Appendix 1: Materials used by Ms. Logan and Mr. Potter
Material for Briefing on

Financial Developments and
Open Market Operations

Lorie Logan and Simon Potter
October 28, 2014
(1) Domestic and Foreign Asset Performance

<table>
<thead>
<tr>
<th>Changes in Basis Points</th>
<th>Since FOMC</th>
<th>Since Year-End</th>
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<tbody>
<tr>
<td>U.S. 10-Year</td>
<td>-29</td>
<td>-76</td>
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<tr>
<td>U.K. 10-Year</td>
<td>-29</td>
<td>-79</td>
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<tr>
<td>German 10-Year</td>
<td>-16</td>
<td>-104</td>
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<td>HY Corp. Credit OAS</td>
<td>+35</td>
<td>+43</td>
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<table>
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<th>Changes in Percent</th>
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<tr>
<td>S&amp;P 500 Index</td>
<td>-1.8</td>
<td>+6.3</td>
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<tr>
<td>S&amp;P 500 Utilities</td>
<td>+4.6</td>
<td>+17.2</td>
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<tr>
<td>EuroStoxx 50 Index</td>
<td>-6.4</td>
<td>-2.5</td>
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<tr>
<td>DXY Dollar Index*</td>
<td>+2.0</td>
<td>+7.1</td>
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</table>

*Positive value indicates dollar appreciation.
Source: Bloomberg, Barclays

(2) Implied Federal Funds Rate Path*

*Derived from federal funds futures and Eurodollar futures.
Source: Bloomberg, Federal Reserve Bank of New York, Federal Reserve Board of Governors

(3) Probability Distribution of the Timing of Liftoff*

*Average of all responses from the Survey of Primary Dealers and Survey of Market Participants.
Source: Federal Reserve Bank of New York

(4) Ten-Year Treasury Yield Intraday Ranges*

*Difference between highest and lowest traded yields in one day. Observations since October 1998.
Source: Bloomberg

(5) Turnover in Eurodollar and Treasury Futures Contracts*

*Daily trading volume divided by open interest. Daily data since September 2008. Boxes show interquartile ranges and medians; whiskers show maximum and minimum values.
Source: Bloomberg

(6) Standardized Implied Volatility Index*

*Standardized 1-month equity, currency, short-rate, and long-rate implied volatilities since June 1994.
Source: Bloomberg, CBOE, Deutsche Bank, Barclays, Federal Reserve Bank of New York Staff Calculations
(7) Measures of U.S. Inflation Expectations

- Board Five-Year, Five-Year Inflation Compensation
- Primary Dealer Five-Year, Five-Year Estimate*

*Average modal expectation for five-year CPI inflation, five years ahead.
Source: Federal Reserve Board of Governors, Federal Reserve Bank of New York

(8) Decomposition of the Decline in the Five-Year, Five-Year Forward Breakeven*

Expected Average CPI Inflation
Inflation Risk Premia
Other Risk Premia

*From 09/02/14 to 10/15/14. The survey question asked specifically about the Bloomberg measure of the five-year, five-year forward breakeven rate. Average of responses shown.
Source: Federal Reserve Bank of New York

(9) Commodities and China-Sensitive Equities

- S&P GSCI Industrial Metal Index (LHS)
- MSCI World with China Exposure Index (LHS)
- Front-Month Brent Crude Futures Contract (RHS)

Source: Bloomberg, MSCI

(10) Currency Performance

Indexed to 12/31/13

- DXY Index ex. Euro (LHS)
- Euro-Dollar (RHS, Inverted)

Source: Bloomberg, Federal Reserve Bank of New York Staff Calculations

(11) Euro-Area Five-Year, Five-Year Forward Inflation Swap

Source: Barclays

(12) Potential ECB Balance Sheet Expansion

Source: European Central Bank, Reuters, Dealer Estimates, Federal Reserve Bank of New York Staff Calculations
(13) Euro Reserves Portfolio Duration

Source: Federal Reserve Bank of New York

(14) MBS Purchase Offer-to-Cover Ratio*

*Offered amounts are adjusted to exclude aggregate dealer offers that are larger than the publicly-stated maximum size of the operation.

Source: Federal Reserve Bank of New York

(15) Overnight Interest Rates

*Daily survey of primary dealers.

Source: Federal Reserve Bank of New York

(16) ON RRP Operation Results

Source: Federal Reserve Bank of New York

(17) Distribution of ON RRP Counterparty Propositions by Rate

*All dates from 09/22/14 through 10/24/14, excluding 09/30/14.

Source: Federal Reserve Bank of New York

(18) Changes in Money Market Rates and Volumes on Quarter-Ends*

*Difference between quarter-end value and the average value over the previous five business days.

**Daily survey of primary dealers.

Source: Federal Reserve Bank of New York
(19) TDF Operation Results*

- Allotment, No Breakability (LHS)
- Allotment, With Breakability Feature (LHS)
- Number of Participants (RHS)

*Operations offered at 26 basis points.
Source: Federal Reserve Board of Governors

(20) Current and Potential Money Market
Mutual Fund ON RRP Counterparties

<table>
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<tr>
<th>Counterparty Status</th>
<th>Fund Type</th>
<th>Number of Firms</th>
<th>AUM ($ Billions)</th>
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<tr>
<td></td>
<td>Gov't</td>
<td>32</td>
<td>560</td>
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<tr>
<td></td>
<td>Prime</td>
<td>62</td>
<td>1,460</td>
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<tr>
<td></td>
<td>Total</td>
<td>94</td>
<td>2020</td>
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<tr>
<td>Likely to Apply*</td>
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<tr>
<td>Gov't</td>
<td>11</td>
<td>123</td>
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<tr>
<td>Prime</td>
<td>2</td>
<td>18</td>
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<tr>
<td>Total</td>
<td>13</td>
<td>141</td>
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<tr>
<td>Additional Firms that Appear Eligible**</td>
<td>Gov't</td>
<td>1</td>
<td>18</td>
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<tr>
<td></td>
<td>Prime</td>
<td>7</td>
<td>79</td>
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<tr>
<td></td>
<td>Total</td>
<td>8</td>
<td>97</td>
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*Indicated interest and has ability to invest in repo.
**Has not indicated interest but has the ability to invest in repo.
Source: Federal Reserve Bank of New York, SEC Form N-MFP

(21) Daily Federal Funds Volumes

<table>
<thead>
<tr>
<th>$ Billions</th>
<th>04/01/14</th>
<th>06/01/14</th>
<th>08/01/14</th>
<th>10/01/14</th>
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<td>Brokered</td>
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<td>FR 2420</td>
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Source: Federal Reserve Bank of New York

(22) Segregated Balance Accounts

- Remove credit risk by creating narrow accounts that would allow small or regional banks to compete for money market funds.

- Benefits: Could increase competition for deposits, reduce system-wide balance sheet costs, and improve the transmission of monetary policy.

- Risks and Uncertainties: May reduce fed funds arbitrage activity. Legal and regulatory issues must be resolved.

(23) Potential Next Steps

- Engage in further discussions with the FDIC, the OCC, banks, and potential lenders into SBAs.

- Develop contractual language.

- Begin modification of STAR and other applications to accommodate the accounts.
Appendix 2: Materials used by Mr. Natalucci
Material for Briefing on
Proposals for Reverse Repurchase Agreement Operations

Fabio Natalucci
October 28, 2014
Testing of Reverse Repos: Possible Further Steps

Testing ON RRP Rate Changes

- Staff recommends modest decreases and increases in ON RRP rate after the October meeting.
- This test could provide additional information about:
  - The effect of the spread to IOER on money markets and demand for ON RRP.
  - The effectiveness of the ON RRP rate as a floor for short-term rates.
- Staff recommends that a schedule of ON RRP rate changes be preannounced.

Testing Term RRPs at Year-End

- Anticipated year-end pressure due to balance sheet constraints raises two questions:
  1. Does the Committee desire to take action to address it?
  2. If so, what action could the Committee take?
- The Committee may wish to test supplementary tools to improve control over short-term rates.
  - If so, staff recommends a series of term RRP operations.
  - Would provide opportunity to test utility of supplementary tools prior to liftoff.
  - Would increase availability of safe money market instruments ahead of year-end.
  - May signal that the Committee is prepared to deploy additional tools if warranted.
  - Exercise could be sized to offset anticipated decline in safe money market assets.
  - Could announce following this meeting term RRP operations in December to cross year-end.
    - Cumulative size limit of up to $300 billion.
    - Specific operational details to be announced by early December.
- Alternatively, the Committee may find it desirable to take no action:
  - If concerned about appearing to accommodate "window dressing" by banks.
  - If comfortable with potentially significant pressure on short-term rates.
  - Would provide a second observation of current framework on quarter-ends.
  - Could reinforce FOMC’s earlier communication.
**Resolutions**

**Resolution 1: Modification to ON RRP Operations**
The Federal Open Market Committee (FOMC) modifies the authorization concerning overnight reverse repurchase operations adopted at the September 17, 2014, FOMC meeting as follows:

(i) The offering rate of the operations may vary from zero to ten basis points.

This modification shall be effective beginning with the operation conducted on November 3, 2014, and conclude with the operation conducted on December 12, 2014.

**Resolution 2: Term Reverse Repurchase Operations**
During the period of December 1, 2014, to December 30, 2014, 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 January 5, 2015.
(ii) be subject to an overall size limit of $300 billion outstanding at any one time.
(iii) be subject to a maximum bid rate of ten basis points.
(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 pre-announced size of the operation; or
   (B) at the stopout rate, determined by evaluating bids in ascending order by submitted rate up to the point at which the total quantity of bids equals the pre-announced size of the operation, with all bids below this rate awarded in full at the stopout rate and all bids at the stopout rate awarded on a pro rata basis, if the sum of the counterparty offers received is greater than the pre-announced 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.
Appendix 3: Materials used by Mr. Engen
Material for
The U.S. Outlook

Eric Engen
October 28, 2014
Forecast Summary
Confidence Intervals Based on FRB/US Stochastic Simulations

1. Real GDP
   Percent change, annual rate
   - Oct. TB
   - Sept. TB
   - 70% confidence interval

2. Unemployment Rate
   Percent
   - Oct. TB
   - Sept. TB
   - Sept. 2012 TB
   - 70% conf. interval
   *Effect of emergency unemployment compensation and state-federal extended benefit programs.

3. Total Payroll Employment
   Millions
   - Oct. TB
   - Sept. TB
   - Sept. 2012 TB

4. PCE Prices
   Percent change, annual rate
   - Oct. TB
   - Sept. TB
   - Sept. 2012 TB
   - 70% confidence interval

5. PCE Prices Excluding Food and Energy
   Percent change, annual rate
   - Oct. TB
   - Sept. TB
   - 70% confidence interval

6. Two Risks to the Staff Baseline
   - Lower long-term inflation expectations
   - Financial market turbulence
Appendix 4: Materials used by Mr. Kamin
Class II FOMC – Restricted (FR)

Material for
The Foreign Outlook

Steven B. Kamin
October 28, 2014
Exhibit 1

The Outlook for Foreign Economies and the Dollar

1. Foreign GDP

- Percent change, annual rate
- September TB
- Emerging market economies
- Total
- Advanced foreign economies

2. Foreign GDP and New Export Orders

- Diffusion Index
- Foreign GDP
- New Export Orders
- Q3 est.

3. Euro-Area GDP

- Percent change, annual rate
- History and current forecast
- September TB
- Eurocoin prediction

4. China: GDP and Property Markets

- GDP: History and current forecast
- September TB
- Property price index

5. Real Broad Dollar Index

- 2007:Q1 = 100
- Current forecast
- Unrevised approach
- July Tealbook

6. Real AFE Dollar Index

- 2007:Q1 = 100
- Current forecast
- July Tealbook

7. Real EME Dollar Index

- 2007:Q1 = 100
- Current forecast
- Unrevised approach
- July Tealbook
Exhibit 2

Effect of a Ten Percent Appreciation Shock to the Dollar

1. Real Broad Dollar Index

2. Federal Funds Rate

3. U.S. Real GDP

4. U.S. Core Inflation
Appendix 5: Materials used by Ms. Liang
Material for Briefing on
Financial Stability Developments

Nellie Liang
October 28, 2014
Financial Stability Developments

Surplus Fully Phased-in Basel III Common Equity Tier 1 Ratio

- Percentage points
- JPM, BAC, CITI, WFC, GS, MS, BK, STT
- 2014Q2, 2014Q3
- Note: Surplus is calculated as estimated percentage of tier 1 common equity minus the FSB requirement including the SIFI surcharge. STT data for Q2 are not available.
- Source: Bank earnings releases.

Net Short-term Wholesale Debt of Financial Sector-to-GDP Ratio

- Quarterly
- Q2
- Source: FOFA.

Nonfinancial sector credit-to-GDP ratio

- Quarterly
- Household, Business
- Source: FOFA.

S&P 500 Equity Premium

- Monthly
- Expected 10-year real equity return*
- Expected real yield on 10-year Treasury**
- Note: *Staff estimate using a dividend discount model incorporating private sector earnings growth estimates. **Off-the-run 10-year treasury yield less Philadelphia Fed 10-year expected inflation
- Source: Thomson Reuters Financial.

High Yield Bond Spreads

- Monthly
- Near-Term*, Far-Term**
- Note: * Near-Term spread between years two and three. ** Far-Term spread between years nine and ten.
- Source: Staff estimates.

Commercial Real Estate

- Monthly
- Price-to-Income (left axis)
- CMBS (right axis)
- Q2, Q3
- Note: Price-to-Income is a 3-month moving average.
- Source: Commercial Mortgage Alert and Thomson Reuters.
Financial Stability Developments

Leveraged Loan and High Yield Bond Issuance

- Billions of Dollars
- Annual Rate

**Nonfinancial Corporate Net Leverage Ratio**

- Speculative-grade
- Investment-grade

**Credit Cycle**

- Rapid rise in riskier debt would result in notably higher default rates and lower returns relative to moderate debt growth
- If losses borne by leveraged investors, credit cycle would be more severe
- Losses could be exacerbated by growing liquidity mismatch

**U.S. Corporate Bond Fund and Dealer Corporate Bond Holdings**

**Fund Redemptions at PIMCO**

Note: Percent of US public corporate bond market.
Source: Flow of Funds, ICI, Mergent FISD

Note: Percent of US public corporate bond market.
Source: Flow of Funds, ICI, Mergent FISD

Note: CONFIDENTIAL
Source: Calculations based on State Street Corporation and Morningstar.
Total assets at the end of September.
### Financial Stability Developments

**Policy Initiatives**

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<td>Leveraged lending</td>
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<td>CCAR macroeconomic scenarios</td>
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<td>Interest rate risk at banks</td>
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<td>Asset management activities</td>
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<td>Algorithmic and high frequency trading</td>
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Appendix 6: Materials used by Mr. English
Material for

Briefing on Monetary Policy Alternatives

Bill English
October 28-29, 2014
Policy Issues

Average Monthly Change in Labor Market Conditions Index

Source: Staff calculations.

Unemployment Rate and Persons Working Part Time for Economic Reasons

*Calculated as a percentage of total U.S. civilian labor force.
Note: Shaded region represents NBER recession.

TIPS-Based Inflation Compensation

Source: Bloomberg.

Survey-Based Expectations of Longer-Run Inflation

*Note: Median most likely inflation.
Source: FRBNY Primary Dealers Survey, Blue Chip Economic Indicators, University of Michigan Survey of Consumers.

Forward Guidance

- Focuses more explicitly on the target range for the federal funds rate.
- Alternative B:
  - Would retain the reference to "considerable time" but start the clock at the end of the asset purchase program "this month."
  - Would add language emphasizing the data-dependence of the timing of the first rate increase.
- Options for updating the forward guidance:
  - Could use paragraphs 1 and 2 to update the Committee’s assessment of economic conditions.
  - Could adjust the reference to "considerable time" as the anticipated timing of liftoff approaches.
SEPTEMBER 2014 FOMC STATEMENT

1. Information received since the Federal Open Market Committee met in July suggests that economic activity is expanding at a moderate pace. On balance, labor market conditions improved somewhat further; however, the unemployment rate is little changed and a range of labor market indicators suggests that there remains significant underutilization of labor resources. Household spending appears to be rising moderately and business fixed investment is advancing, while the recovery in the housing sector remains slow. Fiscal policy is restraining economic growth, although the extent of restraint is diminishing. Inflation has been running below the Committee’s longer-run objective. Longer-term inflation expectations have remained stable.

2. 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 and inflation moving toward levels the Committee judges consistent with its dual mandate. The Committee sees the risks to the outlook for economic activity and the labor market as nearly balanced and judges that the likelihood of inflation running persistently below 2 percent has diminished somewhat since early this year.

3. The Committee currently judges that there is sufficient underlying strength in the broader economy to support ongoing improvement in labor market conditions. In light of the cumulative progress toward maximum employment and the improvement in the outlook for labor market conditions since the inception of the current asset purchase program, the Committee decided to make a further measured reduction in the pace of its asset purchases. Beginning in October, the Committee will add to its holdings of agency mortgage-backed securities at a pace of $5 billion per month rather than $10 billion per month, and will add to its holdings of longer-term Treasury securities at a pace of $10 billion per month rather than $15 billion per month. 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. The Committee’s sizable and still-increasing holdings of longer-term securities should maintain downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative, which in turn should promote a stronger economic recovery and help to ensure that inflation, over time, is at the rate most consistent with the Committee’s dual mandate.

4. The Committee will closely monitor incoming information on economic and financial developments in coming months and will continue its purchases of Treasury and agency mortgage-backed securities, and employ its other policy tools as appropriate, until the outlook for the labor market has improved substantially in a context of price stability. If incoming information broadly supports the Committee’s expectation of ongoing improvement in labor market conditions and inflation moving back toward its longer-run objective, the Committee will end its current program of asset purchases at its next meeting. However, asset purchases are not on a preset course, and the Committee’s decisions about their pace will remain contingent on the
Committee’s outlook for the labor market and inflation as well as its assessment of the likely efficacy and costs of such purchases.

5. To support continued progress toward maximum employment and price stability, the Committee today reaffirmed its view that a highly accommodative stance of monetary policy remains appropriate. In determining how long to maintain the current 0 to ¼ percent target range for the federal funds rate, the Committee will assess progress—both 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 developments. The Committee continues to anticipate, based on its assessment of these factors, that it likely will be appropriate to maintain the current target range for the federal funds rate for a considerable time after the asset purchase program ends, especially if projected inflation continues to run below the Committee’s 2 percent longer-run goal, and provided that longer-term inflation expectations remain well anchored.

6. 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.
FOMC STATEMENT—OCTOBER 2014 ALTERNATIVE A

1. Information received since the Federal Open Market Committee met in July
   suggests that economic activity is expanding at a moderate pace. On
   balance, Labor market conditions improved somewhat further; however, with a
   lower the unemployment rate, is little changed and Even so, a range of labor market
   indicators suggests that there remains significant underutilization of labor resources.
   Household spending appears to be rising moderately and business fixed investment is
   advancing, while the recovery in the housing sector remains slow. Fiscal policy is
   restraining economic growth, although the extent of restraint is diminishing.
   Financial conditions have tightened, on balance. Inflation has been running
   continued to run below the Committee’s longer-run objective. Market-based
   measures of longer-term inflation expectations have remained stable declined
   somewhat.

2. 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 and inflation moving toward levels the Committee judges consistent with
   its dual mandate. However, developments in financial markets here and abroad
   have increased the Committee sees the downside risks to the outlook for economic
   activity, and the labor market, as nearly balanced and judges that the likelihood of
   inflation running persistently below 2 percent has diminished somewhat since early
   this year and inflation, making the outlook more uncertain.

3. The Committee currently judges that there is sufficient underlying strength in the
   broader economy to support ongoing improvement in labor market conditions. In
   light of the cumulative progress toward maximum employment and the improvement
   in the outlook for labor market conditions since the inception of the current asset
   purchase program, the Committee decided to make a further measured reduction in
   the pace of its asset purchases. Beginning in October, In light of the increase in
downside risks and greater uncertainty, the Committee will continue to add to its
holdings of agency mortgage-backed securities at a pace of $5 billion per month
rather than $10 billion per month, and will add to its holdings of longer-term Treasury
securities at a pace of $10 billion per month rather than $15 billion per month, while
assessing incoming information that bears on the outlook for economic activity,
the labor market, and inflation. 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. The Committee’s sizable and still-increasing
holdings of longer-term securities should maintain downward pressure on longer-term
interest rates, support mortgage markets, and help to make broader financial
conditions more accommodative, which in turn should promote a stronger economic
recovery and help to ensure that inflation, over time, is at the rate most consistent
with the Committee’s dual mandate.

4. The Committee will closely monitor incoming information on economic and financial
developments in coming months and will continue its purchases of Treasury and
agency mortgage-backed securities, and employ its other policy tools as appropriate,
until the outlook for the labor market has improved substantially in a context of price stability. If incoming information broadly supports the Committee’s expectation of ongoing improvement in labor market conditions and inflation moving back toward its longer-run objective, the Committee will end its current program of asset purchases at its next meeting. However, asset purchases are not on a preset course, and the Committee’s decisions about their pace will remain contingent on the Committee’s outlook for the labor market and inflation as well as its assessment of the likely efficacy and costs of such purchases.

5. To support continued progress toward maximum employment and price stability, the Committee today reaffirmed its view that a highly accommodative stance of monetary policy remains appropriate. In determining how long to maintain the current 0 to ¼ percent target range for the federal funds rate, the Committee will assess progress—both 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 developments. The Committee continues to anticipate, based on its assessment of these factors, that it likely will be appropriate to maintain the current target range for the federal funds rate for a considerable time after the asset purchase program ends, especially if projected inflation continues to run below the Committee’s 2 percent longer-run goal, and at least as long as inflation between one and two years ahead is projected to be below 2 percent, provided that longer-term inflation expectations remain well anchored.

6. 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.
FOMC STATEMENT—OCTOBER 2014 ALTERNATIVE B

1. Information received since the Federal Open Market Committee met in July
   September suggests that economic activity is expanding at a moderate pace. On
   balance, Labor market conditions improved somewhat further; however, with solid
   job gains and a lower the unemployment rate, is little changed and On balance, a
   range of labor market indicators suggests that there remains significant
   underutilization of labor resources is gradually diminishing. Household spending
   appears to be is rising moderately and business fixed investment is advancing, while
   the recovery in the housing sector remains slow. Fiscal policy is restraining
   economic growth, although the extent of restraint is diminishing. Inflation has been
   running continued to run below the Committee’s longer-run objective. Market-
   based measures of inflation compensation have declined somewhat; survey-
   based measures of longer-term inflation expectations have remained stable.

2. 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 and inflation moving toward levels the Committee judges consistent with
   its dual mandate. The Committee sees the risks to the outlook for economic activity
   and the labor market as nearly balanced. Although inflation in the near term will
   likely be held down by lower energy prices and other factors, and the Committee
   judges that the likelihood of inflation running persistently below 2 percent has
   diminished somewhat since early this year.

3. The Committee currently judges that there has been a substantial improvement in
   the outlook for the labor market since the inception of its current asset purchase
   program. Moreover, the Committee continues to see is sufficient underlying
   strength in the broader economy to support ongoing improvement in labor market
   conditions progress toward maximum employment in a context of price stability.
   In light of the cumulative progress toward maximum employment and the
   improvement in the outlook for labor market conditions since the inception of the
   current asset purchase program, the Committee decided to make a further measured
   reduction in the pace of its asset purchases. Beginning in October, the Committee will
   add to its holdings of agency mortgage-backed securities at a pace of $5 billion per
   month rather than $10 billion per month, and will add to its holdings of longer-term
   Treasury securities at a pace of $10 billion per month rather than $15 billion per
   month. Accordingly, the Committee decided to conclude its asset purchase
   program this month. 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
   sizable and still-increasing holdings of longer-term securities at sizable levels, should
   help maintain downward pressure on longer-term interest rates, support mortgage
   markets, and help to make broader accommodative financial conditions more
   accommodative, which in turn should promote a stronger economic recovery and help
   to ensure that inflation, over time, is at the rate most consistent with the Committee’s
   dual mandate.
4. The Committee will closely monitor incoming information on economic and financial developments in coming months and will continue its purchases of Treasury and agency mortgage-backed securities, and employ its other policy tools as appropriate, until the outlook for the labor market has improved substantially in a context of price stability. If incoming information broadly supports the Committee’s expectation of ongoing improvement in labor market conditions and inflation moving back toward its longer-run objective, the Committee will end its current program of asset purchases at its next meeting. However, asset purchases are not on a preset course, and the Committee’s decisions about their pace will remain contingent on the Committee’s outlook for the labor market and inflation as well as its assessment of the likely efficacy and costs of such purchases.

4. To support continued progress toward maximum employment and price stability, the Committee today reaffirmed its view that a highly accommodative stance of monetary policy—the current 0 to ¼ percent target range for the federal funds rate—remains appropriate. In determining how long to maintain this target range for the federal funds rate, the Committee will assess progress—both 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 developments. The Committee continues to anticipate, based on its current assessment of these factors, that it likely will be appropriate to maintain the current 0 to ¼ percent target range for the federal funds rate for a considerable time after the end of its asset purchase program ends this month, especially if projected inflation continues to run below the Committee’s 2 percent longer-run goal, and provided that longer-term inflation expectations remain well anchored. 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.

5. 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.
FOMC STATEMENT—OCTOBER 2014 ALTERNATIVE C

1. Information received since the Federal Open Market Committee met in July suggests that economic activity is expanding at a moderate pace. On balance, labor market conditions improved somewhat further; however, with solid job gains and a lower unemployment rate, is little changed and a range of labor market indicators suggests that there remains significant underutilization of labor resources is diminishing. Household spending appears to be rising moderately and business fixed investment is advancing, while the recovery in the housing sector remains slow. Fiscal policy is restraining economic growth, although the extent of restraint is diminishing. Inflation has been running below the Committee’s longer-run objective. Longer-term inflation expectations have remained stable.

2. 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 and inflation moving toward levels the Committee judges consistent with its dual mandate. The Committee sees the risks to the outlook for economic activity and the labor market as nearly balanced and judges that the likelihood of inflation running persistently below 2 percent has diminished somewhat since early this year.

3. The Committee currently judges that there has been a substantial improvement in the outlook for the labor market since the inception of its current asset purchase program. Moreover, the Committee continues to see sufficient underlying strength in the broader economy to support ongoing improvement in labor market conditions progress toward maximum employment in a context of price stability. In light of the cumulative progress toward maximum employment and the improvement in the outlook for labor market conditions since the inception of the current asset purchase program, the Committee decided to make a further measured reduction in the pace of its asset purchases. Beginning in October, the Committee will add to its holdings of agency mortgage-backed securities at a pace of $5 billion per month rather than $10 billion per month, and will add to its holdings of longer-term Treasury securities at a pace of $10 billion per month rather than $15 billion per month. Accordingly, the Committee decided to conclude its asset purchase program this month. 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 sizable and still increasing holdings of longer-term securities at sizable levels, should help maintain downward pressure on longer-term interest rates, support mortgage markets, and help to make broader accommodative financial conditions more accommodative, which in turn should promote a stronger economic recovery and help to ensure that inflation, over time, is at the rate most consistent with the Committee’s dual mandate.

4. The Committee will closely monitor incoming information on economic and financial developments in coming months and will continue its purchases of Treasury and agency mortgage-backed securities, and employ its other policy tools as appropriate, until the outlook for the labor market has improved substantially in a context of price
stability. If incoming information broadly supports the Committee’s expectation of ongoing improvement in labor market conditions and inflation moving back toward its longer-run objective, the Committee will end its current program of asset purchases at its next meeting. However, asset purchases are not on a preset course, and the Committee’s decisions about their pace will remain contingent on the Committee’s outlook for the labor market and inflation as well as its assessment of the likely efficacy and costs of such purchases.

4. To support continued progress toward maximum employment and price stability, the Committee today reaffirmed its view that a highly accommodative stance of monetary policy, the current 0 to ¼ percent target range for the federal funds rate, remains appropriate. In determining how long to maintain the current 0 to ¼ percent target range for the federal funds rate, the Committee will assess progress—both realized and expected—toward its objectives. 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 developments. The Committee continues to anticipate, based on its current assessment of these factors, that it likely will be appropriate to maintain the current 0 to ¼ percent target range for the federal funds rate for a considerable time after following the end of its asset purchase program ends, especially if projected inflation continues to run below the Committee’s 2 percent longer-run goal, and provided that longer-term inflation expectations remain well anchored. 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.

5. 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 as employment and inflation are near approach 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.
SEPTEMBER 2014 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 ¼ percent. The Committee directs the Desk to undertake open market operations as necessary to maintain such conditions. Beginning in October, the Desk is directed to purchase longer-term Treasury securities at a pace of about $10 billion per month and to purchase agency mortgage-backed securities at a pace of about $5 billion per month. 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 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 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.
DIRECTIVE FOR OCTOBER 2014 ALTERNATIVE A

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 ¼ percent. The Committee directs the Desk to undertake open market operations as necessary to maintain such conditions. Beginning in October, The Desk is directed to purchase longer-term Treasury securities at a pace of about $10 billion per month and to purchase agency mortgage-backed securities at a pace of about $5 billion per month. 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 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 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.
**DIRECTIVE FOR OCTOBER 2014 ALTERNATIVE B**

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 ¼ percent. The Committee directs the Desk to undertake open market operations as necessary to maintain such conditions. **Beginning in October** The Desk is directed to purchase conclude the current program of purchases of longer-term Treasury securities at a pace of about $10 billion per month and to purchase agency mortgage-backed securities at a pace of about $5 billion per month **by the end of October.** 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 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.
DIRECTIVE FOR OCTOBER 2014 ALTERNATIVE C

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 ¼ percent. The Committee directs the Desk to undertake open market operations as necessary to maintain such conditions. **Beginning in October** The Desk is directed to purchase conclude the current program of purchases of longer-term Treasury securities at a pace of about $10 billion per month and to purchase agency mortgage-backed securities at a pace of about $5 billion per month **by the end of October.** 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 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.
Appendix 7: Materials used by Mr. Tetlow
Material for Briefing on
Longer-Run Goals and Monetary Policy Strategy
(“Consensus Statement”)

Robert Tetlow
October 29, 2014
Briefing on possible amendments to the “Consensus Statement”

Three topics for discussion at this meeting:

- Clarification of the symmetry of inflation preferences
- Clarification of the “balanced approach” monetary policy strategy
- Clarification of the potential role of monetary policy in promoting financial stability

Symmetry of preferences for inflation

- Why might symmetry be preferred and communicated?
  - Provides a clear focal point for long-term inflation expectations
  - Facilitates clear communications
  - Fosters transparency and public accountability
- Why might participants have asymmetric preferences?
  - The costs of inflation may be asymmetric around two percent
  - Possible asymmetries in the dynamics of long-term inflation expectations

“Balanced approach”

- Balanced approach as a statement about the Committee’s loss function
  - Equal weights in the loss function
- Balanced approach as a statement about the Committee’s reaction function
  - Time horizons for returning goal variables to target are similar
  - Conditions for tolerating over- or undershooting a mandate variable
  - Tradeoffs between mandate variables always matter

Financial stability and the Dual Mandate

- The role of monetary policy in promoting financial stability
  - Macroprudential and supervisory tools are the first line of defense
  - Imprudent to assume that these tools can be consistently relied upon
- What makes financial instability different from other asymmetric risks?
  - Monetary policy may affect the probability of financial instability
  - Financial instability can reduce the efficacy of monetary policy
- Responding to incipient instability
  - An episodic phenomenon inducing a temporary response
  - The appropriate response is not always straightforward

Why the current Consensus Statement might be the preferred option

- The risk that the public might misinterpret any changes
- The option value of waiting
- The current Statement is a delicate balance
Questions for the Committee Discussion of the Consensus Statement on Longer-Run Goals and Monetary Policy Strategy at the October 2014 Meeting

1. Should the Consensus Statement be modified to clarify the symmetry of the Committee’s preferences for inflation relative to its 2 percent longer-run objective? For example, should it be made clearer that inflation below the Committee's 2 percent longer-run objective is considered to be equally as undesirable as inflation the same amount above that objective?

2. Should the Consensus Statement elaborate on the “balanced approach” language used in paragraph 5, or do you judge that there is no further elaboration which would still encompass the diversity of views among Committee participants regarding their preferences over the dual-mandate goals?
   
   2.a Do you interpret “balanced approach” as connoting equal weights on the two parts of the dual mandate goals – specifically, that a miss of inflation relative to its longer-run objective is generally as costly in the Committee’s objective function as an equal-sized miss in the unemployment rate relative what the Committee judges to be its’ mandate consistent level? If so, should this be stated explicitly in the Consensus Statement?

3. Should the Consensus Statement be modified to further clarify the relationship between the objective of financial stability and the dual-mandate goals of price stability and maximum employment, or are you comfortable with the current statement’s treatment of financial stability?

   If you prefer enhancements,

   3.a Should financial stability be included in paragraph 5 in the discussion of the approach the Committee takes in promoting its dual-mandate goals?

   3.b Should the statement include the recognition that in some circumstances when financial stability appears to be at risk, the stance of monetary policy may have to be adjusted in order to mitigate risks to financial stability?

4. Looking ahead, are there other portions of the Consensus Statement that you would like the subcommittee to study during 2015? Are there revisions to other communications tools or additional tools that the subcommittee should consider on behalf of the FOMC? For example, do you see promising opportunities to improve the SEP? Do you believe it is time again to consider a consensus forecast?
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 longer-term inflation expectations firmly anchored, thereby fostering price stability and moderate long-term interest rates and enhancing the Committee’s ability to promote maximum employment in the face of significant economic disturbances.

The maximum level of employment is largely determined by nonmonetary factors that affect the structure and dynamics of the labor market. These factors may change over time and may not be directly measurable. Consequently, it would not be appropriate to specify a fixed goal for employment; rather, the Committee’s policy decisions must be informed by assessments of the maximum level of employment, recognizing that such assessments are necessarily uncertain and subject to revision. The Committee considers a wide range of indicators in making these assessments. Information about Committee participants’ estimates of the longer-run normal rates of output growth and unemployment is published four times per year in the FOMC’s Summary of Economic Projections. For example, in the most recent projections, FOMC participants’ estimates of the longer-run normal rate of unemployment had a central tendency of 5.2 percent to 5.8 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.