#### Minutes of the Federal Open Market Committee January 27–28, 2015

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, January 27, 2015, at 10:00 a.m. and continued on Wednesday, January 28, 2015, at 9:00 a.m.

#### PRESENT:

Janet L. Yellen, Chair

William C. Dudley, Vice Chairman

Lael Brainard

Charles L. Evans

Stanley Fischer

Jeffrey M. Lacker

Dennis P. Lockhart

Ierome H. Powell

Daniel K. Tarullo

John C. Williams

James Bullard, Esther L. George, Loretta J. Mester, and Eric Rosengren, Alternate Members of the Federal Open Market Committee

Richard W. Fisher, Narayana Kocherlakota, and Charles I. Plosser, Presidents of the Federal Reserve Banks of Dallas, Minneapolis, and Philadelphia, respectively

Thomas Laubach, Secretary and Economist Matthew M. Luecke, Deputy Secretary Michelle A. Smith, Assistant Secretary Scott G. Alvarez, General Counsel Thomas C. Baxter, Deputy General Counsel Steven B. Kamin, Economist David W. Wilcox, Economist

David Altig, Thomas A. Connors, Michael P. Leahy, Jonathan P. McCarthy, William R. Nelson, Glenn D. Rudebusch, Daniel G. Sullivan, and William Wascher, Associate Economists

Simon Potter, Manager, System Open Market Account

Lorie K. Logan, Deputy Manager, System Open Market Account

Robert deV. Frierson,<sup>1</sup> Secretary of the Board, Office of the Secretary, Board of Governors

Michael S. Gibson, Director, Division of Banking Supervision and Regulation, Board of Governors

Nellie Liang, Director, Office of Financial Stability Policy and Research, Board of Governors

James A. Clouse, Deputy Director, Division of Monetary Affairs, Board of Governors

William B. English, Senior Special Adviser to the Board, Office of Board Members, Board of Governors

Andrew Figura, David Reifschneider, and Stacey Tevlin, Special Advisers to the Board, Office of Board Members, Board of Governors

Trevor A. Reeve, Special Adviser to the Chair, Office of Board Members, Board of Governors

David E. Lebow, Senior Associate Director, Division of Research and Statistics, Board of Governors

Michael T. Kiley, Senior Adviser, Division of Research and Statistics, and Senior Associate Director, Office of Financial Stability Policy and Research, Board of Governors

Jeremy B. Rudd, Senior Adviser, Division of Research and Statistics, Board of Governors; Joyce K. Zickler, Senior Adviser, Division of Monetary Affairs, Board of Governors

Fabio M. Natalucci<sup>2</sup> and Gretchen C. Weinbach,<sup>3</sup> Associate Directors, Division of Monetary Affairs, Board of Governors

Attended the joint session of the Federal Open Market Committee and the Board of Governors.

<sup>&</sup>lt;sup>2</sup> Attended the portion of the meeting following the joint session of the Federal Open Market Committee and the Board of Governors.

<sup>&</sup>lt;sup>3</sup> Attended through the conclusion of the joint session of the Federal Open Market Committee and the Board of Governors.

- Joseph W. Gruber, Deputy Associate Director, Division of International Finance, Board of Governors; David López-Salido, Deputy Associate Director, Division of Monetary Affairs, Board of Governors
- Jennifer Gallagher, Special Assistant to the Board, Office of Board Members, Board of Governors
- Edward Nelson, Assistant Director, Division of Monetary Affairs, Board of Governors; Shane M. Sherlund, Assistant Director, Division of Research and Statistics, Board of Governors
- Burcu Duygan-Bump and Robert J. Tetlow,<sup>2</sup> Advisers, Division of Monetary Affairs, Board of Governors; Eric C. Engstrom, Adviser, Division of Research and Statistics, Board of Governors
- Penelope A. Beattie,<sup>1</sup> Assistant to the Secretary, Office of the Secretary, Board of Governors
- Dana L. Burnett and Christopher J. Gust, Section Chiefs, Division of Monetary Affairs, Board of Governors
- Katie Ross,¹ Manager, Office of the Secretary, Board of Governors
- David H. Small, Project Manager, Division of Monetary Affairs, Board of Governors
- Carlos O. Arteta, Senior Economist, Division of International Finance, Board of Governors; Kimberly Bayard, Senior Economist, Division of Research and Statistics, Board of Governors; Elmar Mertens, Senior Economist, Division of Monetary Affairs, Board of Governors
- Bernd Schlusche and Emre Yoldas, Economists, Division of Monetary Affairs, Board of Governors
- Peter M. Garavuso, Information Management Analyst, Division of Monetary Affairs, Board of Governors

- Blake Prichard, First Vice President, Federal Reserve Bank of Philadelphia
- Jeff Fuhrer and Alberto G. Musalem, Executive Vice Presidents, Federal Reserve Banks of Boston and New York, respectively
- Troy Davig, Michael Dotsey, Joshua L. Frost,<sup>4</sup> Evan F. Koenig, Samuel Schulhofer-Wohl, and Christopher J. Waller, Senior Vice Presidents, Federal Reserve Banks of Kansas City, Philadelphia, New York, Dallas, Minneapolis, and St. Louis, respectively
- Todd E. Clark and Douglas Tillett, Vice Presidents, Federal Reserve Banks of Cleveland and Chicago, respectively
- Robert L. Hetzel, Senior Economist, Federal Reserve Bank of Richmond

#### Annual Organizational Matters<sup>5</sup>

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 (the "Committee") for a term beginning January 27, 2015, had been received and that these individuals had executed their oaths of office.

The elected members and alternate members were as follows:

William C. Dudley, President of the Federal Reserve Bank of New York, with Christine Cumming, First Vice President of the Federal Reserve Bank of New York, as alternate

Jeffrey M. Lacker, President of the Federal Reserve Bank of Richmond, with Eric Rosengren, President of the Federal Reserve Bank of Boston, 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

<sup>&</sup>lt;sup>1</sup> Attended the joint session of the Federal Open Market Committee and the Board of Governors.

<sup>&</sup>lt;sup>2</sup> Attended the portion of the meeting following the joint session of the Federal Open Market Committee and the Board of Governors.

<sup>&</sup>lt;sup>4</sup> Attended through the discussion on liftoff tools and possible liftoff options.

Versions of the current Committee documents are available at www.federalreserve.gov/monetarypolicy/rules\_authorizations.htm.

Dennis P. Lockhart, President of the Federal Reserve Bank of Atlanta, with James Bullard, President of the Federal Reserve Bank of St. Louis, as alternate

John C. Williams, President of the Federal Reserve Bank of San Francisco, with Esther L. George, President of the Federal Reserve Bank of Kansas City, 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 2016:

Janet L. Yellen William C. Dudley Thomas Laubach Matthew M. Luecke David W. Skidmore Michelle A. Smith Scott G. Alvarez Thomas C. Baxter Richard M. Ashton Steven B. Kamin David W. Wilcox Chairman
Vice Chairman
Secretary and Economist
Deputy Secretary
Assistant Secretary
Assistant Secretary
General Counsel
Deputy General Counsel
Assistant General Counsel
Economist
Economist

David Altig
Thomas A. Connors
Eric M. Engen
Michael P. Leahy
Jonathan P. McCarthy
William R. Nelson
Glenn D. Rudebusch
Daniel G. Sullivan
John A. Weinberg
William Wascher

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 their selection was 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 Authorization for Domestic Open Market Operations was approved with two sets of amendments. The first set of amendments aimed at simplifying the language by defining common terms, eliminating duplication of language, and standardizing references to the Committee.7 The second set of amendments clarified or modified existing authority, in particular by introducing the defined term "Selected Bank" as part of prudent planning to simplify transfer of authority from the Federal Reserve Bank of New York to another Federal Reserve Bank selected by the Committee in the event of a significant contingency, removing the authorization to use agents for agency mortgage-backed securities ("MBS") transactions, defining the types of collateral accepted in securities lending operations described in paragraph 3, and updating the language relating to the Chair's authority to act in exceptional circumstances.8 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 27, 2015)

- 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

<sup>&</sup>lt;sup>6</sup> Effective February 2, 2015.

<sup>&</sup>lt;sup>7</sup> To improve consistency, references to "the FOMC," "the Federal Open Market Committee," and "the Committee" were standardized, where appropriate, around the convention of "the Committee." This change was implemented in other affected documents.

<sup>8</sup> The change regarding the introduction of the term "Selected Bank" was implemented in other affected documents, including the Authorization for Foreign Currency Operations, Procedural Instructions with Respect to Foreign Currency Operations, and Program for Security of FOMC Information.

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.
- 2. The Committee authorizes the Selected Bank to undertake transactions of the type described in paragraph 1 from time to time for the purpose of testing operational readiness, subject to the following limitations:
  - A. All transactions authorized in this paragraph 2 shall be conducted with prior notice to the Committee;
  - B. The aggregate par value of the transactions authorized in this paragraph 2 that are of the type described in paragraph 1.A.i shall not exceed \$5 billion per calendar year; and
  - C. The outstanding amount of the transactions described in paragraph 1.A.ii shall not exceed \$5 billion at any given time.
- 3. 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 3; and
  - iii. Accept agency securities as collateral only for a loan of agency securities authorized in this paragraph 3.
- 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 intraday reverse 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.

- 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 to amend the Authorization for Foreign Currency Operations and the Procedural Instructions with Respect to Foreign Currency Operations, and to reaffirm the Foreign Currency Directive in the form shown below. The approval of these documents included approval of the System's warehousing agreement with the U.S. Treasury. A change was made to the Authorization for Foreign Currency Operations to increase the duration limit of the foreign currency portfolio to 24 months from 18 months. This change was made to provide greater flexibility in the management of the foreign currency portfolio, in an environment in which interest rates are low in many major economies. Mr. Lacker dissented in the votes on the Authorization for Foreign Currency Operations and the Foreign Currency Directive to indicate his opposition to foreign currency intervention by the Federal Reserve. In his view, such intervention would be ineffective if it did not also signal a shift in domestic monetary policy; and if it did signal such a shift, it could potentially compromise the Federal Reserve's monetary policy independence.

## AUTHORIZATION FOR FOREIGN CURRENCY OPERATIONS

(As amended effective January 27, 2015)

- 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"), for the System Open Market Account, to the extent necessary to carry out the Committee's foreign currency directive and express authorizations by the Committee pursuant thereto, and in conformity with such procedural instructions as the Committee may issue from time to time:
  - A. To purchase and sell the following foreign currencies in the form of cable transfers through spot or forward transactions on the open market at home and abroad, including transactions with the U.S. Treasury, with the U.S. Exchange Stabilization Fund established by section 10 of the Gold Reserve Act of 1934, with foreign monetary authorities, with the Bank for International Settlements, and with other international financial institutions:

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

- B. To hold balances of, and to have outstanding forward contracts to receive or to deliver, the foreign currencies listed in paragraph A above.
- C. To draw foreign currencies and to permit foreign banks to draw dollars under the arrangements listed in paragraph 2 below, in accordance with the Procedural Instructions with Respect to Foreign Currency Operations.
- D. To maintain an overall open position in all foreign currencies not exceeding \$25.0 billion. For this purpose, the overall open position in all foreign currencies is defined as the sum (disregarding signs) of net positions in individual currencies, excluding changes

in dollar value due to foreign exchange rate movements and interest accruals. The net position in a single foreign currency is defined as holdings of balances in that currency, plus outstanding contracts for future receipt, minus outstanding contracts for future delivery of that currency, i.e., as the sum of these elements with due regard to sign.

- 2. The Committee directs the Selected Bank to maintain for the System Open Market Account (subject to the requirements of section 214.5 of Regulation N, Relations with Foreign Banks and Bankers):
  - A. Reciprocal currency arrangements with the following foreign banks:

Foreign bank Amount of arrangement (millions of dollars equivalent)

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

B. Standing dollar liquidity swap arrangements with the following foreign banks:

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

C. Standing foreign currency liquidity swap arrangements with the following foreign banks:

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

Dollar and foreign currency liquidity swap arrangements have no pre-set size limits. Any new swap arrangements shall be referred for review and approval to the Committee. All swap arrangements are subject to annual review and approval by the Committee.

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

- 4. It shall be the normal practice to arrange with foreign central banks for the coordination of foreign currency transactions. In making operating arrangements with foreign central banks on System holdings of foreign currencies, the Selected Bank shall not commit itself to maintain any specific balance, unless authorized by the Committee. Any agreements or understandings concerning the administration of the accounts maintained by the Selected Bank with the foreign banks designated by the Board of Governors under section 214.5 of Regulation N shall be referred for review and approval to the Committee.
- Foreign currency holdings shall be invested to ensure that adequate liquidity is maintained to meet anticipated needs and so that each currency portfolio shall generally have an average duration of no more than 24 months (calculated as Macaulay duration). Such investments may include buying or selling outright obligations of, or fully guaranteed as to principal and interest by, a foreign government or agency thereof; buying such securities under agreements for repurchase of such securities; selling such securities under agreements for the resale of such securities; and holding various time and other deposit accounts at foreign institutions. In addition, when appropriate in connection with arrangements to provide investment facilities for foreign currency holdings, U.S. government securities may be purchased from foreign central banks under agreements for repurchase of such securities within 30 calendar days.
- All operations undertaken pursuant to the preceding paragraphs shall be reported promptly to the Foreign Currency Subcommittee (the "Subcommittee") and the Committee. The Subcommittee consists of the Chairman and Vice Chairman of the Committee, the Vice Chairman of the Board of Governors, and such other member of the Board as the Chairman may designate (or in the absence of members of the Board serving on the Subcommittee, other Board members designated by the Chairman as alternates, and in the absence of the Vice Chairman of the Committee, the Vice Chairman's alternate). Meetings of the Subcommittee shall be called at the request of any member, or at the request of the manager, System Open Market Account ("manager"), for the purposes of reviewing recent or contemplated operations and of consulting with the manager on other matters relating to the manager's responsibilities. At the request of any member of the Subcommittee, questions arising from such reviews and consultations shall be referred for determination to the Committee.
- 7. The Chairman is authorized:
- A. With the approval of the Committee, to enter into any needed agreement or understanding with the

- Secretary of the Treasury about the division of responsibility for foreign currency operations between the System and the Treasury;
- B. To keep the Secretary of the Treasury fully advised concerning System foreign currency operations, and to consult with the Secretary on policy matters relating to foreign currency operations;
- C. From time to time, to transmit appropriate reports and information to the National Advisory Council on International Monetary and Financial Policies.
- 8. All Federal Reserve Banks shall participate in the foreign currency operations for System Account in accordance with paragraph 3G(1) of the Board of Governors' Statement of Procedure with Respect to Foreign Relationships of Federal Reserve Banks dated January 1, 1944.
- 9. The Committee authorizes the Selected Bank to undertake transactions of the type described in paragraphs 1, 2, and 5, 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.

## FOREIGN CURRENCY DIRECTIVE (As reaffirmed effective January 27, 2015)

- 1. System operations in foreign currencies shall generally be directed at countering disorderly market conditions, provided that market exchange rates for the U.S. dollar reflect actions and behavior consistent with IMF Article IV, Section 1.
- 2. To achieve this end the System shall:
  - A. Undertake spot and forward purchases and sales of foreign exchange.
  - B. Maintain reciprocal currency arrangements with foreign central banks in accordance with the Authorization for Foreign Currency Operations.
- C. Maintain standing dollar liquidity swap arrangements with foreign banks in accordance with the Authorization for Foreign Currency Operations.
- D. Maintain standing foreign currency liquidity swap arrangements with foreign banks in accordance with the Authorization for Foreign Currency Operations.
- E. Cooperate in other respects with central banks of other countries and with international monetary institutions.
- 3. Transactions may also be undertaken:

- A. To adjust System balances in light of probable future needs for currencies.
- B. To provide means for meeting System and Treasury commitments in particular currencies, and to facilitate operations of the Exchange Stabilization Fund.
- C. For such other purposes as may be expressly authorized by the Committee.
- 4. System foreign currency operations shall be conducted:
  - A. In close and continuous consultation and cooperation with the United States Treasury;
  - B. In cooperation, as appropriate, with foreign monetary authorities; and
  - C. In a manner consistent with the obligations of the United States in the International Monetary Fund regarding exchange arrangements under IMF Article IV.

## PROCEDURAL INSTRUCTIONS WITH RESPECT TO FOREIGN CURRENCY OPERATIONS (As a granded official Lagrange 27, 2015)

(As amended effective January 27, 2015)

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

- 1. For the reciprocal currency arrangements authorized in paragraphs 2.A of the Authorization for Foreign Currency Operations:
  - A. Drawings must be approved by the Subcommittee (or by the Chairman, if the Chairman believes that consultation with the Subcommittee is not feasible in the time available) if the swap drawing proposed by a foreign bank does not exceed the larger of (i) \$200 million or (ii) 15 percent of the size of the swap arrangement.
  - B. Drawings must be approved by the Committee (or by the Subcommittee, if the Subcommittee believes that consultation with the full Committee is

- not feasible in the time available, or by the Chairman, if the Chairman believes that consultation with the Subcommittee is not feasible in the time available) if the swap drawing proposed by a foreign bank exceeds the larger of (i) \$200 million or (ii) 15 percent of the size of the swap arrangement.
- C. The manager shall also consult with the Subcommittee or the Chairman about proposed swap drawings by the System.
- D. Any changes in the terms of existing swap arrangements shall be referred for review and approval to 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.
- 2. For the dollar and foreign currency liquidity swap arrangements authorized in paragraphs 2.B and 2.C of the Authorization for Foreign Currency Operations:
  - A. Drawings must be approved by the Chairman in consultation with the Subcommittee. The Chairman or the Subcommittee will consult with the Committee prior to the initial drawing on the dollar or foreign currency liquidity swap lines if possible under the circumstances then prevailing; authority to approve subsequent drawings for either the dollar or foreign currency liquidity swap lines may be delegated to the manager by the Chairman.
  - B. Any changes in the terms of existing swap arrangements shall be referred for review and approval to 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.
- 3. Any operation must be approved by:
  - A. The Subcommittee (or by the Chairman, if the Chairman believes that consultation with the Subcommittee is not feasible in the time available) if it:
    - i. Would result in a change in the System's overall open position in foreign currencies exceeding \$300 million on any day or \$600 million since the most recent regular meeting of the Committee.
    - ii. Would result in a change on any day in the System's net position in a single foreign currency exceeding \$150 million, or \$300 million when the operation is associated with repayment of swap drawings.

- iii. Might generate a substantial volume of trading in a particular currency by the System, even though the change in the System's net position in that currency (as defined in paragraph 1.D of the Authorization for Foreign Currency Operations) might be less than the limits specified in 3.A.ii.
- B. The Committee (or by the Subcommittee, if the Subcommittee believes that consultation with the full Committee is not feasible in the time available, or by the Chairman, if the Chairman believes that consultation with the Subcommittee is not feasible in the time available) if it would result in a change in the System's overall open position in foreign currencies exceeding \$1.5 billion since the most recent regular meeting of the Committee.
- 4. The Committee authorizes the Selected Bank to undertake transactions of the type described in paragraphs 1, 2, and 5 of the Authorization for Foreign Currency Operations 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.

By unanimous vote, the Committee amended its Program for Security of FOMC Information with changes to how Federal Reserve Banks classify and access Committee information.

In its annual reconsideration of the Statement on Longer-Run Goals and Monetary Policy Strategy, participants generally agreed that only a minor update was required at this meeting. Several participants observed that this statement had helped to increase public understanding of the Committee's goals and policy framework. It was noted, however, that the Committee should continue to discuss possible enhancements to the statement over the coming year.

Following the discussion, the Committee voted to reaffirm the statement with an updated reference to participants' estimates of the longer-run normal unemployment rate. Mr. Tarullo abstained because he did not believe the statement reflects sufficient consensus in the principles underlying the Committee's policy actions so as to significantly advance public understanding of its monetary policy strategy.

# STATEMENT ON LONGER-RUN GOALS AND MONETARY POLICY STRATEGY (As amended effective January 27, 2015)

"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. Communicating this inflation goal clearly to the public helps keep longerterm 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, FOMC participants' estimates of the longer-run normal rate of unemployment had a central tendency of 5.2 percent to 5.5 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 the Federal Reserve's Balance Sheet

In a joint session of the Committee and the Board of Governors of the Federal Reserve System, the manager of the System Open Market Account (SOMA) reported on developments in domestic and foreign financial markets. The deputy manager followed with a review of System open market operations conducted during the period since the Committee met on December 16–17, 2014. The deputy manager also discussed the outcomes of recent tests of term and overnight reverse repurchase agreements (term RRPs and ON RRPs, respectively). These tests suggested that the combination of term RRP and ON RRP operations had been effective in supporting money market rates leading into and over year-end. The presentation also outlined some staff recommendations for further testing of Term Deposit Facility operations.

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

#### Liftoff Tools and Possible Liftoff Options

A staff briefing provided some background on possible options for the use of supplementary tools, in addition to interest on excess reserves (IOER), that the Committee could choose to use during the early stages of policy normalization. The purpose of these options was to

help ensure sufficient control over the federal funds rate and other short-term interest rates during this period while mitigating potential risks associated with particular policy tools. The presentation discussed the possibility of establishing, on a temporary basis, an aggregate cap for ON RRP operations that was substantially above the cap the Committee had chosen for the purposes of testing such operations. In addition, the presentation discussed the possible use of term RRP operations, either before or after the commencement of policy firming, as a way to reinforce control of short-term interest rates and to manage the size of the ON RRP program. Other possible options presented at the briefing included adjusting the values of the IOER and ON RRP rates associated with a given target range for the federal funds rate and the use of term deposits.

In their discussion of these issues, participants generally agreed that it was very important for the commencement of policy firming to proceed successfully. Consequently, most were prepared to take the steps necessary to ensure that the federal funds rate traded within the target range established by the Federal Open Market Committee (FOMC). However, a few participants noted that day-to-day volatility in the federal funds rate, potentially including temporary movements outside the target range, would not be surprising, and that historical experience suggested that such temporary movements had few, if any, implications for overall financial conditions or the aggregate economy.

With regard to the appropriate setting of the cap for ON RRP operations at the beginning of normalization, the staff reported that testing to date suggested that ON RRP operations have generally been successful in establishing a floor on the level of the federal funds effective rate and other short-term interest rates, as long as market participants judge that the aggregate cap is quite unlikely to bind. Against this backdrop, most meeting participants indicated that a sizable ON RRP cap would be appropriate to support policy implementation at the time of liftoff, and a couple of participants suggested that the aggregate cap might be suspended for a time. A couple of participants expressed continued concerns about the potential risks to financial stability associated with a large ON RRP facility and the possible effect of such a facility on patterns of financial intermediation. Moreover, some participants were concerned that a decision to allow a temporary increase in the maximum size of the ON RRP facility could be viewed by market participants as a signal that a large ON RRP facility would be maintained for a longer period than those participants deemed appropriate. While acknowledging these concerns, many participants believed that a temporarily elevated cap on the ON RRP operations at a time when the Committee saw conditions as appropriate to begin normalization would likely pose limited risks; another participant judged that an ON RRP program was, in any case, unlikely to materially increase the risks to financial stability. Some participants noted that a relatively high cap could be established and then reduced fairly soon after the initial policy firming if it was determined that it was not needed, and that such a reduction could help underscore the Committee's intent to use such a facility only to the extent necessary. A number of participants emphasized that the Committee should develop plans to ensure that such a facility is temporary and that it can be phased out once it is no longer needed to help control the federal funds rate.

With regard to the possible use of term RRP operations as an additional supplementary tool, participants noted that recent testing showed that term RRP operations ahead of the year-end were associated with a significant decline in the level of take-up at ON RRP operations. The staff presentation suggested that risks to financial stability associated with term RRPs could be somewhat lower than those associated with ON RRP operations because term RRP operations would be conducted only on selected dates, the Federal Reserve would set the quantity auctioned, and the rate on term RRPs would be determined by the auction process. However, a few participants expressed the view that term RRPs were unlikely to lower risks to financial stability significantly. In addition, some participants noted that the use of term RRP operations could complicate communications. A few others observed that the Committee should not design its operations to reduce year-end or quarter-end volatility induced by financial firms' reporting practices. Nonetheless, many participants agreed that the use of term RRP operations during the period of policy tightening could be useful in some situations.

With regard to the potential use of other tools, several participants noted that the IOER and ON RRP rates should be set at the top and bottom, respectively, of the target range for the federal funds rate. To deviate from such a structure would complicate communications about the policy framework and therefore should be avoided if possible. However, some participants judged that adjustments to the relationship of the IOER rate and the ON RRP rate to the target range for the federal funds rate might, in some circumstances, be helpful for improving control of the federal funds rate. A few par-

ticipants noted that use of term deposits during the tightening phase could also be appropriate in some circumstances.

The staff presentation also discussed a technical issue related to the calculation of the payment of interest on reserves. Under current arrangements, an increase in the IOER rate that is implemented in the middle of a reserve maintenance period is not fully reflected in interest payments to depository institutions until the beginning of a new maintenance period. Participants generally suggested that it would be useful for the staff to investigate changes in the method used to determine the interest payments on reserves that could tighten the link between the IOER rate in place each day and the level of reserve balances held by depository institutions each day.

At the conclusion of their discussion, participants generally agreed that it would be useful to discuss further at coming meetings specific calibrations of policy tools that could be used during the early stages of policy normalization. In addition, many noted that it would be useful to communicate additional information to the public on these issues to provide greater clarity about the Committee's approach to policy implementation at that time.

A staff briefing outlined two proposals that the Committee could consider for further testing of term RRP operations. In the first of these proposals, the Desk would conduct a series of preannounced term RRP operations that would span the end of the first quarter. In the second proposal, the Desk would conduct small term RRP operations in February and early March, in addition to the quarter-end option presented in the first proposal. In their discussion of term RRP testing, participants noted that the testing could provide further information about the substitutability between the ON and term RRP operations, including outside year-end and quarter-end periods. A number of participants emphasized that, even if the Committee conducted additional tests, it had not yet decided whether to use term RRP operations as part of policy normalization.

Following the discussion of the testing of term RRP operations, the Committee approved the following resolution on term RRP testing over the end of the first quarter of 2015:

"During the period of March 19, 2015, to March 30, 2015, the Federal Open Market Committee (FOMC) authorizes the Federal Reserve Bank of New York to conduct a series of term reverse repurchase operations involving U.S. government securities. Such operations shall: (i) mature no later than April 9, 2015; (ii) be subject to an overall size limit of \$200 billion outstanding at any one time; (iii) be subject to a maximum bid rate of five basis points above the ON RRP offering rate in effect on the day of the operation; (iv) be awarded to all submitters: (A) at the highest submitted rate if the sum of the bids received is less than or equal to the preannounced size of the operation, or (B) at the stop-out rate, determined by evaluating bids in ascending order by submitted rate up to the point at which the total quantity of bids equals the preannounced size of the operation, with all bids below this rate awarded in full at the stop-out rate and all bids at the stop-out rate awarded on a pro rata basis, if the sum of the counterparty offers received is greater than the preannounced size of the operation. Such operations may be for forward settlement. The System Open Market Account manager will inform the FOMC in advance of the terms of the planned operations. The Chair must approve the terms of, timing of the announcement of, and timing of the operations. These operations shall be conducted in addition to the authorized overnight reverse repurchase agreements, which remain subject to a separate overall size limit of \$300 billion per day."

The Committee also approved the following resolution on testing term RRP operations during February and March:

"During the period of February 12, 2015, to March 10, 2015, the Federal Open Market Committee (FOMC) authorizes the Federal Reserve Bank of New York to conduct a series of term reverse repurchase operations involving U.S. government securities. Such operations shall: (i) mature no later than March 12, 2015; (ii) be subject to an overall size limit of \$50 billion outstanding at any one time; (iii) be subject to a maximum bid rate of five basis points above the ON RRP offering rate in effect on the day of the operation; (iv) be awarded to all submitters: (A) at the highest submitted rate if the sum of the bids received is less than or equal to the preannounced size of the operation, or (B) at the stop-out rate, determined by evaluating bids

in ascending order by submitted rate up to the point at which the total quantity of bids equals the preannounced size of the operation, with all bids below this rate awarded in full at the stop-out rate and all bids at the stop-out rate awarded on a pro rata basis, if the sum of the counterparty offers received is greater than the preannounced size of the operation. Such operations may be for forward settlement. The System Open Market Account manager will inform the FOMC in advance of the terms of the planned operations. The Chair must approve the terms of, timing of the announcement of, and timing of the operations. These operations shall be conducted in addition to the authorized overnight reverse repurchase agreements, which remain subject to a separate overall size limit of \$300 billion per day."

Mr. Lacker dissented in the votes on both resolutions because he felt that the testing to date had already provided sufficient information about this tool, and that authorizing further testing could encourage the incorrect impression that the Committee had already decided that it would be engaging in term RRP operations during the period of policy normalization.

The Board meeting concluded at the end of the discussion of liftoff tools and possible liftoff options.

#### Staff Review of the Economic Situation

The information reviewed for the January 27–28 meeting indicated that economic activity expanded at a solid pace over the second half of 2014, and that labor market conditions had again improved in recent months. Consumer price inflation moved further below the FOMC's longer-run objective of 2 percent, held down by continuing large decreases in energy prices. While longer-term market-based measures of inflation compensation declined substantially in recent months, survey measures of longer-run inflation expectations remained stable.

Total nonfarm payroll employment expanded in December and the gains for October and November were revised up, putting the increase for the fourth quarter above that for the third quarter. The unemployment rate declined to 5.6 percent in December, the labor force participation rate decreased, and the employment-to-population rate was unchanged. The share of workers employed part time for economic reasons declined. The

rate of private-sector job openings moved up in November, while the rates of hiring and of quits edged down but remained well above their year-earlier readings.

Industrial production rose at a robust pace in the fourth quarter, with a strong increase in manufacturing output and a modest gain in mining output. Automakers' assembly schedules for the first quarter and broader indicators of manufacturing production, such as the readings on new orders from national and regional manufacturing surveys, generally pointed to moderate gains in factory output early this year. In contrast, some indicators of mining activity, such as counts of drilling rigs in operation, weakened, presumably reflecting the recent sharp declines in energy prices.

Real personal consumption expenditures (PCE) appeared to have risen at a robust pace over the second half of 2014. Data on spending in the third quarter were revised up, and the components of nominal retail sales used to construct estimates of PCE rose briskly in the fourth quarter. Light motor vehicle sales in the fourth quarter maintained their robust third-quarter pace. Important factors influencing household spending remained supportive of further solid gains in real PCE early this year. Real disposable personal income increased in November; since then, continued declines in energy prices likely raised the purchasing power of households' incomes. Households' net worth likely increased as home values and equity prices advanced, and consumer sentiment, as measured by the Thomson Reuters/University of Michigan Surveys of Consumers, moved up in early January to its highest level in more than a decade.

The pace of housing market activity improved somewhat but remained slow. Starts of new single-family homes increased in December to their highest level since 2008, and permits for new construction also moved higher. Starts of multifamily units were unchanged in December and within the range they have been in for the past year. Sales of new homes increased, on net, in November and December, while sales of existing homes declined, on average, over those two months.

Real private expenditures for business equipment and intellectual property appeared to decelerate in the fourth quarter. Nominal orders and shipments of nondefense capital goods, excluding aircraft, declined in November and December. Moreover, the level of new orders for these capital goods was only a little above that for shipments, which pointed to modest near-term gains in business equipment spending despite relatively positive readings on business conditions from national and regional

surveys. Firms' nominal spending for nonresidential structures edged down in November but remained higher than in the third quarter.

Real federal government purchases appeared likely to have decreased sharply in the fourth quarter, reversing much of the surprisingly strong increase in the third quarter. Real state and local government purchases were rising modestly in the fourth quarter, as nominal construction expenditures for October and November were little changed, on net, and the payrolls of these governments increased somewhat.

The U.S. international trade deficit narrowed substantially in November, with imports declining more than exports. The decrease in the value of imports stemmed in large part from a reduction in the value of petroleum imports, reflecting both lower prices and volumes. However, many other categories of goods imports were also weaker. Export declines were concentrated in capital goods, particularly aircraft. Despite the narrowing of the nominal trade deficit in November, real net exports appeared to be on track to decline in the fourth quarter after adding considerably to real gross domestic product (GDP) growth in the third quarter.

Total U.S. consumer prices, as measured by the PCE price index, increased 1<sup>1</sup>/<sub>4</sub> percent over the 12 months ending in November, while core prices, as measured by PCE prices excluding food and energy, rose about 1½ percent; consumer energy prices declined, and consumer food prices increased faster than overall prices. Over the 12 months ending in December, total inflation as measured by the consumer price index (CPI) was <sup>3</sup>/<sub>4</sub> percent, while core CPI inflation was 1½ percent. Over the 3 months ending in December, the total CPI decreased at an annual rate of 2½ percent, reflecting recent declines in consumer energy prices, and the core CPI increased at a 1 percent pace. Measures of expected long-run inflation from a variety of surveys, including the Michigan survey and the Desk's Survey of Primary Dealers, remained stable. In contrast, market-based measures of inflation compensation 5 to 10 years ahead declined further. Over the 12 months ending in December, nominal average hourly earnings for all employees increased only slightly faster than core consumer price inflation.

Foreign real GDP growth appeared to increase slightly in the fourth quarter. In the euro area, retail sales, car registrations, and industrial production through November were above their third-quarter averages, and in Japan, strengthening consumption and exports suggested a recovery of output after two quarters of contraction.

However, growth slowed in China, partly reflecting further moderation in residential investment, and declining construction activity also contributed to slowing GDP growth in Korea and the United Kingdom. Inflation in the advanced foreign economies declined sharply at the end of last year, amid rapidly falling energy prices. By contrast, inflation in the emerging market economies fell only modestly, as several of these economies have government-administered energy prices and some have been experiencing upward price pressures from currency depreciations.

#### Staff Review of the Financial Situation

Over the intermeeting period, amid trading that was volatile at times, longer-term sovereign yields in the United States and other advanced economies declined. These moves were attributed in part to a deterioration in market sentiment associated with downward pressure on inflation, increased concern about the global economic outlook, and announced and anticipated foreign central bank policies. Moreover, continued sharp declines in oil prices and U.S. economic data releases that were viewed by investors as a bit weaker than anticipated, on balance, reportedly weighed on sentiment.

Federal Reserve communications over the intermeeting period were apparently seen as about in line with expectations on balance. However, reflecting in part the deterioration in market sentiment, the expected path for the federal funds rate implied by market quotes shifted down. Results from the Desk's January Survey of Primary Dealers indicated that dealers continued to put the highest probability on scenarios in which the FOMC chooses to commence policy firming around the middle of the year, although the average probability assigned to a commencement after June increased somewhat.

Yields on nominal Treasury securities continued to move lower over the intermeeting period, with market expectations of the policy rate path being revised downward, and with term premiums declining, in part reflecting actual and expected policy easing abroad. On balance, the Treasury yield curve flattened over the intermeeting period, while interest rate volatility increased somewhat. Although the measure of inflation compensation over the next 5 years based on Treasury Inflation-Protected Securities (TIPS) increased, inflation compensation 5 to 10 years ahead declined further to its lowest level in a decade. Yields on 5- and 10-year TIPS moved lower over the period.

Over the intermeeting period, U.S. equity markets were volatile. Option-implied volatility for the S&P 500 index declined, on balance, but remained in the upper half of

the range seen over the past year. Broad U.S. equity price indexes moved higher, while stock prices for large domestic banking organizations moved lower on net. Corporate bond spreads were also volatile over the intermeeting period but were little changed, on net, for investment-grade issuers and ended the period lower for speculative-grade issuers, particularly energy companies.

Credit flows to nonfinancial firms generally remained strong through the last quarter of 2014, though they slowed somewhat for riskier firms. Gross corporate bond issuance continued to be solid, although speculative-grade bond issuance declined late in the year and remained subdued into January. Commercial and industrial loans on banks' books continued to expand at a robust rate in the fourth quarter of 2014, consistent with the stronger loan demand from large and middle-market firms reported in the January Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS). Issuance of syndicated leveraged loans in the fourth quarter was at its slowest pace in two years, as spreads on newly issued loans increased and refinancing activity declined significantly. Issuance of collateralized loan obligations declined but remained elevated; 2014 was the strongest year on record for the issuance of such securities.

Financing conditions in the commercial real estate (CRE) sector stayed accommodative. In the January SLOOS, banks reported that standards continued to ease, on net, for CRE lending and noted stronger demand for all CRE loan types. Issuance of commercial mortgage-backed securities continued at a solid pace in November and December.

Residential mortgage credit conditions, while remaining tight, showed some further signs of gradual easing. According to the January SLOOS, lending standards eased for a number of categories of residential mortgage loans in the fourth quarter. The price of mortgage credit for qualified borrowers declined again over the intermeeting period, with interest rates on 30-year fixed-rate mortgages reaching levels close to their all-time lows. Refinance applications rose near the end of the intermeeting period.

Conditions in consumer credit markets stayed largely accommodative over the intermeeting period. Auto and student loan balances continued to post significant gains through November, while the expansion of credit card loans on banks' books remained moderate during the fourth quarter as a whole. Respondents to the January SLOOS indicated that demand for auto and credit card loans had strengthened further in the fourth quarter. Consumer credit quality has remained strong on balance.

The credit performance of auto loans, however, reportedly deteriorated a bit further for some lenders, and several banks indicated in the January SLOOS that they expect the performance of subprime auto loans to worsen this year.

The U.S. dollar strengthened against the currencies of most other advanced economies amid investor concerns about growth in those economies as well as increased monetary accommodation in some of them; the dollar was largely unchanged, on average, against the currencies of emerging market economies. Sovereign yields abroad moved lower, with euro-area yields reflecting the expected and actual easing of the stance of monetary policy by the European Central Bank (ECB) and U.K. yields responding to a shift in expectations toward a later start of Bank of England policy firming. Global equity markets were broadly higher, rebounding from declines in mid-December.

Several central banks announced monetary policy actions during the period. The ECB announced that it would expand its asset purchase program to include the purchase of sovereign bonds; the euro depreciated significantly against the dollar both in anticipation of and following this announcement. The Swiss National Bank (SNB) ended its policy of defending the exchange rate floor of 1.20 Swiss francs per euro, resulting in a significant appreciation of the franc. At the same time, the SNB reduced policy rates, moving the rate it pays on deposits and its target range for Swiss franc LIBOR, or London interbank offered rate, further into negative territory. The Bank of Canada, National Bank of Denmark, Reserve Bank of India, and Central Bank of Turkey also cut policy rates in January to support their economies and, in some cases, to foster higher inflation, while the Central Bank of Brazil raised rates in response to concerns about elevated inflation.

The staff provided its latest report on potential risks to financial stability. Relatively high levels of capital and liquidity in the banking sector, moderate levels of maturity transformation in the financial sector, and a relatively subdued pace of borrowing by the nonfinancial sector continued to be seen as important factors limiting the vulnerability of the financial system to adverse shocks. However, the staff report noted valuation pressures in some asset markets. Such pressures were most notable in corporate debt markets, despite some easing in recent months. In addition, valuation pressures appear to be building in the CRE sector, as indicated by rising prices and the easing in lending standards on CRE

loans. Finally, the increased role of bond and loan mutual funds, in conjunction with other factors, may have increased the risk that liquidity pressures could emerge in related markets if investor appetite for such assets wanes. The effects on the largest banking firms of the sharp decline in oil prices and developments in foreign exchange markets appeared limited, although other institutions with more concentrated exposures could face strains if oil prices remain at current levels for a prolonged period.

#### Staff Economic Outlook

The staff estimated that real GDP growth in the second half of 2014 was faster than in the projection prepared for the December meeting, primarily reflecting stronger-than-expected consumer spending. Even so, real GDP was still estimated to have risen more slowly in the fourth quarter than in the third quarter, as changes in both net exports and federal government purchases appeared likely to have subtracted from real GDP growth in the fourth quarter following large positive contributions in the previous quarter.

The staff's outlook for economic activity over the first half of 2015 was revised up since December, in part reflecting an anticipated boost to consumer spending from declines in energy prices. However, the forecast for real GDP growth over the medium term was little revised, as the greater momentum implied by recent spending gains and the support to household spending from lower energy prices was about offset by the restraint implied by the recent appreciation of the dollar. The staff continued to forecast that real GDP would expand at a modestly faster pace in 2015 and 2016 than it did in 2014 and that it would rise more quickly than potential output, supported by increases in consumer and business confidence and a pickup in foreign economic growth, as well as by a U.S. monetary policy stance that was assumed to remain highly accommodative for some time. In 2017, real GDP growth was projected to begin slowing toward, but to remain slightly above, the rate of growth of potential output. The expansion in economic activity over the medium term was anticipated to lead to a slow reduction in resource slack, and the unemployment rate was expected to decline gradually and to move slightly below the staff's estimate of its longer-run natural rate for a time.

The staff's forecast for inflation in the near term was revised down, as further sharp declines in crude oil prices since the December FOMC meeting pointed toward a somewhat larger transitory decrease in the total PCE price index early this year than was previously projected.

In addition, the incoming data on consumer prices apart from those for energy showed a somewhat smaller rise than anticipated. The staff's forecast for inflation in 2016 and 2017 was essentially unchanged, with inflation projected to remain below the Committee's 2 percent objective. Nevertheless, inflation was projected to reach 2 percent over time, with inflation expectations in the longer run assumed to be consistent with the Committee's objective and slack in labor and product markets anticipated to fade.

The staff viewed the uncertainty around its projections for real GDP growth, the unemployment rate, and inflation as similar to the average over the past 20 years. The risks to the forecast for real GDP growth were viewed as tilted a little to the downside, reflecting the staff's assessment that neither monetary policy nor fiscal policy was well positioned to help the economy withstand adverse shocks. At the same time, the staff viewed the risks around its outlook for the unemployment rate as roughly balanced. The downside risks to the forecast for inflation were seen as having increased somewhat, partly reflecting the recent soft monthly readings on core inflation.

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

In their discussion of the economic situation and the outlook, meeting participants regarded the information received over the intermeeting period as indicating that economic activity had been expanding at a solid pace. Although growth likely slowed from the rapid rate recorded for the third quarter of 2014, a variety of indicators suggested that real GDP continued to grow faster than potential GDP late in the year and during January. Labor market conditions improved further, with strong job gains and a lower unemployment rate; participants judged that the underutilization of labor resources was continuing to diminish. Participants expected that, over the medium term, real economic activity would increase at a moderate pace sufficient to lead to further improvements in labor market conditions toward levels consistent with the Committee's objective of maximum employment. Inflation had declined further below the Committee's longer-run objective, largely reflecting declines in energy prices, and was anticipated to decline further in the near term. Market-based measures of inflation compensation 5 to 10 years ahead had registered a further decline, while survey-based measures of longerterm inflation expectations remained stable. Participants generally anticipated that inflation would rise gradually toward the Committee's 2 percent objective as the labor market improved further and the transitory effects of lower energy prices and other factors dissipated. The risks to the outlook for economic activity and the labor market were seen as nearly balanced. Participants generally regarded the net effect of the recent decline in energy prices as likely to be positive for economic activity and employment. Many participants continued to judge that a deterioration in the foreign economic situation could pose downside risks to the outlook for U.S. economic growth. Several saw those risks as having diminished over the intermeeting period, with lower oil prices and actions of foreign central banks both being supportive of growth abroad, but others pointed to heightened geopolitical and other risks.

With respect to the U.S. economy, participants noted that household spending was rising moderately. Recent declines in oil prices, which had boosted household purchasing power, were among the factors likely to underpin consumer spending in coming months; other factors cited as supporting household spending included low interest rates, easing credit standards, and continued gains in employment and income. However, it was noted that the recovery in the housing sector remained slow and that tepid nominal wage growth, if continued, could become a significant restraining factor for household spending.

Industry contacts pointed to generally solid business conditions, with businesses in many parts of the country continuing to express optimism about prospects for further improvement in 2015. Although manufacturing activity appeared to have slowed somewhat over the intermeeting period in some regions, business contacts suggested that this slowing was likely to prove temporary, and information from some parts of the country suggested that capital investment was poised to pick up. Several participants noted that there were signs of layoffs in the oil and gas industries, and that persistently low energy prices might prompt a larger retrenchment of employment in these industries. In addition, it was observed that if capital investment in energy-producing industries slowed significantly, it could damp the overall expansion of economic activity for a period, especially if the slowing took place after most of the positive effects of lower energy prices on growth in household spending had occurred. A few participants observed that government spending was unlikely to be a major contributor to the expansion of demand in the period ahead, with real federal purchases projected to be fairly flat over the medium term.

In their discussion of the foreign economic outlook, participants noted that a number of developments over the

intermeeting period had likely reduced the risks to U.S. growth. Accommodative policy actions announced by a number of foreign central banks had likely strengthened the outlook abroad. The decline in energy prices was also seen as potentially exerting a stronger-than-anticipated positive effect on growth in the domestic economy and abroad. However, the increase in the foreign exchange value of the dollar was expected to be a persistent source of restraint on U.S. net exports, and a few participants pointed to the risk that the dollar could appreciate further. In addition, the slowdown of growth in China was noted as a factor restraining economic expansion in a number of countries, and several continuing risks to the international economic outlook were cited, including global disinflationary pressure, tensions in the Middle East and Ukraine, and financial uncertainty in Greece. Overall, the risks to the outlook for U.S. economic activity and the labor market were seen as nearly balanced.

Participants noted that inflation had moved further below the Committee's longer-run objective, largely reflecting declines in energy prices and other transitory factors. A number of participants observed that, with anchored inflation expectations, the fall in energy prices should not leave an enduring imprint on aggregate inflation. It was pointed out that the recent intensification of downward pressure on inflation reflected price movements that were concentrated in a narrow range of items in households' consumption basket, a pattern borne out by trimmed mean measures of inflation. Several participants remarked that inflation measures that excluded energy items had also moved down in recent months, but these declines partly reflected transitory factors, including downward pressure on import prices and the passthrough of lower energy costs to the prices of nonenergy items. Nonetheless, several participants saw the continuing weakness of core inflation measures as a concern. In addition, a few participants suggested that the weakness of nominal wage growth indicated that core and headline inflation could take longer to return to 2 percent than the Committee anticipated. In contrast, a couple of participants suggested that nominal wage growth provides little information about the future behavior of price inflation. Participants also discussed the possibility that, because of the infrequent occurrence of reductions in nominal wages, wages may not have fully adjusted downward in the period of high unemployment, and therefore pent-up wage deflation might have weighed on wage gains for a time during the expansion. If this was the case, nominal wage growth could be expected to pick up in coming periods and to resume a

more normal relationship with labor market slack. Most participants expected that continuing reductions in resource slack would be helpful in returning inflation over the medium term to the Committee's 2 percent longerrun objective, but a few participants voiced concern that nominal wage growth might rise rapidly and inflation might exceed 2 percent for a time.

Participants discussed the sizable decline in marketbased measures of inflation compensation that had been observed over the past year and continued over the intermeeting period. A number of them judged that the decline mostly reflected a reduction in the risk premiums embedded in nominal interest rates rather than a decline in inflation expectations; this interpretation was supported by results of some analytical models used to decompose movements in market-based measures of inflation compensation and also by the continuing stability of survey-based measures of inflation expectations. However, other participants put some weight on the possibility that the decline in inflation compensation reflected a reduction in expected inflation. These participants further argued that the stability of survey-based measures of inflation expectations should not be taken as providing much reassurance; in particular, it was noted that in Japan in the late 1990s and early 2000s, survey-based measures of longer-term inflation expectations had not recorded major declines even as a disinflationary process had become entrenched. In addition, a few participants argued that even if the shift down in inflation compensation reflected lower inflation risk premiums rather than reductions in expected inflation, policymakers might still want to take that decline into account because it could reflect increased concern on the part of investors about adverse outcomes in which low inflation was accompanied by weak economic activity. Participants generally agreed that the behavior of market-based measures of inflation compensation needed to be monitored closely.

Participants also discussed other aspects of the substantial decline in nominal longer-term interest rates and its implications. The fall had occurred despite the strengthening U.S. economic outlook and market expectations that policy normalization could begin later this year. Some participants suggested that shifts of funds from abroad into U.S. Treasury securities may have put downward pressure on term premiums; the shifts, in turn, may have reflected in part a reaction to declines in foreign sovereign yields in response to actual and anticipated monetary policy actions abroad. A couple of participants noted that the reduction in longer-term real interest rates tended to make U.S. financial conditions more

accommodative, potentially calling for a somewhat higher path for the federal funds rate going forward. Others observed that insofar as the shifts reflected concerns about growth prospects abroad or were accompanied by a stronger dollar, the implications for U.S. monetary policy were less clear. It was further noted that investment flows from abroad could also be contributing to the decline in TIPS-based measures of inflation compensation, as such flows tend to be concentrated in nominal Treasury securities rather than inflation-protected securities.

Participants saw broad-based improvement in labor market conditions over the intermeeting period, including strong gains in payroll employment and a further reduction in the unemployment rate. Some participants believed that considerable labor market slack remained, especially when indicators other than the unemployment rate were taken into account, including the unusually large fraction of the labor force working part time for economic reasons. A few observed that the combination of recent labor market improvements and continued softness in inflation had led them to lower their estimates of the longer-run normal rate of unemployment. However, a few others saw only a limited degree of remaining labor underutilization or anticipated that underutilization would be eliminated relatively soon.

#### Participants' Discussion of Policy Planning

Participants discussed considerations related to the choice of the appropriate timing of the initial firming in monetary policy and pace of subsequent rate increases. Ahead of this discussion, the staff gave a presentation that outlined some of the key issues likely to be involved, including the extent to which similar economic outcomes could be generated by different combinations of the date of the initial firming of policy and the pace of rate increases thereafter, how these combinations could affect the risks to economic outcomes, a review of past episodes in the United States and abroad in which monetary policy transitioned to a tightening phase after a lengthy period of low policy rates, and issues related to communications regarding the likely timing and pace of normalization.

Participants discussed the tradeoffs between the risks that would be associated with departing from the effective lower bound later and those that would be associated with departing earlier. Several participants noted that a late departure could result in the stance of monetary policy becoming excessively accommodative, leading to undesirably high inflation. It was also suggested that maintaining the federal funds rate at its effective

lower bound for an extended period or raising it rapidly, if that proved necessary, could adversely affect financial stability. Some participants were concerned that a decision to delay the commencement of tightening could be perceived as indicating that an overly accommodative policy is likely to prevail during the firming phase. In connection with the risks associated with an early start to policy normalization, many participants observed that a premature increase in rates might damp the apparent solid recovery in real activity and labor market conditions, undermining progress toward the Committee's objectives of maximum employment and 2 percent inflation. In addition, an earlier tightening would increase the likelihood that the Committee might be forced by adverse economic outcomes to return the federal funds rate to its effective lower bound. Some participants noted the communications challenges associated with the prospect of commencing policy tightening at a time when inflation could be running well below 2 percent, and a few expressed concern that in some circumstances the public could come to question the credibility of the Committee's 2 percent goal. Indeed, one participant recommended that, in light of the outlook for inflation, the Committee consider ways to use its tools to provide more, not less, accommodation.

Many participants indicated that their assessment of the balance of risks associated with the timing of the beginning of policy normalization had inclined them toward keeping the federal funds rate at its effective lower bound for a longer time. Some observed that, even with these risks taken into consideration, the federal funds rate may have already been kept at its lower bound for a sufficient length of time, and that it might be appropriate to begin policy firming in the near term. Regardless of the particular strategy undertaken, it was noted that, provided that the data-dependent nature of the path for the federal funds rate after its initial increase could be communicated to financial markets and the general public in an effective manner, the precise date at which firming commenced would have a less important bearing on economic outcomes.

Participants discussed the economic conditions that they anticipate will prevail at the time they expect it will be appropriate to begin normalizing policy. There was wide agreement that it would be difficult to specify in advance an exhaustive list of economic indicators and the values that these indicators would need to take. Nonetheless, a number of participants suggested that they would need to see further improvement in labor market conditions and data pointing to continued growth in real activity at a pace sufficient to support additional labor market gains

before beginning policy normalization. Many participants indicated that such economic conditions would help bolster their confidence in the likelihood of inflation moving toward the Committee's 2 percent objective after the transitory effects of lower energy prices and other factors dissipate. Some participants noted that their confidence in inflation returning to 2 percent would also be bolstered by stable or rising levels of core PCE inflation, or of alternative series, such as trimmed mean or median measures of inflation. A number of participants emphasized that they would need to see either an increase in market-based measures of inflation compensation or evidence that continued low readings on these measures did not constitute grounds for concern. Several participants indicated that signs of improvements in labor compensation would be an important signal, while a few others deemphasized the value of labor compensation data for judging incipient inflation pressures in light of the loose short-run empirical connection between wage and price inflation.

Participants discussed the communications challenges associated with signaling, when it becomes appropriate to do so, that policy normalization is likely to begin relatively soon while remaining clear that the Committee's actions would depend on incoming data. Many participants regarded dropping the "patient" language in the statement, whenever that might occur, as risking a shift in market expectations for the beginning of policy firming toward an unduly narrow range of dates. As a result, some expressed the concern that financial markets might overreact, resulting in undesirably tight financial conditions. Participants discussed some possible communications by which they might further underscore the data dependency of their decision regarding when to tighten the stance of monetary policy. A number of participants noted that while forward guidance had been a very useful tool under the extraordinary conditions of recent years, as the start of normalization approaches, there would be limits to the specificity that the Committee could provide about its timing. Looking ahead, some participants highlighted the potential benefits of streamlining the Committee's postmeeting statement once normalization has begun. More broadly, it was suggested that the Committee should communicate clearly that policy decisions will be data dependent, and that unanticipated economic developments could therefore warrant a path of the federal funds rate different from that currently expected by investors or policymakers.

#### **Committee Policy Action**

In their discussion of monetary policy for the period ahead, members judged that information received since

the FOMC met in December indicated that economic activity had been expanding at a solid pace. Labor market conditions had improved further, with strong job gains and a lower unemployment rate; numerous labor market indicators suggested that the underutilization of labor resources was continuing to diminish. Household spending was rising moderately; recent declines in energy prices had boosted household purchasing power. Business fixed investment was advancing, while the recovery in the housing sector remained slow. Inflation had declined further below the Committee's longer-run objective, largely reflecting declines in energy prices, and was expected to decline further in the near term. Market-based measures of five-year, five-year-forward inflation compensation had declined substantially in recent months, but survey-based measures of longer-term inflation expectations had remained stable. The Committee expected that, with appropriate monetary policy accommodation, economic activity would continue to expand at a moderate pace, with labor market indicators moving toward levels the Committee judges consistent with its dual mandate. The Committee also expected that inflation would rise gradually toward 2 percent as the labor market improves further and the transitory effects of lower energy prices and other factors dissipate. In view of the uncertainties about the inflation outlook, the Committee agreed that it should continue to monitor inflation developments closely.

In their discussion of language for the postmeeting statement, members generally agreed that they should acknowledge the solid growth over the second half of 2014 as well as the further improvement in labor market conditions over the intermeeting period. Job gains had been strong, and the Committee judged that labor market slack continued to diminish. In addition, members decided that the statement should note the further decline of inflation seen of late and the additional decline that was in prospect in the near term, while also registering their judgment that these short-term movements of inflation largely reflected the recent decline in energy prices and other transitory factors, and that inflation was likely to rise gradually toward 2 percent over the medium term. Members also agreed that it was appropriate to observe that lower energy prices had boosted household purchasing power. The Committee further decided that postmeeting statement should acknowledge the role of international developments as one of the factors influencing the Committee's assessment of progress toward its objectives of maximum employment and 2 percent inflation.

The Committee agreed to maintain the target range for the federal funds rate at 0 to ½ percent and to reaffirm the indication in the statement that the Committee's decision about how long to maintain the current target range for the federal funds rate would depend on its assessment of actual and expected progress toward its objectives of maximum employment and 2 percent inflation. Members agreed to continue to include, in the forward guidance, language indicating that the Committee judges that it can be patient in beginning to normalize the stance of monetary policy. Members agreed that their policy decisions would remain data dependent, and they continued to include wording in the statement noting that if incoming information indicates faster progress toward the Committee's employment and inflation objectives than the Committee now expects, then increases in the target range for the federal funds rate would likely occur sooner than currently anticipated, and, conversely, that if progress proves slower than expected, then increases in the target range would likely occur later than currently anticipated. The Committee decided to maintain its policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. This policy, by keeping the Committee's holdings of longer-term securities at sizable levels, should help maintain accommodative financial conditions. Finally, the Committee also decided to reiterate its expectation that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run.

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

"Consistent with its statutory mandate, the Federal Open Market Committee seeks monetary and financial conditions that will foster maximum employment and price stability. In particular, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ½ percent. The Committee directs the Desk to undertake open market operations as necessary to maintain such conditions. The Committee directs the Desk to maintain its policy of rolling over maturing Treasury

securities into new issues and its policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in agency mortgage-backed securities. 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 System Open Market Account manager and the secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability."

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

"Information received since the Federal Open Market Committee met in December suggests that economic activity has been expanding at a solid pace. Labor market conditions have improved further, with strong job gains and a lower unemployment rate. On balance, a range of labor market indicators suggests that underutilization of labor resources continues to diminish. Household spending is rising moderately; recent declines in energy prices have boosted household purchasing power. Business fixed investment is advancing, while the recovery in the housing sector remains slow. Inflation has declined further below the Committee's longer-run objective, largely reflecting declines in energy prices. Marketbased measures of inflation compensation have declined substantially in recent months; survey-based measures of longer-term inflation expectations have remained stable.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects that, with appropriate policy accommodation, economic activity will expand at a moderate pace, with labor market indicators continuing to move toward levels the Committee judges consistent with its dual mandate. The Committee continues to see the risks to the outlook for economic activity and the labor market as nearly balanced. Inflation is anticipated to decline further in the near

term, but the Committee expects inflation to rise gradually toward 2 percent over the medium term as the labor market improves further and the transitory effects of lower energy prices and other factors dissipate. The Committee continues to monitor inflation developments closely.

To support continued progress toward maximum employment and price stability, the Committee today reaffirmed its view that the current 0 to 1/4 percent target range for the federal funds rate remains appropriate. In determining how long to maintain this target range, the Committee will assess progressboth realized and expected—toward its objectives of maximum employment and 2 percent inflation. 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. Based on its current assessment, the Committee judges that it can be patient in beginning to normalize the stance of monetary policy. However, if incoming information indicates faster progress toward the Committee's employment and inflation objectives than the Committee now expects, then increases in the target range for the federal funds rate are likely to occur sooner than currently anticipated. Conversely, if progress proves slower than expected, then increases in the target range are likely to occur later than currently anticipated.

The Committee is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. This policy, by keeping the Committee's holdings of longer-term securities at sizable levels, should help maintain accommodative financial conditions.

When the Committee decides to begin to remove policy accommodation, it will take a balanced approach consistent with its longer-run goals of maximum employment and inflation of 2 percent. The Committee currently anticipates that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run."

Voting for this action: Janet L. Yellen, William C. Dudley, Lael Brainard, Charles L. Evans, Stanley Fischer, Jeffrey M. Lacker, Dennis P. Lockhart, Jerome H. Powell, Daniel K. Tarullo, and John C. Williams.

Voting against this action: None.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, March 17–18, 2015. The meeting adjourned at 12:55 p.m. on January 28, 2015.

#### **Notation Vote**

By notation vote completed on January 6, 2015, the Committee unanimously approved the minutes of the Committee meeting held on December 16–17, 2014.

Thomas Laubach Secretary