carry out any foreign currency directive of the Committee:
 - A. To purchase and sell foreign currencies (also known as cable transfers) at home and abroad in the open market, including with the United States Treasury, with foreign monetary authorities, with the Bank for International Settlements, and with other entities in the open market. This authorization to purchase

- and sell foreign currencies encompasses purchases and sales through standalone spot or forward transactions and through foreign exchange swap transactions. For purposes of this Authorization, foreign exchange swap transactions are: swap transactions with the United States Treasury (also known as warehousing transactions), swap transactions with other central banks under reciprocal currency arrangements, swap transactions with other central banks under standing dollar liquidity and foreign currency liquidity swap arrangements, and swap transactions with other entities in the open market.
- B. To hold balances of, and to have outstanding forward contracts to receive or to deliver, foreign currencies.
- 2. All transactions in foreign currencies undertaken pursuant to paragraph 1 above shall, unless otherwise authorized by the Committee, be conducted:
 - A. In a manner consistent with the obligations regarding exchange arrangements under Article IV of the Articles of Agreement of the International Monetary Fund (IMF).¹
 - B. In close and continuous cooperation and consultation, as appropriate, with the United States Treasury.
 - C. In consultation, as appropriate, with foreign monetary authorities, foreign central banks, and international monetary institutions.
 - D. At prevailing market rates.

STANDALONE SPOT AND FORWARD TRANSACTIONS

- 3. For any operation that involves standalone spot or forward transactions in foreign currencies:
 - A. Approval of such operation is required as follows:
 - i. The Committee must direct the Selected Bank in advance to execute the operation if it would result in the overall volume of standalone spot and forward transactions in foreign currencies, as defined in paragraph 3.C of this Authorization, exceeding \$5 billion since the close of the most recent regular meeting of the Committee. The Foreign Currency Subcommittee (the "Subcommittee") must direct the Selected Bank in advance to execute the operation if the Subcommittee believes that consultation with the Committee is not feasible in the time available.
 - ii. The Committee authorizes the Subcommittee to direct the Selected Bank in advance to execute the operation if it would result in the overall volume of standalone spot and forward transactions in foreign

currencies, as defined in paragraph 3.C of this Authorization, totaling \$5 billion or less since the close of the most recent regular meeting of the Committee.

- B. Such an operation also shall be:
 - i. Generally directed at countering disorderly market conditions; or
 - ii. Undertaken to adjust System balances in light of probable future needs for currencies; or
 - iii. Conducted for such other purposes as may be determined by the Committee.
- C. For purposes of this Authorization, the overall volume of standalone spot and forward transactions in foreign currencies is defined as the sum (disregarding signs) of the dollar values of individual foreign currencies purchased and sold, valued at the time of the transaction.

WAREHOUSING

4. The Committee authorizes the Selected Bank, with the prior approval of the Subcommittee and at the request of the United States Treasury, to conduct swap transactions with the United States Exchange Stabilization Fund established by section 10 of the Gold Reserve Act of 1934 under agreements in which the Selected Bank purchases foreign currencies from the Exchange Stabilization Fund and the Exchange Stabilization Fund repurchases the foreign currencies from the Selected Bank at a later date (such purchases and sales also known as warehousing).

RECIPROCAL CURRENCY ARRANGEMENTS, AND STANDING DOLLAR AND FOREIGN CURRENCY LIQUIDITY SWAPS

- 5. The Committee authorizes the Selected Bank to maintain reciprocal currency arrangements established under the North American Framework Agreement, standing dollar liquidity swap arrangements, and standing foreign currency liquidity swap arrangements as provided in this Authorization and to the extent necessary to carry out any foreign currency directive of the Committee.
 - A. For reciprocal currency arrangements all drawings must be approved in advance by the Committee (or by the Subcommittee, if the Subcommittee believes that consultation with the Committee is not feasible in the time available).
 - B. For standing dollar liquidity swap arrangements all drawings must be approved in advance by the Chairman. The Chairman may approve a schedule of

- potential drawings, and may delegate to the manager, System Open Market Account, the authority to approve individual drawings that occur according to the schedule approved by the Chairman.
- C. For standing foreign currency liquidity swap arrangements all drawings must be approved in advance by the Committee (or by the Subcommittee, if the Subcommittee believes that consultation with the Committee is not feasible in the time available).
- D. Operations involving standing dollar liquidity swap arrangements and standing foreign currency liquidity swap arrangements shall generally be directed at countering strains in financial markets in the United States or abroad, or reducing the risk that they could emerge, so as to mitigate their effects on economic and financial conditions in the United States.
- E. For reciprocal currency arrangements, standing dollar liquidity swap arrangements, and standing foreign currency liquidity swap arrangements:
 - i. All arrangements are subject to annual review and approval by the Committee;
 - ii. Any new arrangements must be approved by the Committee; and
 - iii. Any changes in the terms of existing arrangements must be approved in advance by the Chairman. The Chairman shall keep the Committee informed of any changes in terms, and the terms shall be consistent with principles discussed with and guidance provided by the Committee.

OTHER OPERATIONS IN FOREIGN CURRENCIES

6. Any other operations in foreign currencies for which governance is not otherwise specified in this Authorization (such as foreign exchange swap transactions with private-sector counterparties) must be authorized and directed in advance by the Committee.

FOREIGN CURRENCY HOLDINGS

- 7. The Committee authorizes the Selected Bank to hold foreign currencies for the System Open Market Account in accounts maintained at foreign central banks, the Bank for International Settlements, and such other foreign institutions as approved by the Board of Governors under Section 214.5 of Regulation N, to the extent necessary to carry out any foreign currency directive of the Committee.
 - A. The Selected Bank shall manage all holdings of foreign currencies for the System Open Market Account:

- i. Primarily, to ensure sufficient liquidity to enable the Selected Bank to conduct foreign currency operations as directed by the Committee;
- ii. Secondarily, to maintain a high degree of safety;
- iii. Subject to paragraphs 7.A.i and 7.A.ii, to provide the highest rate of return possible in each currency; and
- iv. To achieve such other objectives as may be authorized by the Committee.
- B. The Selected Bank may manage such foreign currency holdings by:
 - i. Purchasing and selling obligations of, or fully guaranteed as to principal and interest by, a foreign government or agency thereof ("Permitted Foreign Securities") through outright purchases and sales;
 - ii. Purchasing Permitted Foreign Securities under agreements for repurchase of such Permitted Foreign Securities and selling such securities under agreements for the resale of such securities; and
 - iii. Managing balances in various time and other deposit accounts at foreign institutions approved by the Board of Governors under Regulation N.
- C. The Subcommittee, in consultation with the Committee, may provide additional instructions to the Selected Bank regarding holdings of foreign currencies.

ADDITIONAL MATTERS

- 8. The Committee authorizes the Chairman:
 - A. With the prior approval of the Committee, to enter into any needed agreement or understanding with the Secretary of the United States Treasury about the division of responsibility for foreign currency operations between the System and the United States Treasury;
 - B. To advise the Secretary of the United States Treasury concerning System foreign currency operations, and to consult with the Secretary on policy matters relating to foreign currency operations;
 - C. To designate Federal Reserve System persons authorized to communicate with the United States Treasury concerning System Open Market Account foreign currency operations; and
 - D. From time to time, to transmit appropriate reports and information to the National Advisory Council on International Monetary and Financial Policies.
- 9. The Committee authorizes the Selected Bank to undertake transactions of the type described in this Authorization, and foreign exchange and investment transactions that it may be otherwise authorized to

- undertake, from time to time for the purpose of testing operational readiness. The aggregate amount of such transactions shall not exceed \$2.5 billion per calendar year. These transactions shall be conducted with prior notice to the Committee.
- 10. All Federal Reserve banks shall participate in the foreign currency operations for System Open Market 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.
- 11. Any authority of the Subcommittee pursuant to this Authorization may be exercised by the Chairman if the Chairman believes that consultation with the Subcommittee is not feasible in the time available. The Chairman shall promptly report to the Subcommittee any action approved by the Chairman pursuant to this paragraph.
- 12. The Committee authorizes the Chairman, in exceptional circumstances where it would not be feasible to convene the Committee, to foster the Committee's objectives by instructing the Selected Bank to engage in foreign currency operations not otherwise authorized pursuant to this Authorization. Any such action shall be made in the context of the Committee's discussion and decisions regarding foreign currency operations. The Chairman, whenever feasible, will consult with the Committee before making any instruction under this paragraph.

FOREIGN CURRENCY DIRECTIVE (As reaffirmed effective January 29, 2019)

1. The Committee directs the Federal Reserve Bank selected by the Committee (the "Selected Bank") to execute open market transactions, for the System Open Market Account, in accordance with the provisions of the Authorization for Foreign Currency Operations (the "Authorization") and subject to the limits in this Directive.

¹ In general, as specified in Article IV, each member of the IMF undertakes to collaborate with the IMF and other members to assure orderly exchange arrangements and to promote a stable system of exchange rates. These obligations include seeking to direct the member's economic and financial policies toward the objective of fostering orderly economic growth with reasonable price stability. These obligations also include avoiding manipulating exchange rates or the international monetary system in such a way that would impede effective balance of payments adjustment or to give an unfair competitive advantage over other members.

- The Committee directs the Selected Bank to execute warehousing transactions, if so requested by the United States Treasury and if approved by the Foreign Currency Subcommittee (the "Subcommittee"), subject to the limitation that the outstanding balance of United States dollars provided to the United States Treasury as a result of these transactions not at any time exceed \$5 billion.
- The Committee directs the Selected Bank to maintain, for the System Open Market Account:
 - Reciprocal currency arrangements with the following foreign central banks:

Foreign central bank Maximum amount (millions of dollars or equivalent)

Bank of Canada 2,000 Bank of Mexico 3,000

Standing dollar liquidity swap arrangements with the following foreign central banks:

Bank of Canada Bank of England Bank of Japan European Central Bank Swiss National Bank

Standing foreign currency liquidity swap arrangements with the following foreign central banks:

Bank of Canada Bank of England Bank of Japan European Central Bank Swiss National Bank

- The Committee directs the Selected Bank to hold and to invest foreign currencies in the portfolio in accordance with the provisions of paragraph 7 of the Authorization.
- The Committee directs the Selected Bank to report to the Committee, at each regular meeting of the Committee, on transactions undertaken pursuant to paragraphs 1 and 6 of the Authorization. The Selected Bank is also directed to provide quarterly reports to the Committee regarding the management of the foreign currency holdings pursuant to paragraph 7 of the Authorization.

The Committee directs the Selected Bank to conduct testing of transactions for the purpose of operational readiness in accordance with the provisions of paragraph 9 of the Authorization.

By unanimous vote, the Committee reaffirmed its Program for Security of FOMC Information.

In the Committee's annual reconsideration of the Statement on Longer-Run Goals and Monetary Policy Strategy, participants agreed that only a minor revision was required at this meeting, which was to update the reference to the median of FOMC participants' estimates of the longer-run normal rate of unemployment from 4.6 percent to 4.4 percent. All participants supported the statement with the revision, and the Committee voted unanimously to approve the updated statement.

STATEMENT ON LONGER-RUN GOALS AND MONETARY POLICY STRATEGY

(As amended effective January 29, 2019)

The Federal Open Market Committee (FOMC) is firmly committed to fulfilling its statutory mandate from the Congress of promoting maximum employment, stable prices, and moderate long-term interest rates. The Committee seeks to explain its monetary policy decisions to the public as clearly as possible. Such clarity facilitates well-informed decisionmaking by households and businesses, reduces economic and financial uncertainty, increases the effectiveness of monetary policy, and enhances transparency and accountability, which are essential in a democratic society.

Inflation, employment, and long-term interest rates fluctuate over time in response to economic and financial disturbances. Moreover, monetary policy actions tend to influence economic activity and prices with a lag. Therefore, the Committee's policy decisions reflect its longer-run goals, its medium-term outlook, and its assessments of the balance of risks, including risks to the financial system that could impede the attainment of the Committee's goals.

The inflation rate over the longer run is primarily determined by monetary policy, and hence the Committee has the ability to specify a longer-run goal for inflation. The Committee reaffirms its judgment that inflation at the rate of 2 percent, as measured by the annual change in the price index for personal consumption expenditures, is most consistent over the longer run with the Federal Reserve's statutory mandate. The Committee would be concerned if inflation were running persistently above or below this objective. Communicating

this symmetric inflation goal clearly to the public helps keep longer-term inflation expectations firmly anchored, thereby fostering price stability and moderate long-term interest rates and enhancing the Committee's ability to promote maximum employment in the face of significant economic disturbances. The maximum level of employment is largely determined by nonmonetary factors that affect the structure and dynamics of the labor market. These factors may change over time and may not be directly measurable. Consequently, it would not be appropriate to specify a fixed goal for employment; rather, the Committee's policy decisions must be informed by assessments of the maximum level of employment, recognizing that such assessments are necessarily uncertain and subject to revision. The Committee considers a wide range of indicators in making these assessments. Information about Committee participants' estimates of the longer-run normal rates of output growth and unemployment is published four times per year in the FOMC's Summary of Economic Projections. For example, in the most recent projections, the median of FOMC participants' estimates of the longer-run normal rate of unemployment was 4.4 percent.

In setting monetary policy, the Committee seeks to mitigate deviations of inflation from its longer-run goal and deviations of employment from the Committee's assessments of its maximum level. These objectives are generally complementary. However, under circumstances in which the Committee judges that the objectives are not complementary, it follows a balanced approach in promoting them, taking into account the magnitude of the deviations and the potentially different time horizons over which employment and inflation are projected to return to levels judged consistent with its mandate.

The Committee intends to reaffirm these principles and to make adjustments as appropriate at its annual organizational meeting each January.

Developments in Financial Markets and Open Market Operations

The deputy manager of the System Open Market Account (SOMA) provided an overview of developments in U.S. and global financial markets. Financial markets were quite volatile over the intermeeting period. Market participants pointed to a number of factors as contributing to the heightened volatility and sustained declines in risk asset prices and interest rates over recent months including a weaker outlook and greater uncertainties for foreign economies (particularly for Europe and China), perceptions of greater policy risks, and the partial shutdown of the federal government. Against this backdrop,

market participants appeared to interpret FOMC communications at the time of the December meeting as not fully appreciating the tightening of financial conditions and the associated downside risks to the U.S. economic outlook that had emerged since the fall. In addition, some market reports suggested that investors perceived the FOMC to be insufficiently flexible in its approach to adjusting the path for the federal funds rate or the process for balance sheet normalization in light of those risks. The deterioration in risk sentiment late in December was reportedly amplified by poor liquidity and thin trading conditions around year-end.

Early in the new year, market sentiment improved following communications by Federal Reserve officials emphasizing that the Committee could be "patient" in considering further adjustments to the stance of policy and that it would be flexible in managing the reduction of securities holdings in the SOMA. On balance, stock prices finished the period up almost 5 percent while corporate risk spreads narrowed, reversing a portion of the changes in these variables since the September FOMC meeting.

The deputy manager reported results from the Open Market Desk's latest surveys of primary dealers and market participants. Regarding the outlook for policy, the median path for the federal funds rate among respondents had shifted down about 25 basis points relative to the responses from the surveys conducted ahead of the December meeting. Moreover, the average probability that respondents attached to an increase in the target range as the next policy action declined and the corresponding probabilities they attached to the possibility that the target range would be unchanged or lowered at some point this year increased. Concerning expectations for the FOMC statement, many survey respondents anticipated the retention of language pointing to the likelihood of "some further gradual increases" in the target range for the federal funds rate but many also expected the statement to emphasize patience or data dependence in the conduct of policy. Consistent with recent communications that the FOMC would be flexible in its approach to balance sheet normalization, the survey results also suggested that the respondents anticipated that the Committee would slow the balance sheet runoff in scenarios that involved a reduction in the target range for the federal funds rate.

In reviewing money market developments, the deputy manager noted that federal funds continued to trade at rates close to the interest on excess reserves rate. Moreover, no signs of reserve scarcity were evident in the behavior of the federal funds rate; the correlation between daily changes in reserve balances and the federal funds rate remained close to zero. In other markets, repurchase agreement (repo) rates spiked at year-end, reportedly reflecting strong demands for financing from dealers associated with large Treasury auction net settlements on that day combined with a cutback in the supply of financing available from banks and others managing the size of their balance sheets over year-end for reporting purposes. The deputy manager noted that the Federal Reserve Bank of New York was planning to release a notice in early February for public comment on plans to include new data on selected deposits in the calculation of the overnight bank funding rate (OBFR). In addition, the staff had begun work aimed at publishing a series of backward-looking average secured overnight financing rates (SOFR) as a further step to support reference rate reform. The staff planned to solicit public feedback on this effort later this year and initiate publication of these averages by the first half of 2020.

Following the briefing, participants raised a number of questions about market reports that the Federal Reserve's balance sheet runoff and associated "quantitative tightening" had been an important factor contributing to the selloff in equity markets in the closing months of last year. While respondents assessed that the reduction of securities held in the SOMA would put some modest upward pressure on Treasury yields and agency mortgage-backed securities (MBS) yields over time, they generally placed little weight on balance sheet reduction as a prime factor spurring the deterioration in risk sentiment over that period. However, some other investors reportedly held firmly to the belief that the runoff of the Federal Reserve's securities holdings was a factor putting significant downward pressure on risky asset prices, and the investment decisions of these investors, particularly in thin market conditions around the year-end, might have had an outsized effect on market prices for a time. Participants also discussed the hypothesis that investors may have taken some signal about the future path of the federal funds rate based on perceptions that the Federal Reserve was unwilling to adjust the pace of balance sheet runoff in light of economic and financial developments.

By unanimous vote, the Committee ratified the Desk's domestic transactions over the intermeeting period. There were no intervention operations in foreign currencies for the System's account during the intermeeting period.

Long-Run Monetary Policy Implementation Frameworks

Committee participants resumed their discussion from the December 2018 meeting of the appropriate long-run framework for monetary policy implementation. At the January meeting, the staff provided briefings on the effectiveness and efficiency of the Committee's current operating regime and on options for transitioning to the longer-run size of the balance sheet.

The staff noted that the Committee had previously indicated that, in the longer run, it intends to operate with no more securities holdings than necessary to implement monetary policy efficiently and effectively. In considering the effectiveness of the operating regime, the staff observed that over recent years, the Federal Reserve had been able to implement monetary policy in an environment with ample reserves by adjusting administered rates—including the rates on required and excess reserve balances and the offered rate at the overnight reverse repurchase agreement facility—without needing to actively manage the supply of reserves. Over this period, the effective federal funds rate was generally steady at levels well within the Committee's target range despite substantial changes in the level of reserves in the banking system and significant changes in money markets, regulations, and financial institutions' business models. In addition, other money market rates generally moved closely with the federal funds rate. The current regime was therefore effective both in providing control of the policy rate and in ensuring transmission of the policy stance to other rates and broader financial markets.

The staff briefing also included a discussion of factors relevant in judging the level of reserves that would support the efficient implementation of monetary policy. The staff suggested that maintaining a buffer of reserves above the minimum quantity that corresponds to the flat portion of the reserve demand curve could reduce the size and frequency of open market operations needed to maintain good control of the policy rate. The aggregate level of reserves had already declined by \$1.2 trillion from a peak level of \$2.8 trillion reached in October 2014; the decline stemmed from both reductions in asset holdings and increases in nonreserve liabilities such as Federal Reserve notes in circulation. Some recent survey information and other evidence suggested that reserves might begin to approach an efficient level later this year. Against this backdrop, the staff presented options for substantially slowing the decline in reserves by ending the reduction in asset holdings at some point over the latter half of this year and thereafter holding the size of the SOMA portfolio roughly constant for a time so that

the average level of reserves would fall at a very gradual pace reflecting the trend growth in other Federal Reserve liabilities.

The staff also described options for communicating plans both for the operating regime and for the completion of the normalization of the size of the balance sheet. If the Committee reached a decision to continue using its current operating regime, announcing this decision after the current meeting would help reduce uncertainty about both the long-run implementation framework and the likely evolution of the balance sheet. In addition, the Committee could revise its previous communications to make clear that it was flexible in its approach to normalizing the balance sheet and was prepared to change the details of its balance sheet normalization plans in light of economic and financial developments if necessary to support the FOMC's broader policy goals. The staff noted that, after the end of asset redemptions, the Desk could reinvest principal payments received from holdings of agency MBS in Treasury securities as directed.

Participants noted some of the key advantages of the Federal Reserve's current operating regime, including good control of the policy rate in a variety of conditions and good transmission to other money market rates and broader financial markets. They observed that a regime that controlled the policy rate through active management of the supply of reserves likely would have disadvantages. In particular, the level and variability of reserve demand and supply were likely to be much larger than in the period before the crisis, and stabilizing the policy rate in this environment would require large and frequent open market operations. Participants judged that, in light of their extensive previous discussions, it was now appropriate to provide the public with more certainty that the Federal Reserve would continue to use its current operating regime. Choosing an operating regime would also allow the Committee to move forward on related issues, including plans for concluding the normalization of the size of the balance sheet. Participants emphasized the importance of describing their chosen operating regime in clear terms to enhance public understanding.

Participants discussed market commentary that suggested that the process of balance sheet normalization might be influencing financial markets. Participants noted that the ongoing reduction in the Federal Reserve's asset holdings had proceeded smoothly for more than a year, with no significant effects on financial markets. The gradual reduction in securities holdings had been announced well in advance and, as intended, was

proceeding largely in the background, with the federal funds rate remaining the Committee's primary tool for adjusting the stance of policy. Nonetheless, some investors might have interpreted previous communications as indicating that a very high threshold would have to be met before the Committee would be willing to adjust its balance sheet normalization plans. Participants observed that, although the target range for the federal funds rate was the Committee's primary means of adjusting the stance of policy, the balance sheet normalization process should proceed in a way that supports the achievement of the Federal Reserve's dual-mandate goals of maximum employment and stable prices. Consistent with this principle, participants agreed that it was important to be flexible in managing the process of balance sheet normalization, and that it would be appropriate to adjust the details of balance sheet normalization plans in light of economic and financial developments if necessary to achieve the Committee's macroeconomic objectives.

Almost all participants thought that it would be desirable to announce before too long a plan to stop reducing the Federal Reserve's asset holdings later this year. Such an announcement would provide more certainty about the process for completing the normalization of the size of the Federal Reserve's balance sheet. A substantial majority expected that when asset redemptions ended, the level of reserves would likely be somewhat larger than necessary for efficient and effective implementation of monetary policy; if so, many suggested that some further very gradual decline in the average level of reserves, reflecting the trend growth of other liabilities such as Federal Reserve notes in circulation, could be appropriate. In these participants' view, this process would allow the Federal Reserve to arrive slowly at an efficient level of reserves while maintaining good control of short-term interest rates without needing to engage in more frequent open market operations. A few participants judged that there would be little benefit to allowing reserves to continue to fall after the end of redemptions or that this approach could have costs, such as an undue risk of volatility in short-term interest rates, that would exceed its benefits. These participants thought that upon ending asset redemptions, the Federal Reserve should begin adding to its assets to offset growth in nonreserve liabilities, so as to keep the average level of reserves relatively stable. A couple of participants suggested that a ceiling facility to mitigate temporary unexpected pressures in reserve markets could play a useful role in supporting policy implementation at lower levels of reserves.

Participants commented that, in light of the Committee's longstanding plan to hold primarily Treasury securities in the long run, it would be appropriate once asset redemptions end to reinvest most, if not all, principal payments received from agency MBS in Treasury securities. Some thought that continuing to reinvest agency MBS principal payments in excess of \$20 billion per month in agency MBS, as under the current balance sheet normalization plan, would simplify communications or provide a helpful backstop against scenarios in which large declines in long-term interest rates caused agency MBS prepayment speeds to increase sharply. However, some others judged that retaining the cap on agency MBS redemptions was unnecessary at this stage in the normalization process. These participants noted considerations in support of this view, including that principal payments were unlikely to reach the \$20 billion level after 2019, that the cap could slightly slow the return to a portfolio of primarily Treasury securities, or that the Committee would have the flexibility to adjust the details of its balance sheet normalization plans in light of economic and financial developments. Participants commented that it would be important over time to develop and communicate plans for reinvesting agency MBS principal payments, and they expected to continue their discussion of balance sheet normalization and related issues at upcoming meetings.

Following the discussion, the Chairman proposed that the Committee communicate its intentions regarding monetary policy implementation and its willingness to adjust the details of its balance sheet normalization program by publishing a statement at the conclusion of the meeting. All participants agreed with the proposed statement.

STATEMENT REGARDING MONETARY POLICY IMPLEMENTATION AND BALANCE SHEET NORMALIZATION

(Adopted January 30, 2019)

After extensive deliberations and thorough review of experience to date, the Committee judges that it is appropriate at this time to provide additional information regarding its plans to implement monetary policy

over the longer run. Additionally, the Committee is revising its earlier guidance regarding the conditions under which it could adjust the details of its balance sheet normalization program.⁵ Accordingly, all participants agreed to the following:

- The Committee intends to continue to implement monetary policy in a regime in which an ample supply of reserves ensures that control over the level of the federal funds rate and other short-term interest rates is exercised primarily through the setting of the Federal Reserve's administered rates, and in which active management of the supply of reserves is not required.
- The Committee continues to view changes in the target range for the federal funds rate as its primary means of adjusting the stance of monetary policy. The Committee is prepared to adjust any of the details for completing balance sheet normalization in light of economic and financial developments. Moreover, the Committee would be prepared to use its full range of tools, including altering the size and composition of its balance sheet, if future economic conditions were to warrant a more accommodative monetary policy than can be achieved solely by reducing the federal funds rate.

Staff Review of the Economic Situation

The information available for the January 29–30 meeting indicated that labor market conditions continued to strengthen and that growth in real gross domestic product (GDP) was solid in the fourth quarter of last year, although the availability of data was more limited than usual because of the partial federal government shutdown that extended from December 22 to January 25. Consumer price inflation, as measured by the 12-month percentage change in the price index for personal consumption expenditures (PCE), was a bit below 2 percent in November, held down in part by recent declines in consumer energy prices. Survey-based

https://www.federalreserve.gov/monetarypolicy/files/FOMC PolicyNormalization.20150318.pdf. On June 13, 2017, the Committee adopted a second addendum to the Policy Normalization Principles and Plans, which is available at https://www.federalreserve.gov/monetarypolicy/files/FOMC PolicyNormalization.20170613.pdf.

⁵ The Committee's Policy Normalization Principles and Plans were adopted on September 16, 2014, and are available at https://www.federalreserve.gov/monetarypolicy/files/FOMC_PolicyNormalization.pdf. On March 18, 2015, the Committee adopted an addendum to the Policy Normalization Principles and Plans, which is available at

measures of longer-run inflation expectations were little changed.

Total nonfarm payroll employment expanded strongly in December. The national unemployment rate edged up but was still at a low level of 3.9 percent, while the labor force participation rate also increased somewhat; as a result, the employment-to-population ratio remained steady in December. The unemployment rates for African Americans, Asians, and Hispanics in December were below their levels at the end of the previous economic expansion, although persistent differentials in unemployment rates across groups remained. The share of workers employed part time for economic reasons continued to be close to the lows reached in late 2007. The rates of private-sector job openings and quits edged down in November but were still at high levels; initial claims for unemployment insurance benefits through the middle of January were near historically low levels. Average hourly earnings for all employees rose 3.2 percent over the 12 months ending in December.

Industrial production increased solidly in December. Output gains were strong in the manufacturing and mining sectors, while the output of utilities declined, with warmer-than-usual temperatures lowering the demand for heating. Automakers' assembly schedules suggested that the production of light motor vehicles would ease somewhat in the first quarter, although new orders indexes from national and regional manufacturing surveys pointed to moderate gains in overall factory output in the coming months.

Household spending looked to have increased strongly in the fourth quarter, as real PCE growth was strong in October and November. The release of the retail sales report for December was delayed, but available indicators—such as credit card and debit card transaction data and light motor vehicle sales—suggested that household spending growth remained strong in December. Key factors that influence consumer spending—including ongoing gains in real disposable personal income and still-elevated measures of households' net worth—continued to be supportive of solid real PCE growth in the near term. Consumer sentiment, as measured by the University of Michigan Surveys of Consumers, was less upbeat in early January than it had been last year but remained at a generally favorable level.

Real residential investment appeared to have declined again in the fourth quarter, likely reflecting in part decreases in the affordability of housing arising from both the net increase in mortgage interest rates over the past year and ongoing, though somewhat slower, house price appreciation. Data on starts and permits for new residential construction in December were not available, but building permit issuance for new single-family homes—which tends to be a good indicator of the underlying trend in construction of such homes—had moved down modestly in the previous couple of months. Sales of existing homes decreased, on net, over November and December, while data on new home sales for those two months were delayed.

Growth in real private expenditures for business equipment and intellectual property looked to have picked up solidly in the fourth quarter. Nominal shipments of nondefense capital goods excluding aircraft rose, on balance, in October and November, while information on shipments for December was delayed; available indicators of transportation equipment spending in the fourth quarter were strong. Forward-looking indicators of business equipment spending—such as orders for nondefense capital goods excluding aircraft and readings on business sentiment—pointed to somewhat slower spending gains in the near term. Data on nominal business expenditures for nonresidential structures outside of the drilling and mining sector in November were not available. The number of crude oil and natural gas rigs in operation—an indicator of business spending for structures in the drilling and mining sector—was roughly flat in December and through most of January.

Total real government purchases appeared to have increased moderately in the fourth quarter. Nominal defense spending in October and November pointed to solid growth in real federal purchases, although spending data for December were delayed. The partial federal government shutdown restrained real federal purchases somewhat in the fourth quarter and likely had a more significant negative effect on federal purchases in the first quarter. Real purchases by state and local governments looked to have risen modestly in the fourth quarter, as the payrolls of those governments expanded a bit over that period. Nominal state and local construction spending had risen solidly in October, but construction data for November were delayed.

Data on U.S. international trade for November and December also were delayed. The available data for October suggested that the contribution of the change in net exports to real GDP growth in the fourth quarter would be much less negative than the drag of nearly 2 percentage points in the third quarter.

Total U.S. consumer prices, as measured by the PCE price index, increased 1.8 percent over the 12 months ending in November. Core PCE price inflation, which

excludes changes in consumer food and energy prices, was 1.9 percent over that same period. The consumer price index (CPI) rose 1.9 percent over the 12 months ending in December, while core CPI inflation was 2.2 percent. Recent readings on survey-based measures of longer-run inflation expectations—including those from the Michigan survey and the Desk's Survey of Primary Dealers and Survey of Market Participants—were little changed.

Recent data suggested that foreign economic growth was subdued in the fourth quarter relative to earlier in the year. In the advanced foreign economies (AFEs), especially the euro area, indicators of economic activity weakened further, though they remained consistent with positive economic growth. In the emerging market economies (EMEs), growth in Mexico and Brazil appeared to have slowed to a modest pace in the fourth quarter after a temporary pickup in the third quarter. The Chinese economy expanded at a slower pace than earlier in the year amid notable weakness in household spending, and Chinese imports from other emerging Asian economies turned down. Foreign inflation fell in the fourth quarter, largely reflecting lower oil prices. Inflation pressures, especially in some AFEs, generally remained muted.

Staff Review of the Financial Situation

Investor risk sentiment fluctuated materially over the intermeeting period. A variety of factors—including FOMC communications, weaker-than-expected data, trade policy uncertainties, the partial federal government shutdown, and concerns about the outlook for corporate earnings—were cited by market participants as contributing to a deterioration in risk sentiment early in the period. During this time, broad equity indexes declined substantially amid a sharp rise in financial market volatility, and corporate bond spreads widened notably. Subsequently, positive signals regarding trade policy, robust economic data releases, and communications from FOMC participants led to an improvement in risk sentiment. On net, the S&P 500 index rose, option-implied volatility—the VIX—fell, Treasury yields declined, and corporate spreads narrowed over the intermeeting period. Despite the intermeeting moves in financial markets, financial conditions remained notably tighter than in September 2018. Financing conditions for businesses and households tightened a bit further over the intermeeting period but remained generally supportive of spending.

December FOMC communications were reportedly perceived by market participants as not fully appreciating the implications of tighter financial conditions and softening global data over recent months for the U.S. economic outlook. Subsequent communications from FOMC participants were interpreted as suggesting that the FOMC would be patient in assessing the implications of recent economic and financial developments. The market-implied path for the federal funds rate in 2019 was little changed, on net, over the intermeeting period and investors continued to expect no change to the target range for the federal funds rate at the January FOMC meeting. The market-implied path for 2020 shifted down somewhat.

Nominal Treasury yields fluctuated substantially, with heightened risk aversion contributing to a significant decline in yields early in the intermeeting period. Subsequently, yields rose, though 2-, 5-, and 10-year yields still ended the period somewhat lower, on net. The spread between the yields on nominal 10- and 2-year Treasury securities was little changed over the period, and remained in the lower end of its historical range over recent decades. The near-term forward spread—the difference between the current implied three-month forward rate at a horizon six quarters ahead (derived from the Treasury yield curve) and the current yield on a three-month Treasury bill-narrowed, on net, and also was in the lower end of its historical distribution. The 5-year and 5-to-10-year-forward inflation compensation measures based on Treasury Inflation-Protected Securities (TIPS) edged down a bit over the period; both measures were down significantly from levels prevailing in the fall of last year.

In U.S. risky asset markets, the S&P 500 equity index was down as much as 8 percent at one point during the period but ended the period notably higher. On net, the VIX fell substantially while corporate bond spreads narrowed a bit.

The federal funds rate and other overnight funding rates rose following the increase in the target range for the federal funds rate at the December FOMC meeting. Year-end pressures in repo markets were reportedly exacerbated by a high volume of settlements of Treasury securities against a backdrop of large dealer inventories and reduced intermediation by global systemically important banks. General collateral repo rates moved up sharply at year-end but subsequently returned to normal levels.

Foreign financial markets followed the same general pattern as those in the United States. On balance, foreign equity prices moved up moderately and sovereign credit spreads in EMEs narrowed. Moreover, inflows to dedicated emerging market funds resumed after two quarters of outflows. Longer-term sovereign yields in AFEs edged lower on net.

The dollar depreciated broadly amid falling U.S. yields and greater investor optimism about prospects for some EMEs. The dollar depreciated notably against the British pound, on net, as market participants reportedly saw an increased likelihood of a delay in the Brexit process. The dollar also depreciated considerably against the Brazilian real and the Mexican peso following progress on pension reform in Brazil and a fiscal announcement in Mexico that was perceived as prudent.

Financing conditions for nonfinancial firms tightened somewhat, on balance. Gross issuance of corporate bonds slowed considerably in December across the credit rating spectrum but rebounded in January. Even so, the volume of high-yield bonds issued by nonfinancial firms remained well below its average over the past few years. Spreads on nonfinancial corporate bonds were volatile but narrowed a bit, on net, and stayed at levels well above those that prevailed a year ago. The credit quality of nonfinancial corporations continued to show signs of deterioration, although actual corporate bond defaults remained low overall. Institutional leveraged loan issuance slowed in December to its lowest level since July 2016, as loan spreads widened substantially. Small business credit market conditions were little changed, and credit conditions in municipal bond markets stayed accommodative on net.

Private-sector analysts significantly revised down their projections for corporate earnings for the fourth quarter and for 2019 as a whole. The pace of gross equity issuance through both initial and seasoned offerings was sluggish in December, amid reports that several firms may have pushed back initial equity offerings.

Respondents to the January 2019 Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS) reported that lending standards for commercial and industrial (C&I) loans remained basically unchanged in the fourth quarter, after having reported easing standards over the past several quarters. Growth of C&I loans on banks' balance sheets picked up in the fourth quarter, reflecting stronger originations as well as reduced paydowns and loan sales.

In the commercial real estate (CRE) sector, financing conditions remained accommodative. Although commercial mortgage backed securities (CMBS) spreads were volatile, they were little changed, on net, over the intermeeting period, and issuance of both agency and non-agency CMBS remained strong. CRE loan growth at banks continued to expand at a pace comparable with that seen over the course of 2018. Banks in the January SLOOS reported that demand was unchanged, on net, in the fourth quarter for nonfarm nonresidential loans, the largest CRE loan category, while demand was reportedly weaker for multifamily loans and construction loans. On balance, banks reported tightening their standards for all types of CRE loans in the fourth quarter.

Financing conditions in the residential mortgage market also remained accommodative for most borrowers. Purchase mortgage origination activity continued to decline modestly through November, while refinancing activity continued to be muted.

In consumer credit markets, financing conditions tightened a bit but, on balance, remained generally supportive of growth in household spending. Banks reported in the SLOOS that they tightened credit card lending standards during the fourth quarter. In the consumer asset-backed securities market, spreads widened somewhat amid broad market volatility.

The staff provided an update on its views with respect to potential risks to financial stability. The increase in financial market volatility seen over the fall of last year was characterized as a return to historically more typical levels, following the historically low-volatility environment that persisted through much of 2017 and 2018. However, the increase in volatility in financial markets in December was viewed as substantial and as likely exacerbated by thin year-end liquidity, among other factors. Staff judged asset valuation pressures in equity and corporate debt markets to have abated somewhat in the period since the assessment presented in the November 2018 financial stability report. Staff continued to monitor developments in the leveraged loan market given the sharp rise in spreads and slowdown in issuance late last year. The build-up in overall nonfinancial business debt to levels close to historical highs relative to GDP was viewed as a factor that could amplify adverse shocks to the business sector. Staff continued to judge risks associated with household-sector debt as moderate. Both the risks associated with financial leverage and the vulnerabilities related to maturity transformation were viewed as being low, as they have been for some time.

Staff Economic Outlook

The U.S. economic forecast prepared by the staff for the January FOMC meeting was revised down a little, on balance, primarily reflecting somewhat lower projected paths for domestic equity prices and foreign economic growth. The staff estimated that U.S. real GDP growth was solid in the fourth quarter of last year, bolstered by consumer spending and business investment, and that the effects of the partial federal government shutdown were quite small in that quarter. Real GDP growth was expected to slow but remain solid in the first half of this year, with the effects of the partial federal government shutdown modestly restraining GDP growth in the first quarter and those effects being reversed in the second quarter. In the medium term, real GDP growth in 2019 was forecast to be at a rate above the staff's estimate of potential output growth, step down to the growth rate of potential output next year and then slow further to a pace below potential output growth in 2021. The unemployment rate was projected to decline somewhat further below the staff's estimate of its longer-run natural rate but to bottom out by the end of this year and begin to edge up in 2021. With labor market conditions judged to already be tight, the staff continued to assume that projected employment gains would manifest in smaller-than-usual downward pressure on the unemployment rate and in larger-than-usual upward pressure on the labor force participation rate.

The staff's forecast for inflation was little revised for the January FOMC meeting. Core PCE price inflation was still expected to step up to 2 percent over this year as a whole and then to run at that level through the medium term. Total PCE price inflation was forecast to be a little below core inflation this year and next, reflecting projected declines in energy prices, and then to run at the same level as core inflation in 2021.

The staff viewed the uncertainty around its projections for real GDP growth, the unemployment rate, and inflation as similar to the average of the past 20 years. The staff also saw the risks to the forecasts for real GDP growth and the unemployment rate as roughly balanced. On the upside, household spending and business investment could expand faster than the staff projected, supported in part by the tax cuts enacted last year. On the downside, trade policies and foreign economic developments could move in directions that have significant negative effects on U.S. economic growth. Risks to the inflation projection also were seen as balanced. The upside risk that inflation could increase more than expected in an economy that was projected to move further above its potential was counterbalanced by the downside risk that longer-term inflation expectations may be lower than was assumed in the staff forecast, as well as the possibility that the dollar could appreciate if foreign economic conditions deteriorated.

Participants' Views on Current Conditions and the Economic Outlook

Participants agreed that over the intermeeting period the labor market had continued to strengthen and that economic activity had been rising at a solid rate. Job gains had been strong, on average, in recent months, and the unemployment rate had remained low. Household spending had continued to grow strongly, while growth of business fixed investment had moderated from its rapid pace earlier last year. On a 12-month basis, both overall inflation and inflation for items other than food and energy had remained near 2 percent. Although market-based measures of inflation compensation had moved lower in recent months, survey-based measures of longer-term inflation expectations were little changed.

Participants continued to view a sustained expansion of economic activity, strong labor market conditions, and inflation near the Committee's symmetric 2 percent objective as the most likely outcomes over the next few years. Participants generally continued to expect the growth rate of real GDP in 2019 to step down somewhat from the pace seen over 2018 to a rate closer to their estimates of longer-run growth, with a few participants commenting that waning fiscal stimulus was expected to contribute to the step-down. Several participants commented that they had nudged down their outlooks for output growth since the December meeting, citing a softening in consumer or business sentiment, a reduction in the outlook for foreign economic growth, or the tightening in financial conditions that had occurred in recent months.

In their discussion of the household sector, participants noted that recent data on spending had been strong, supported by a strong job market and rising incomes. A couple of participants commented that contacts in their Districts remained optimistic about consumer spending. However, some participants noted the recent softening in surveys of consumer sentiment. Participants observed that the recent partial federal government shutdown had presented a significant hardship for many families. A few participants also pointed to continued weakness in the housing sector, which was attributed in part to concerns about affordability among potential homebuyers.

Participants noted that growth of business fixed investment had moderated from its rapid pace earlier last year. Some participants highlighted that recent surveys of business sentiment or District contacts had indicated some weakening in optimism or confidence about the economic outlook, though available indicators suggested

that the level of business sentiment had remained high. Concerns about the economic outlook were variously attributed to uncertainty or worries about slowing global economic growth, including in Europe and China; trade policy; waning fiscal policy stimulus; and the partial government shutdown. Manufacturing contacts in a number of Districts indicated that such factors were causing them to delay or defer capital expenditures. In addition, a few participants noted that recent declines in oil or gasoline prices had damped plans for capital expenditures in the energy sector. A few participants observed that conditions in the agricultural sector remained difficult, citing large inventories of agricultural commodities, uncertainty about international trade policies, and concerns regarding low prices of commodities and farmland. However, a few participants commented that business optimism had increased among contacts in their Districts, or that they were planning new capital expenditures.

Participants observed that both overall inflation and inflation for items other than food and energy remained near 2 percent on a 12-month basis. Participants continued to view inflation near the Committee's symmetric 2 percent objective as the most likely outcome. Some participants noted that some factors, such as the decline in oil prices, slower growth and softer inflation abroad, or appreciation of the dollar last year, had held down some recent inflation readings and may continue to do so this year. In addition, many participants commented that upward pressures on inflation appeared to be more muted than they appeared to be last year despite strengthening labor market conditions and rising input costs for some industries.

In their discussion of indicators of inflation expectations, participants noted that market-based measures of inflation compensation had moved lower in recent months. Participants expressed a range of views in interpreting the decline in inflation compensation. On the one hand, that decline could stem from a decrease in expected inflation on the part of market participants. In that case, the current low levels of inflation compensation could suggest that inflation expectations are below the Committee's 2 percent inflation objective. On the other hand, the decline in inflation compensation might reflect in large part declines in risk premiums or increased concerns about downside risks to the outlook for inflation. This interpretation was seen as consistent with the behavior of the most recent survey-based measures of expected inflation, which were little changed.

In their discussion of labor markets, participants agreed that conditions had continued to strengthen. Estimates of job gains in the December employment report had been strong, the unemployment rate had remained low, and the labor force participation rate had moved up. Several participants noted solid rates of hiring or other indicators of tight labor market conditions in their Districts. Some participants commented on recent indicators at the national or District levels as suggesting a pickup in wage growth. The pickup was attributed to tightening in national or District labor market conditions or to gains in the rate of productivity growth. Continued solid productivity growth was seen as a key factor necessary to support rising real wages over time.

Participants commented on a number of risks associated with their outlook for economic activity, the labor market, and inflation over the medium term. Participants noted that some risks to the downside had increased, including the possibilities of a sharper-than-expected slowdown in global economic growth, particularly in China and Europe, a rapid waning of fiscal policy stimulus, or a further tightening of financial market conditions. An increase in some foreign and domestic government policy uncertainties, including those associated with Brexit, an escalation in international trade policy tensions, and the potential for additional extended federal government shutdowns were also cited as downside risks. A few participants expressed concern that longerrun inflation expectations may be lower than levels consistent with the Committee's 2 percent inflation objective. Several participants judged that risks that could lead to higher-than-expected inflation had diminished relative to downside risks. The potential that various sources of uncertainty might abate more quickly than expected was mentioned as a potential upside risk for the economic outlook.

In their discussion of financial developments, participants noted that although financial market conditions had not changed much, on net, over the intermeeting period, prices had been volatile and financial conditions were materially tighter than they had been several months ago, with lower equity prices and wider corporate risk spreads. Several participants also noted that the slope of the Treasury yield curve was unusually flat by historical standards, which in the past had often been associated with a deterioration in future macroeconomic performance. Participants noted that financial asset prices appeared to be sensitive to information regarding trade policy tensions, domestic fiscal and monetary policy, and global economic growth prospects. A couple of

participants noted that the rise in credit spreads over recent months, if it were to persist, could restrain future economic activity. Participants agreed that it was important to continue to monitor financial market developments and assess the implications of these developments for the economic outlook.

Among those participants who commented on financial stability, a number expressed concerns about the elevated financial market volatility and the apparent decline in investors' willingness to bear risk that occurred toward the end of last year. Although these conditions had eased somewhat in recent weeks, a couple of participants noted that the strain in financial markets might have persisted or spread if it had occurred during a period of less favorable macroeconomic conditions. A couple of participants highlighted the role that decreased liquidity at the end of the year appeared to play in exacerbating changes in financial market conditions. They emphasized the need to monitor financial market structures or practices that may contribute to strained liquidity conditions. A few participants highlighted the importance of ensuring that financial institutions were able to withstand adverse financial market events—for instance, by maintaining adequate levels of capital.

In their consideration of monetary policy at this meeting, participants judged that information received since December indicated that real economic activity had been rising at a solid rate, labor market conditions had continued to strengthen, and inflation had been near the Committee's objective. Participants generally expected economic activity to continue expanding at a solid pace in the period ahead, with strong labor market conditions and inflation near 2 percent. At the time of the December meeting, the Committee had noted that it would continue to monitor global economic and financial developments and assess their implications for the economic outlook. Participants observed that since then, the economic outlook had become more uncertain. Financial market volatility had remained elevated over the intermeeting period, and, despite some easing since the December FOMC meeting, overall financial conditions had tightened since September. In addition, the global economy had continued to record slower growth, and consumer and business sentiment had deteriorated. The government policy environment, including trade negotiations and the recent partial federal government shutdown, was also seen as a factor contributing to uncertainty about the economic outlook.

Based on their current assessments, all participants expressed the view that it would be appropriate for the

Committee to maintain the target range for the federal funds rate at 2½ to 2½ percent. With regard to the Committee's postmeeting statement, participants supported a proposed change in the forward guidance language that would replace the previous guidance referring to "some further gradual increases in the target range for the federal funds rate" with an indication that, in light of "global economic and financial developments and muted inflation pressures," the Committee would "be patient as it determines what future adjustments to the target range for the federal funds rate may be appropriate." Participants also supported a proposal to remove from the statement the characterization of risks to the economic outlook as "roughly balanced."

Participants pointed to a variety of considerations that supported a patient approach to monetary policy at this juncture as an appropriate step in managing various risks and uncertainties in the outlook. With regard to the domestic economic picture, additional data would help policymakers gauge the trajectory of business and consumer sentiment, whether the recent softness in core and total inflation and inflation compensation would persist, and the effect of the tightening of financial conditions on aggregate demand. Information arriving in coming months could also shed light on the effects of the recent partial federal government shutdown on the U.S. economy and on the results of the budget negotiations occurring in the wake of the shutdown, including the possible implications for the path of fiscal policy. A patient approach would have the added benefit of giving policymakers an opportunity to judge the response of economic activity and inflation to the recent steps taken to normalize the stance of monetary policy. Furthermore, a patient posture would allow time for a clearer picture of the international trade policy situation and the state of the global economy to emerge and, in particular, could allow policymakers to reach a firmer judgment about the extent and persistence of the economic slowdown in Europe and China.

Participants noted that maintaining the current target range for the federal funds rate for a time posed few risks at this point. The current level of the federal funds rate was at the lower end of the range of estimates of the neutral policy rate. Moreover, inflation pressures were muted, and asset valuations were less stretched than they had been a few months earlier. Many participants suggested that it was not yet clear what adjustments to the target range for the federal funds rate may be appropriate later this year; several of these participants argued that rate increases might prove necessary only if inflation outcomes were higher than in their baseline outlook.

Several other participants indicated that, if the economy evolved as they expected, they would view it as appropriate to raise the target range for the federal funds rate later this year.

Participants observed that a patient posture in these circumstances was consistent with their general approach to setting the stance of policy, in which they were importantly guided by the implications of incoming data for the economic outlook. Some participants noted that, while global economic and financial developments had been important factors leading to a patient monetary policy posture, those developments mattered because they affected assessments of the policy rate path most consistent with achievement of the Committee's dual-mandate goals of maximum employment and price stability. Many participants observed that if uncertainty abated, the Committee would need to reassess the characterization of monetary policy as "patient" and might then use different statement language.

A few participants expressed concerns that in the current environment of increased uncertainty, the policy rate projections prepared as part of the Summary of Economic Projections (SEP) do not accurately convey the Committee's policy outlook. These participants were concerned that, although the individual participants' projections for the federal funds rate in the SEP reflect their individual views of the appropriate path for the policy rate conditional on the evolution of the economic outlook, at times the public had misinterpreted the median or central tendency of those projections as representing the consensus view of the Committee or as suggesting that policy was on a preset course. However, some other participants noted that the policy rate projections in the SEP are a valuable component of the overall information provided about the monetary policy outlook.

Committee Policy Action

In their discussion of monetary policy for the period ahead, members judged that information received since the Committee met in December indicated that the labor market had continued to strengthen and that economic activity had been rising at a solid rate. Job gains had been strong, on average, in recent months, and the unemployment rate had remained low. Household spending had continued to grow strongly, while growth of business fixed investment had moderated from its rapid pace earlier last year. On a 12-month basis, both overall inflation and inflation for items other than food and energy remained near 2 percent. Although market-based measures of inflation compensation had moved lower in

recent months, survey-based measures of longer-term inflation expectations were little changed.

In their consideration of the economic outlook, members noted that financial conditions had tightened, on net, since September, and that global growth had moderated; members also observed that a number of uncertainties, including those pertaining to the evolution of policies of the U.S. and foreign governments, still awaited resolution. However, members continued to view sustained expansion of economic activity, strong labor market conditions, and inflation near the Committee's symmetric 2 percent objective as the most likely outcomes for the U.S. economy in the period ahead. In light of global economic and financial developments and muted inflation pressures, the Committee could be patient as it determined what future adjustments to the target range for the federal funds rate may be appropriate to support these outcomes.

After assessing current conditions and the outlook for economic activity, the labor market, and inflation, members decided to maintain the target range for the federal funds rate at 21/4 to 21/2 percent. Members agreed that in determining the timing and size of future adjustments to the target range for the federal funds rate, the Committee would assess realized and expected economic conditions relative to the Committee's maximum employment and symmetric 2 percent inflation objectives. They reiterated that this assessment would take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments. More generally, members noted that decisions regarding near-term adjustments of the stance of monetary policy would appropriately remain dependent on the evolution of the outlook as informed by incoming data.

With regard to the postmeeting statement, members agreed to change the characterization of recent growth in economic activity from "strong" to "solid," consistent with incoming information that suggested that the pace of expansion of the U.S. economy had moderated somewhat since late last year. The description of indicators of inflation expectations was revised to recognize that the downward moves in market-based measures of inflation compensation that occurred in recent months had been sustained, while also noting that survey-based measures of longer-term inflation expectations were little changed. Members also agreed to several adjustments in the description of the outlook for the economy

and monetary policy. The statement language was revised to indicate that the Committee continued to view sustained expansion of economic activity, strong labor market conditions, and inflation near 2 percent as "the most likely outcomes." Members also agreed to add a sentence indicating that, in light of "global economic and financial developments and muted inflation pressures, the Committee will be patient as it determines what future adjustments to the target range for the federal funds rate may be appropriate to support these outcomes." This sentence was intended to convey the Committee's view that a patient and flexible approach was appropriate at this time as a way to manage risks while assessing incoming information bearing on the economic outlook. In light of the range of uncertainties associated with global economic and financial developments, the Committee decided that it was not useful at this time to express a judgment about the balance of risks.

At the conclusion of the discussion, the Committee voted to authorize and direct the Federal Reserve Bank of New York, until instructed otherwise, to execute transactions in the SOMA in accordance with the following domestic policy directive, to be released at 2:00 p.m.:

"Effective January 31, 2019, the Federal Open Market Committee directs the Desk to undertake open market operations as necessary to maintain the federal funds rate in a target range of 2½ to 2½ percent, including overnight reverse repurchase operations (and reverse repurchase operations with maturities of more than one day when necessary to accommodate weekend, holiday, or similar trading conventions) at an offering rate of 2.25 percent, in amounts limited only by the value of Treasury securities held outright in the System Open Market Account that are available for such operations and by a per counterparty limit of \$30 billion per day.

The Committee directs the Desk to continue rolling over at auction the amount of principal payments from the Federal Reserve's holdings of Treasury securities maturing during each calendar month that exceeds \$30 billion, and to continue reinvesting in agency mortgage-backed securities the amount of principal payments from the Federal Reserve's holdings of agency debt and agency mortgage-backed securities received during each calendar month that exceeds \$20 billion. Small deviations from

these amounts for operational reasons are acceptable.

The Committee also directs the Desk to engage in dollar roll and coupon swap transactions as necessary to facilitate settlement of the Federal Reserve's agency mortgage-backed securities transactions."

The vote also encompassed approval of the statement below to be released at 2:00 p.m.:

"Information received since the Federal Open Market Committee met in December indicates that the labor market has continued to strengthen and that economic activity has been rising at a solid rate. Job gains have been strong, on average, in recent months, and the unemployment rate has remained low. Household spending has continued to grow strongly, while growth of business fixed investment has moderated from its rapid pace earlier last year. On a 12-month basis, both overall inflation and inflation for items other than food and energy remain near 2 percent. Although market-based measures of inflation compensation have moved lower in recent months, survey-based measures of longer-term inflation expectations are little changed.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. In support of these goals, the Committee decided to maintain the target range for the federal funds rate at 21/4 to 2½ percent. The Committee continues to view sustained expansion of economic activity, strong labor market conditions, and inflation near the Committee's symmetric 2 percent objective as the most likely outcomes. In light of global economic and financial developments and muted inflation pressures, the Committee will be patient as it determines what future adjustments to the target range for the federal funds rate may be appropriate to support these outcomes.

In determining the timing and size of future adjustments to the target range for the federal funds rate, the Committee will assess realized and expected economic conditions relative to its maximum employment objective and its symmetric 2 percent inflation objective. This assessment will take into account a wide range of

information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments."

Voting for this action: Jerome H. Powell, John C. Williams, Michelle W. Bowman, Lael Brainard, James Bullard, Richard H. Clarida, Charles L. Evans, Esther L. George, Randal K. Quarles, and Eric Rosengren.

Voting against this action: None.

Consistent with the Committee's decision to leave the target range for the federal funds rate unchanged, the Board of Governors voted unanimously to leave the interest rates on required and excess reserve balances unchanged at 2.40 percent and voted unanimously to approve establishment of the primary credit rate at the

existing level of 3.00 percent, effective January 31, 2019.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, March 19–20, 2019. The meeting adjourned at 10:30 a.m. on January 30, 2019.

Notation Vote

By notation vote completed on January 8, 2019, the Committee unanimously approved the minutes of the Committee meeting held on December 18–19, 2018.

James A. Clouse Secretary