

Appendix 1: Materials used by Mr. Potter

Class II FOMC – Restricted (FR)

Material for the Briefing on

**Financial Developments and
Open Market Operations**

Simon Potter

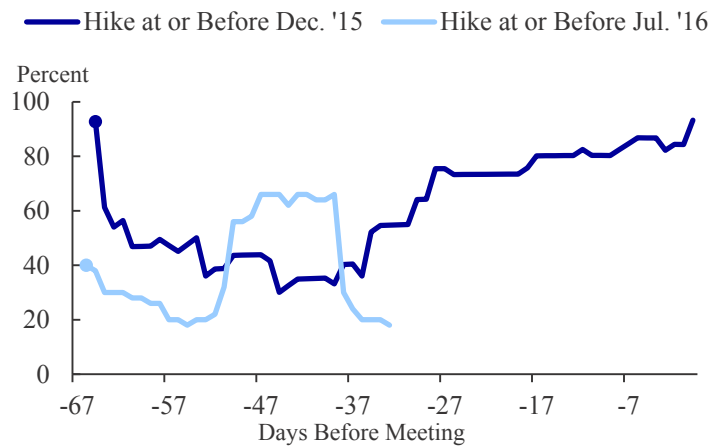
June 14, 2016

(1) Changes in Asset Prices

	From Start of Year to 02/11/16	From 02/11/16 to April FOMC	From April FOMC to Current
2-Year Treasury Yield	-40 bps	+21 bps	-13 bps
10-Year Treasury Yield	-61 bps	+27 bps	-29 bps
U.S. Broad T.W. Dollar	+0.8 %	-3.8 %	+1.2 %
S&P 500 Index	-10.5 %	+14.4 %	+0.2 %
High-Yield OAS	+179 bps	-253 bps	-22 bps
MBS OAS*	+6 bps	-1 bps	+13 bps

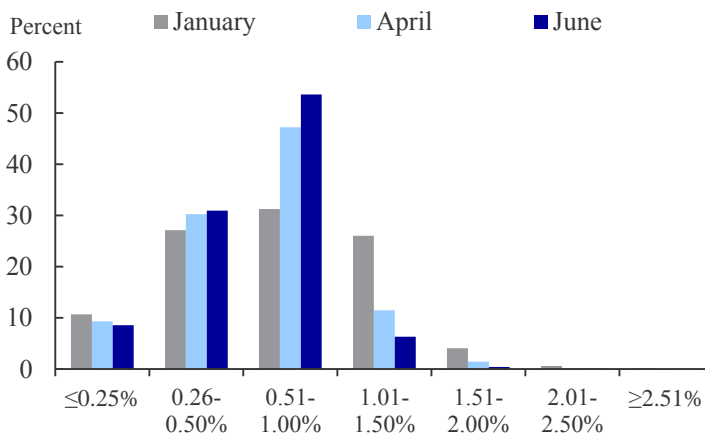
*Current coupon Fannie Mae 30-Year.
Source: Barclays, Bloomberg, Federal Reserve Board of Governors

(2) Market-Implied Probability of Rate Hike*



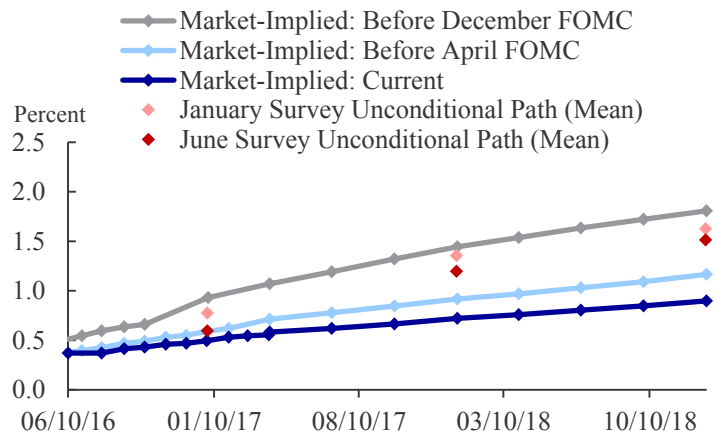
*Series start the day before two meetings prior, e.g. for Dec. '15 series starts the day before the Sept. '15 FOMC Meeting.
Source: Bloomberg, Desk Calculations

(3) Year-End 2016 Average Survey PDF*



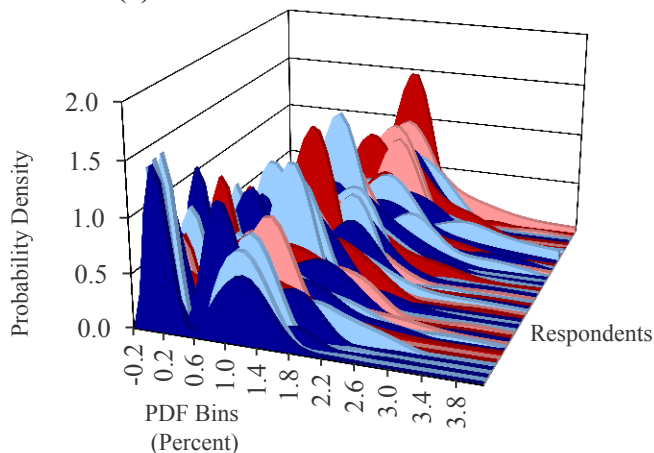
*Based on all responses from the January, April, and June Surveys of Primary Dealers and Market Participants.
Source: FRBNY

(4) Implied Federal Funds Rate Path*



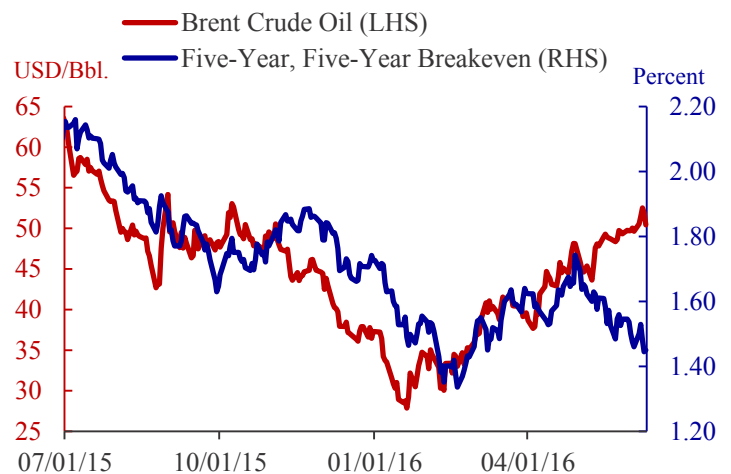
*Market-implied paths derived from federal funds and Eurodollar futures, survey paths are the average PDF-implied means from the January and June Surveys of Primary Dealers and Market Participants.
Source: Bloomberg, Desk Calculations

(5) Year-End 2017 Individual PDFs*



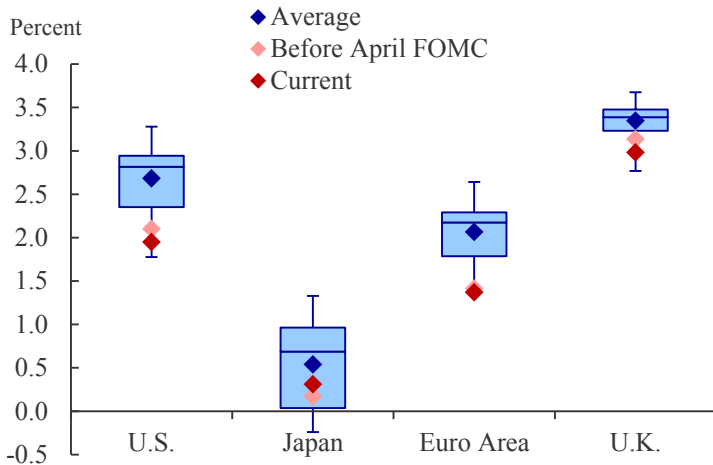
*Based on all responses from the June Surveys of Primary Dealers and Market Participants. Blue series are market participants, red are primary dealers.
Source: FRBNY

(6) Brent Crude Oil and Five-Year, Five-Year Breakeven



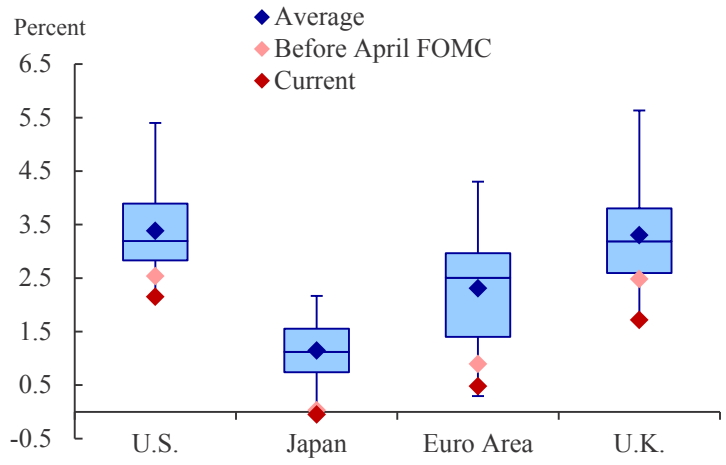
Source: Bloomberg, Federal Reserve Board of Governors

(7) Five-Year, Five-Year Inflation Swaps Since 2011*



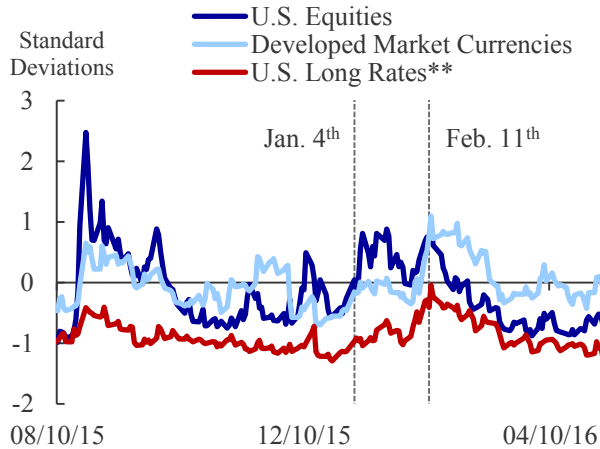
*Boxed blue ranges show the 25th to 75th percentiles and whiskers illustrate the maximum and minimum levels since 2011.
Source: Barclays

(8) Five-Year, Five-Year Nominal Rates Since 2011*



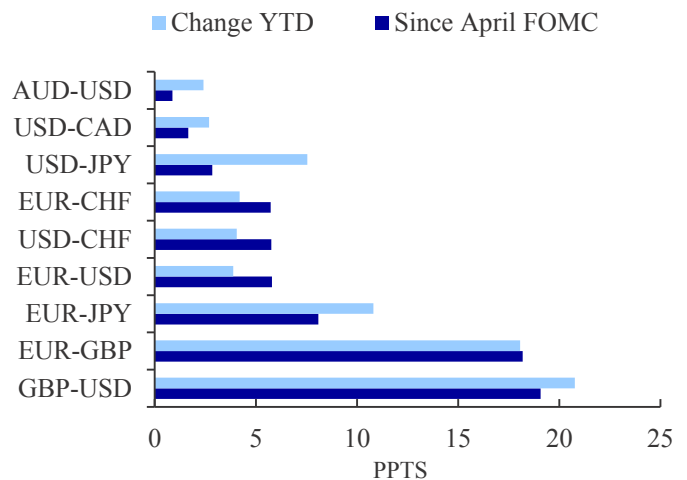
*Boxed blue ranges show the 25th to 75th percentiles and whiskers illustrate the maximum and minimum levels since 2011.
Source: Bloomberg

(9) Standardized Implied Volatility Indices*



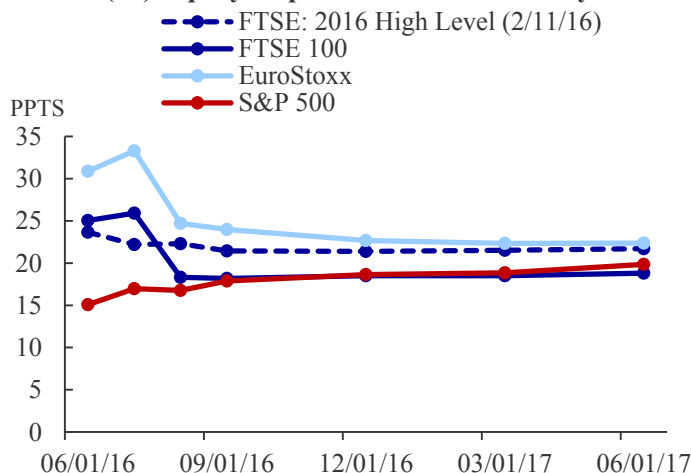
*Standardized 1-month implied volatilities since June 1994. Updated as of 9:30 A.M. on 06/14/16.
**Swaption with 10-year underlying.
Source: Barclays, Bloomberg, CBOE, Deutsche Bank, Desk Calculations

(10) Changes in Currency Pair Implied Volatility*



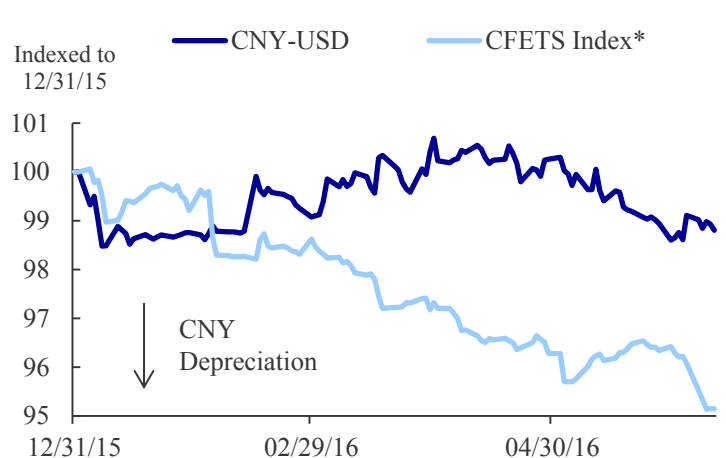
*1-month, at-the-money options. Updated as of 9:30 A.M. on 06/14/16.
Source: Bloomberg

(11) Equity Implied Forward Volatility*



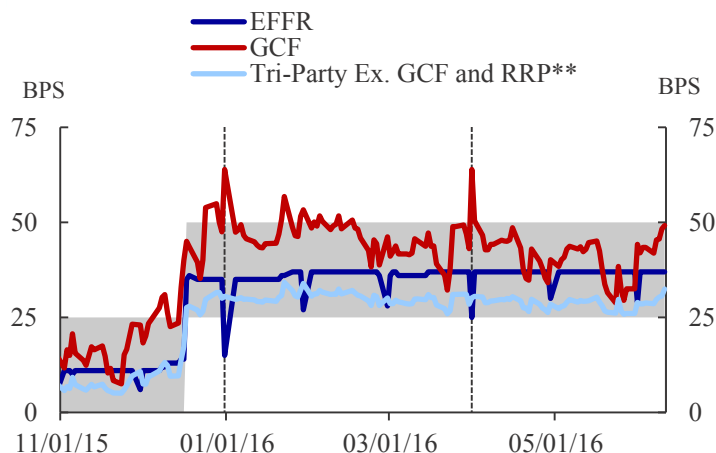
*At-the-money options. Updated as of 9:30 A.M. on 06/14/16.
Source: Bloomberg, Desk Calculations

(12) Chinese Exchange Rate



*RMB exchange rate against a basket of 13 currencies.
Computed from central parity rates for all currencies traded on CFETS.
Source: Bloomberg, Desk Calculations

(13) Money Market Rates*

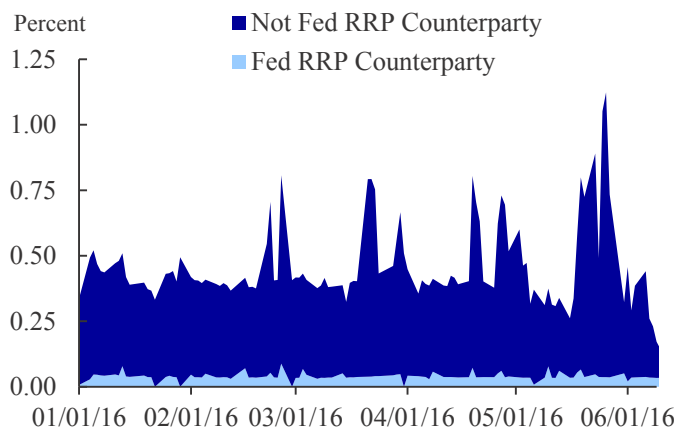


*Dashed lines indicate quarter-ends.

**Excludes intra-bank transactions.

Source: FRBNY

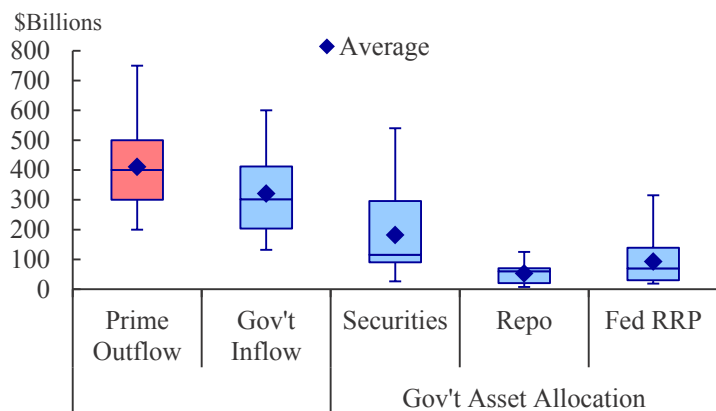
(14) Share of ON Treasury Tri-party Trades Below ON RRP Offering Rate*



*Tri-party volumes exclude GCF and intra-bank transactions.

Source: Desk Calculations, FRBNY

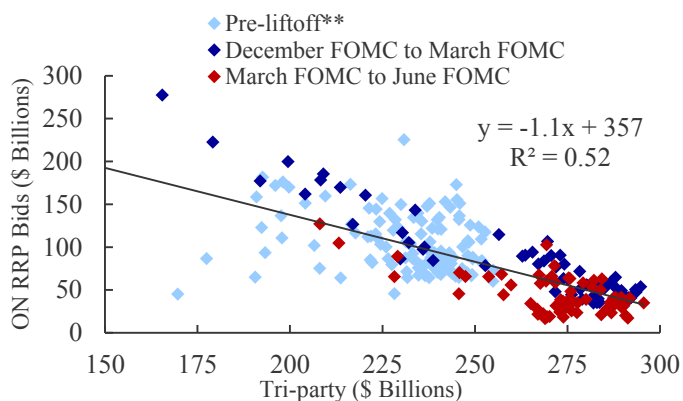
(15) Money Fund Migration Survey Results*



*For gov't inflow and allocation, survey responses given in percent; these values calculated based on respondents' prime outflow estimates. Boxed ranges show the 25th to 75th percentiles and whiskers illustrate the maximum and minimum values.

Source: Desk Calculations, FRBNY

(16) ON RRP Usage vs. ON Treasury Tri-party Volumes*

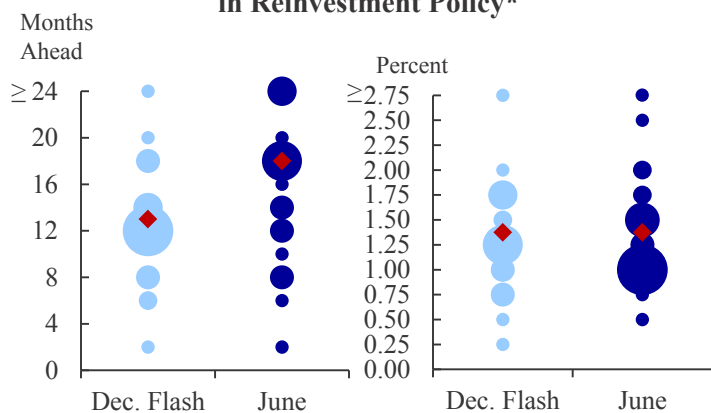


*Excludes quarter-end dates. Tri-party volumes exclude GCF and intra-bank transactions.

**June 2015 FOMC to December 2015 FOMC.

Source: FRBNY

(17) Timing of and Fed Funds Rate at Change in Reinvestment Policy*



*Dots scaled by percent of respondents from the June and Dec. Flash Surveys of Primary Dealers and Market Participants. Red dot is median. If timing of policy change differs between Treasury and MBS, earlier is taken.

Source: FRBNY

(18) Contingency Plan for Maintaining Par Value of Treasury Portfolio

- If unable to roll over maturing Treasuries at auction, Desk has no authority to make secondary market purchases
- Inability to roll over could be caused by technical or operational issues, errors, or change to auction calendar
 - February 25, 2016: 7-year auction rescheduled for the next day
- With proper authorization, Desk could make purchases in secondary market to maintain SOMA size
- Desk to prepare procedures to seek authorization

Appendix: Summary of Operational Testing*Summary of Operational Tests in prior period:*

- Domestic Authorization
 - May 24: Outright Treasury sale for \$200 million
 - May 25: Overnight repo for \$610 million
 - May 25: Outright MBS Sale (specified pool) for approximately \$99 million
 - June 1: Outright MBS Sale (basket) for approximately \$30 million
- Foreign Authorization
 - June 7: Liquidity swap with the Bank of Canada for CAD51 thousand
- TDF test operation
 - May 19: Conducted 7-day test with total take-up of \$67 billion

Upcoming Operational Tests

- No tests under the Domestic Authorization
- One test scheduled under the Foreign Authorization
 - July 12: Euro-denominated overnight repo for approximately €1 million

Appendix 2: Materials used by Messrs. Rudd and Ahmed

Class II FOMC – Restricted (FR)

Material for

**Staff Presentation on the Economic and Financial
Situation**

Jeremy Rudd and Shaghil Ahmed
June 14, 2016

Exhibit 1

Staff Projection

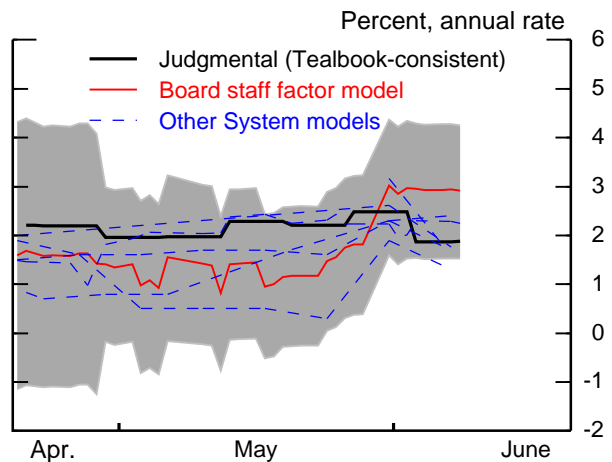
1. Near-Term Outlook

(Quarterly percent changes or percentage point contributions at annual rate)

	2016		
	Q1 ^e	Q2 ^f	H2 ^f
1. Real GDP	1.2	1.9	2.3
2. <i>April TB</i>	0.4	2.2	2.7
<i>Contributions to revision:</i>			
3. PDPF	-0.1	0.0	-0.6
4. PCE	0.1	0.2	-0.2
5. RES	0.1	0.0	-0.3
6. E&I + NRS	-0.3	-0.2	-0.1
7. Inventory investment	0.2	-0.2	-0.1
8. Government	-0.1	-0.3	0.1
9. Net exports	0.8	0.1	0.2

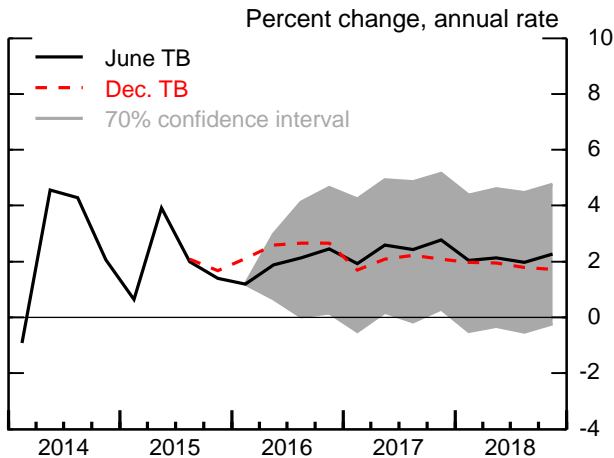
e: Staff estimate. f: Staff forecast.

2. Evolution of 2016:Q2 GDP Growth Nowcasts



Note: The shaded region is a 70 percent confidence interval around the Board staff factor model estimate.

3. Real GDP



Note: Confidence intervals for panels 3 and 6 are based on FRB/US stochastic simulations.

4. Sources of GDP Revisions Since December

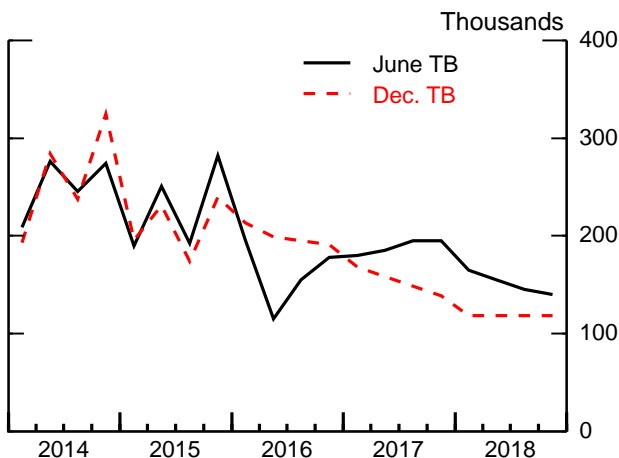
Factors revising down 2016-2018 GDP growth:

- Incoming domestic spending data (PCE, E&I) and our reaction to it.

Factors revising up 2016-2018 GDP growth:

- Incoming external-sector data and our reaction to it.
- More-supportive financial conditions.

5. Total Payroll Employment*



* Average monthly change in quarter shown.

6. Unemployment Rate

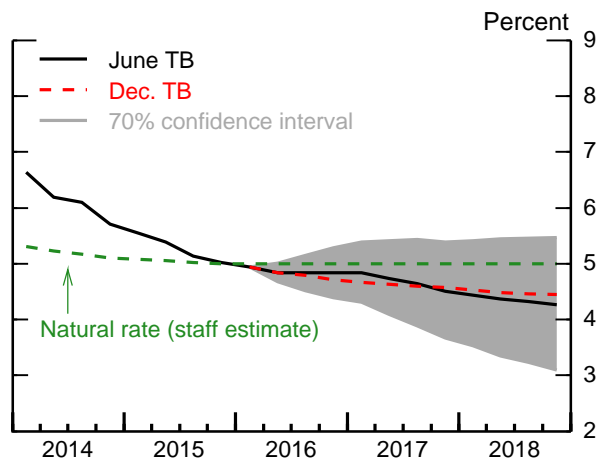
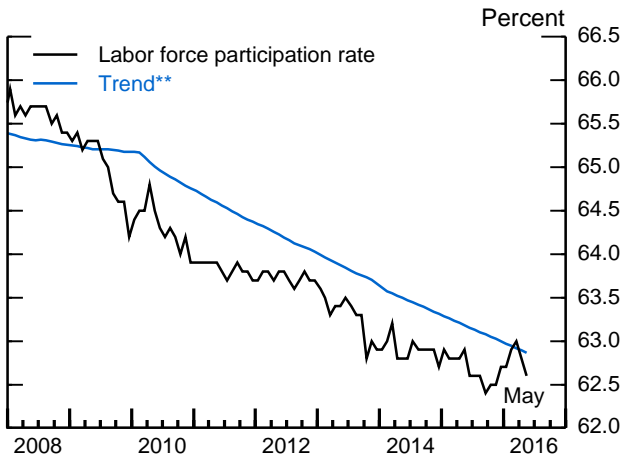


Exhibit 2

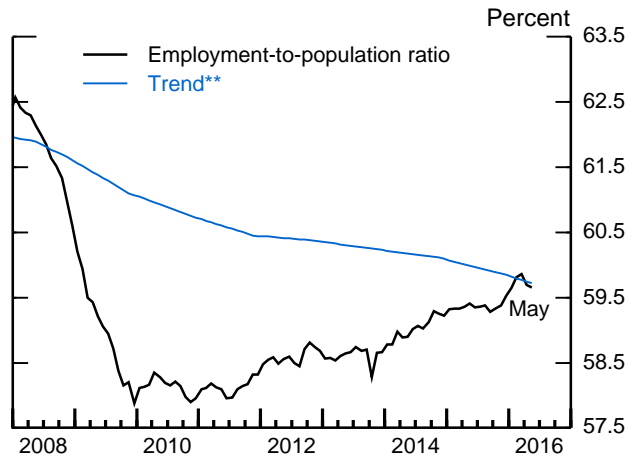
Perspectives on Labor Market Slack

1. Labor Force Participation Rate*



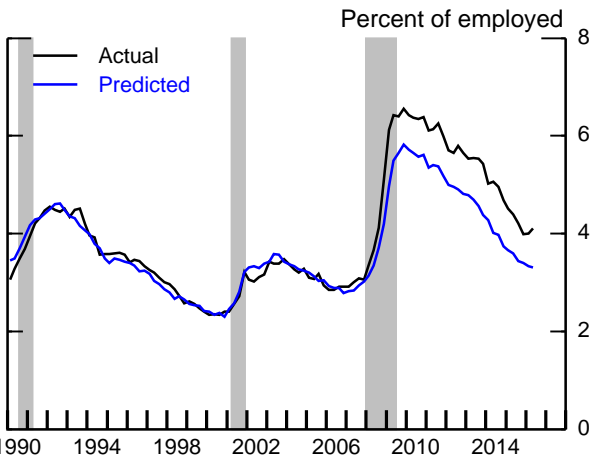
*Published data adjusted by staff to account for changes in population weights. **Staff estimate including the effect of extended unemployment benefits.

2. Employment-to-Population Ratio*



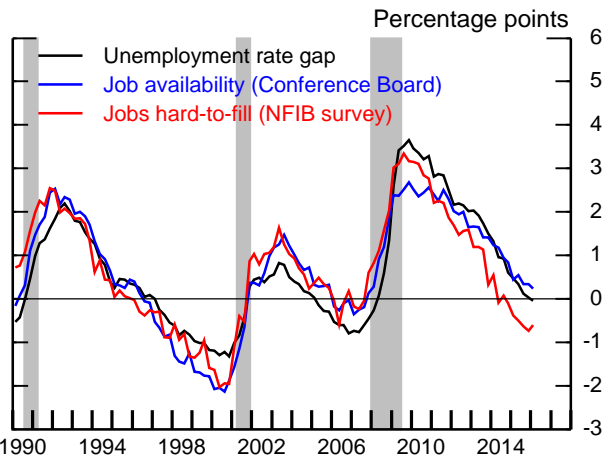
*Published data adjusted by staff to account for changes in population weights. **Staff estimate.

3. Part-Time for Economic Reasons



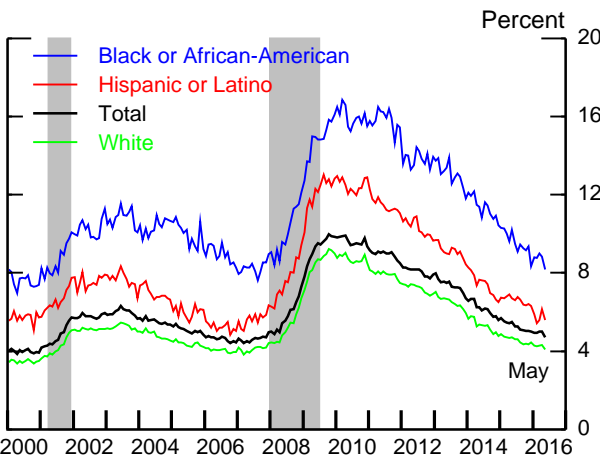
Note: Shaded bars indicate a period of business recession as defined by the NBER. Series adjusted for CPS redesign; 2016:Q2 is April-May average.

4. Alternative Measures of Labor Market Slack



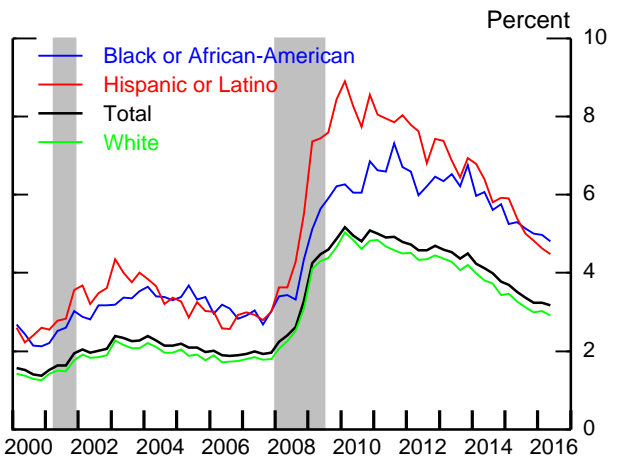
Note: Shaded bars indicate a period of business recession as defined by the NBER. Indexes normalized to have same mean and standard deviation as staff unemployment rate gap.

5. Unemployment Rates by Group



Note: Shaded bars indicate a period of business recession as defined by the NBER.

6. Part-Time for Economic Reasons by Group

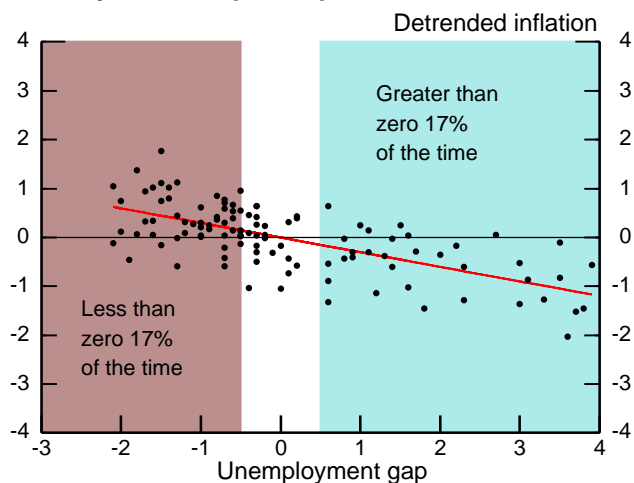


Note: Shaded bars indicate a period of business recession as defined by the NBER. Data are not seasonally adjusted and cover workers who are usually part time only; 2016:Q2 is April-May average.

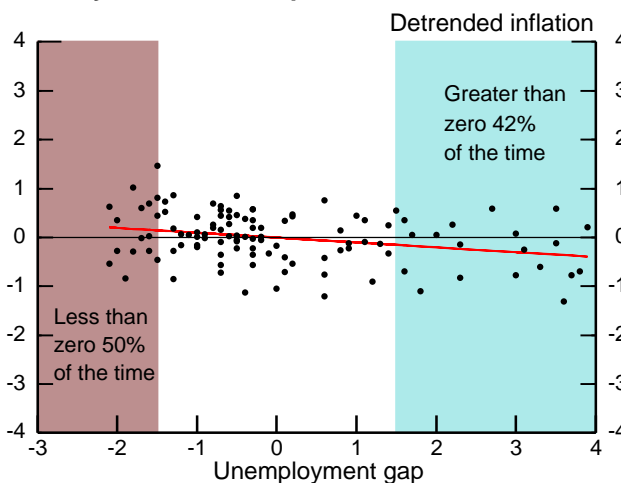
Exhibit 3

Additional Perspectives on Slack

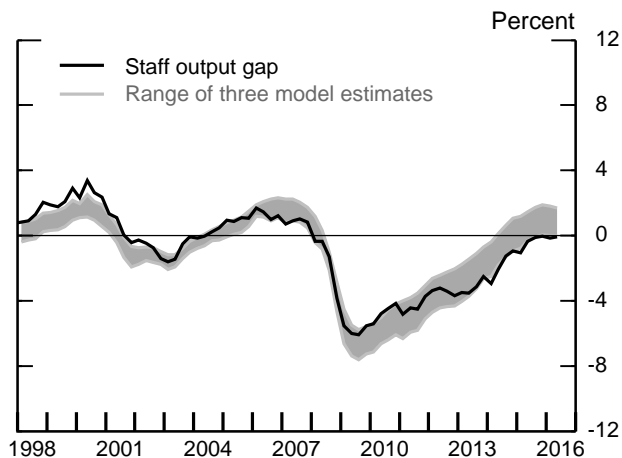
1. Stylized Steep Phillips Curve



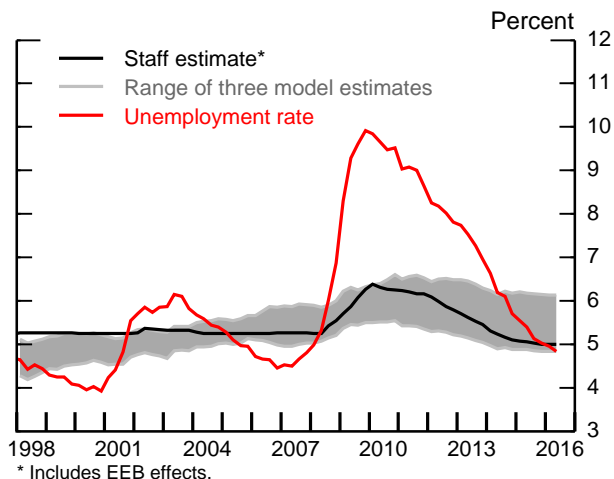
2. Stylized Flat Phillips Curve



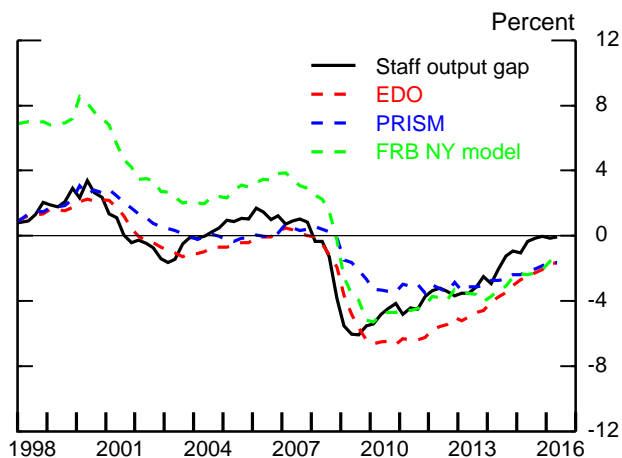
3. Output Gap Estimates from Statistical Models



4. Natural Rate of Unemployment Estimates from Statistical Models



5. Output Gap Estimates from DSGE Models



6. Short-Run Real Natural Rate of Interest Estimates from DSGE Models

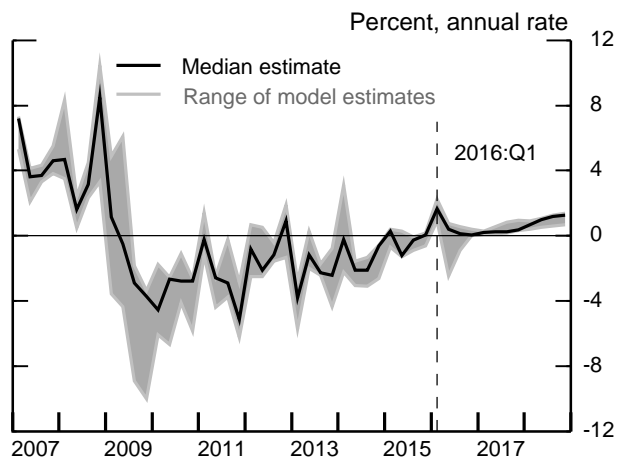
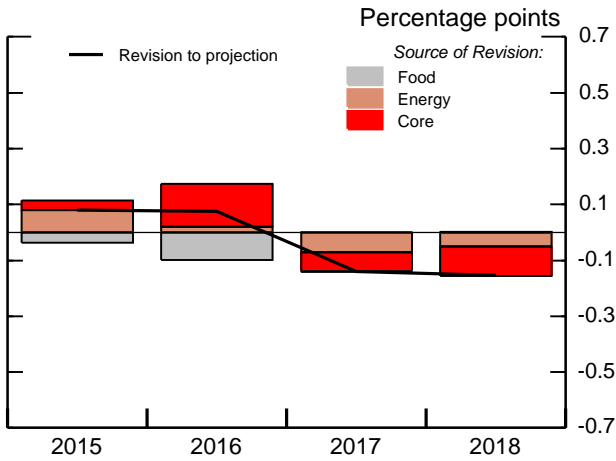


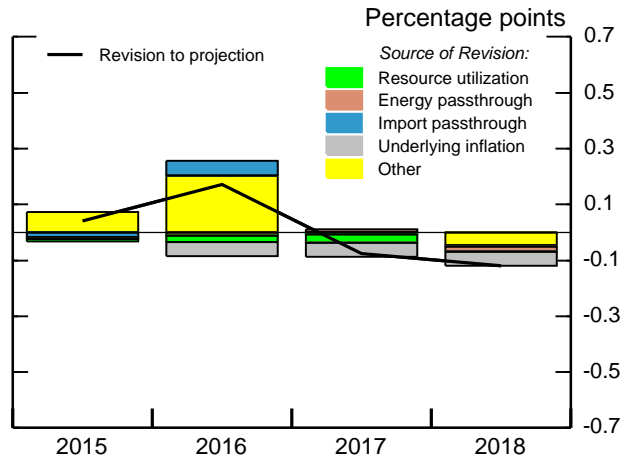
Exhibit 4

Inflation

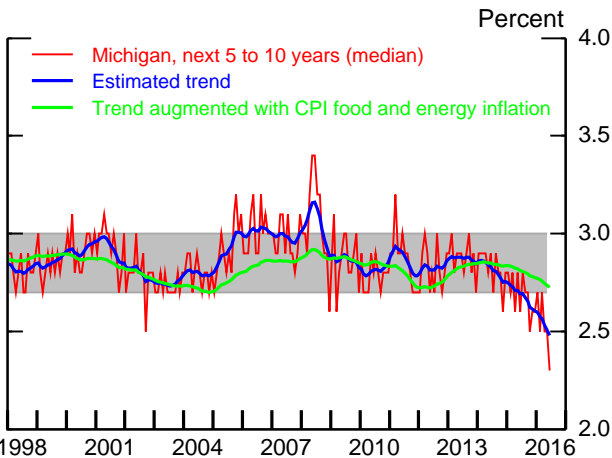
1. Inflation Revisions Since December: Total PCE



2. Inflation Revisions Since December: Core PCE



3. Longer-Term Inflation Expectations



Note: Shaded area denotes 70 percent of the observed historical range since 1998. Augmented trend uses staff forecasts for May and June CPIs. June Michigan survey value is preliminary.

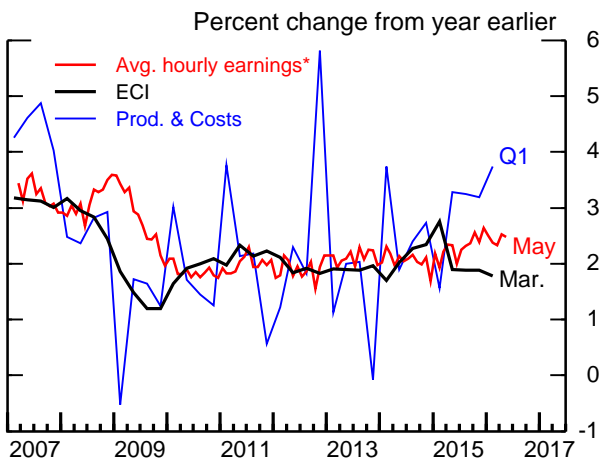
4. Indicators of Underlying Core PCE Inflation

(Percent change, annual rate)

	2007:Q4		2016:Q1	
	Est.	Est.	Est.	Range
1. Phillips curve (Michigan)	1.9	1.6	1.5 - 1.8	
2. Phillips curve (SPF)	1.7	1.6	1.5 - 1.7	
3. Phillips curve (TIPS)	2.1	0.9	0.7 - 1.0	
4. TVP/SV VAR	1.9	2.0	1.3 - 2.7	
5. Stock-Watson	1.9	1.6	1.4 - 1.8	
6. Cogley-Sargent	1.8	1.6	1.3 - 1.9	
7. Mertens (2011)	2.2	1.8	1.7 - 2.0	
8. Nalewaik (2015)	1.9	1.8	1.7 - 2.0	

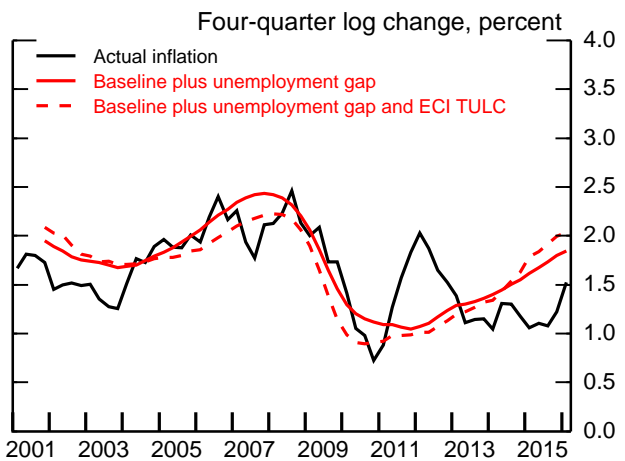
Note: Model 8 based on total PCE prices. "Range" gives 70 percent confidence interval or credible set.

5. Measures of Labor Compensation



* All employees.

6. VAR Decomposition of Core Market-Based Inflation



Note: The red lines show the estimated effects of the specified structural shocks on core inflation.

Exhibit 5

Foreign Outlook

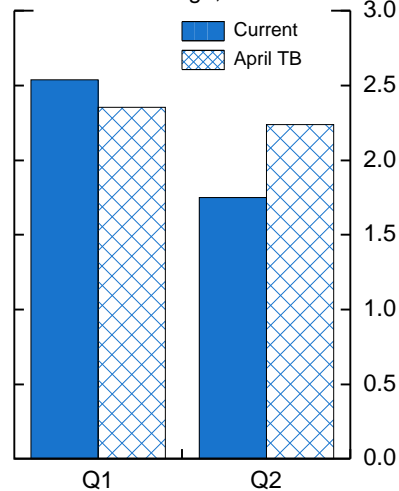
1. Real GDP*

Percent change, annual rate

	2015	2016		2017 ^f	2018 ^f
	Q4	Q1	Q2 ^f	H2 ^f	
1. Total Foreign	1.5	2.5	1.8	2.8	2.8
<i>April Tealbook</i>	1.7	2.4	2.2	2.6	2.7
<i>March Tealbook</i>	1.7	2.1	2.3	2.6	2.8
2. AFEs	0.9	2.2	0.7	2.3	2.1
3. Canada	0.5	2.4	-0.0	3.0	2.4
4. Japan	-1.8	1.9	-0.4	1.2	0.9
5. Euro Area	1.7	2.2	1.5	1.7	1.9
6. United Kingdom	2.4	1.4	1.4	2.3	2.4
7. EMEs	2.1	2.8	2.8	3.2	3.5
8. China	7.1	5.8	6.7	6.6	6.1
9. Em. Asia ex. China	2.6	2.7	3.5	3.7	3.8
10. Mexico	2.2	3.3	2.4	2.5	2.8

2. Foreign Growth

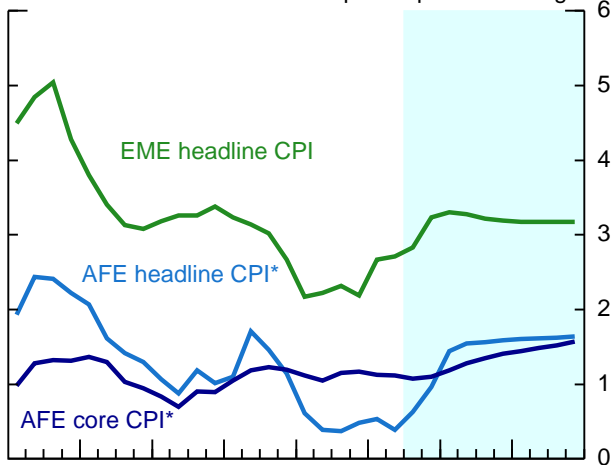
Percent change, annual rate



* GDP aggregates weighted by shares of U.S. merchandise exports. f: Staff forecast.

3. Consumer Prices

Four-quarter percent change



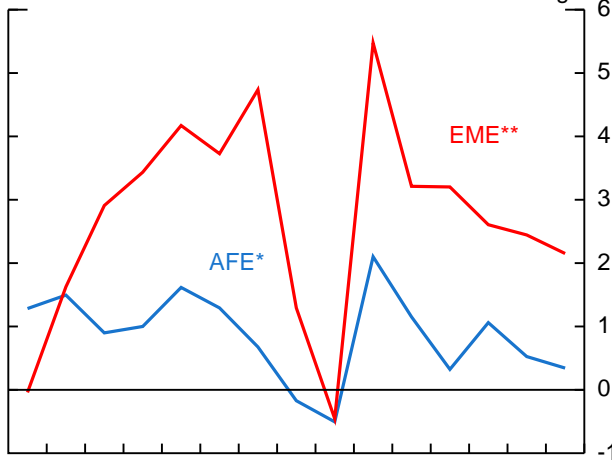
* Excluding the effects of Japanese consumption tax hikes.

4. Policy Accommodation

- ECB policy remains very accommodative and its balance sheet will expand further.
- BOJ to ease further, and consumption tax hike postponed to 2019.
- Policy rates in Canada and U.K. not expected to rise until next year.

5. Labor Productivity

Percent change



2001 2003 2005 2007 2009 2011 2013 2015
*Total Economy Database. **Penn World Tables, U.N. population projections, and staff calculations.

6. Potential Growth

Four-quarter percent change

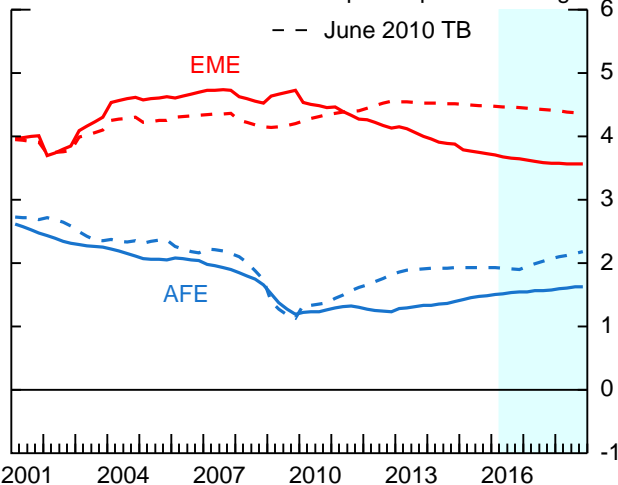
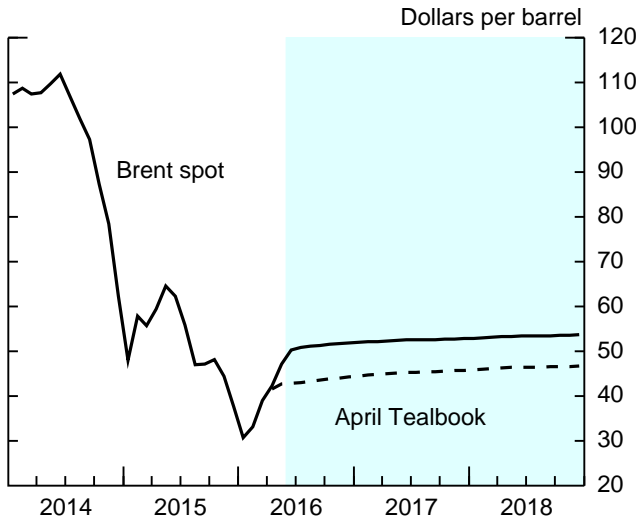


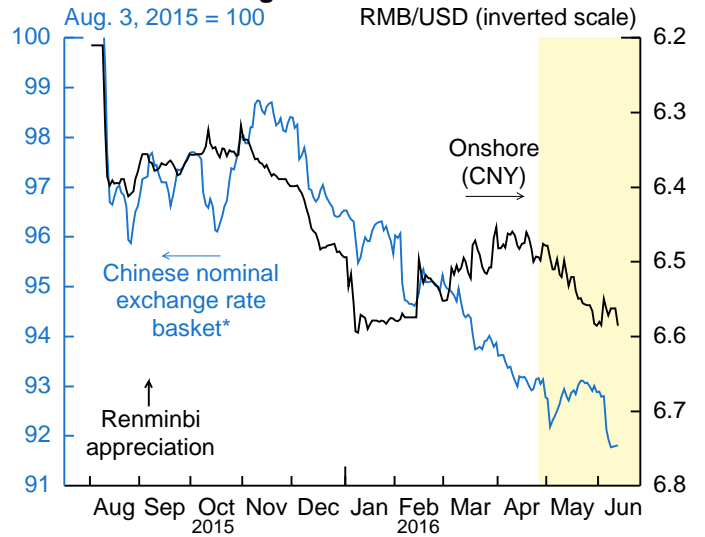
Exhibit 6

Risks

1. Oil Prices



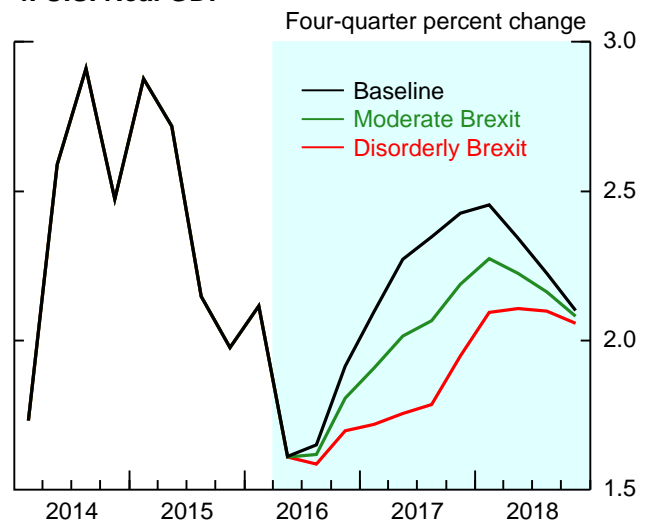
2. RMB Exchange Rate



3. Brexit

- Two scenarios using SIGMA model:
 - Moderate: Relatively muted reaction of global financial markets.
 - Disorderly: Greater spillovers to global financial markets.
- Effect on U.S. GDP:
 - Moderate: ¼ ppt. hit to growth.
 - Disorderly: Larger negative effect.

4. U.S. Real GDP



5. Federal Funds Rate

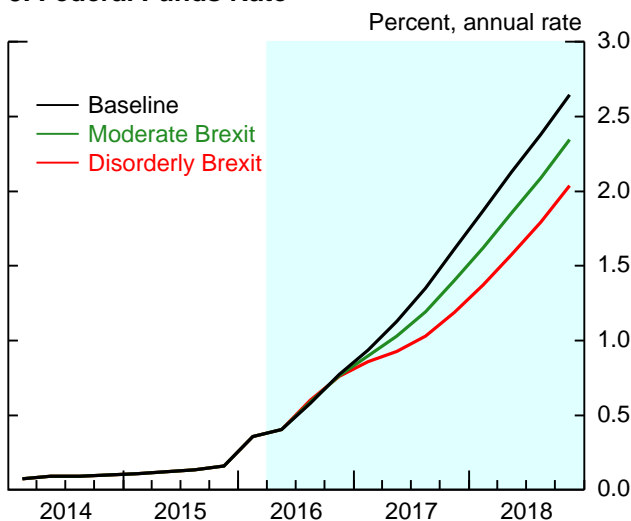
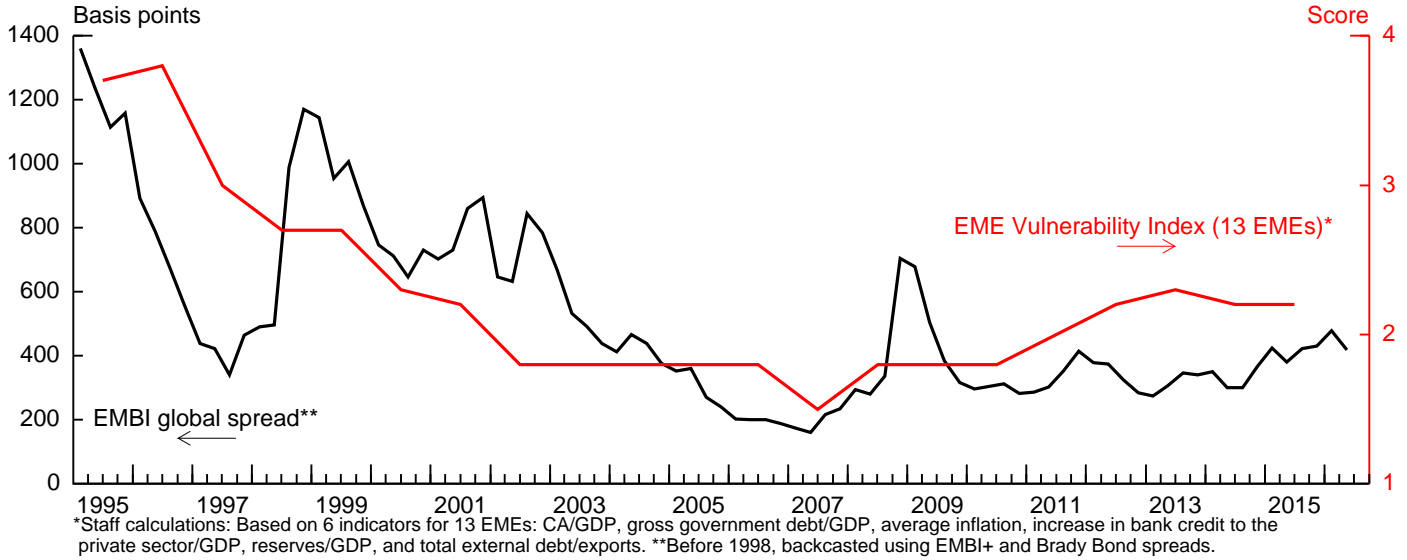


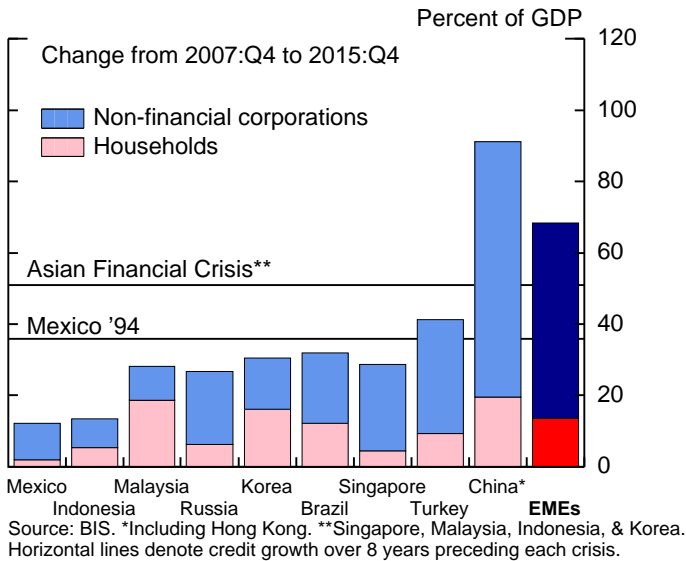
Exhibit 7

U.S. Monetary Policy Normalization: EME Spillovers

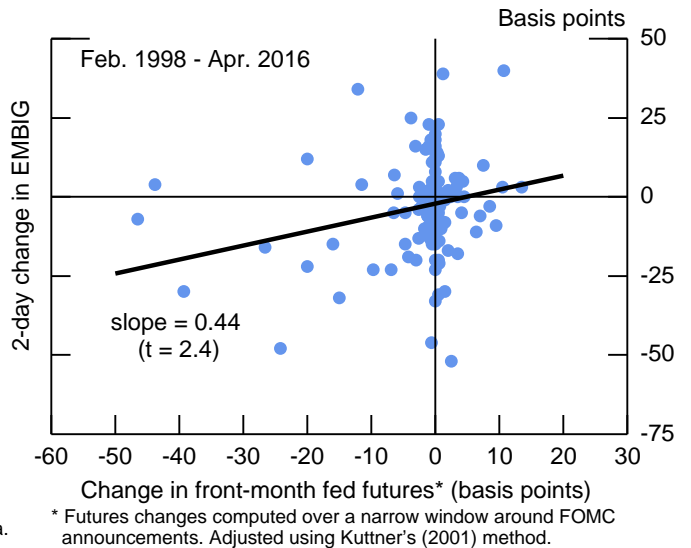
1. EME Vulnerabilities



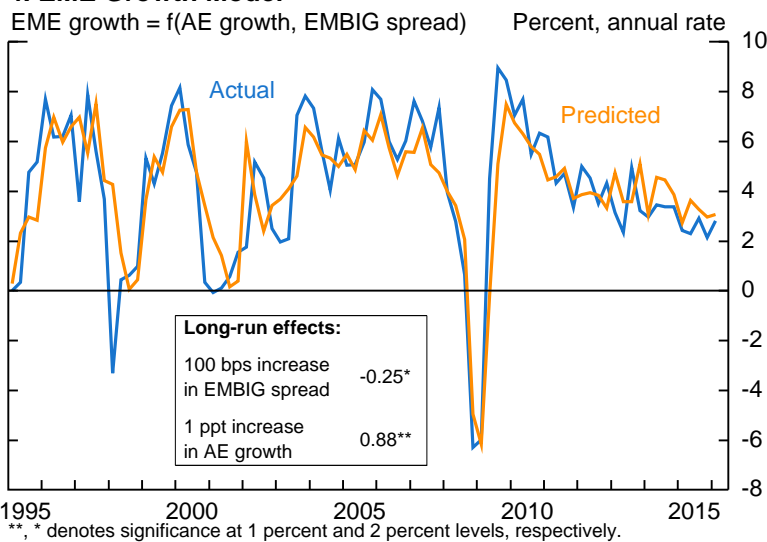
2. Private Non-Financial Sector Credit



3. Reaction to FOMC Announcements



4. EME Growth Model



5. EME Growth with EMBIG Surge

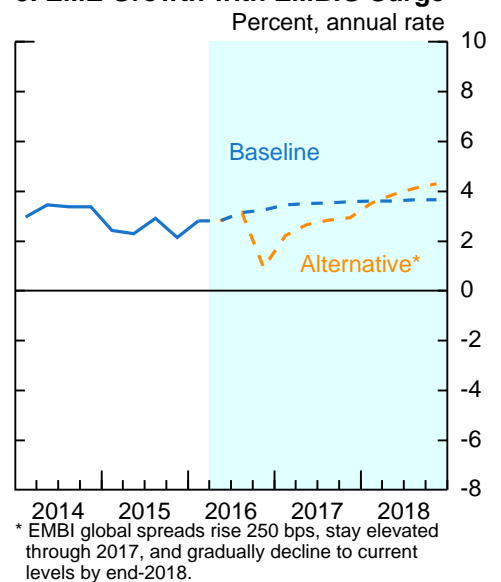
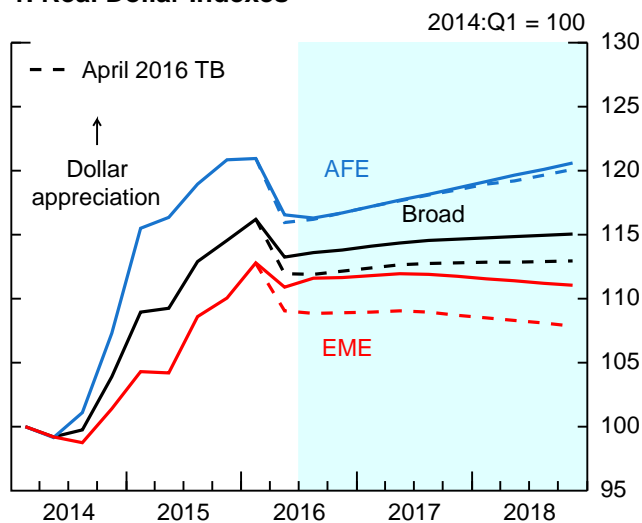


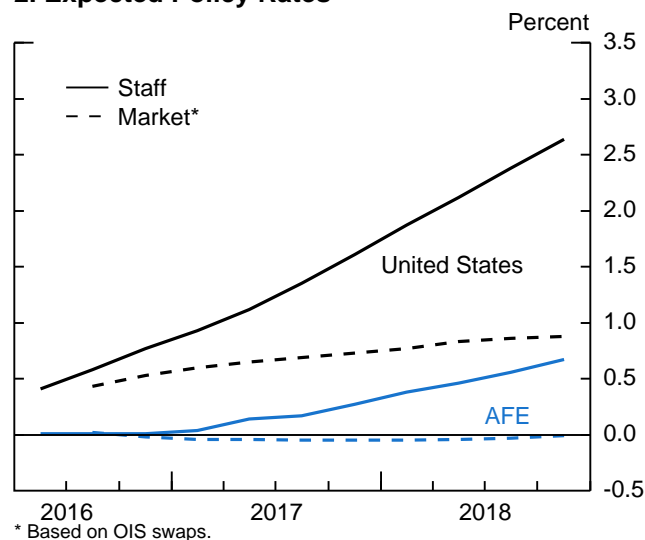
Exhibit 8

U.S. External Sector

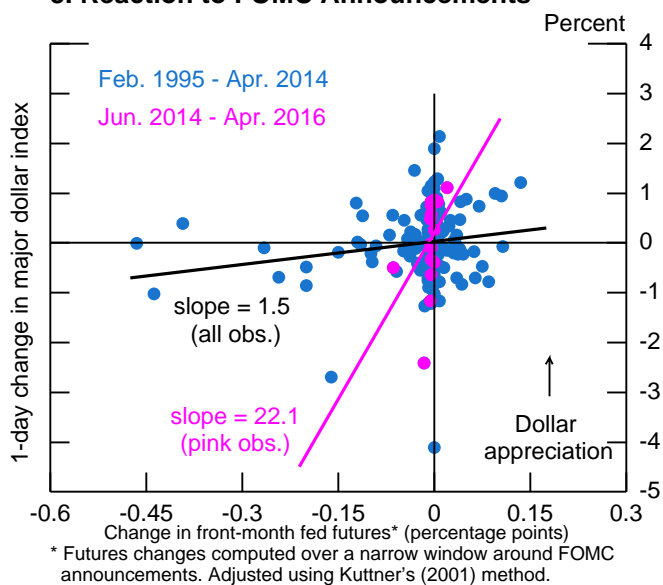
1. Real Dollar Indexes



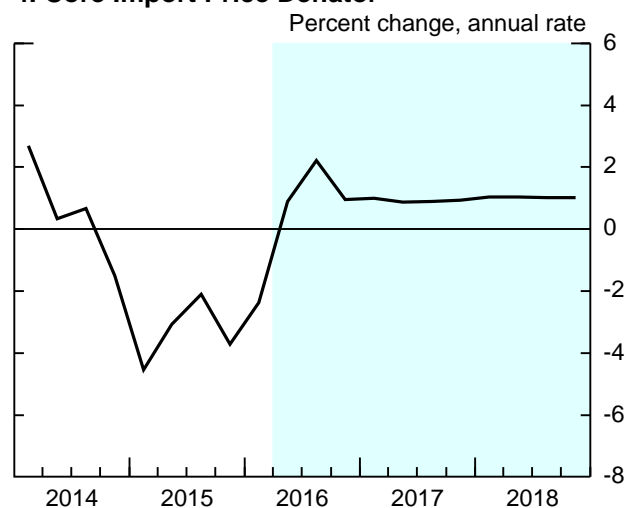
2. Expected Policy Rates



3. Reaction to FOMC Announcements



4. Core Import Price Deflator



5. Trade in Real Goods and Services

	2014	2015	2016			2017 ^f	2018 ^f
			Q1 ^e	Q2 ^f	H2 ^f		
Contribution to Real GDP Growth (percentage points, annual rate)							
1. Net Exports	-0.5	-0.5	0.1	-0.3	-0.4	-0.3	-0.1
<i>April Tealbook</i>			-0.7	-0.4	-0.6	-0.4	-0.2
Growth Rates (percent, annual rate)							
2. Imports	5.4	2.9	-0.6	2.5	4.6	4.1	3.8
<i>April Tealbook</i>			4.0	3.8	6.0	4.8	3.9
3. Exports	2.4	-0.6	0.3	0.3	2.7	2.5	3.7
<i>April Tealbook</i>			-0.9	1.5	2.6	2.7	3.8

e: Staff estimate. f: Staff forecast.

Appendix Exhibit
Key Economic Indicators for the June, July, and September FOMC Meetings
(Percent change at annual rate, except as noted)

	2016						
	Mar.	Apr.	May	June	July	Aug.	Sept.
Total PCE price index							
3-month change	0.4	1.1	2.2	2.7	1.9	1.4	1.1
<i>April Tealbook</i>	0.2	0.9	1.5	1.6			
12-month change	0.8	1.1	1.0	0.9	0.9	1.0	1.2
<i>April Tealbook</i>	0.8	1.0	0.7	0.6			
Core PCE price index							
3-month change	2.2	1.7	1.4	1.6	1.4	1.3	1.2
<i>April Tealbook</i>	1.9	1.5	1.3	1.6			
12-month change	1.6	1.6	1.6	1.6	1.6	1.6	1.5
<i>April Tealbook</i>	1.5	1.5	1.5	1.5			
Unemployment rate (percent)	5.0	5.0	4.7	4.8	4.8	4.8	4.8
<i>April Tealbook</i>	5.0	4.9	4.9	4.9			
Payroll employment (change in 000s)	186	123	38	185	155	155	155
<i>April Tealbook</i>	215	202	202	202			
Gross Domestic Product	3rd Q4 est.		2nd Q1 est.	3rd Q1 est.		2nd Q2 est.	3rd Q2 est.
	1.4		1.2	1.2		1.9	1.9
<i>April Tealbook</i>	1.4		0.4	0.4		2.2	2.2

Key: Estimate first available at:

 June meeting

 July meeting

 September meeting

Note: The June CPI will be released prior to the July FOMC meeting; the August CPI will be released prior to the September meeting.

Appendix 3: Materials used by Mr. Wu

Class I FOMC – Restricted Controlled (FR)

Material for Briefing on the

Summary of Economic Projections

Jason Wu
June 14, 2016

Class I FOMC – Restricted Controlled (FR)

Exhibit 1. Medians, central tendencies, and ranges of economic projections, 2016–18 and over the longer run



NOTE: The data for the actual values of the variables are annual. The percent changes in real GDP and inflation are measured Q4/Q4. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. One participant did not submit longer-run projections.

Class I FOMC – Restricted Controlled (FR)

Exhibit 2. Economic projections for 2016–18 and over the longer run (percent)

Change in real GDP

	2016	2017	2018	Longer run
Median	2.0	2.0	2.0	2.0
March projection	2.2	2.1	2.0	2.0
Range.....	1.8 – 2.2	1.6 – 2.4	1.5 – 2.2	1.6 – 2.4
March projection	1.9 – 2.5	1.7 – 2.3	1.8 – 2.3	1.8 – 2.4
Memo: Tealbook	1.9	2.4	2.1	1.9
March projection	2.2	2.2	2.0	1.9

Unemployment rate

	2016	2017	2018	Longer run
Median	4.7	4.6	4.6	4.8
March projection	4.7	4.6	4.5	4.8
Range.....	4.5 – 4.9	4.3 – 4.8	4.3 – 5.0	4.6 – 5.0
March projection	4.5 – 4.9	4.3 – 4.9	4.3 – 5.0	4.7 – 5.8
Memo: Tealbook	4.8	4.5	4.3	5.0
March projection	4.8	4.5	4.3	5.0

PCE inflation

	2016	2017	2018	Longer run
Median	1.4	1.9	2.0	2.0
March projection	1.2	1.9	2.0	2.0
Range.....	1.3 – 2.0	1.6 – 2.0	1.8 – 2.1	2.0
March projection	1.0 – 1.6	1.6 – 2.0	1.8 – 2.0	2.0
Memo: Tealbook	1.3	1.7	1.8	2.0
March projection	1.0	1.6	1.8	2.0

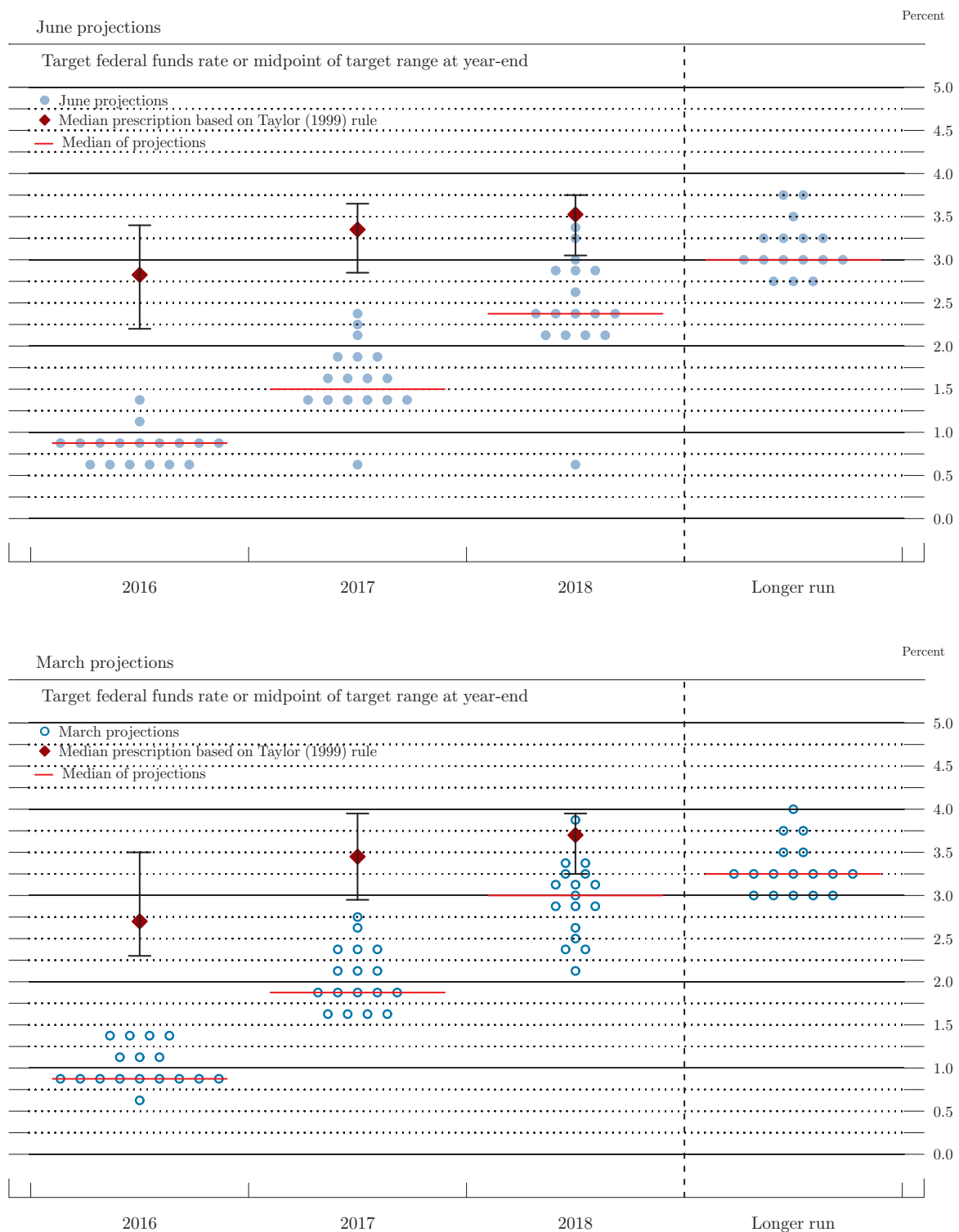
Core PCE inflation

	2016	2017	2018
Median	1.7	1.9	2.0
March projection	1.6	1.8	2.0
Range.....	1.3 – 2.0	1.6 – 2.0	1.8 – 2.1
March projection	1.4 – 2.1	1.6 – 2.0	1.8 – 2.0
Memo: Tealbook	1.6	1.6	1.8
March projection	1.4	1.6	1.8

* The percent changes in real GDP and inflation are measured Q4/Q4. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. One participant did not submit longer-run projections in conjunction with the June 2016 meeting.

Class I FOMC – Restricted Controlled (FR)

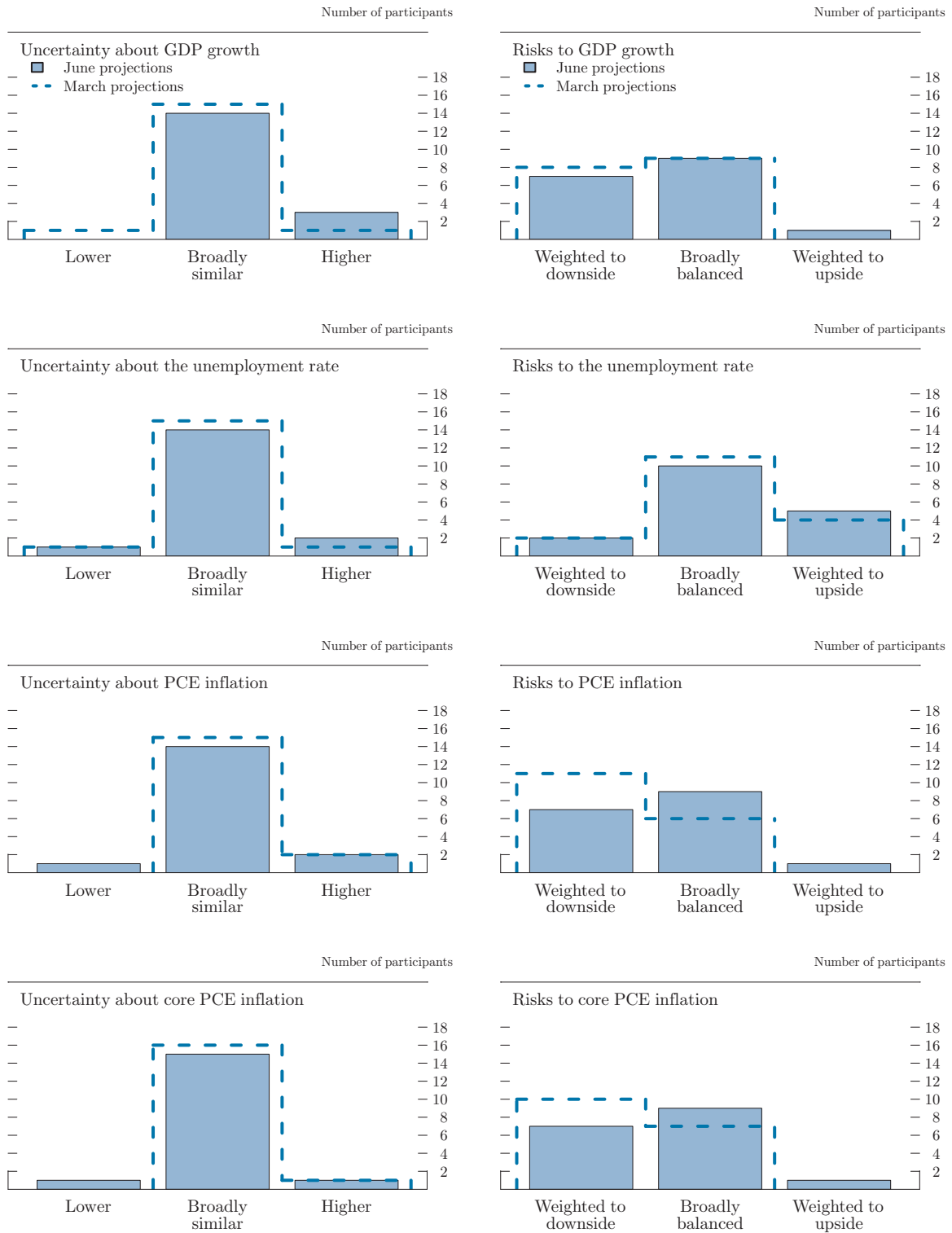
Exhibit 3. Overview of FOMC participants’ assessments of appropriate monetary policy



NOTE: In the two panels above, each circle indicates the value (rounded to the nearest 1/8 percentage point) of an individual participant’s judgment of the midpoint of the appropriate target range for the federal funds rate or the appropriate target level for the federal funds rate at the end of the specified calendar year or over the longer run. The red diamonds for each year represent the median of the federal funds rate prescriptions that were derived by taking each participant’s projections for the unemployment gap, core PCE inflation and longer-run nominal federal funds rate for that year and inserting them into the non-inertial Taylor (1999) rule. The whiskers represent the central tendency of the prescriptions of the non-inertial Taylor (1999) rule using participants’ projections. One participant did not submit longer-run projections in conjunction with the June 2016 meeting.

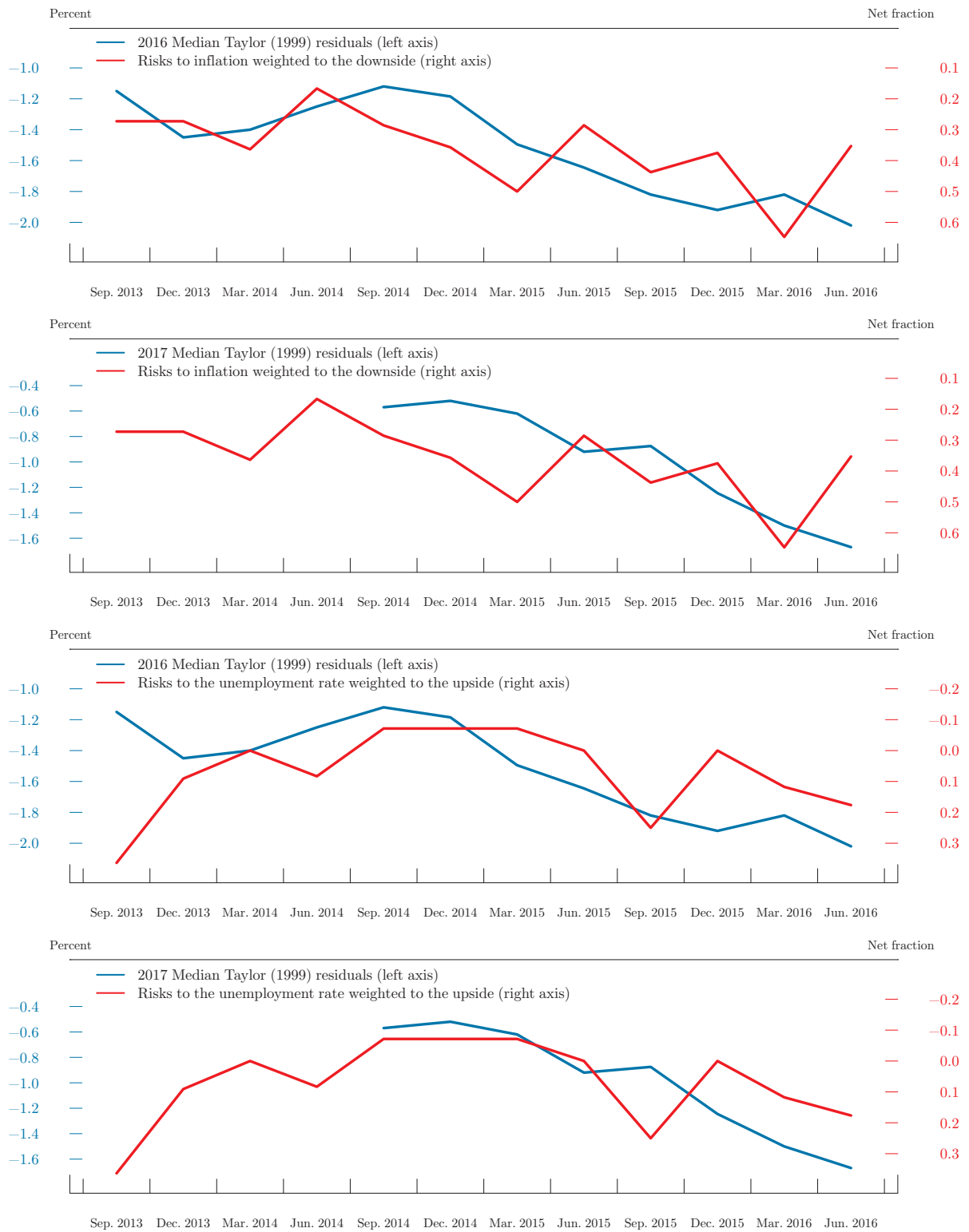
Class I FOMC – Restricted Controlled (FR)

Exhibit 4. Uncertainty and risks in economic projections



Class I FOMC – Restricted Controlled (FR)

Exhibit 5. History of Taylor (1999) rule residuals and assessments of risks in economic projections



NOTE: Taylor (1999) rule residuals are calculated as the projections of individual participants for the appropriate level of the federal funds rates minus the prescriptions from a non-inertial Taylor (1999) rule that uses as inputs projections for the unemployment gap, core PCE inflation, and longer-run nominal federal funds rate. The blue lines show, for each SEP date, the median of the residuals across individual participants.

Appendix 4: Materials used by Mr. Laubach

Class I FOMC – Restricted Controlled (FR)

Material for the Briefing on

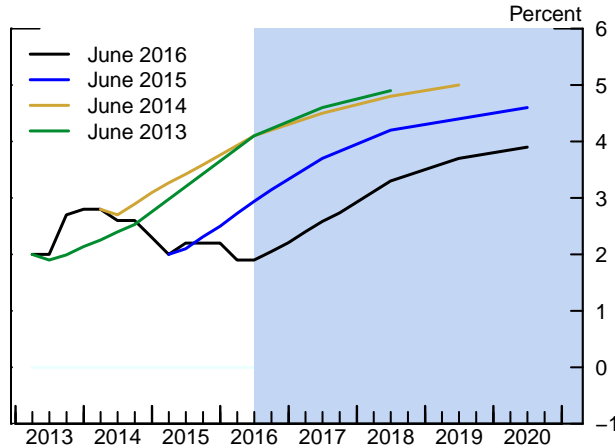
Monetary Policy Alternatives

Thomas Laubach

June 15, 2016

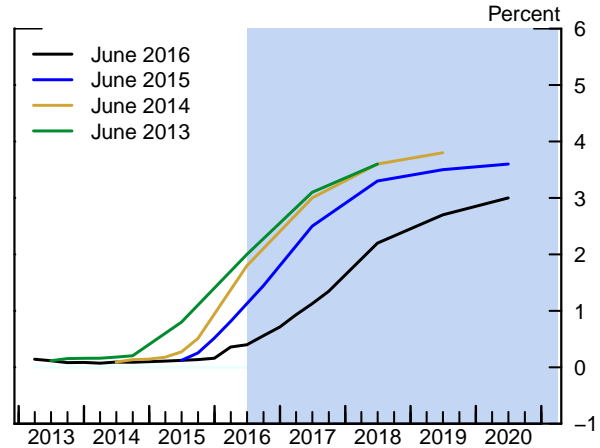
Exhibit 1: The Surprising Decline in Longer-Term Treasury Yields

Blue Chip Projections for the 10-year Treasury Yield



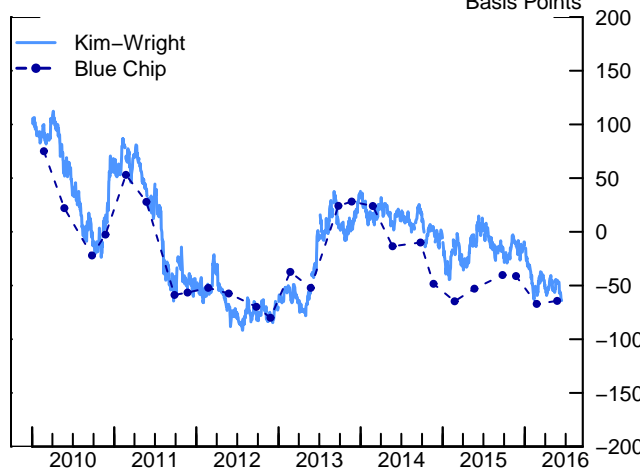
Note: Shaded area represents current forecast period.
Source: Blue Chip Financial Forecast Survey.

Blue Chip Projections for the Fed Funds Rate



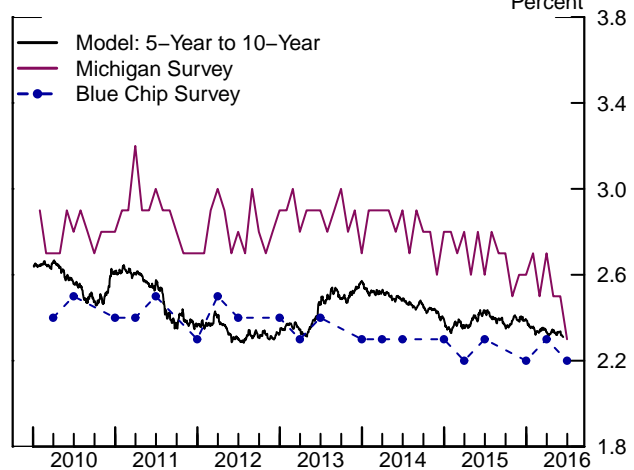
Note: Shaded area represents current forecast period.
Source: Blue Chip Financial Forecast Survey.

10-Year Nominal Term Premium



Note: Nominal term premium estimates implied by Blue Chip surveys and by the staff's three-factor model at the ten-year horizon.
Source: Blue Chip surveys and staff calculations.

Inflation(CPI) Expectations



Note: Model refers to the staff's four-factor model by D'Amico, Kim, and Wei. The Blue Chip surveys use the long-term CPI forecasts of both the Economic Indicators and Financial Forecasts Survey.
Source: Michigan Survey, Blue Chip surveys, and staff calculations.

Decomposition of Yield Changes, 6/1/2014 to 6/1/2016

	10-Year Yield	5-Y, 5-Y-Forward
Total Change (basis points)	-71	-127
Contribution from:		
Expected Nominal Rate	-20	-52
Real rate expectations	-11	-44
Inflation expectations	-9	-8
Nominal Term Premium	-51	-75
Real rate risk premium	-8	-28
Inflation risk premium	-43	-48

Note: The decomposition has been adjusted for the liquidity premium in TIPS yields.
Source: Bloomberg, Blue Chip, and staff calculations.

Policy Implications

- Policy path consistent with objectives is uncertain
- Thus, important to communicate that the path
 - will depend on "realized and expected conditions" relative to objectives
 - is in no way preset

APRIL 2016 FOMC STATEMENT

1. Information received since the Federal Open Market Committee met in March indicates that labor market conditions have improved further even as growth in economic activity appears to have slowed. Growth in household spending has moderated, although households' real income has risen at a solid rate and consumer sentiment remains high. Since the beginning of the year, the housing sector has improved further but business fixed investment and net exports have been soft. A range of recent indicators, including strong job gains, points to additional strengthening of the labor market. Inflation has continued to run below the Committee's 2 percent longer-run objective, partly reflecting earlier declines in energy prices and falling prices of non-energy imports. Market-based measures of inflation compensation remain low; survey-based measures of longer-term inflation expectations are little changed, on balance, in recent months.
2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee currently expects that, with gradual adjustments in the stance of monetary policy, economic activity will expand at a moderate pace and labor market indicators will continue to strengthen. Inflation is expected to remain low in the near term, in part because of earlier declines in energy prices, but to rise to 2 percent over the medium term as the transitory effects of declines in energy and import prices dissipate and the labor market strengthens further. The Committee continues to closely monitor inflation indicators and global economic and financial developments.
3. Against this backdrop, the Committee decided to maintain the target range for the federal funds rate at $\frac{1}{4}$ to $\frac{1}{2}$ percent. The stance of monetary policy remains accommodative, thereby supporting further improvement in labor market conditions and a return to 2 percent inflation.
4. In determining the timing and size of future adjustments to the target range for the federal funds rate, the Committee will assess realized and expected economic conditions relative to its objectives of maximum employment and 2 percent inflation. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments. In light of the current shortfall of inflation from 2 percent, the Committee will carefully monitor actual and expected progress toward its inflation goal. The Committee expects that economic conditions will evolve in a manner that will warrant only gradual increases in the federal funds rate; the federal funds rate is likely to remain, for some time, below levels that are expected to prevail in the longer run. However, the actual path of the federal funds rate will depend on the economic outlook as informed by incoming data.

5. 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, and it anticipates doing so until normalization of the level of the federal funds rate is well under way. This policy, by keeping the Committee's holdings of longer-term securities at sizable levels, should help maintain accommodative financial conditions.

JUNE 2016 ALTERNATIVE A

1. Information received since the Federal Open Market Committee met in ~~March~~ **April** indicates that, ~~labor market conditions have improved further even as~~ **although** growth in economic activity appears to have slowed **picked up, the pace of improvement in the labor market has slowed**. Growth in household spending has ~~moderated,~~ **strengthened**, ~~although households' real income has risen at a solid rate and consumer sentiment remains high.~~ Since the beginning of the year, the housing sector has ~~improved further~~ **continued to improve and the drag from net exports appears to have diminished**, but business fixed investment and net exports have **has** been soft. A range of recent indicators, including strong job gains, points to additional strengthening of the labor market. **Although the unemployment rate has declined, job gains have slowed noticeably**. Inflation has continued to run below the Committee's 2 percent longer-run objective, **only** partly reflecting **because of** earlier declines in energy prices and **falling in** prices of non-energy imports. **Moreover**, market-based measures of inflation compensation ~~remain low;~~ **and some** survey-based measures of longer-term inflation expectations ~~are little changed, on balance, in recent months~~ **have declined**.
2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee currently expects that, with ~~gradual adjustments in the stance of~~ **appropriate** monetary policy **accommodation**, economic activity will expand at a moderate pace and labor market indicators will ~~continue to~~ strengthen. Inflation is expected to remain low in the near term, in part because of earlier declines in energy prices, but to rise to 2 percent over the medium term as the transitory effects of **past** declines in energy and import prices dissipate and the labor market strengthens further. The Committee ~~continues to closely monitor inflation indicators and global economic and financial developments~~ **sees the risks to the economic outlook as tilted somewhat to the downside**.
3. Against this backdrop, the Committee decided to maintain the target range for the federal funds rate at ¼ to ½ percent. The stance of monetary policy remains accommodative, thereby supporting further improvement in labor market conditions and a return to 2 percent inflation. **The Committee judges that an increase in the target range will not be warranted until the risks to the outlook are more closely balanced and inflation moves closer to 2 percent on a sustained basis**.
4. ~~In determining the~~ **When adjustments to the target range become appropriate, their** timing and size of future adjustments to the target range for the federal funds rate, the Committee will assess **will depend on the Committee's assessment of** realized and expected economic conditions relative to its objectives of maximum employment and 2 percent inflation. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments. ~~In light of the current shortfall of inflation from 2~~

~~percent, the Committee will carefully monitor actual and expected progress toward its inflation goal.~~ The Committee expects that economic conditions will evolve in a manner that will warrant ~~only gradual increases in the federal funds rate;~~ the federal funds rate is likely to remain **remaining**, for some time, below levels that are expected to prevail in the longer run. However, the actual path of the federal funds rate will depend on the economic outlook as informed by incoming data.

5. 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, and it anticipates doing so until normalization of the level of the federal funds rate is well under way. This policy, by keeping the Committee's holdings of longer-term securities at sizable levels, should help maintain accommodative financial conditions.

JUNE 2016 ALTERNATIVE B

1. Information received since the Federal Open Market Committee met in ~~March~~ **April** indicates that **the pace of improvement in the** labor market ~~conditions have improved further~~ **has slowed** even as **while** growth in economic activity appears to have ~~slowed~~ **picked up**. **Although the unemployment rate has declined, job gains have diminished**. Growth in household spending has ~~moderated,~~ **strengthened**, although households' real income has risen at a solid rate and consumer sentiment remains high. Since the beginning of the year, the housing sector has ~~improved further~~ **continued to improve and the drag from net exports appears to have lessened**, but business fixed investment and net exports have **has** been soft. A range of recent indicators, including strong job gains, points to additional strengthening of ~~the labor market~~. Inflation has continued to run below the Committee's 2 percent longer-run objective, partly reflecting earlier declines in energy prices and **falling in** prices of non-energy imports. Market-based measures of inflation compensation ~~remain low~~ **declined; most** survey-based measures of longer-term inflation expectations are little changed, on balance, in recent months.
2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee currently expects that, with gradual adjustments in the stance of monetary policy, economic activity will expand at a moderate pace and labor market indicators will ~~continue to~~ strengthen. Inflation is expected to remain low in the near term, in part because of earlier declines in energy prices, but to rise to 2 percent over the medium term as the transitory effects of **past** declines in energy and import prices dissipate and the labor market strengthens further. The Committee continues to closely monitor inflation indicators and global economic and financial developments.
3. Against this backdrop, the Committee decided to maintain the target range for the federal funds rate at $\frac{1}{4}$ to $\frac{1}{2}$ percent. The stance of monetary policy remains accommodative, thereby supporting further improvement in labor market conditions and a return to 2 percent inflation.
4. In determining the timing and size of future adjustments to the target range for the federal funds rate, the Committee will assess realized and expected economic conditions relative to its objectives of maximum employment and 2 percent inflation. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments. In light of the current shortfall of inflation from 2 percent, the Committee will carefully monitor actual and expected progress toward its inflation goal. The Committee expects that economic conditions will evolve in a manner that will warrant only gradual increases in the federal funds rate; the federal funds rate is likely to remain, for some time, below levels that are expected to prevail in the longer run. However, the actual path

of the federal funds rate will depend on the economic outlook as informed by incoming data.

5. 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, and it anticipates doing so until normalization of the level of the federal funds rate is well under way. This policy, by keeping the Committee's holdings of longer-term securities at sizable levels, should help maintain accommodative financial conditions.

JUNE 2016 ALTERNATIVE C

1. Information received since the Federal Open Market Committee met in ~~March~~ **April** indicates that **the pace of improvement in the** labor market conditions have improved further **has slowed** even as **while** growth in economic activity appears to have slowed **picked up**. Growth in household spending has ~~moderated,~~ **strengthened**, although households' real income has risen at a solid rate and consumer sentiment remains high. Since the beginning of the year, the housing sector has improved further **continued to improve and the drag from net exports appears to have diminished**, but business fixed investment and net exports have **has** been soft. A range of recent indicators, including strong job gains, points to additional strengthening of the labor market. **Although job gains slowed, the unemployment rate has declined noticeably**. Inflation has **risen somewhat, but it has** continued to run below the Committee's 2 percent longer-run objective, partly reflecting **largely because of** earlier declines in energy prices and **falling in** prices of non-energy imports. Market-based measures of inflation compensation remain low; **most** survey-based measures of longer-term inflation expectations are little changed, on balance, in recent months.
2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee currently expects that, with gradual adjustments in the stance of monetary policy, economic activity **and employment** will expand at a moderate pace **rates**, and labor market indicators will continue to ~~strengthen~~. Inflation is expected to remain low in the near term, in part because of earlier declines in energy prices, but to rise to 2 percent over the medium term as the transitory effects of **past** declines in energy and import prices dissipate and the labor market strengthens further. The Committee continues to closely monitor inflation indicators and global economic and financial developments.
3. ~~Against this backdrop,~~ The Committee decided **today** to maintain the target range for the federal funds rate at $\frac{1}{4}$ to $\frac{1}{2}$ percent **but agreed that a modest increase in the federal funds rate will likely be appropriate in coming months if incoming information confirms the Committee's expectations for economic activity, the labor market, and inflation**. The stance of monetary policy remains accommodative, thereby supporting further improvement **strengthening** in labor market conditions and a return to 2 percent inflation.

OR

- 3.' **In light of recent and expected progress toward its statutory goals**, the Committee decided to ~~maintain~~ **increase** the target range for the federal funds rate at $\frac{1}{4}$ to $\frac{1}{2}$ **to $\frac{3}{4}$** percent. The stance of monetary policy remains accommodative, **even after this increase**, thereby supporting further improvement **strengthening** in labor market conditions and a return to 2 percent inflation.

-
4. In determining the timing and size of future adjustments to the target range for the federal funds rate, the Committee will assess realized and expected economic conditions relative to its objectives of maximum employment and 2 percent inflation. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments. In light of the current shortfall of inflation from 2 percent, the Committee will carefully monitor actual and expected progress toward its inflation goal. The Committee expects that economic conditions will evolve in a manner that will warrant only gradual increases in the federal funds rate; the federal funds rate is likely to remain, for some time, below levels that are expected to prevail in the longer run. However, the actual path of the federal funds rate will depend on the economic outlook as informed by incoming data.
 5. 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, and it anticipates doing so until normalization of the level of the federal funds rate is well under way. This policy, by keeping the Committee's holdings of longer-term securities at sizable levels, should help maintain accommodative financial conditions.

Implementation Note if the Committee maintains the current target range

Release Date: ~~April 27~~ **June 15**, 2016

Decisions Regarding Monetary Policy Implementation

The Federal Reserve has made the following decisions to implement the monetary policy stance announced by the Federal Open Market Committee in its [statement](#) on ~~April 27~~ **June 15**, 2016:

- The Board of Governors of the Federal Reserve System left unchanged the interest rate paid on required and excess reserve balances at 0.50 percent.
- As part of its policy decision, the Federal Open Market Committee voted to authorize and direct the Open Market Desk at the Federal Reserve Bank of New York, until instructed otherwise, to execute transactions in the System Open Market Account in accordance with the following domestic policy directive:

“Effective ~~April 28~~ **June 16**, 2016, the Federal Open Market Committee directs the Desk to undertake open market operations as necessary to maintain the federal funds rate in a target range of $\frac{1}{4}$ to $\frac{1}{2}$ percent, including overnight reverse repurchase operations (and reverse repurchase operations with maturities of more than one day when necessary to accommodate weekend, holiday, or similar trading conventions) at an offering rate of 0.25 percent, in amounts limited only by the value of Treasury securities held outright in the System Open Market Account that are available for such operations and by a per-counterparty limit of \$30 billion per day.

The Committee directs the Desk to continue rolling over maturing Treasury securities at auction and to continue 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.”

More information regarding open market operations may be found on the Federal Reserve Bank of New York’s [website](#).

- The Board of Governors of the Federal Reserve System took no action to change the discount rate (the primary credit rate), which remains at 1.00 percent.

This information will be updated as appropriate to reflect decisions of the Federal Open Market Committee or the Board of Governors regarding details of the Federal Reserve’s operational tools and approach used to implement monetary policy.

Implementation Note if the Committee raises the target range to ½ to ¾ percent

Release Date: ~~April 27~~ **June 15**, 2016

Decisions Regarding Monetary Policy Implementation

The Federal Reserve has made the following decisions to implement the monetary policy stance announced by the Federal Open Market Committee in its [statement](#) on ~~April 27~~ **June 15**, 2016:

- The Board of Governors of the Federal Reserve System ~~left unchanged the interest rate paid on required and excess reserve balances at 0.50 percent~~ **voted [unanimously] to raise the interest rate paid on required and excess reserve balances to 0.75 percent, effective June 16, 2016.**
- As part of its policy decision, the Federal Open Market Committee voted to authorize and direct the Open Market Desk at the Federal Reserve Bank of New York, until instructed otherwise, to execute transactions in the System Open Market Account in accordance with the following domestic policy directive:

“Effective ~~April 28~~ **June 16**, 2016, the Federal Open Market Committee directs the Desk to undertake open market operations as necessary to maintain the federal funds rate in a target range of ~~¼ to ½~~ **to ¾** percent, including overnight reverse repurchase operations (and reverse repurchase operations with maturities of more than one day when necessary to accommodate weekend, holiday, or similar trading conventions) at an offering rate of ~~0.25~~ **0.50** percent, in amounts limited only by the value of Treasury securities held outright in the System Open Market Account that are available for such operations and by a per-counterparty limit of \$30 billion per day.

The Committee directs the Desk to continue rolling over maturing Treasury securities at auction and to continue 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.”

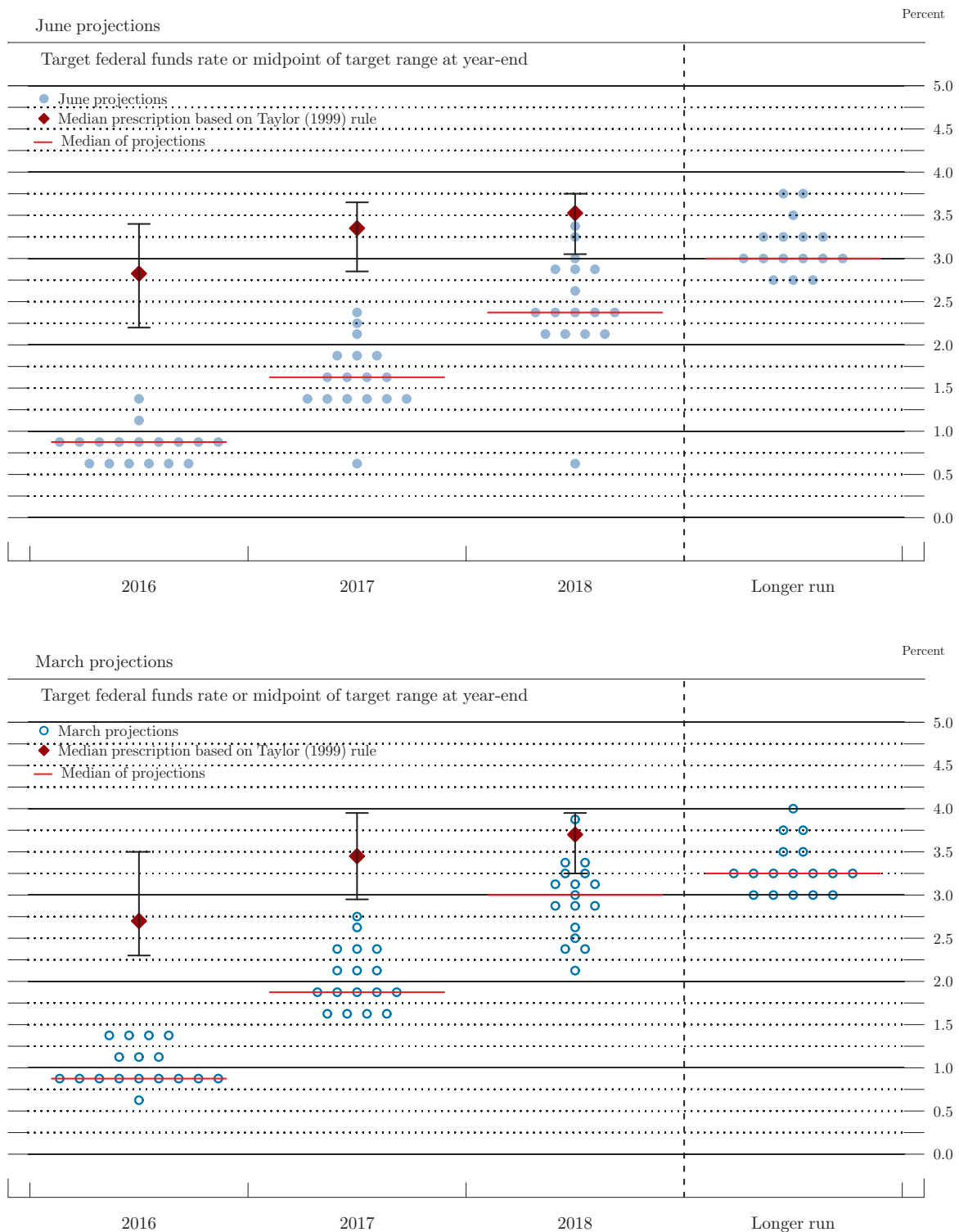
More information regarding open market operations may be found on the Federal Reserve Bank of New York’s [website](#).

- **In a related action**, the Board of Governors of the Federal Reserve System ~~took no action to change the discount rate (the primary credit rate), which remains at 1.00~~ **voted [unanimously] to approve a ¼ percentage point increase in the discount rate (the primary credit rate) to 1.25 percent, effective June 16, 2016. In taking this action, the Board approved requests submitted by the Boards of Directors of the Federal Reserve Banks of ...**

This information will be updated as appropriate to reflect decisions of the Federal Open Market Committee or the Board of Governors regarding details of the Federal Reserve’s operational tools and approach used to implement monetary policy.

Appendix 5: Materials used by Mr. Madigan

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



NOTE: In the two panels above, each circle indicates the value (rounded to the nearest 1/8 percentage point) of an individual participant's judgment of the midpoint of the appropriate target range for the federal funds rate or the appropriate target level for the federal funds rate at the end of the specified calendar year or over the longer run. The red diamonds for each year represent the median of the federal funds rate prescriptions that were derived by taking each participant's projections for the unemployment gap, core PCE inflation and longer-run nominal federal funds rate for that year and inserting them into the non-inertial Taylor (1999) rule. The whiskers represent the central tendency of the prescriptions of the non-inertial Taylor (1999) rule using participants' projections. One participant did not submit longer-run projections in conjunction with the June 2016 meeting.