Appendix 1: Materials used by Mr. Potter and Ms. Logan

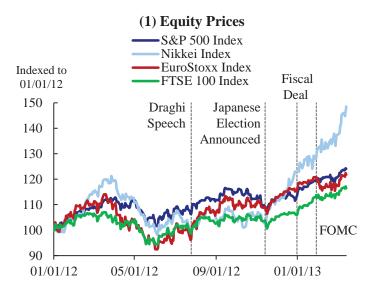
Material for

## **FOMC Presentation:**

Financial Market Developments and Desk Operations

Simon Potter and Lorie Logan March 19, 2013

Exhibit 1

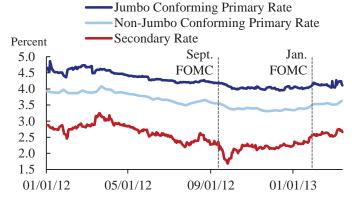


#### (2) Changes in Global Yields and Currencies Over Intermeeting Period

	Change in	Change in	
	Exchange Rate vs. USD		
U.S.		-1 bps	
Japan	-4.8%	-14 bps	
Germany	-3.1%	-24 bps	
U.K.	-4.1%	-15 bps	

Source: Bloomberg

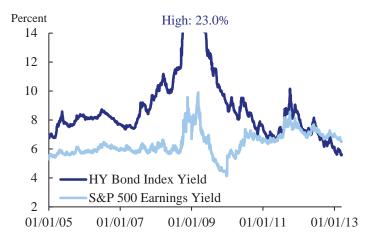
(3) Primary and Secondary Mortgage Rates\*



\*Current jumbo and non-jumbo conforming rates are 4.11% and 3.69%, respectively (spread is currently 42 bps, compared to 62 bps pre-September FOMC). Primary-secondary spread is currently 92 bps, compared to 117 bps pre-September FOMC.

Source: Bankrate, FHLMC, Bloomberg

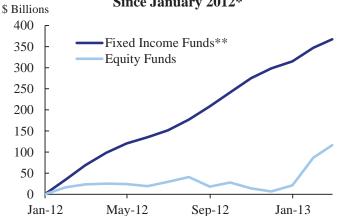
#### (4) High-Yield Bond Yield and Equity Earnings Yield



Source: Barclays, Bloomberg

Source: Bloomberg

#### (5) Cumulative Fund Flows Since January 2012\*



#### ${}^*\text{Combined ETP}$ and mutual fund flows.

Source: Morningstar

# (6) Changes in Financial Equity Prices (Percent)

	Intermeeting	One-Day Ch	nange After:
	Period	DFAST*	CCAR**
Bank of America	9.4	-1.5	3.8
Citigroup	12.1	3.7	-0.4
Goldman Sachs	5.3	-2.3	0.5
JPMorgan Chase	6.2	-0.8	-1.9
Morgan Stanley	4.4	-0.8	3.5
Wells Fargo	8.3	0.2	3.3
KBW Bank Index	6.7	0.6	0.4
(S&P 500 Index)	3.5	0.4	-0.2

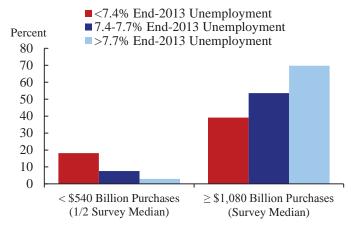
<sup>\*</sup>DFA stress test results released on 03/07/13.

<sup>\*\*</sup>Taxable fixed income funds only.

<sup>\*\*</sup>CCAR evaluation of capital plans and distributions released on 03/14/13. Source: Bloomberg

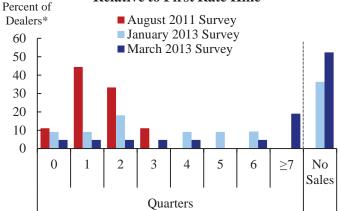
Exhibit 2

# (7) Probability of Purchase Program Sizes Under Alternative Unemployment Paths\*



<sup>\*</sup>Average forecasts for total purchases starting January 2013. Source: Federal Reserve Bank of New York Survey

#### (9) Timing of Start of Agency MBS Sales Relative to First Rate Hike



\*Percent of dealers who indicated timing; sample not matched across surveys.

"No Sales" category includes dealers who consider sales "unlikely."

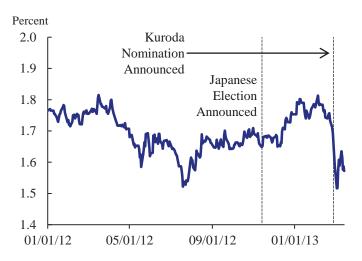
Source: Federal Reserve Bank of New York Survey

#### (8) Expectations for Slowing of Asset Purchases

	March	January
Dealers Expecting Slowing	19	15
(Treasury Slowing)	19	15
(MBS Slowing)	16	14
Median Slowing Start Date	Q4 2013	Q4 2013
Dealers with Multiple Changes in Pace*	8	2

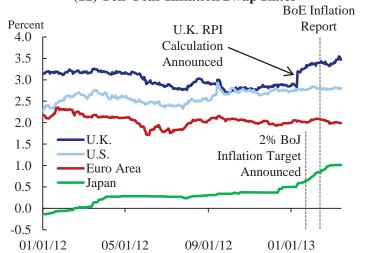
Source: Federal Reserve Bank of New York Survey

#### (10) 20-Year Japanese Sovereign Yield



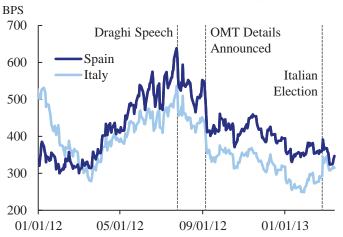
Source: Bloomberg

#### (11) Ten-Year Inflation Swap Rates



Source: Barclays

#### (12) Euro Area Sovereign Yield Spreads\*



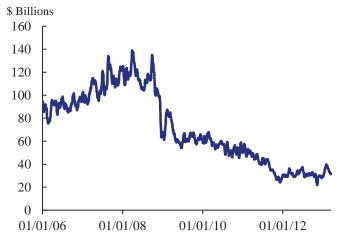
\*10-year spreads to Germany.

Source: Bloomberg

<sup>\*</sup>Dealers who expect more than one downward adjustment to pace of purchases before program end.

Exhibit 3

#### (13) Federal Funds Volumes\*



<sup>\*10-</sup>day moving average of daily trading volumes. Source: Federal Reserve Bank of New York

#### (14) Foreign Reserves Portfolio Allocation (As Percent of Each Portfolio)

		Euro Re	serves	Yen Reserves	
	July 2012 Current				
Cash & Deposits		68%	52%	34%	
Repo		0%	15%	N/A	
Securities		32%	33%	66%	
of which:	French	58%	50%	N/A	
	German	42%	50%	N/A	

Source: Federal Reserve Bank of New York

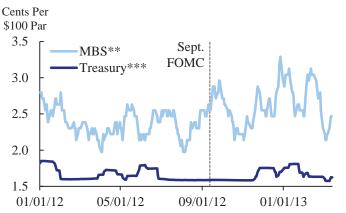
Exhibit 4

#### (15) SOMA Purchases and Holdings

	Treasury	MBS
Purchases Since September FOMC (\$ Billions)	277	449*
Current Ownership**	35%	31%
Ownership Under Survey Median***	41%	42%

#### \*Includes \$206 billion in agency reinvestments.

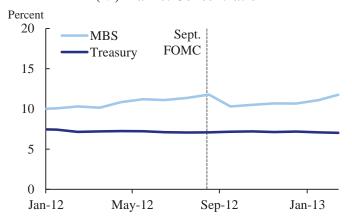
#### (17) Bid-Ask Spreads\*



- \*4-week moving averages of daily time-weighted-average bid-ask spreads.
- \*\*Bid-ask spread on 30-year FNMA 3.5% MBS.
- \*\*\*Bid-ask spread on 10-year benchmark Treasury note.

Source: BrokerTec, Tradeweb

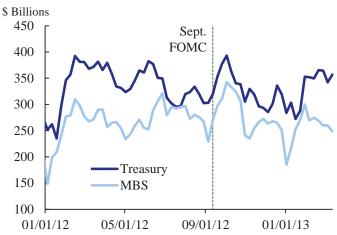
#### (19) Market Concentration\*



<sup>\*</sup>Secondary market concentration of primary dealer transactions as measured by Herfindahl index. Index level below 15 percent is representative of unconcentrated market.

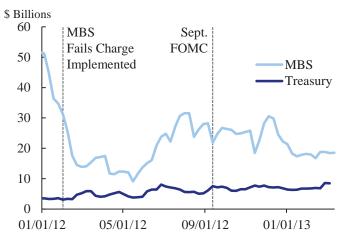
Source: FR 2004, Federal Reserve Bank of New York

#### (16) Daily Trading Volumes\*



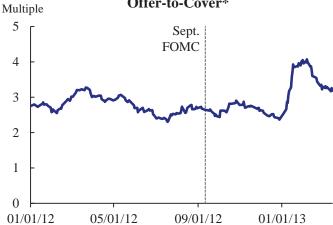
\*4-week moving averages of primary dealer volumes. Source: FR 2004

#### (18) Daily Fails to Deliver\*



\*4-week moving averages of daily primary dealer fails to deliver. Source: FR 2004

#### (20) Treasury Purchase Operations Offer-to-Cover\*



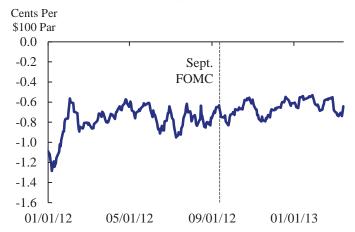
\*10-day moving averages, excluding TIPS operations. Source: Federal Reserve Bank of New York

<sup>\*\*</sup>Treasury ownership is as percent of outstanding with 4-30 years to maturity. MBS ownership is as percent of TBA-eligible outstanding.

<sup>\*\*\*</sup>Ownership after \$1,080 billion in purchases starting January 2013. Source: Federal Reserve Bank of New York Survey, U.S. Treasury, KDS

Exhibit 5 (Last)

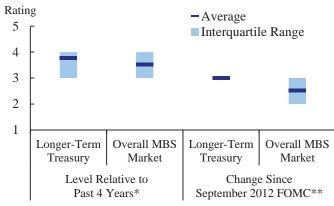
#### (21) MBS Purchase Operations Performance\*



<sup>\*10-</sup>day volume-weighted moving average of execution-to-cover spread, or spread between executed price and next-best proposition.

Source: Federal Reserve Bank of New York

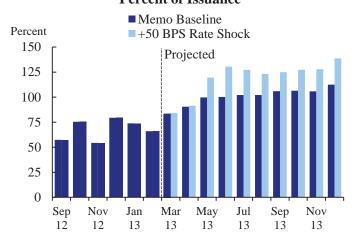
#### (22) Market Functioning Ratings



<sup>\*</sup>Level relative to worst and best conditions since 2009, where 1 is worst and 5 is best.

Source: Federal Reserve Bank of New York Survey

#### (23) Projected MBS Purchases as Percent of Issuance\*



\*Purchases as percent of adjusted TBA-eligible issuance. Source: Federal Reserve Bank of New York, BlackRock

<sup>\*\*</sup>Change since September FOMC, where 1 is significantly worse, 3 is same, and 5 is significantly better.

**Appendix 2: Materials used by Mr. Wilcox** 

Material for

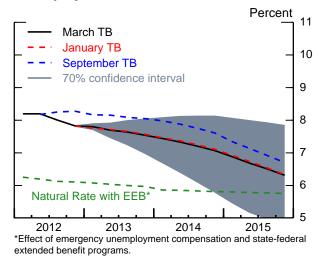
Forecast Summary

David Wilcox March 19, 2013

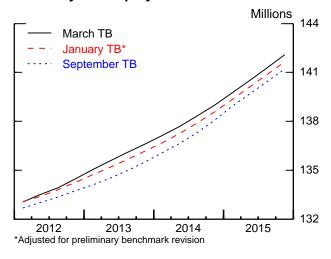
#### **Forecast Summary**

#### Confidence Intervals Based on FRB/US Stochastic Simulations

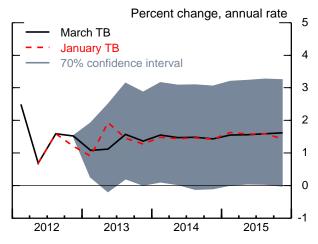
#### **Unemployment Rate**



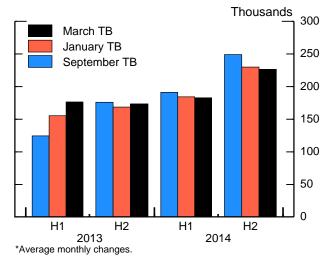
#### **Total Payroll Employment**



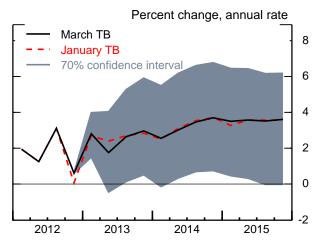
#### **PCE Prices**



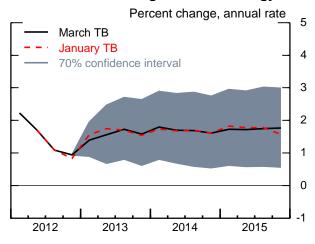
#### Change in Total Payroll Employment\*



#### **Real GDP**



#### **PCE Prices Excluding Food and Energy**

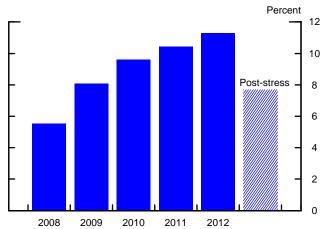


## Appendix 3: Materials used by Ms. Liang

Material for Briefing on Financial Stability

Nellie Liang
March 19, 2013

Chart 1
Historical and Stressed Tier 1 Common Ratio



Note: Year-end aggregate capital ratios for 18 participating bank holding companies (BHCs). Post-stress estimates are supervisory estimates under the severely adverse scenario.

Chart 2 Stock Prices

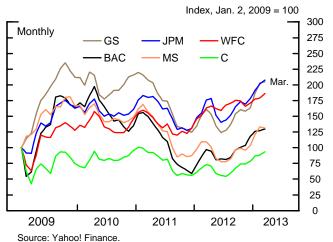


Chart 3
Maturity Gap Large Banks

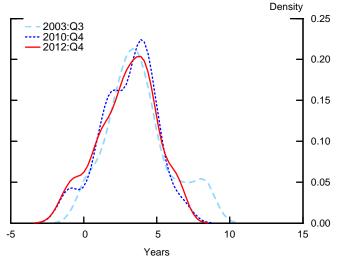


Chart 4
Maturity Gap Small Banks

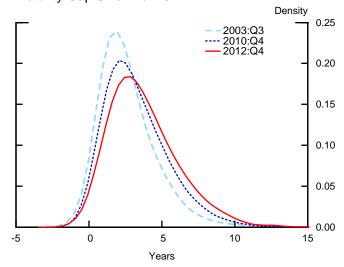


Chart 5
Interest Rate Risk at Large Banking Firms

- Evaluate using supervisory data and firm's own analysis
- A rise in rates would reduce the value of assets, and the effect of a sharp rise would be material especially for long-dated securities
- However, banks can hedge:
  - "Natural hedge" arising from the value associated with banks' ability to issue deposits at below-market rates
  - o Interest rate derivatives
- Many banks' internal measures suggest an upward shock to rates (a parallel shift of 100 to 200 basis points) would increase banks' valuations
- However, the effect depends on whether banks can retain deposits at low cost
  - o In past episodes of policy tightening, core deposits have been fairly stable
  - o In recent weeks following the expiration of TAG, deposits have held steady

## Shadow Banking

200

0

Chart 1 Dealer Financing and Borrowing Billions of dollars Billions of dollars Monthly 6000 1200 Dealer financing (left) Dealer borrowing (left) 5000 1000 Net borrowing (right) 4000 800 3000 600 2000 400

2007

2009

2011

2013

Chart 3 U.S. Securitization Issuance

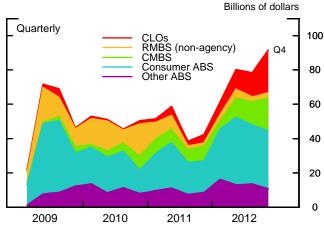
2005

2003

Source: FR 2004C.

1000

0



Note: RMBS includes re-REMICs, first-lien RMBS, home equity ABS, and subprime mortgages. Consumer ABS includes securities backed by consumer, student, and auto loans. The 'other' category includes securities backed by equipment and floorplan loans.

Chart 5
Total Agency REIT Assets

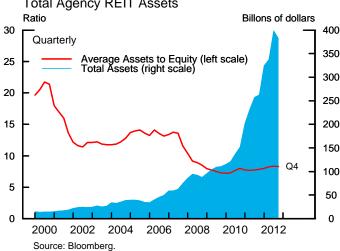
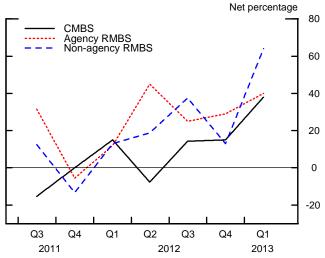


Chart 2
Dealers Reporting Increased Demand for Funding of:



Source: Senior Credit Officer Opinion Survey (SCOOS).

Chart 4
Issuance of Cov-lite Loans

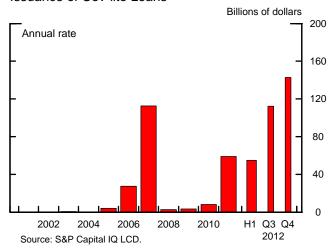


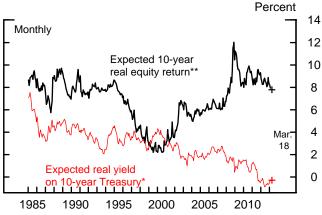
Chart 6 Agency Securities (\$BN)

<del>-</del>	2009	2012:Q3
Agency REITs	105	368
Broker-Dealer Inventories	111	166
Ratio	0.9	2.2

Source: Flow of Funds.

#### **Asset Markets and Nonfinancial Sector**

Chart 1
Expected Real Equity Return



- $^{\star}$  Off-the-run 10-year Treasury yield less Philadelphia Fed 10-year expected inflation.
- \*\* Staff estimate using a dividend discount model incorporating private sector earnings growth estimates.

Chart 3
Demand for Leveraged Finance Assets

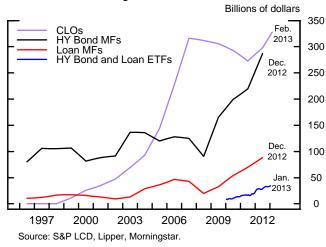
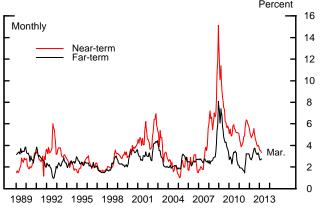


Chart 5
Potential Risks from Leveraged Finance

- Do not currently see a re-emergence of financial leverage or pipeline risk at banks
  Supervisors are taking some steps to mitigate
  - Supervisors are taking some steps to mitigate risks at banks
  - Other risks: Liquidity transformation from ETFs that reference corporate debt
    - Can enhance liquidity in good times, but need to do more work to understand potential effects in stress periods

Chart 2
Near- and Far-Term BB Forward Credit Spreads



Note: Near-term forward spread between years two and three, far-term forward spread between years nine and ten. Source: Staff estimates.

Chart 4 Leveraged Finance Market

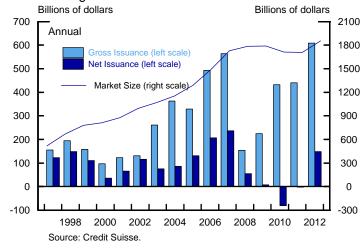
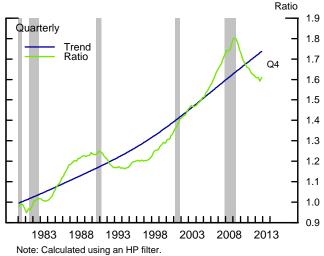


Chart 6
Private Nonfinancial Sector Credit-to-GDP Ratio



Source: FOFA, NIPA, and staff calculations.

**Appendix 4: Materials used by Mr. Bassett** 

Class I FOMC – Restricted Controlled (FR)

Material for Briefing on the

**Summary of Economic Projections** 

William Bassett March 19, 2013

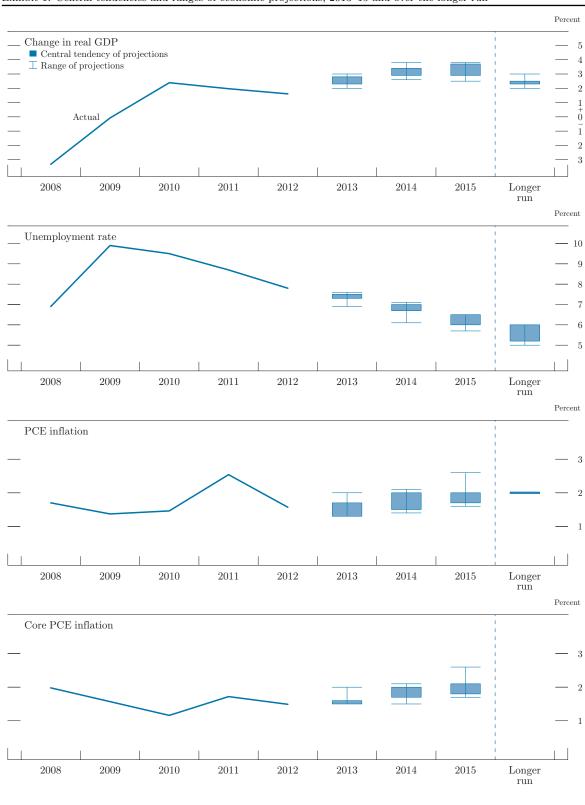


Exhibit 1. Central tendencies and ranges of economic projections, 2013-15 and over the longer run

Note: The data for the actual values of the variables are annual.

Exhibit 2. Economic projections for 2013-2015 and over the longer run (percent)

Change in real GDP								
2013 2014 2015 Longer run								
<b>Central Tendency</b>	2.3 to 2.8	2.9 to 3.4	2.9 to 3.7	2.3 to 2.5				
December projections	2.3 to 3.0	3.0 to 3.5	3.0 to 3.7	2.3 to 2.5				
Range	2.0 to 3.0	2.6 to 3.8	2.5 to 3.8	2.0 to 3.0				
December projections	2.0 to 3.2	2.8 to 4.0	2.5 to 4.2	2.2 to 3.0				
Memo: Tealbook	2.5	3.2	3.6	2.5				
December Tealbook	2.5	3.2	3.6	2.5				

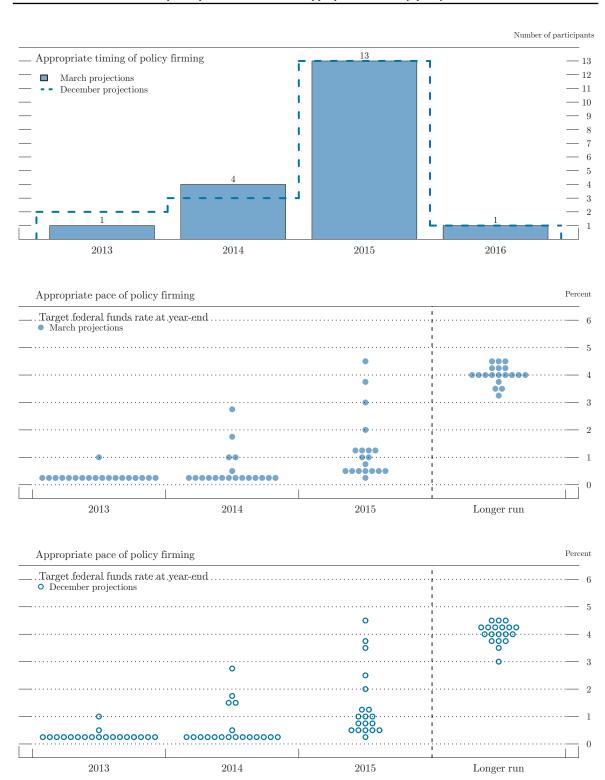
Unemployment rate									
2013 2014 2015 Longer run									
Central Tendency	7.3 to 7.5	6.7 to 7.0	6.0 to 6.5	5.2 to 6.0					
December projections	7.4 to 7.7	6.8 to 7.3	6.0 to 6.6	5.2 to 6.0					
Range	6.9 to 7.6	6.1 to 7.1	5.7 to 6.5	5.0 to 6.0					
December projections	6.9 to 7.8	6.1 to 7.4	5.7 to 6.8	5.0 to 6.0					
Memo: Tealbook	7.5	7.1	6.3	5.2					
December Tealbook	7.8	7.4	6.5	5.2					

PCE inflation									
2013 2014 2015 Longer									
<b>Central Tendency</b>	1.3 to 1.7	1.5 to 2.0	1.7 to 2.0	2.0 to 2.0					
December projections	1.3 to 2.0	1.5 to 2.0	1.7 to 2.0	2.0 to 2.0					
Range	1.3 to 2.0	1.4 to 2.1	1.6 to 2.6	2.0 to 2.0					
December projections	1.3 to 2.0	1.4 to 2.2	1.5 to 2.2	2.0 to 2.0					
Memo: Tealbook	1.3	1.5	1.6	2.0					
December Tealbook	1.3	1.4	1.5	2.0					

	Core PCE inflation				
	2013	2014	2015		
<b>Central Tendency</b>	1.5 to 1.6	1.7 to 2.0	1.8 to 2.1		
December projections	1.6 to 1.9	1.6 to 2.0	1.8 to 2.0		
Range	1.5 to 2.0	1.5 to 2.1	1.7 to 2.6		
December projections	1.5 to 2.0	1.5 to 2.0	1.7 to 2.2		
Memo: Tealbook	1.6	1.7	1.7		
December Tealbook	1.6	1.6	1.7		

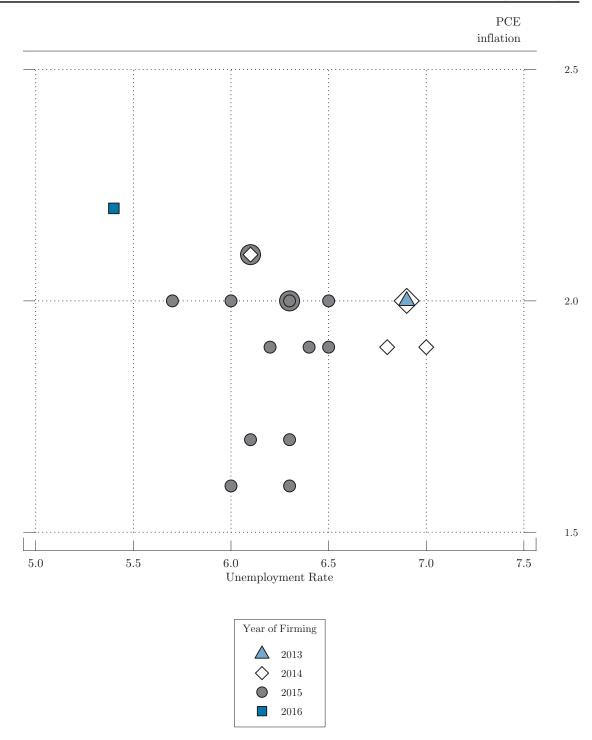
NOTE: The changes in real GDP and inflation are measured Q4/Q4.

Exhibit 3. Overview of FOMC participants' assessments of appropriate monetary policy



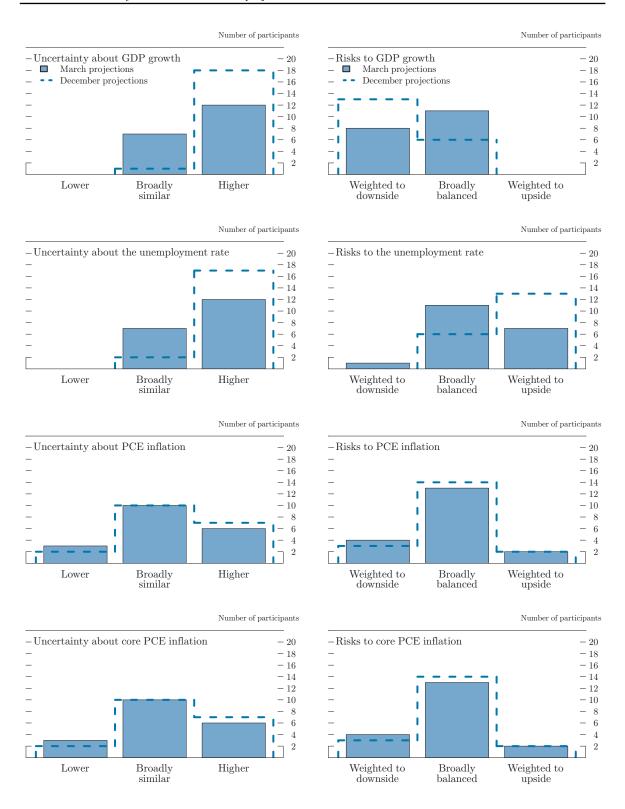
Note: In the upper panel, the height of each bar denotes the number of FOMC participants who judge that, under appropriate monetary policy, the first increase in the target federal funds rate from its current range of 0 to 1/4 percent will occur in the specified calendar year. In the middle and lower panels, each circle indicates the value (rounded to the nearest 1/4 percentage point) of an individual participant's judgment of the appropriate level of the target federal funds rate at the end of the specified calendar year or over the longer run.

Exhibit 4. Scatterplot of unemployment and PCE inflation rates in the initial year of policy firming (in percent)



NOTE: When the projections of two or more participants are identical, larger markers, which represent one participant each, are used so that each projection can be seen.

Exhibit 5. Uncertainty and risks in economic projections



Appendix 5: Materials used by Messrs. Palumbo and Lebow, Ms. Wei, and Mr. Faust

Material for FOMC

Review of Efficacy and Costs of Asset Purchases

### **Evaluating the Efficacy of the Federal Reserve's Large-Scale Asset Purchases**

#### Central Assumptions for the Effects of a Hypothetical \$500 billion Large-Scale Asset Purchase Program on Selected Financial Market Variables

		_
		basis points
1.	10-year Treasury yield (term premium)	-20
2.	Agency MBS yield	-27
3.	Conforming 30-year (fixed) mortgage rate	-25
4.	Investment-grade corporate bond yield	-15
		percent
5.	Exchange value of the dollar (broad index)	-3/4
6.	S&P 500 stock price index	1-3/4
l		

#### **Effects on Real Activity and Inflation**

- Little direct evidence
- Start with presumption that response is similar to the past
- Key assumptions for benchmark:
  - o Federal funds rate at Tealbook path for five years
  - o FRB/US description reasonable
  - o Responses in financial variables similar to those described above

#### **Benchmark LSAP Estimates**

- \$500 billion LSAP program
  - o raises GDP 0.4 percent
  - o reduces unemployment 0.2 pp
  - o raises inflation 0.1 percent
- Smaller than for first rounds of LSAPs

#### Alternative Assumptions that would Affect the Benchmark LSAP Effects

#### Make the effects smaller:

# Attenuated interest-rate effects on real activity

• Pattern of interest rates at different maturities

#### Make the effects larger:

- House price effects
- Hysteresis in labor markets

#### Either smaller or larger:

 Changes in expectations about future federal funds rates

#### Exhibit 2

#### The Question

- What is the risk of a substantial increase in long-term interest rates?
  - Defined as an increase that would be big relative to baseline expectations, and so could cause meaningful investor losses
  - Consider outcomes in which the 10-year Treasury yield at the end of 2014 reaches levels roughly 100 or 200 basis points above market or staff projections

#### Roadmap

- Basic decomposition of long-term Treasury yields
- Use two historical episodes, 1994 and 2003-2004, to illuminate sources of potential risk
- Use information from four sources to quantify the likelihood of various outcomes for long-term rates at the end of 2014
- Consider ways current monetary policy tools serve to amplify or reduce the risks

#### Decomposition of 10-Year Nominal Zero-Coupon Yield Percentage points 12 Svensson Yield Expected Real Short Rate Expected Inflation 11 10 Term Premium June 30, 2004 9 ry 4, 1994 8 June 25, 2003 7 6 5 4 2 0

2002

2005

Note: Based on staff's four-factor term structure model.

1999

1993

1996

1990

#### 1994 and 2003-04

- Long-term Treasury yields jumped after 1994 tightening and June 2003 rate cut, but edged lower after the 2004 tightening
- Rate increases in 1994 and 2003 not associated with higher growth or inflation expectations
  - Higher policy rate expectations and uncertainty were main features, perhaps reflecting lack of clarity regarding Committee's reaction function
  - Initial increase in long-term yields likely amplified by MBS hedging flows

#### Changes in Selected Variables over a Three-Month Period Following FOMC Meetings

2008

2011

	Mode Decompo		1-Year Ahead Blue Chip Survey Forecast					
Meeting Date	10-Year Yields	Short Rate Expectations	Term Premiums	Real GDP Growth	CPI Inflation	Federal Funds Rate	1-Year Eurodollar Implied Volatility*	Effective MBS Duration
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Feb 4, 1994	1.25	0.60	0.68	0.14	0.10	0.62	1.64	1.32
Jun 25, 2003	0.89	0.29	0.65	0.17	-0.05	-0.20	0.87	2.11
Jun 30, 2004	-0.64	-0.09	-0.59	-0.15	0.05	0.58	-0.42	-1.25

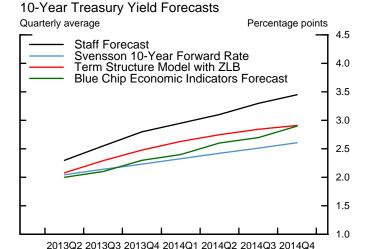
Note: MBS duration is in years; all other variables are in percentage points.

<sup>\*</sup> Width of 90 percent confidence intervals derived from corresponding implied volatilities.

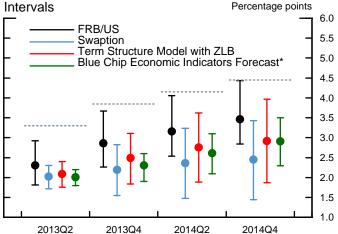
#### Exhibit 3

## Assess Current Risks of a Sharp Increase in Treasury Yields

- Use information from: (1) survey; (2) swaptions; (3) term structure model with ZLB restrictions; (4) FRB/US simulations
- Both market and staff expect a steady but gradual rise in Treasury yields
- Risk of rates rising 100 basis points above market or staff projections notable but not elevated
- The risk to long-term rates appears to be two-sided



## Mean Forecasts and 70-Percent Confidence



Note: The dashed lines represent 100 basis points above the mean staff forecasts.

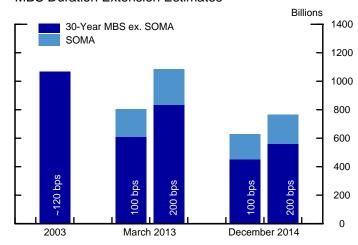
#### Distribution of Holdings of Long-term Securities

- Federal Reserve is the second largest domestic MBS holder as of the end of 2012Q3, while GSEs have scaled back their MBS holdings
- Half of Treasury notes and bonds were held by foreign investors, mostly sovereign investors, while Federal Reserve is the largest domestic holder

#### Implications of Current Policy Environment

- Enhanced communications should limit movements in long-term rates, although communicating clearly may prove challenging given historically unprecedented policy mix
- The amplifying effect of MBS convexity hedging may be less pronounced now due to large SOMA holdings, reduced holdings at GSEs, and lower overall extension risks
- A rise in interest rates may be amplified if SOMA portfolio sales lead to large increases in interest rate implied volatilities

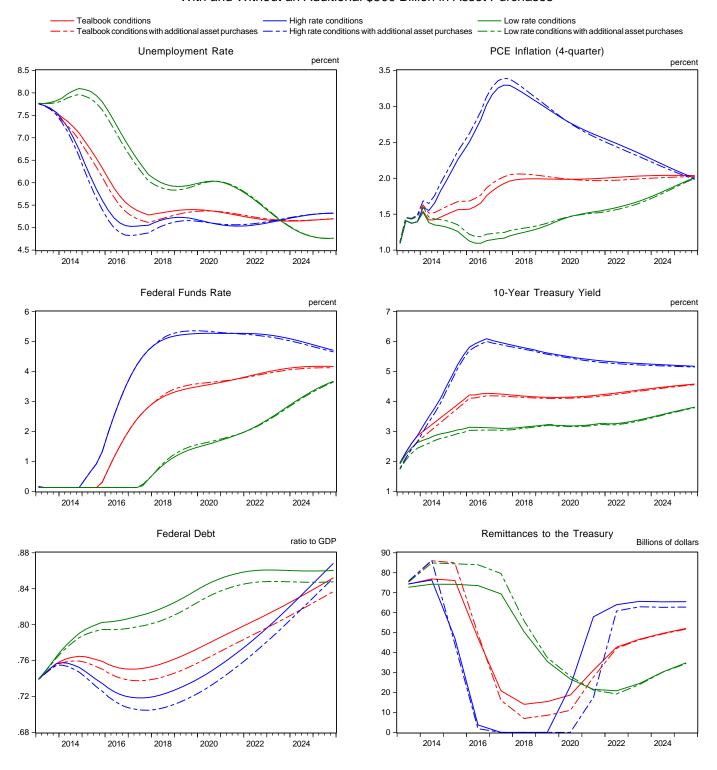
#### MBS Duration Extension Estimates



Note: Duration extension in 10-year equivalents. Source: Blackrock, FRBNY calculations.

<sup>\*</sup> The upper and lower bounds plot the averages of the ten highest and the ten lowest forecasts, respectively, for each horizon.

Exhibit 4
Alternative Scenarios for the Evolution of the Economy and the Federal Budget,
With and Without an Additional \$500 Billion in Asset Purchases



#### Questions for Discussion of Efficacy and Costs of Asset Purchases

- 1. What is your view of the efficacy <u>in general</u> of asset purchases in supporting economic activity? What is your view of the efficacy <u>specifically</u> of current asset purchases, given the economic and financial environment?
- 2. What are the most significant costs, if any, that concern you in considering the net benefits of current or future asset purchases? Do you see these costs as increasing materially if the current pace of asset purchases continues through the end of the year?
- 3. If you listed any costs in your response to the previous question, do you believe that there are effective ways of avoiding or mitigating those costs?
- 4. Going forward, what do you see as the appropriate path for asset purchases? How would you describe the stopping rule or reaction function that you are employing in making that assessment?

Appendix 6: Materials used by Mr. English

Class I FOMC – Restricted Controlled (FR)

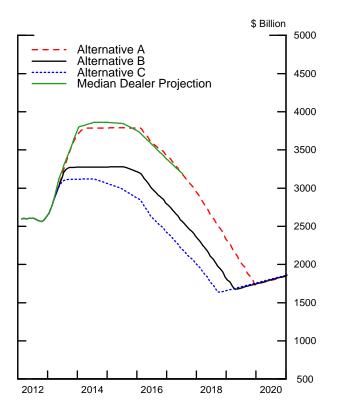
Material for

FOMC Briefing on Monetary Policy Alternatives

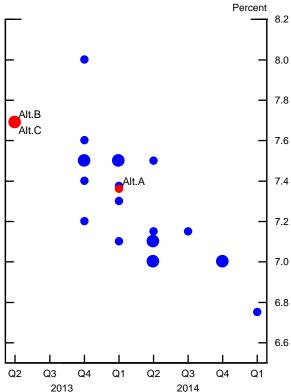
Bill English March 19-20, 2013

#### **Balance Sheet Expectations**

#### Total Projected SOMA Security Holdings



## Modal Unemployment Rate at Expected End of Security Purchases: Dealer Survey



Note. Primary dealer unemployment rates are interpolated from average Q4 values reported in the survey. A larger dot denotes two observations.

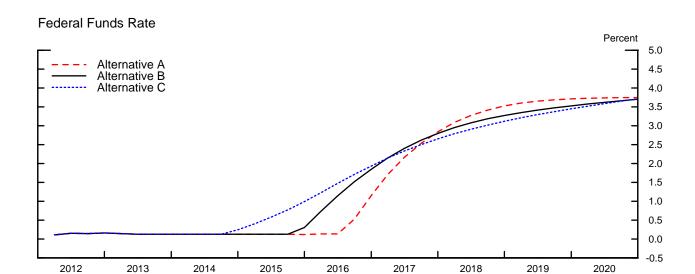
#### Primary Dealer Balance Sheet Expectations

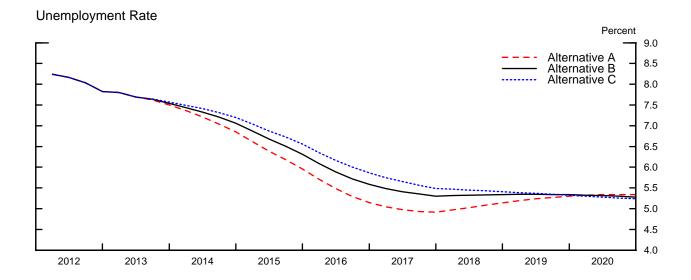
- 19 of 21 dealers expect the Committee to reduce the pace of purchases before completing the program:
  - Of these, about half expect tapering to begin in the second half of this year, with almost all the rest expecting it to start in 2014:H1
  - Most anticipate tapering to last about 6 months
- About evenly split on whether they expect asset sales during exit
- Uncertainty about the size of the balance sheet this year and next decreased somewhat but remained high

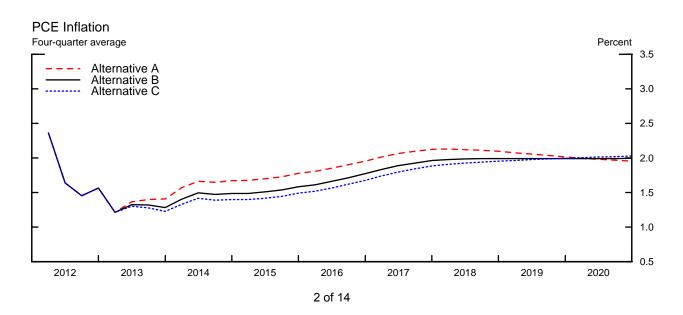
#### SEP Information on Purchases

- 12 participants judged that appropriate policy implied a larger amount of purchases than the staff's baseline assumption
- 4 participants indicated that their balance sheet projections did not materially differ from the staff's assumption
- Other participants likely saw a smaller volume of purchases as appropriate
- About half of the participants described appropriate paths for the balance sheet that appeared to imply no tapering, while roughly one third explicitly assumed that purchases would be tapered

### Alternative Monetary Policy Scenarios







#### **JANUARY FOMC STATEMENT**

- Information received since the Federal Open Market Committee met in December suggests that growth in economic activity paused in recent months, in large part because of weather-related disruptions and other transitory factors. Employment has continued to expand at a moderate pace but the unemployment rate remains elevated. Household spending and business fixed investment advanced, and the housing sector has shown further improvement. Inflation has been running somewhat below the Committee's longer-run objective, apart from temporary variations that largely reflect fluctuations in energy prices. 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 growth will proceed at a moderate pace and the unemployment rate will gradually decline toward levels the Committee judges consistent with its dual mandate. Although strains in global financial markets have eased somewhat, the Committee continues to see downside risks to the economic outlook. The Committee also anticipates that inflation over the medium term likely will run at or below its 2 percent objective.
- 3. To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee will continue purchasing additional agency mortgage-backed securities at a pace of \$40 billion per month and longer-term Treasury securities at a pace of \$45 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. Taken together, these actions should maintain downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative.
- 4. The Committee will closely monitor incoming information on economic and financial developments in coming months. If the outlook for the labor market does not improve substantially, the Committee will continue its purchases of Treasury and agency mortgage-backed securities, and employ its other policy tools as appropriate, until such improvement is achieved in a context of price stability. In determining the size, pace, and composition of its asset purchases, the Committee will, as always, take appropriate account of the likely efficacy and costs of such purchases.
- 5. To support continued progress toward maximum employment and price stability, the Committee expects that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the asset purchase program ends and the economic recovery strengthens. In particular, the Committee decided to keep the target range for the federal funds rate at 0 to ½ percent and currently anticipates that this exceptionally low range for the federal funds rate will be appropriate at least as long as the unemployment rate remains above 6½ percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations

continue to be well anchored. In determining how long to maintain a highly accommodative stance of monetary policy, the Committee will also consider other information, including additional measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. 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.

#### FOMC STATEMENT—MARCH 2013 ALTERNATIVE A

- 1. Information received since the Federal Open Market Committee met in December January suggests that growth in economic activity paused in recent months, in large part because of weather-related disruptions and other transitory factors has resumed following a pause late last year. Although employment has continued to expand at a moderate pace, but the unemployment rate remains elevated. Household spending and business fixed investment advanced, and the housing sector has shown further improvement, but fiscal policy has become somewhat more restrictive. Inflation has been running somewhat below the Committee's longer-run objective, apart from temporary variations that largely reflect fluctuations in energy prices. 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 judges that, with appropriate without further policy accommodation, economic growth will proceed at a moderate pace and the unemployment rate will gradually decline toward levels the Committee judges consistent with its dual mandate might not be strong enough to generate sustained improvement in labor market conditions. Although Moreover, strains in global financial markets have eased somewhat, the Committee continues to see and unresolved fiscal issues pose downside risks to the economic outlook. The Committee also anticipates that inflation over the medium term likely will run at or somewhat below its 2 percent objective.
- 3. To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee will continue purchasing additional increase the pace at which it purchases agency mortgage-backed securities at a pace of \$40 to \$45 billion per month, and longer-term Treasury securities at a pace of \$45 to \$55 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. Taken together, these actions will further increase the Committee's holdings of longer-term securities and should maintain put additional downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative.
- 4. The Committee will closely monitor incoming information on economic and financial developments in coming months. If the outlook for the labor market does not improve substantially, The Committee will continue its purchases of Treasury and agency mortgage-backed securities, and employ its other policy tools as appropriate, until such improvement is achieved the outlook for the labor market has improved substantially in a context of price stability. In determining the size, pace, and composition of its asset purchases, the Committee will, as always, continue to take appropriate account of the likely efficacy and costs of such purchases.
- 5. To support continued progress toward maximum employment and price stability, the Committee expects that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the asset purchase program ends and the economic recovery strengthens. In particular, the Committee decided to keep the

target range for the federal funds rate at 0 to ½ percent and currently anticipates that this exceptionally low range for the federal funds rate will be appropriate at least as long as the unemployment rate remains above 6½ 5½ percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored. In determining how long to maintain a highly accommodative stance of monetary policy, the Committee will also consider other information, including additional measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. 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.

#### FOMC STATEMENT—MARCH 2013 ALTERNATIVE B

- Information received since the Federal Open Market Committee met in December January suggests that a return to moderate economic growth in economic activity paused in recent months, in large part because of weather related disruptions and other transitory factors following a pause late last year. Employment has continued to expand at a moderate pace Labor market conditions have shown signs of improvement in recent months but the unemployment rate remains elevated. Household spending and business fixed investment advanced, and the housing sector has shown strengthened further improvement, but fiscal policy has become somewhat more restrictive. Inflation has been running somewhat below the Committee's longer-run objective, apart from temporary variations that largely reflect fluctuations in energy prices. 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 growth will proceed at a moderate pace and the unemployment rate will gradually decline toward levels the Committee judges consistent with its dual mandate. Although strains in global financial markets have eased somewhat, The Committee continues to see downside risks to the economic outlook. The Committee also anticipates that inflation over the medium term likely will run at or below its 2 percent objective.
- 3. To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate Based on its outlook for the labor market and inflation, and on its current assessment of the likely efficacy and costs of additional asset purchases, the Committee will decided to continue purchasing additional agency mortgage-backed securities at a pace of \$40 billion per month and longer-term Treasury securities at a pace of \$45 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. Taken together, these actions should maintain downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative, thereby supporting a stronger economic recovery and helping 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. If the outlook for the labor market does not improve substantially, The Committee will continue its purchases of Treasury and agency mortgage-backed securities, and employ its other policy tools as appropriate, until such improvement is achieved the outlook for the labor market has improved substantially in a context of price stability. In determining the size, pace, and composition of its asset purchases, the Committee will, as always, continue to take appropriate account of the likely efficacy and costs of such purchases as well as the extent of progress toward its economic objectives.

5. To support continued progress toward maximum employment and price stability, the Committee expects that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the asset purchase program ends and the economic recovery strengthens. In particular, the Committee decided to keep the target range for the federal funds rate at 0 to \(^{1}\)4 percent and currently anticipates that this exceptionally low range for the federal funds rate will be appropriate at least as long as the unemployment rate remains above 6½ percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored. In determining how long to maintain a highly accommodative stance of monetary policy, the Committee will also consider other information, including additional measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. 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.

#### FOMC STATEMENT—MARCH 2013 ALTERNATIVE C

- Information received since the Federal Open Market Committee met in December January suggests that the pace of economic growth in economic activity paused has picked up in recent months, in large part because of weather-related disruptions and other transitory factors following a pause late last year. Employment has continued to expanded at a moderate solid pace but and the unemployment rate remains, though elevated, has declined. Household spending and business fixed investment advanced, and the housing sector has shown strengthened further improvement. Inflation has been running somewhat below the Committee's longer-run objective, apart from temporary variations that largely reflect fluctuations in energy prices. 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 growth will proceed at a moderate pace pick up further over time and the unemployment rate will gradually decline toward levels the Committee judges consistent with its dual mandate. Although strains in global financial markets have eased somewhat, the Committee continues to see downside risks to the economic outlook. The Committee also anticipates that inflation over the medium term likely will run at or below close to its 2 percent objective. The Committee sees the risks to both economic growth and inflation as roughly balanced.
- 3. To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, Based on its outlook for the labor market and inflation, and on its current assessment of the likely efficacy and costs of additional asset purchases, the Committee decided today to reduce the pace of its purchases. In particular, the Committee will continue purchasing purchase additional agency mortgage-backed securities at a pace of \$40 \$30 billion per month and longer-term Treasury securities at a pace of \$45 \$30 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. Taken together, these actions will increase the Committee's holdings of longer-term securities by \$60 billion per month and should maintain sustain downward pressure on longer-term interest rates, support mortgage markets, and help to make keep broader financial conditions more accommodative.
- 4. The Committee will closely monitor incoming information on economic and financial developments in coming months. If the outlook for the labor market does not improve substantially, The Committee will intends to continue its purchases of Treasury and agency mortgage-backed securities, and employ its other policy tools as appropriate, until such improvement is achieved the outlook for the labor market has improved substantially in a context of price stability. The Committee is prepared to increase or reduce the pace of purchases if the outlook for the labor market or inflation changes, with the purpose of maintaining appropriate policy accommodation. In determining the size, pace, and composition of its asset

purchases, the Committee will, as always, take appropriate account of the likely efficacy and costs of such purchases.

5. To support continued progress toward maximum employment and price stability, the Committee expects that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the asset purchase program ends and the economic recovery strengthens. In particular, the Committee decided to keep the target range for the federal funds rate at 0 to \(^1\)4 percent and currently anticipates that this exceptionally low range for the federal funds rate will be appropriate at least as long as the unemployment rate remains above 6½ percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored. In determining how long to maintain a highly accommodative stance of monetary policy, the Committee will also consider other information, including additional measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. 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.

#### **JANUARY 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. The Desk is directed to continue purchasing longer-term Treasury securities at a pace of about \$45 billion per month and to continue purchasing agency mortgage-backed securities at a pace of about \$40 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 MBS 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 MARCH 2013 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** April 1, the Desk is directed to continue increase the pace of purchases of longer-term Treasury securities at a pace of to about \$45 \$55 billion per month and to continue purchasing increase the pace of purchases of agency mortgage-backed securities at a pace of to about \$40 \$45 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 MBS 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 MARCH 2013 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. The Desk is directed to continue purchasing longer-term Treasury securities at a pace of about \$45 billion per month and to continue purchasing agency mortgage-backed securities at a pace of about \$40 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 MBS 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 MARCH 2013 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 April 1, the Desk is directed to continue purchasing reduce the pace of purchases of longer-term Treasury securities at a pace of to about \$45 \$30 billion per month and to continue purchasing reduce the pace of purchases of agency mortgage-backed securities at a pace of to about \$40 \$30 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 MBS 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.