

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

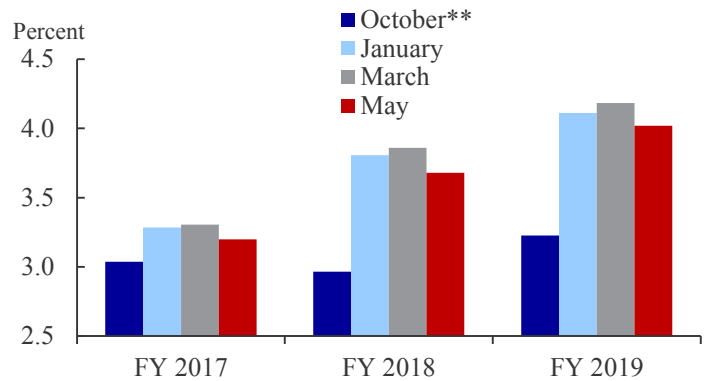
May 2, 2017

(1) Asset Price Changes

	Since March FOMC	Since Nov. FOMC
Nominal 10-Year TSY Yield	-32 bps	+45 bps
U.S. Broad T.W. Dollar	-1.4 %	+0.8 %
S&P 500 Index	+0.8 %	+12.9 %
KBW Bank Index	-5.5 %	+22.5 %
High-Yield OAS	-19 bps	-121 bps
E.M. Bond Spread Index	-16 bps	-47 bps

Source: Barclays, Bloomberg, Federal Reserve Board, J.P. Morgan

(2) Average Estimate for U.S. Fiscal Deficit as a Percent of GDP*

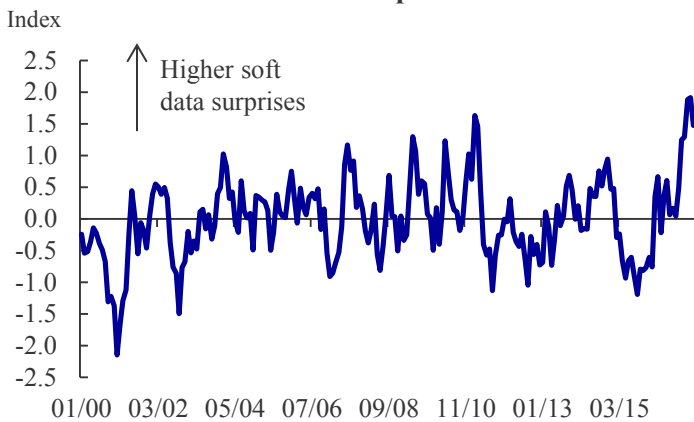


*Based on all responses from the Surveys of Primary Dealers and Market Participants.

**Calculated based on results from two questions in the January surveys that asked for the level and change since October.

Source: FRBNY

(3) Index of Difference Between Soft and Hard Data Surprises*



*Soft data consists of business and consumer surveys data, hard data consists of housing, industrial, labor, household and retail data.

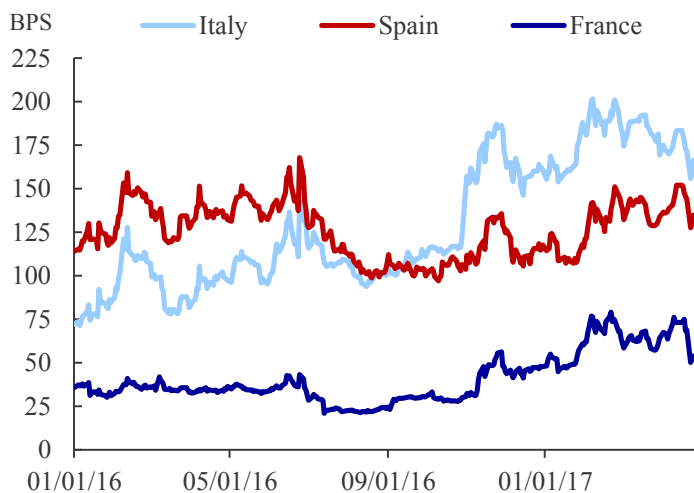
Source: Bloomberg

(4) One-Month Euro-Dollar 25-Delta Risk Reversal



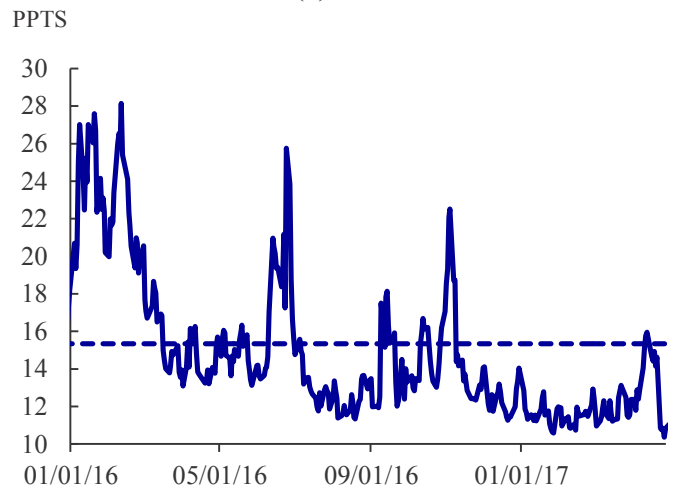
Source: Bloomberg

(5) 10-Year Sovereign Spreads to Germany



Source: Bloomberg

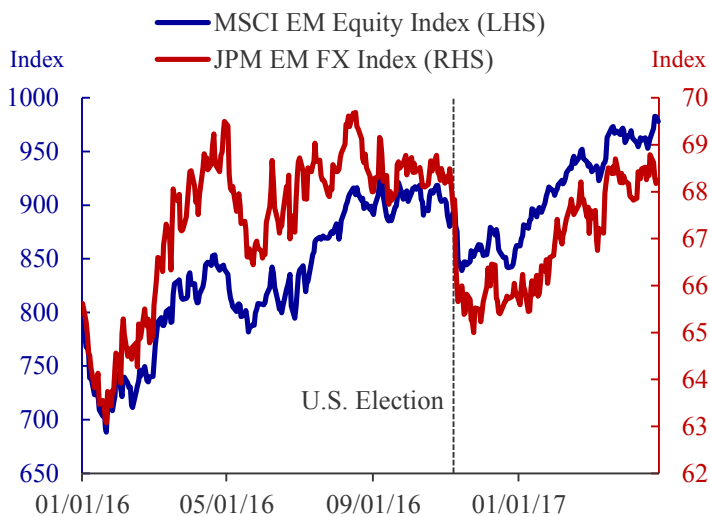
(6) VIX Index*



*Dashed line is 5-year average.

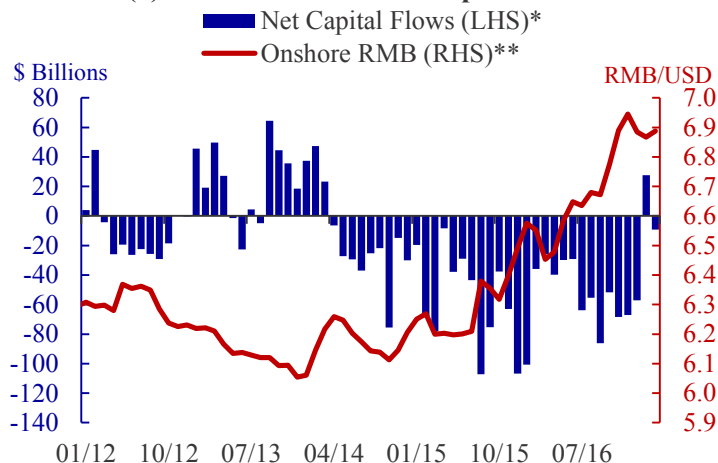
Source: Bloomberg

(7) EM Equity and FX Performance



Source: Bloomberg, J.P. Morgan, MSCI

(8) RMB Level and Net Capital Flows

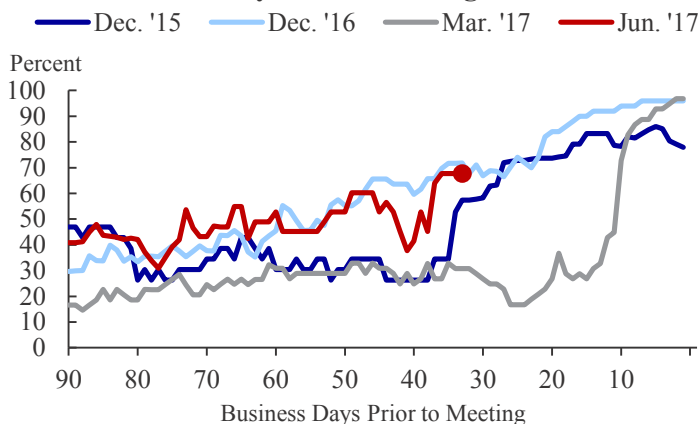


*Reflects financial account balance plus errors and omissions.

**Month-end level.

Source: Bloomberg, IIF, Desk estimate for Mar. '17

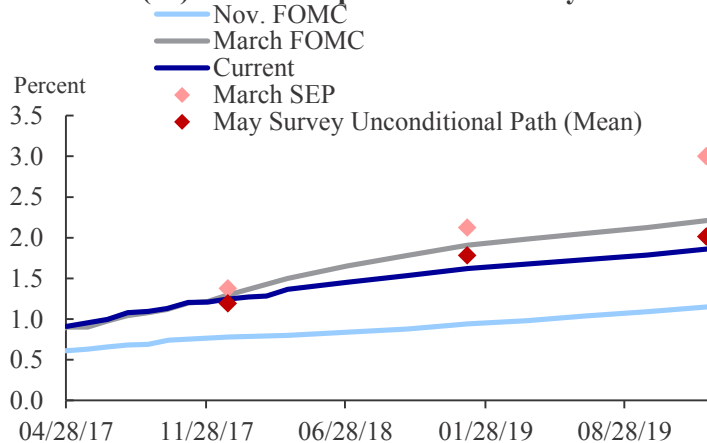
(9) Market-Implied Probability of a 25-BPS Rate Hike by FOMC Meeting*



*Assumes futures contracts price in an EFFR decline on month-end dates equivalent to the six-month rolling average of month-end declines.

Source: Bloomberg, Desk Calculations

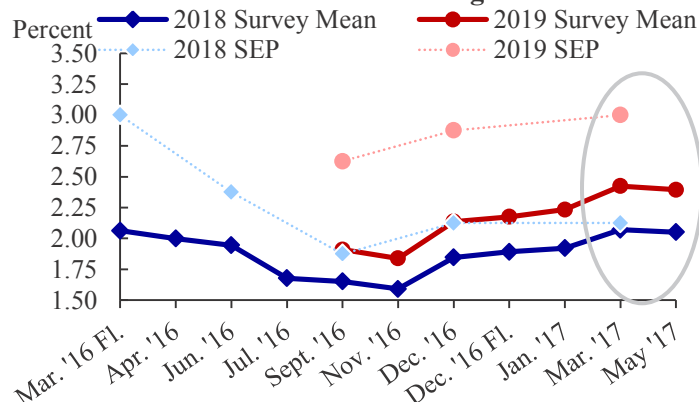
(10) Market-Implied Path of Policy*



*Market-implied paths derived from federal funds and Eurodollar futures. Survey path is the average PDF-implied means from the May Surveys of Primary Dealers and Market Participants.

Source: Bloomberg, Desk Calculations, Federal Reserve Board, FRBNY

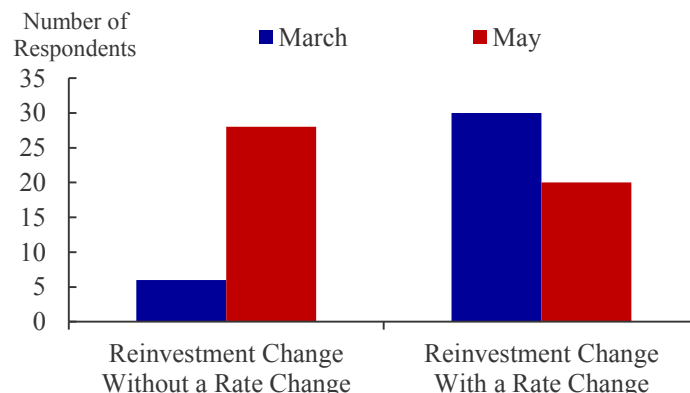
(11) Average PDF-Implied Estimate of Fed Funds Rate Conditional on Not Moving to the ZLB*



*Based on all responses from the Surveys of Primary Dealers and Market Participants.

Source: FRBNY

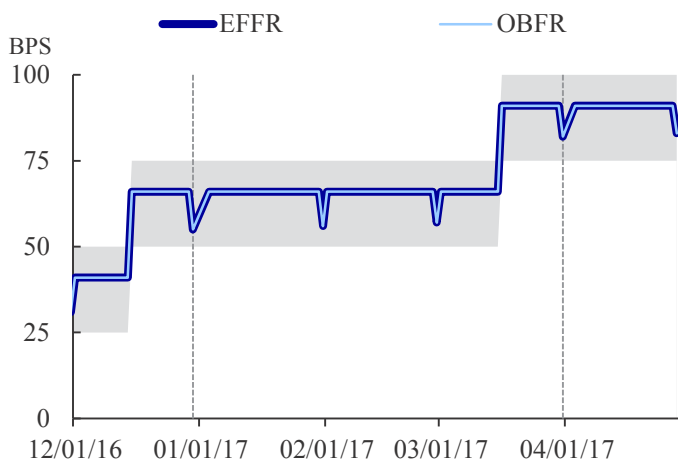
(12) Trade-Off between Timing of Change in Reinvestment Policy and Interest Rate Policy*



*For respondents with a PDF-implied point estimate change in reinvestment policy at or before Q2 2018.

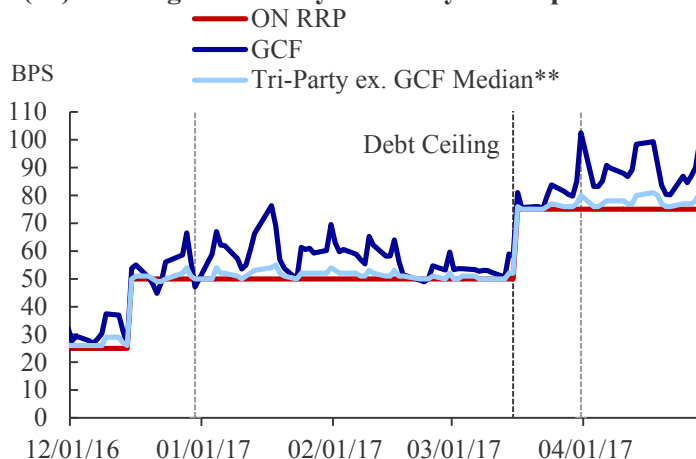
Source: FRBNY

(13) Overnight Unsecured Rates*



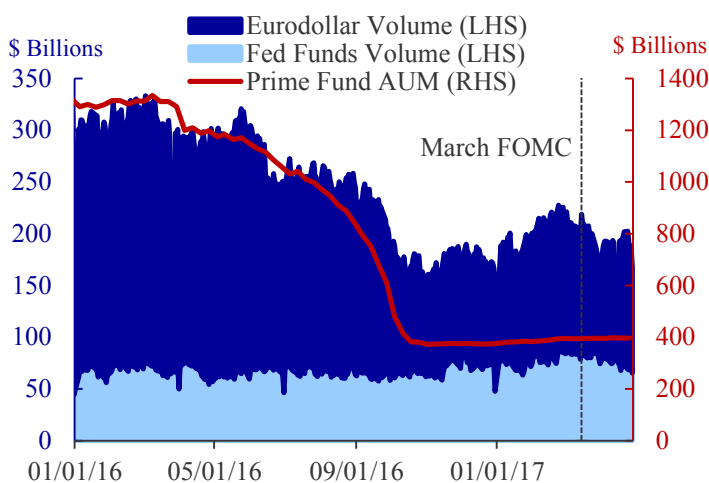
*Grey dashed lines indicate quarter-ends. Shaded area reflects target range for the fed funds rate.
Source: FRBNY

(14) Overnight Treasury Tri-Party GC Repo Rates*



*Grey dashed line indicates quarter-end.
**Excludes intrabank transactions
Source: Bloomberg, BNYM, DTCC, FRBNY, JPMC

(15) Overnight Unsecured Volumes and Prime Fund AUM



Source: FRBNY, iMoney Net

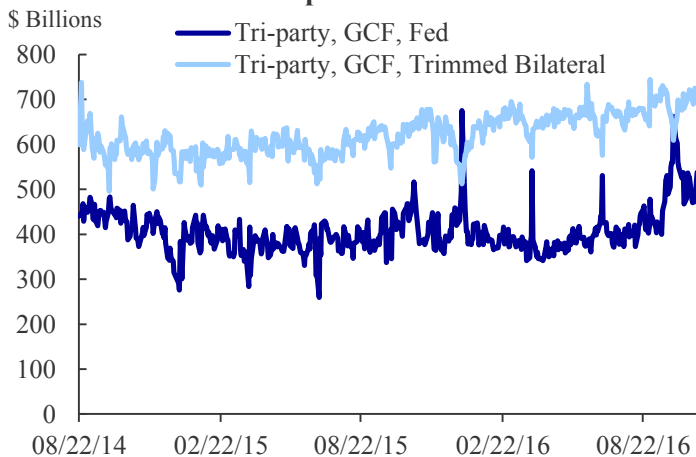
(16) Update on FR 2420

- Covered by FR 2420 report:
 - Domestic bank Eurodollar transactions booked at offshore branches
 - FBO Eurodollar transactions booked at Caribbean branches only
- Not covered by FR 2420 report:
 - Domestic bank and FBO overnight wholesale borrowing activity booked at U.S.-based branches
- Two FBOs have shifted \$35 billion onshore
- OBFR Eurodollar volumes now approx. \$110 billion

(17) Update on Repo Reference Rates

- Rate 1: Tri-party GC repo
 - Unchanged from original proposal
- Rate 2: Tri-party GC and GCF (interdealer) repo
 - Unchanged from original proposal
- Rate 3: Tri-party GC, GCF, and bilateral repo
 - Changed from original proposal
 - Added centrally cleared bilateral repo
 - Trimmed all bilateral transactions below the 25th volume-weighted percentile rate to remove those with highest specialness rent
 - Removed Fed repo-based OMO activity

(18) Comparison of Aggregate Volume for the Third Proposed Rate*



*Series ends on 10/31/16, excludes 12/26/14.
Source: BNYM, DTCC, FRBNY, JPMC

Appendix

(1) Summary of Operational Testing

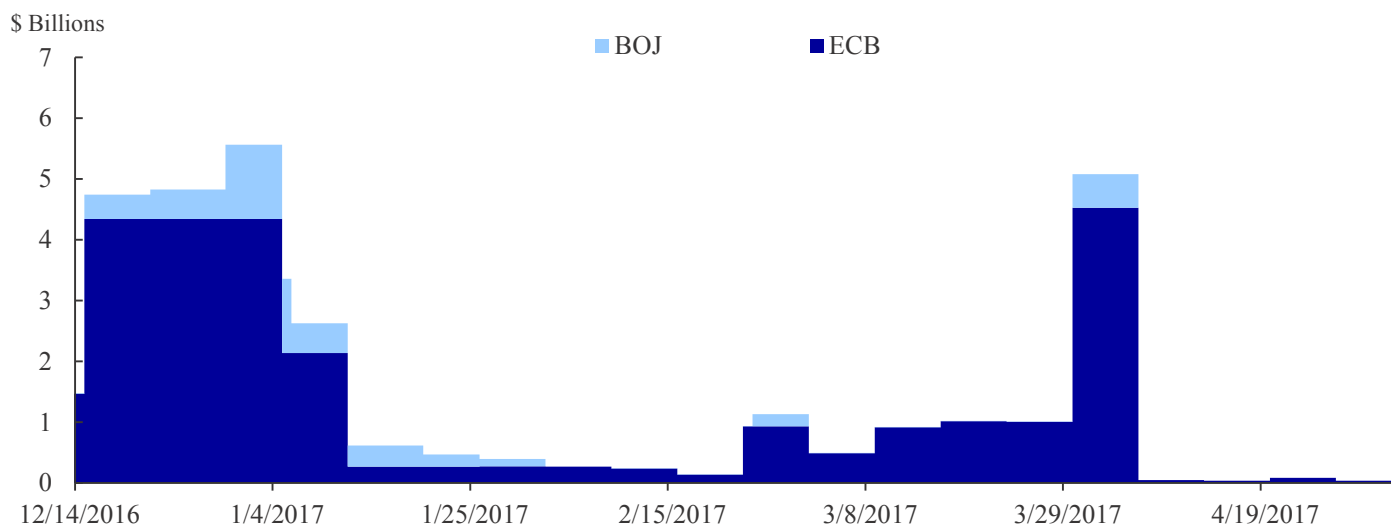
Summary of Operational Tests in prior period:

- Domestic Authorization
 - March 22: Treasury outright purchase for \$200 million
 - April 18 and 20: Outright MBS sales (specified pool) for \$144 million, total
 - April 25: Outright MBS sale (basket) for \$12 million
- Foreign Authorization
 - March 22: Canadian dollar liquidity swap with the Bank of Canada for CAD 51 thousand
 - March 27: Euro-denominated sovereign debt sale for €1 million
 - March 27: Euro liquidity swap with the European Central Bank for EUR 51 thousand (unsuccessful)
 - April 18: Euro-denominated overnight repo for €1 million
 - April 20: Swiss Franc liquidity swap with the Swiss National Bank for CHF 51 thousand

Upcoming Operational Tests

- Six tests scheduled under the Domestic Authorization
 - May 10: Term repo for no more than \$75 million
 - May 11: Treasury outright sale for no more than \$200 million
 - May 16: Term reverse repo for no more than \$175 million
 - May 22: Overnight reverse repo facility (accepting MBS collateral) for no more than \$25 million
 - May 23 and 24: Coupon swaps with unsettled agency MBS holdings for approximately \$20 million total
 - May 24: Overnight repo for no more than \$75 million
- One test scheduled under the Foreign Authorization
 - May 9: Euro-denominated reverse repo for approximately €1 million

(2) FX Swaps Outstanding



Source: FRBNY

(3) FX Intervention

- There were no intervention operations in foreign currencies for the System's account during the intermeeting period

Appendix 2: Materials used by Mr. Wilcox

Class II FOMC – Restricted (FR)

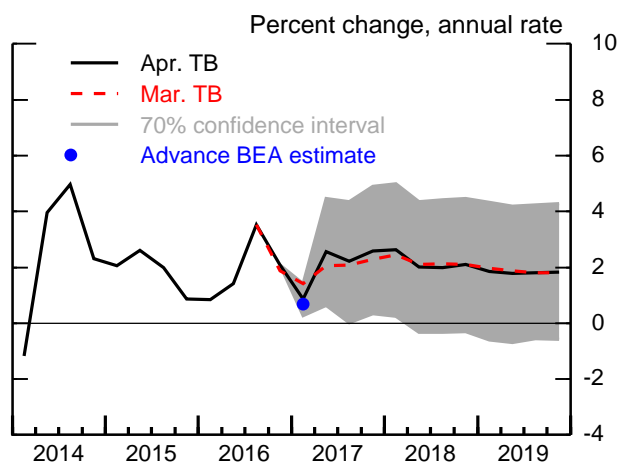
Material for Briefing on
The U.S. Outlook

David W. Wilcox
May 2, 2017

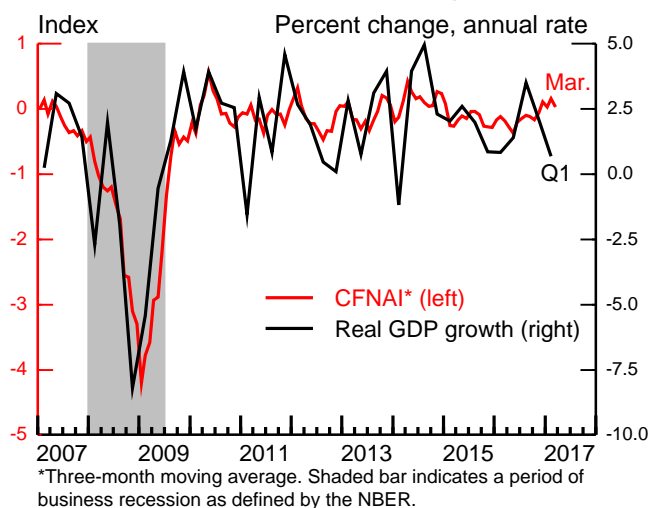
Forecast Summary

Confidence Intervals for Panels 1, 4, 7, and 8 Based on FRB/US Stochastic Simulations

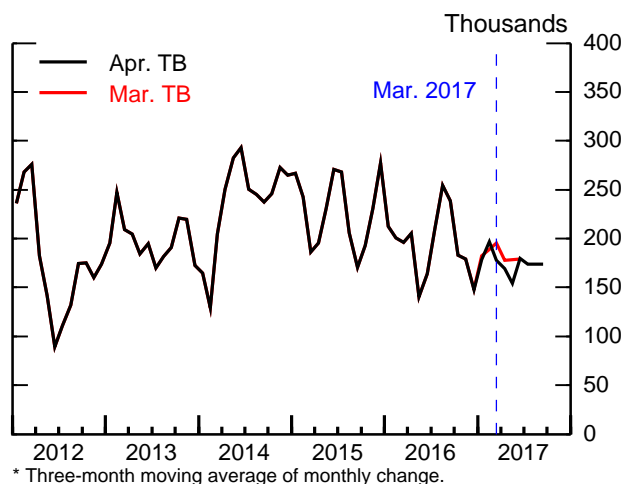
1. Real GDP



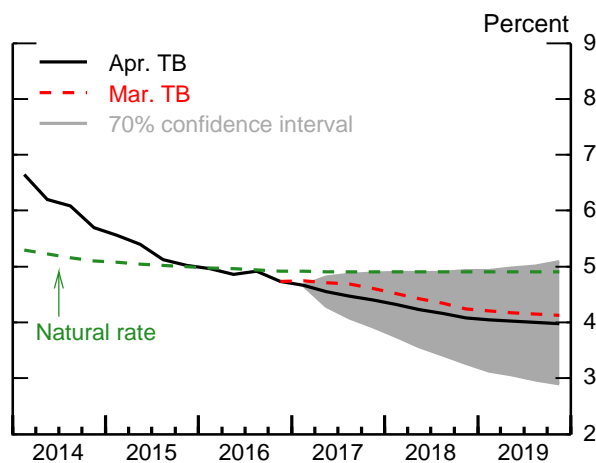
2. Real GDP Growth and Chicago Fed NAI



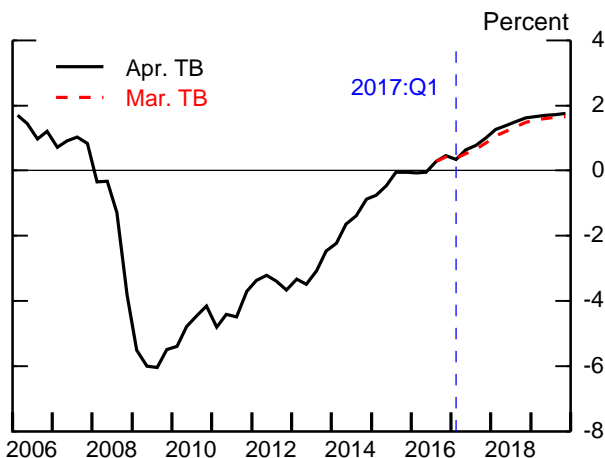
3. Total Nonfarm Payrolls



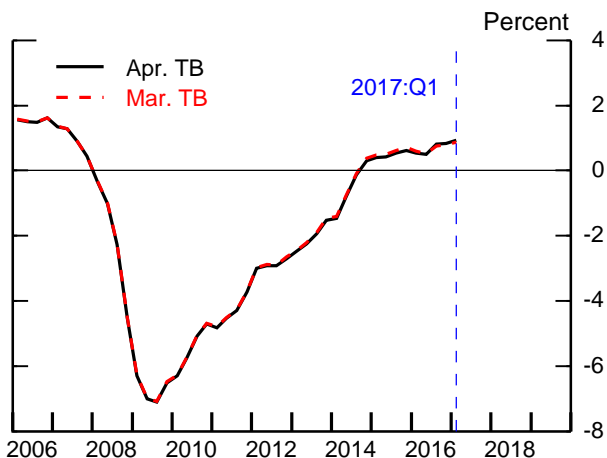
4. Unemployment Rate



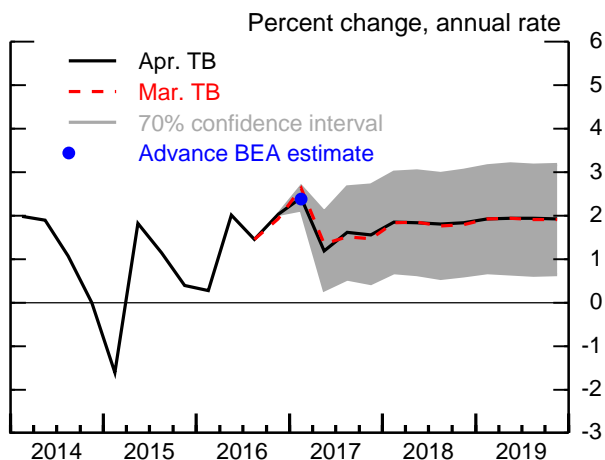
5. Staff Output Gap



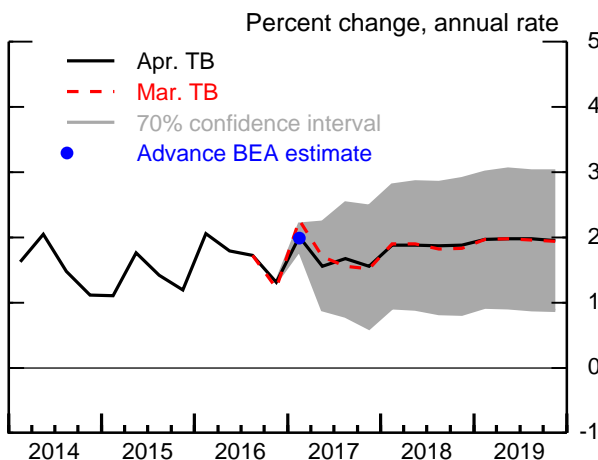
6. Output Gap from State-Space Model



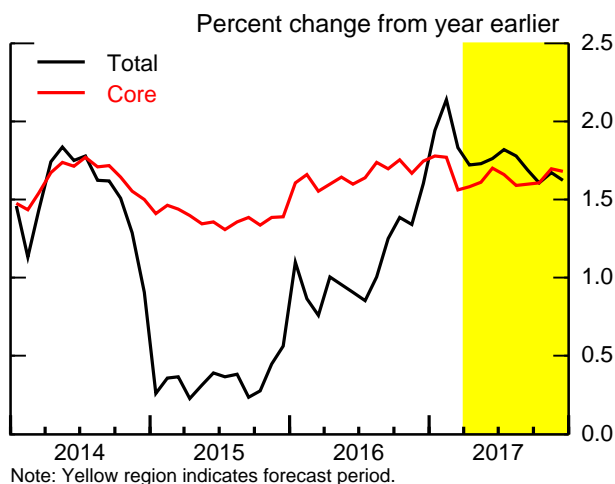
7. Total PCE Prices



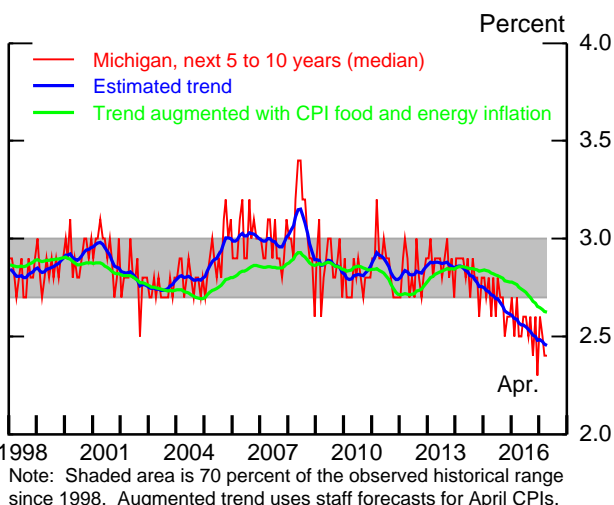
8. PCE Prices Excluding Food and Energy



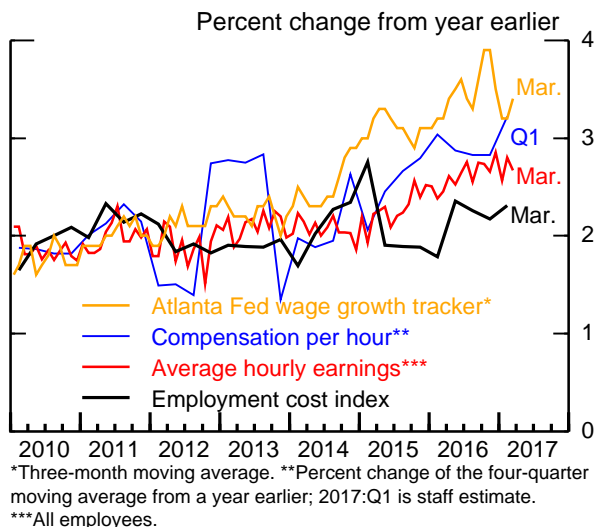
9. Monthly PCE Price Inflation



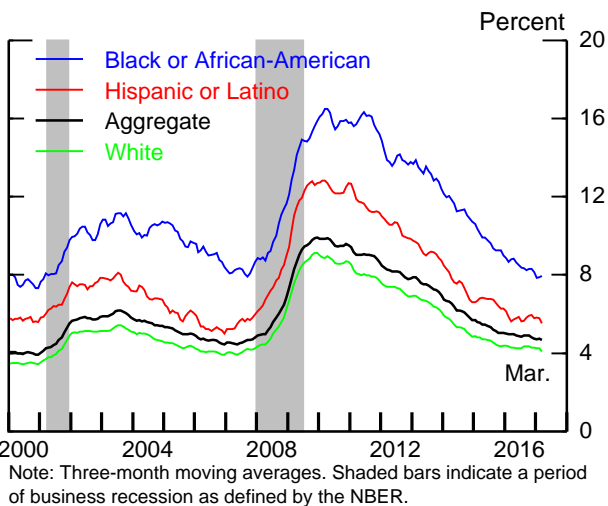
10. Longer-Term Inflation Expectations



11. Measures of Labor Compensation

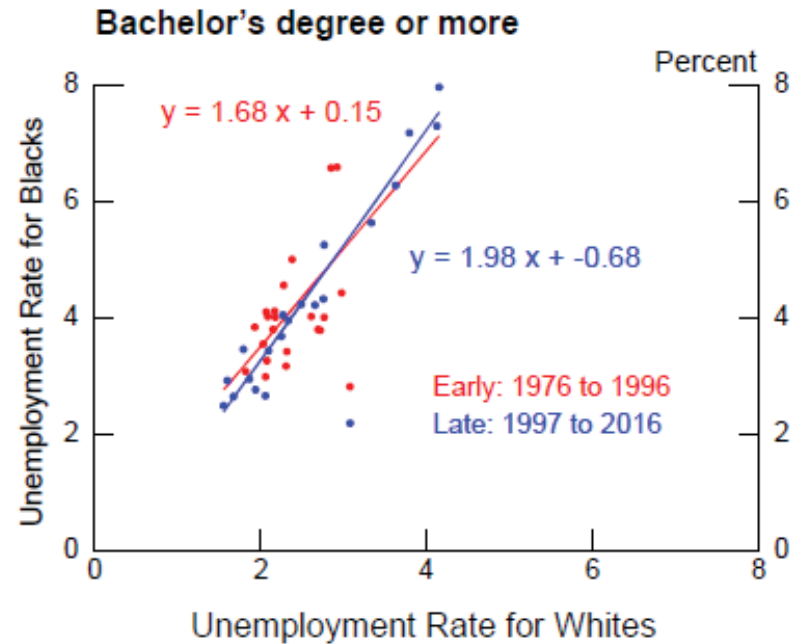
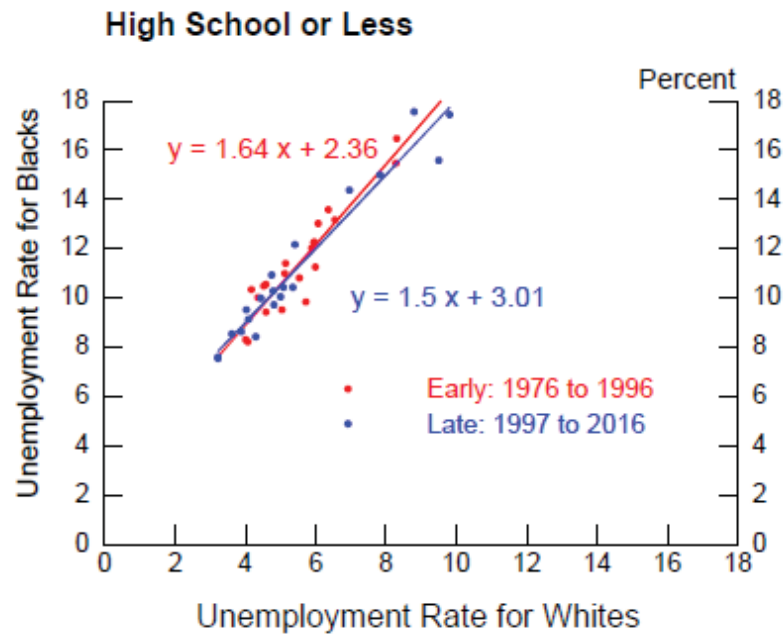


12. Unemployment Rates by Race or Ethnicity

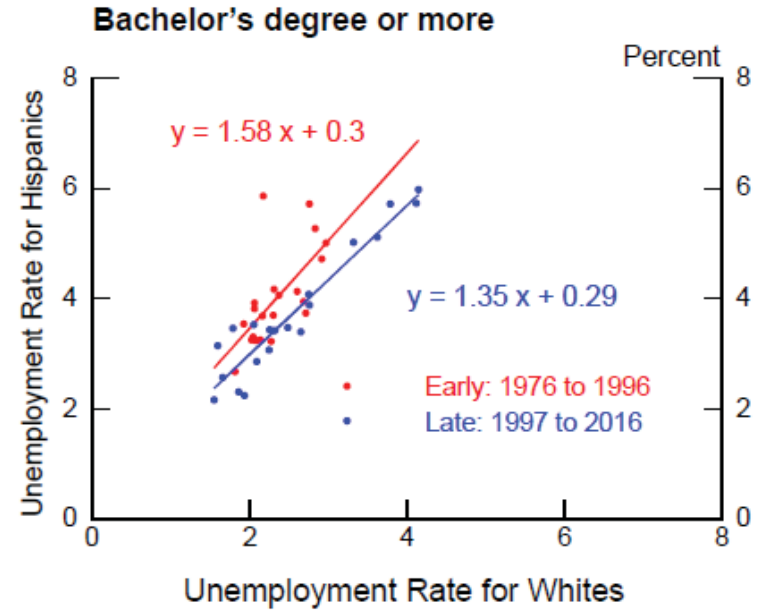
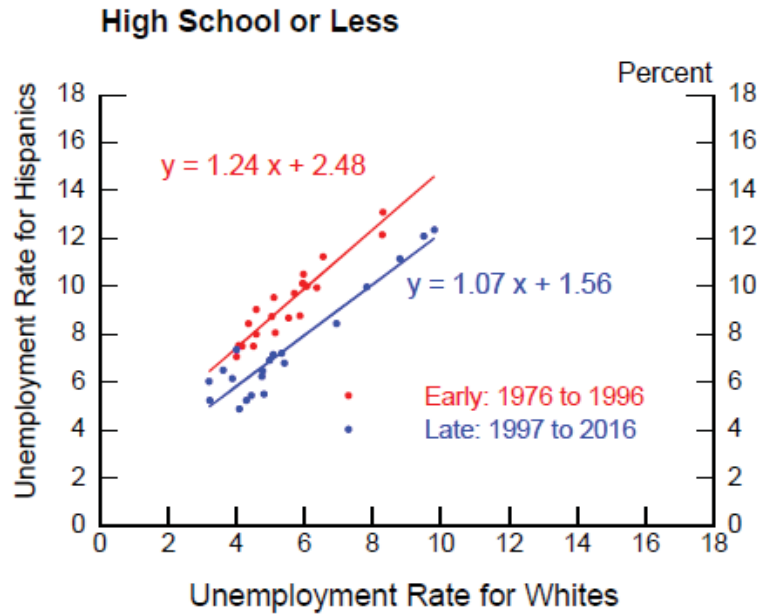


13. Black Unemployment Rates Compared to White Unemployment Rates by Educational Attainment

(annual averages of monthly not-seasonally-adjusted data)



14. Hispanic Unemployment Rates Compared to White Unemployment Rates by Educational Attainment (annual averages of monthly not-seasonally-adjusted data)



Appendix 3: Materials used by Ms. Wilson

Class II FOMC – Restricted (FR)

Material for Briefing on

The International Outlook

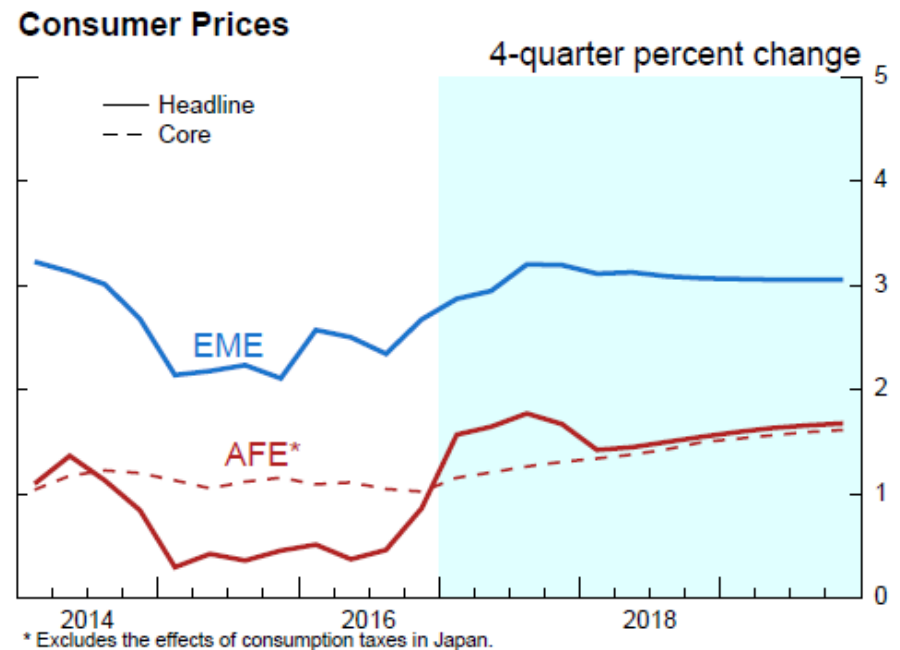
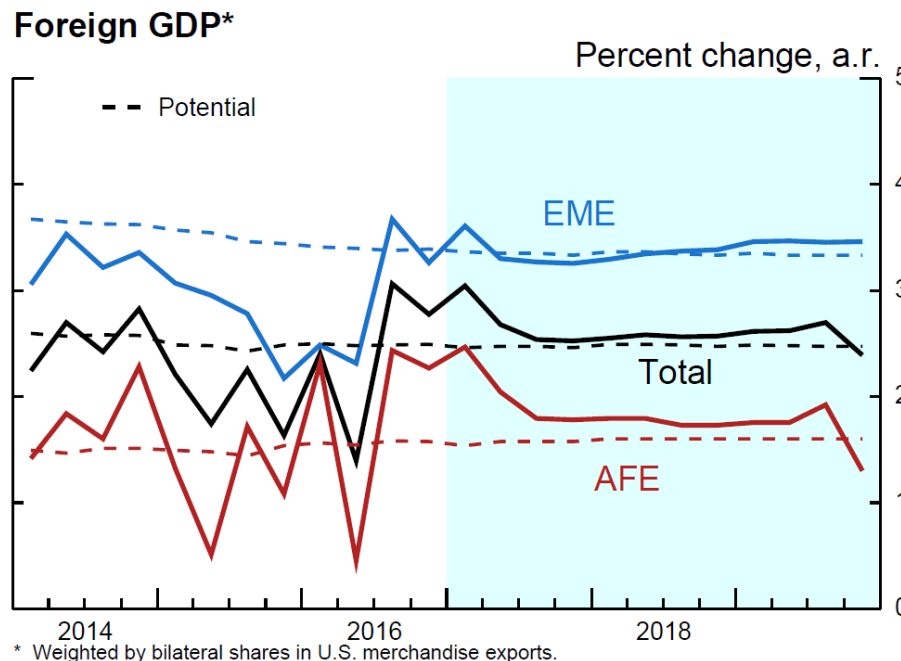
Beth Anne Wilson

Exhibits by Meghan Letendre

May 2, 2017

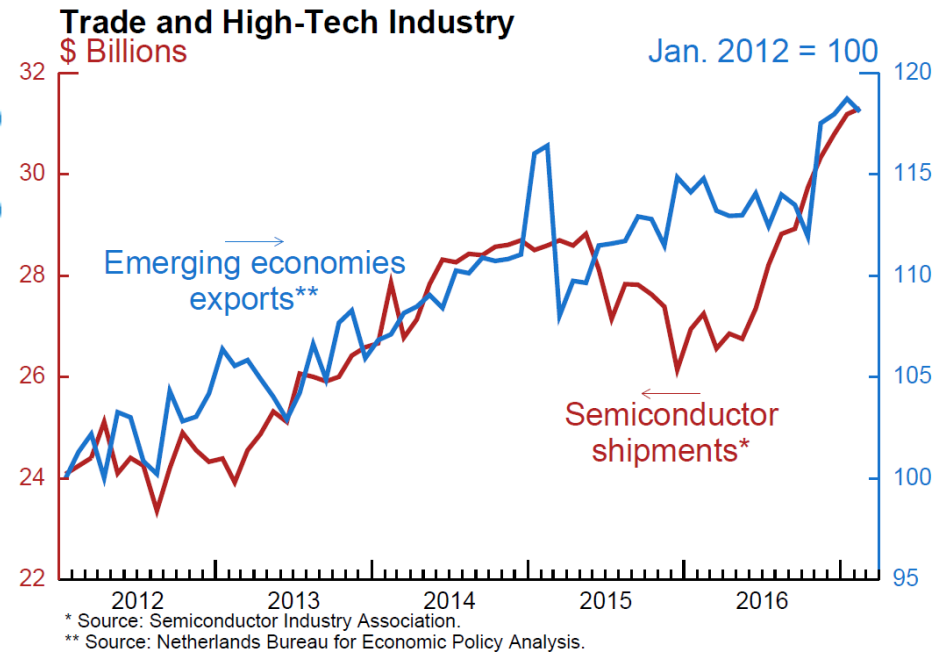
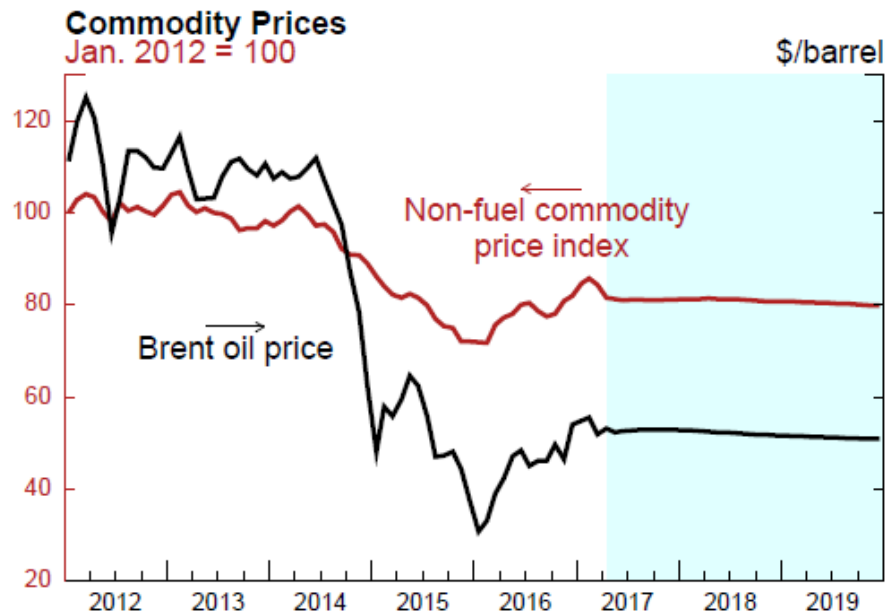
IF's Benign (if Unspectacular) Foreign Outlook

- GDP growth in the advanced foreign economies (AFE) and emerging market economies (EMEs) settling in at potential.
- Inflation stabilizing at 3 percent for the EMEs and trudging toward 2 percent for the AFEs.



Factors Supporting EME Forecast

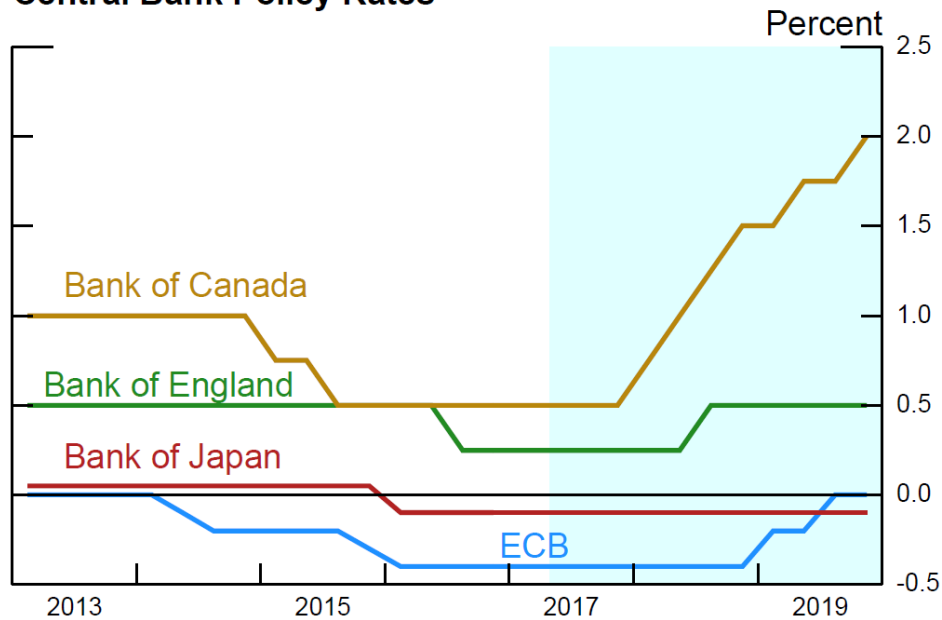
- The stabilization of commodity prices after a modest pickup last year.
- Step up in global trade, partially related to high tech.



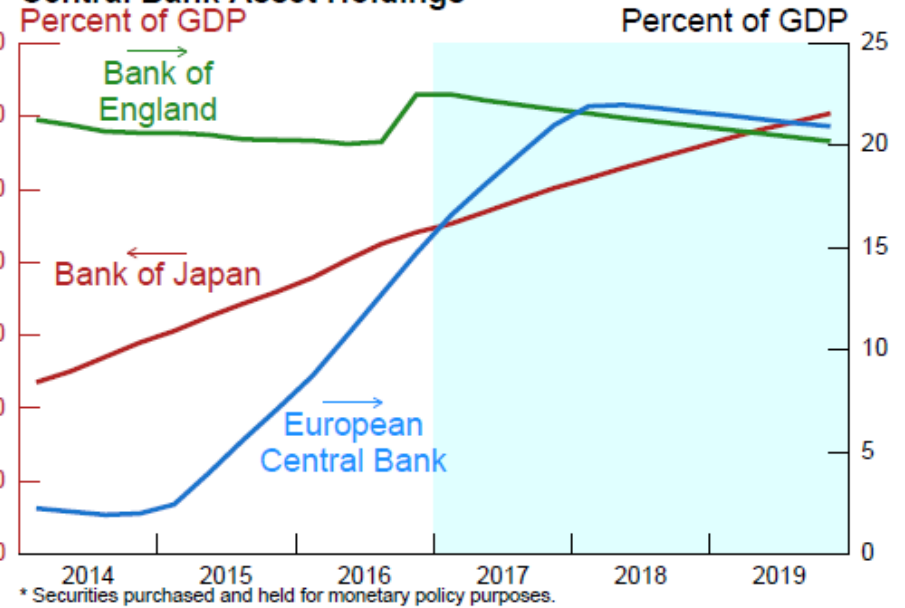
Factor Supporting AFE Forecast

- Accommodative monetary policy
 - Policy rates expected to remain very low.
 - Balance sheets remaining sizable and in some cases still growing.

Central Bank Policy Rates

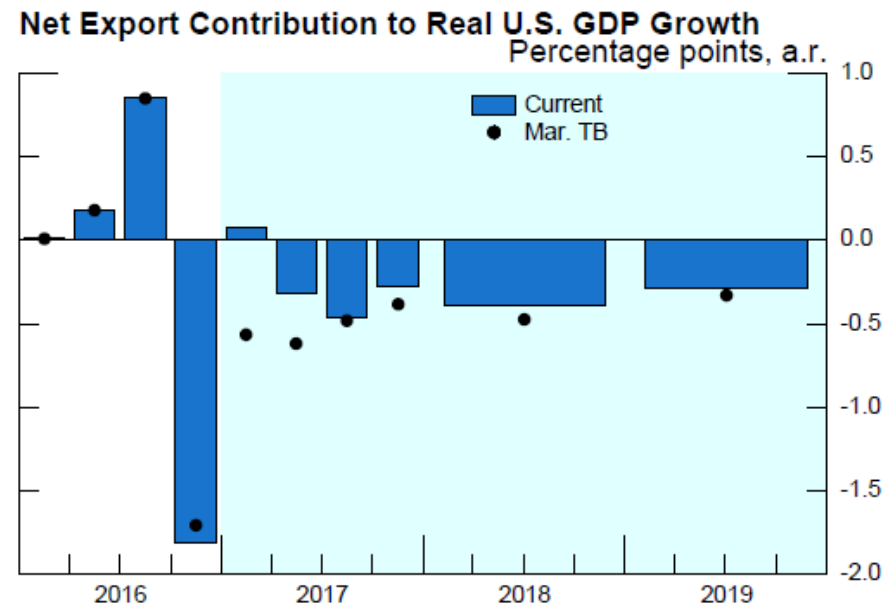
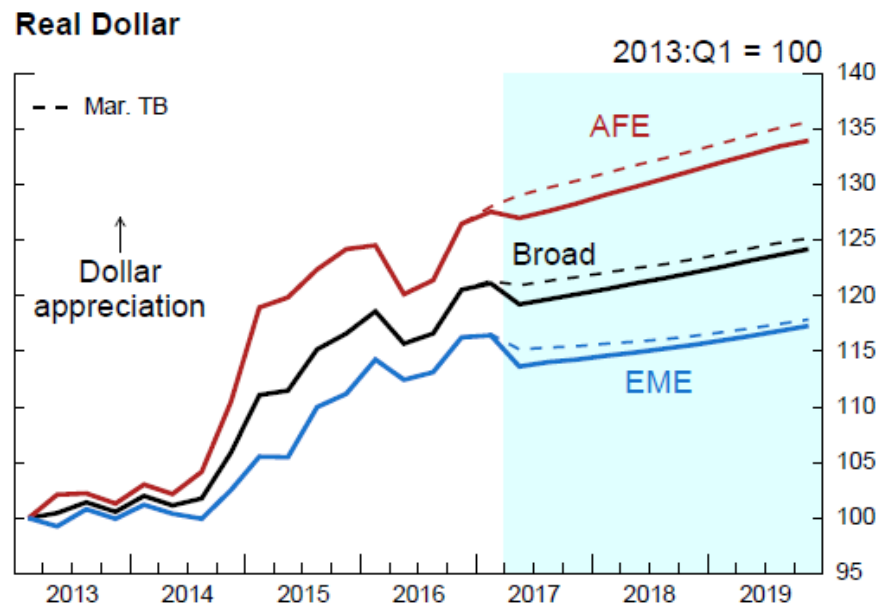


Central Bank Asset Holdings*



Dollar and Trade

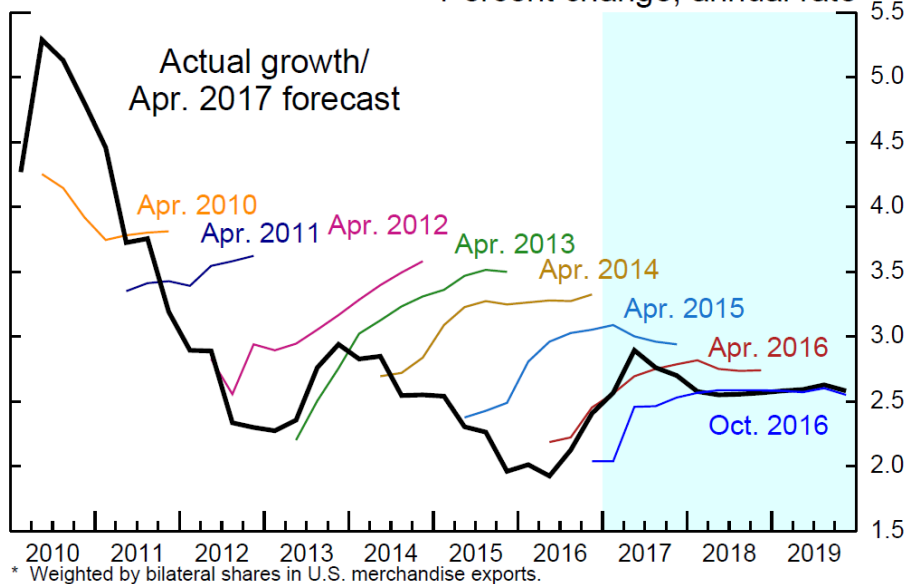
- Dollar appreciates, on average, 1½ percent a year.
 - As policy divergence not completely priced into markets.
- Contributing to a small net export drag over the forecast.



Relatively Happy Forecast

- Outlook for global growth stabilizing and even some upward surprises.
- Data and financial conditions point to low probability of global recession.
- Risks becoming more two sided.

Total Foreign GDP Forecast Revisions*
Percent change, annual rate

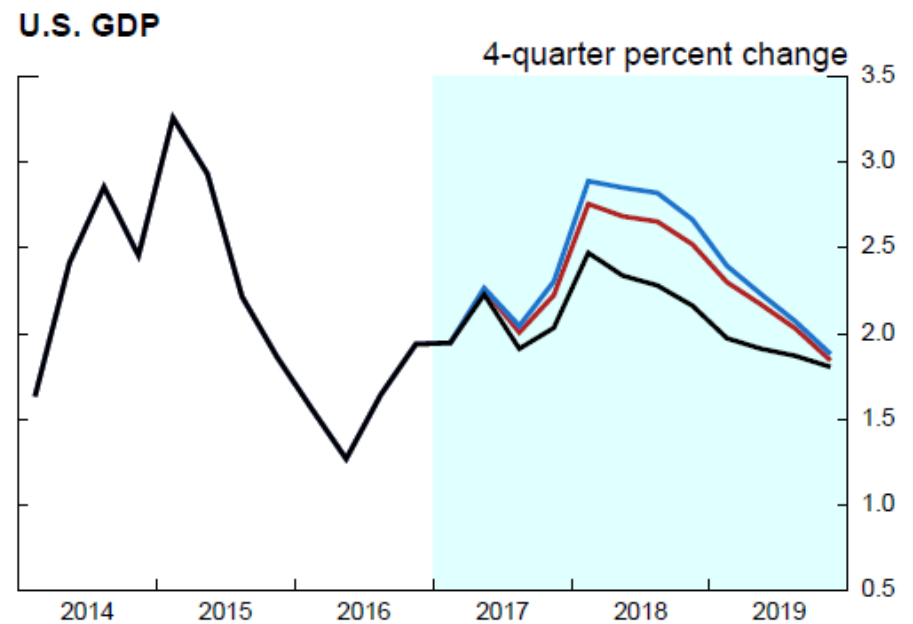
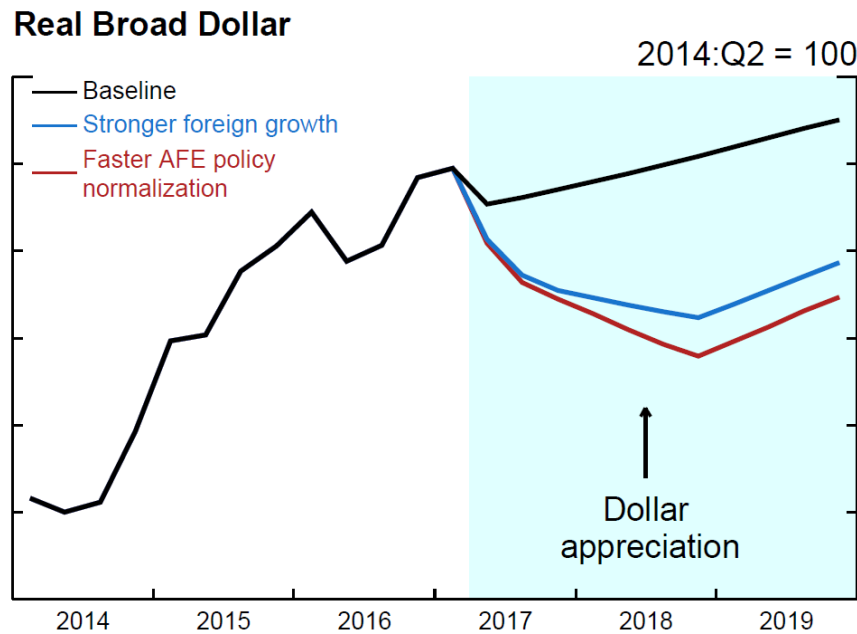


Estimated Probability of Recession in the Foreign Economy within 12 Months*



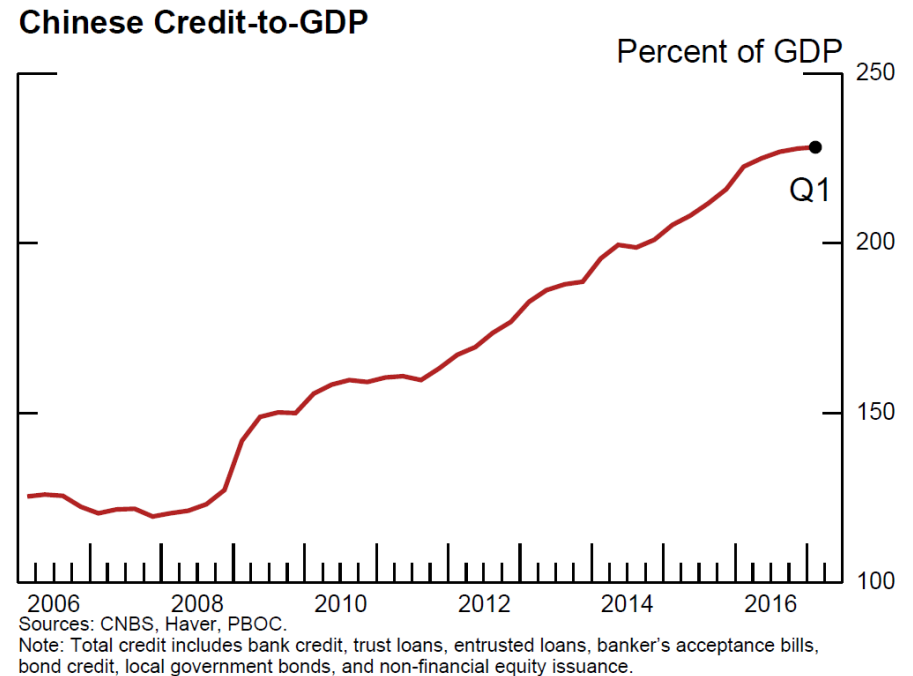
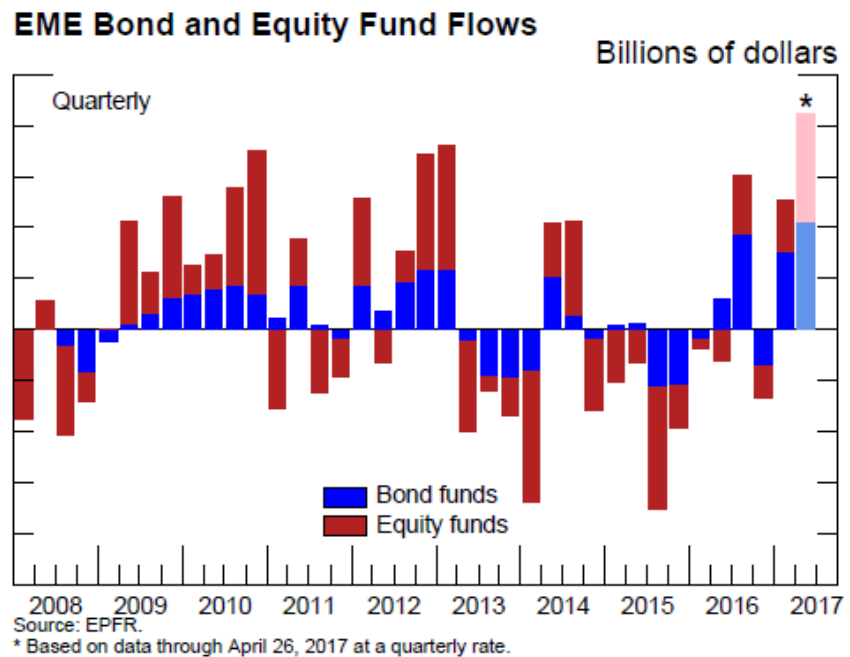
Upside Risk: Stronger Growth/Tighter Policy Abroad

- Positive data and passage of political risks could presage more rapid foreign growth/inflation and forceful central bank responses.
- Foreign growth 1 ppt above baseline with sharp depreciation of dollar leads to stronger U.S. growth and inflation even when AFE central banks tighten more aggressively than baseline policy rule would imply.



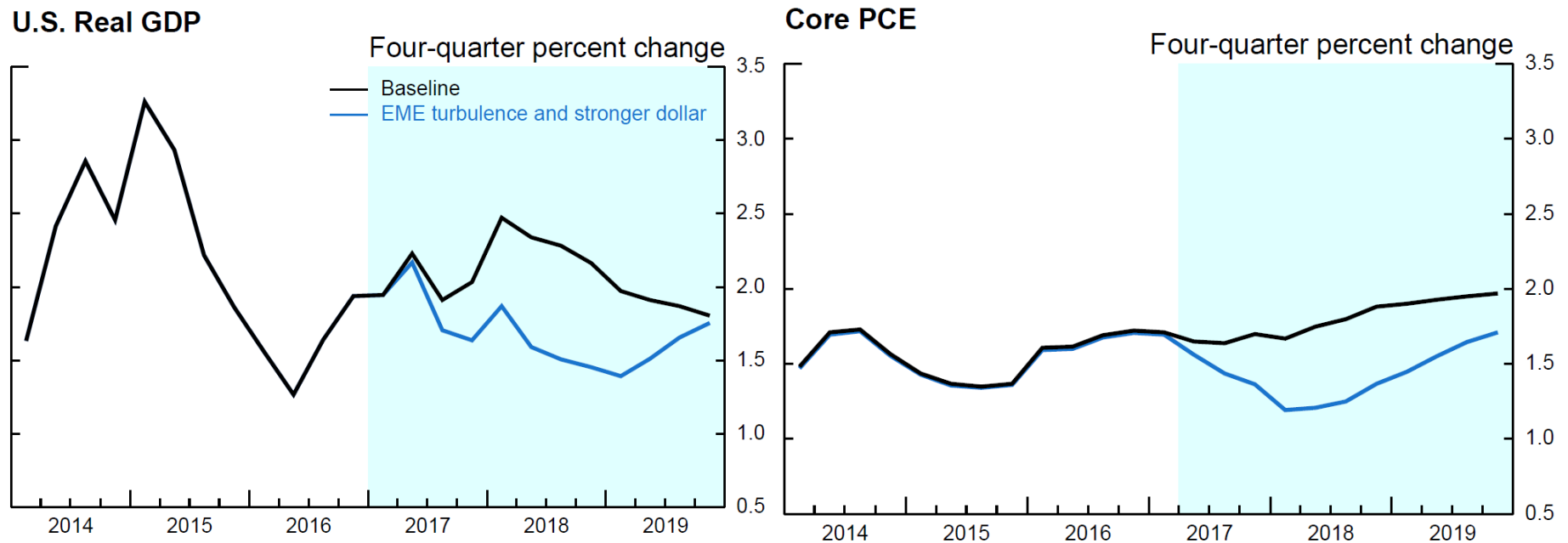
Downside Risk: EME Turbulence

- EME debt rising
 - Positive investor sentiment spurring strong inflows.
 - Chinese growth supported by rapid expansion of credit.
- And, in some cases, to high levels.
- Leaving EMEs vulnerable to shifts in sentiment.



Downside Risk: EME Turbulence (2)

- U.S. monetary policy normalization sharply boosts the dollar, leading to heightened financial pressures abroad that elevate EME borrowing costs and weigh on confidence, reducing foreign economic activity.
- U.S. real GDP slows noticeably and inflation fails to reach target over the forecast period.



Foreign Financial Stability

- Updated International Financial Stability Matrix.
- Overall level of foreign vulnerability still “moderate,” but political risks have risen since October.

		October 2016	April 2017
	Summary Assessment	Moderate	Moderate
Advanced Foreign Economies	Canada	Moderate	Moderate
	France	Moderate	Moderate
	Germany	(not rated)	Low
	Italy	Notable	Notable
	Japan	Moderate	Moderate
	Switzerland	Moderate	Moderate
	United Kingdom	Moderate	Moderate
Emerging Market Economies	Brazil	Elevated	Elevated
	China	Notable	Notable
	Hong Kong	Moderate	Moderate
	Mexico	Moderate	Notable
	South Korea	Low	Low
	Turkey	Notable	Elevated

Appendix 4: Materials used by Ms. Edge

Class II FOMC – Restricted (FR)

Material for Briefing on

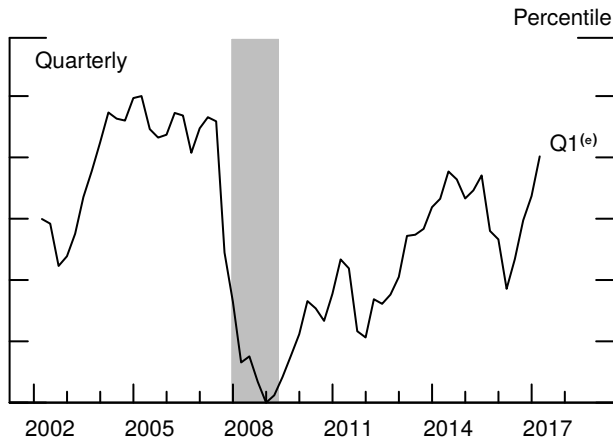
Financial Stability Developments

Rochelle Edge

May 2nd, 2017

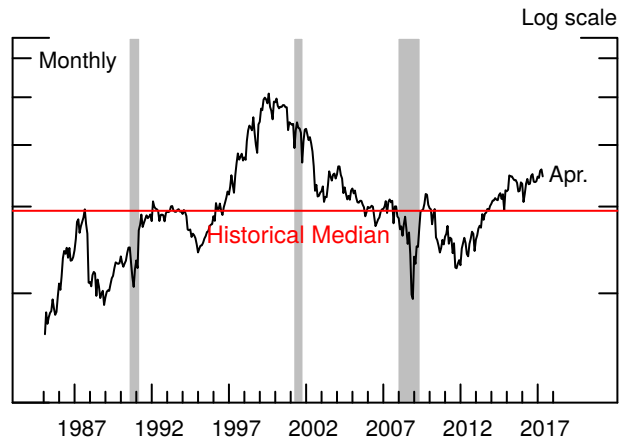
Risk Appetite and Nonfinancial Sector Leverage

Composite Index of Asset Valuation Pressures and Risk Appetite



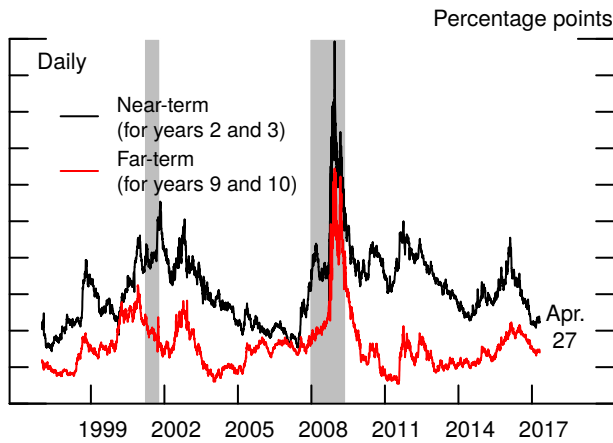
Source: See Aikman et al. (2015).

Equity Forward Price-to-Earnings Ratio



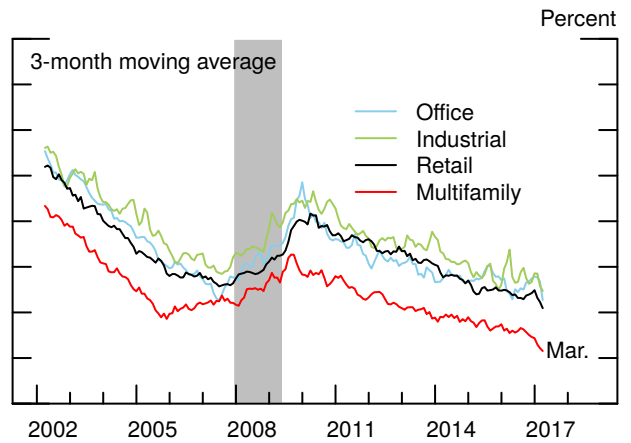
Source: Thompson Reuters Financial.

Speculative Grade Bond Near- and Far-Term Spreads



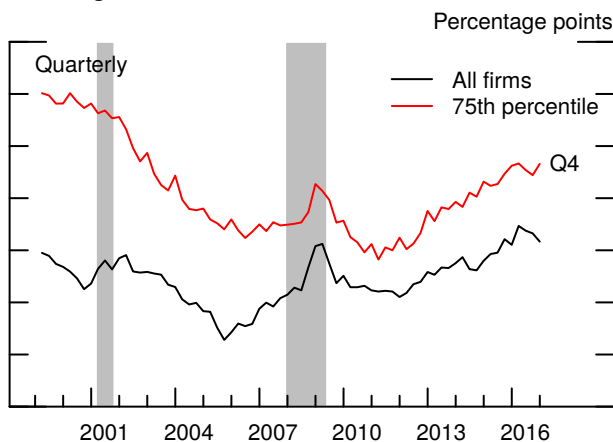
Source: Staff estimates of smoothed yield curves based on Merrill Lynch bond data.

CRE Capitalization Rates at Origination



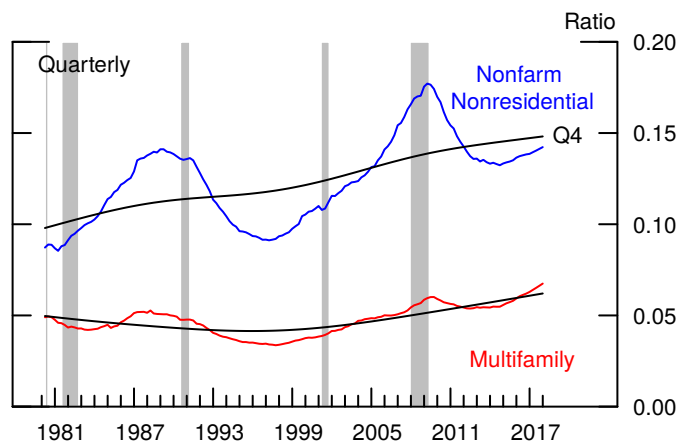
Source: Real Capital Analytics.

Speculative Grade and Unrated Firms' Gross Leverage



Source: Compustat.

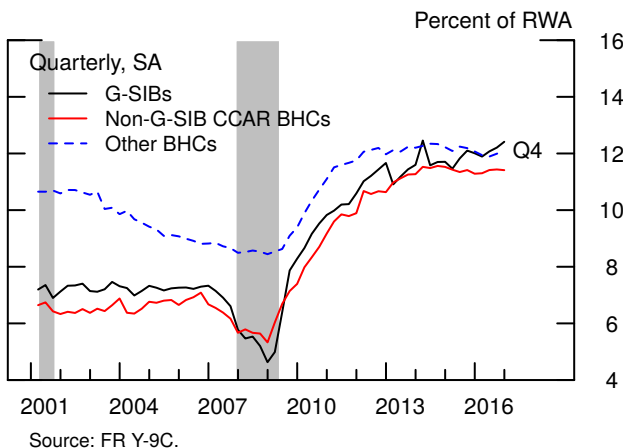
CRE Debt, Ratios to GDP and Ratio Trends



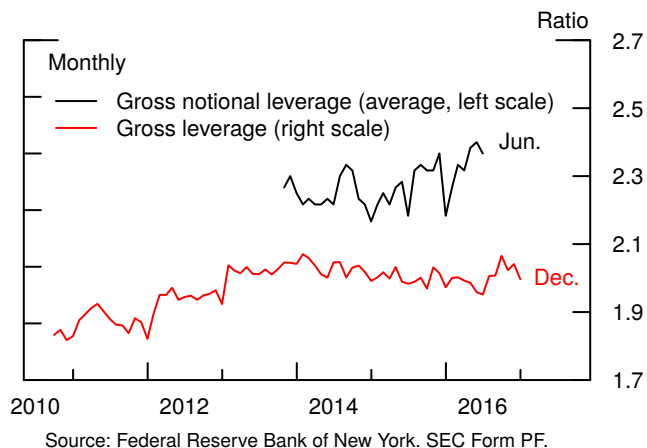
Source: Financial Accounts of the United States.

Financial Sector Leverage and Maturity/Liquidity Transformation

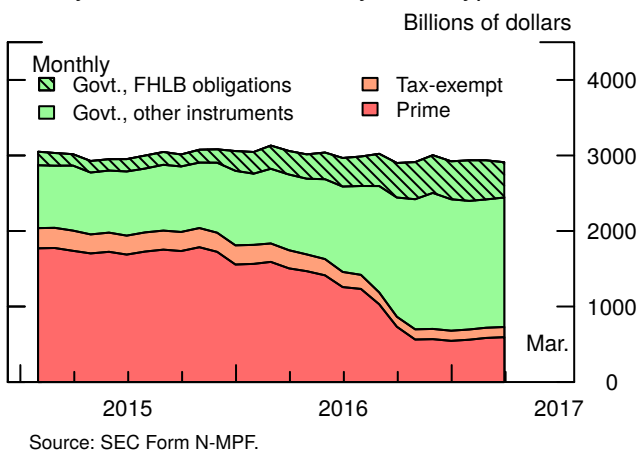
BHC Common Equity Tier 1 Ratio



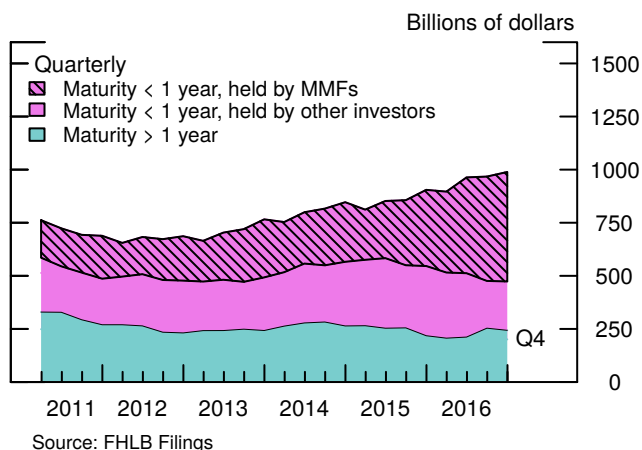
Hedge Fund Leverage



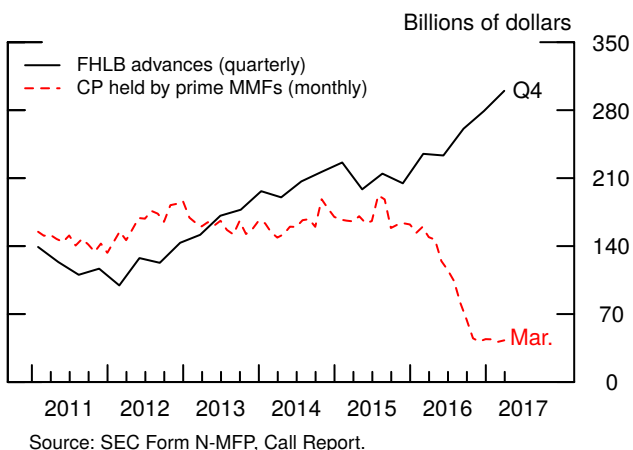
Money Market Fund Assets by Fund Type



FHLB Debt



CCAR Banks' Funding from FHLB Advances and MMFs



Money Fund Reform and Financial Stability

- On net, money fund reform appears to have reduced run risk
- FHLBs warrant further analysis to understand the risks faced by FHLBs and the channels through which stress at FHLBs could be transmitted to the financial system
- Staff are continuing to engage with the FHFA to understand these risks and channels

Staff Judgment on Levels of Vulnerabilities

Key: ■ Extremely subdued ■ Low ■ Moderate ■ Notable ■ Elevated

Notes: Heat map color assignments were made by staff judgment. In the absence of significant structural changes, we would expect vulnerabilities to spend roughly equal proportions of time in each of the colored risk buckets.

	April 2016	January 2017	April 2017
Valuation Pressures	<ul style="list-style-type: none"> Equity valuations moved up, as stock prices rose despite lowered earnings forecasts Valuation pressures in the CRE market remain stretched Treasury term premiums declined further into negative territory Leveraged loan valuation pressures eased a bit further 	<ul style="list-style-type: none"> Risky corporate bond spreads and forward price-to-earnings ratios now stand in the second and fifth quintiles of their respective historical distributions CRE and residential prices rose further; valuation measures stand above their historical averages Treasury term premiums increased but remain below their historical average 	<ul style="list-style-type: none"> Equity price-to-earnings ratios have reached levels not seen since the early 2000s The high-yield corporate bond risk premium declined a bit from an already low level CRE prices continued to rise despite slowing rent growth, though there are signs of tightening credit conditions Treasury term premiums remained low
Private Nonfinancial Sector Leverage	<ul style="list-style-type: none"> Aggregate leverage for nonfinancial corporate sector stayed elevated Growth of risky corporate debt has slowed markedly The credit-to-GDP ratio for the household sector remained well below its estimated trend 	<ul style="list-style-type: none"> Leverage for the nonfinancial corporate sector, particularly among speculative-grade firms, stayed elevated Outstanding risky corporate debt edged lower relative to a year earlier The debt-to-income ratio of households continued to inch down 	<ul style="list-style-type: none"> Leverage in the nonfinancial corporate sector ticked down but remained elevated The debt-to-income ratio of households has yet to turn up, and new borrowing was driven primarily by households with high credit scores
Financial Sector Leverage	<ul style="list-style-type: none"> Capital positions continued to improve at most large banks and stayed high at insurance companies The outlook for bank profits has worsened Available measures of leverage in the nonbank sector suggest little change 	<ul style="list-style-type: none"> Regulatory capital ratios for banks and insurance companies remain at high levels Measures of leverage in the nonbank sector are about unchanged Risks associated with spillovers from troubled Italian banks appear low as U.S. and European banks have limited exposures to these banks 	<ul style="list-style-type: none"> Capital positions at banks and insurance companies remained at high levels Available indicators of leverage at other nonbank institutions were little changed
Maturity and Liquidity Transformation	<ul style="list-style-type: none"> Large BHCs' holdings of liquid assets remain at high levels The ratio of aggregate runnable private money-like instruments to nominal GDP declined further Structural vulnerabilities in MMFs are expected to persist even after SEC reforms go fully into effect Mutual fund outflows could exacerbate volatility in corporate bond markets 	<ul style="list-style-type: none"> Large BHCs' holdings of liquid assets remain at high levels Reforms have made prime MMFs less prone to runs; AUM at prime MMFs declined and stand at low levels Some caution remains with regard to the use of FHLB advances and the potential growth of alternative and fragile short-term funding vehicles 	<ul style="list-style-type: none"> To date, money market reforms appear to have reduced run risk Large BHCs' holdings of liquid assets remained at high levels Large BHCs continued to replace short-term wholesale funding with core deposits
Overall Assessment			

Appendix 5: Materials used by Mr. Laubach

Class I FOMC – Restricted Controlled (FR)

Material for the Briefing on
Monetary Policy Alternatives

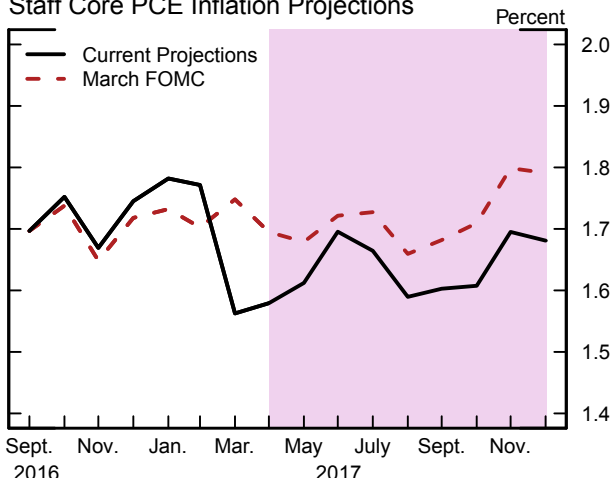
Thomas Laubach
Exhibits by Michelle Bongard
May 2–3, 2017

Monetary Policy Briefing

Recent Data Surprises: Questions

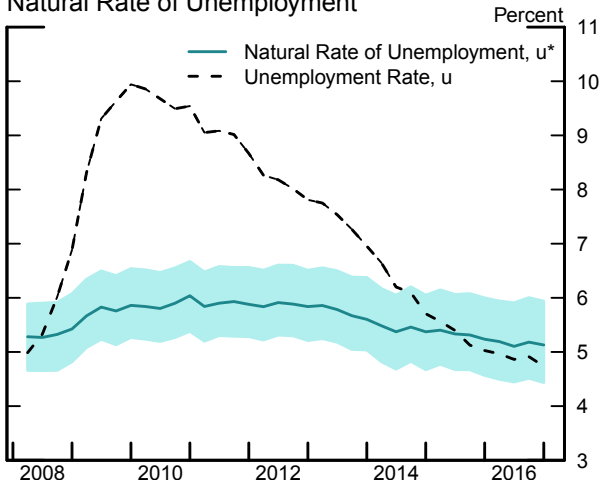
- PCE: Was the Q1 slowdown transitory or could it persist?
- Inflation: Will sustained progress to 2 percent be slower than anticipated?
- Labor Market: Will the unemployment rate undershoot more than expected or is there more room to run?

Staff Core PCE Inflation Projections



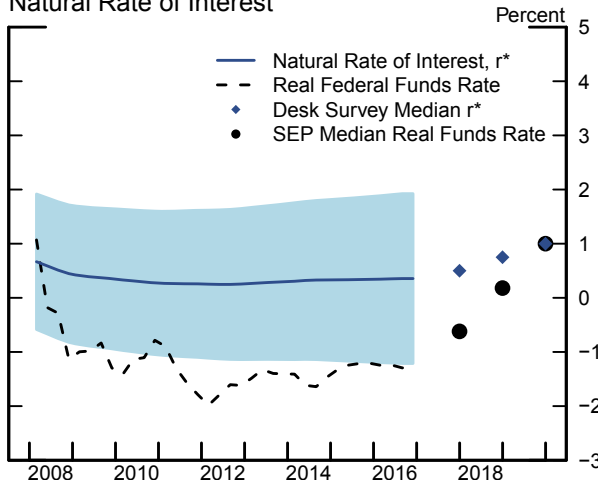
Note: Lines show 12-month inflation through the indicated month. Current forecasts were updated on May 1, 2017. March FOMC forecasts were updated March 9, 2017.
Source: Staff calculations.

Natural Rate of Unemployment



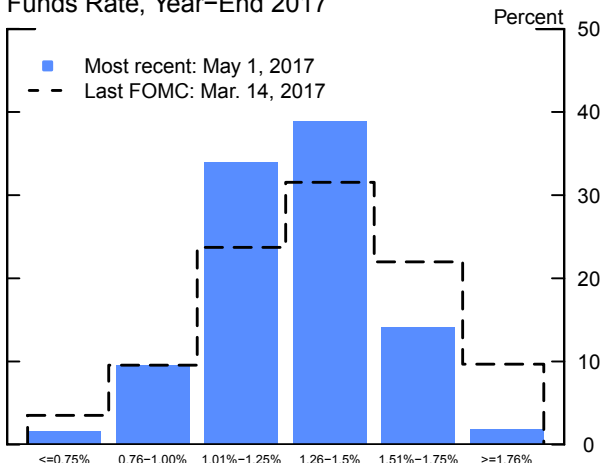
Note: u^* is the two-sided value from one of the staff's state-space models. Shaded region shows a 70% confidence interval for u^* .
Source: Staff calculations.

Natural Rate of Interest



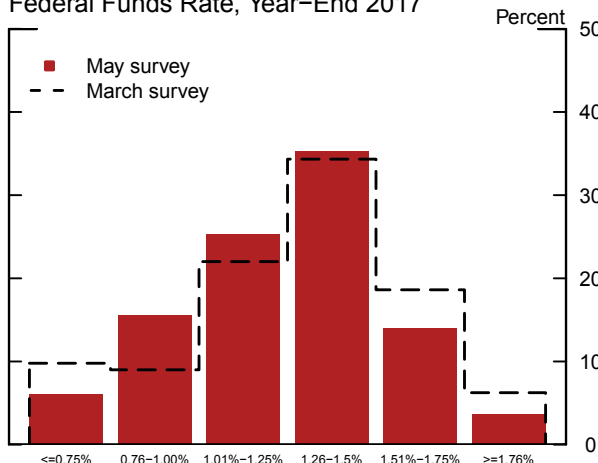
Note: The real federal funds rate is the nominal federal funds rate less 4-quarter core PCE inflation. r^* is the two-sided value from the Holston-Laubach-Williams model. The shaded region shows a 68% confidence interval for r^* .
Source: Holston, Laubach, and Williams (2016), March SEP, and FRBNY Desk Surveys.

Market-Implied Probability Distribution of the Federal Funds Rate, Year-End 2017



Note: Estimated from Eurodollar futures options, accounting for the differences in the levels and option-implied volatilities of LIBOR and the federal funds rate, but not adjusted for risk premiums.
Source: CME Group and staff calculations.

Desk Survey Probability Distribution of the Federal Funds Rate, Year-End 2017



Note: Average unconditional probabilities across survey respondents for different ranges of the federal funds rate at the end of 2017.
Source: FRBNY Desk Surveys.

MARCH 2017 FOMC STATEMENT

1. Information received since the Federal Open Market Committee met in February indicates that the labor market has continued to strengthen and that economic activity has continued to expand at a moderate pace. Job gains remained solid and the unemployment rate was little changed in recent months. Household spending has continued to rise moderately while business fixed investment appears to have firmed somewhat. Inflation has increased in recent quarters, moving close to the Committee's 2 percent longer-run objective; excluding energy and food prices, inflation was little changed and continued to run somewhat below 2 percent. Market-based measures of inflation compensation remain low; survey-based measures of longer-term inflation expectations are little changed, on balance.
2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects that, with gradual adjustments in the stance of monetary policy, economic activity will expand at a moderate pace, labor market conditions will strengthen somewhat further, and inflation will stabilize around 2 percent over the medium term. Near-term risks to the economic outlook appear roughly balanced. The Committee continues to closely monitor inflation indicators and global economic and financial developments.
3. In view of realized and expected labor market conditions and inflation, the Committee decided to raise the target range for the federal funds rate to 3/4 to 1 percent. The stance of monetary policy remains accommodative, thereby supporting some further strengthening in labor market conditions and a sustained 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. The Committee will carefully monitor actual and expected inflation developments relative to its symmetric inflation goal. The Committee expects that economic conditions will evolve in a manner that will warrant 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.

MAY 2017 ALTERNATIVE A

1. Information received since the Federal Open Market Committee met in February **March** indicates that the labor market has continued to strengthen and **but** that **growth in** economic activity has ~~continued to expand at a moderate pace~~ **slowed**. Job gains ~~remained solid and~~ **While** the unemployment rate ~~was little changed in recent months~~ **declined, job gains slowed and wage pressures remained subdued**. **Growth of** household spending ~~has continued to rise moderately while~~ **weakened even as** business fixed investment ~~appears to have firmed somewhat~~. **Although** inflation has increased in recent quarters, moving close to the Committee's 2 percent longer-run objective, **the rise largely reflected the temporary effects of higher energy prices**; excluding energy and food, **consumer** prices **declined in March and** inflation ~~was little changed and~~ continued to run somewhat below 2 percent. Market-based measures of inflation compensation remain low; survey-based measures of longer-term inflation expectations are little changed, on balance.
2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects that, with gradual adjustments in the stance of monetary policy, economic activity will expand at a moderate pace, labor market conditions will strengthen somewhat further, and inflation will stabilize around 2 percent over the medium term. Near-term risks to the economic outlook appear roughly balanced. The Committee continues to closely monitor inflation indicators and global economic and financial developments.
3. In view of ~~realized and expected~~ **the mixed readings on economic activity**, labor market conditions, and inflation, the Committee decided to ~~raise~~ **maintain** the target range for the federal funds rate ~~to~~ **at** 3/4 to 1 percent. The stance of monetary policy remains accommodative, thereby supporting some further strengthening in labor market conditions and a sustained 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. The Committee will carefully monitor actual and expected inflation developments relative to its symmetric inflation goal. The Committee expects that economic conditions will evolve in a manner that will warrant 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.

MAY 2017 ALTERNATIVE B

1. Information received since the Federal Open Market Committee met in February **March** indicates that the labor market has continued to strengthen and that **even as growth in** economic activity has continued to expand at a moderate pace **slowed**. Job gains ~~remained~~ **were solid, on average, in recent months**, and the unemployment rate ~~was little changed in recent months~~ **declined**. Household spending has continued to rise moderately **rose only modestly, but households' real income and wealth continued to rise and consumer sentiment remained high**, while Business fixed investment appears to have firmed **somewhat**. Inflation has increased in recent quarters, moving **measured on a 12-month basis recently has been running** close to the Committee's 2 percent longer-run objective; Excluding energy and food, **consumer** prices **declined in March and** inflation was little changed and continued to run somewhat below 2 percent. Market-based measures of inflation compensation remain low; survey-based measures of longer-term inflation expectations are little changed, on balance.
2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee **views the slowing in growth during the first quarter as likely to be transitory and continues to** expects that, with gradual adjustments in the stance of monetary policy, economic activity will expand at a moderate pace, labor market conditions will strengthen somewhat further, and inflation will stabilize around 2 percent over the medium term. Near-term risks to the economic outlook appear roughly balanced. The Committee continues to closely monitor inflation indicators and global economic and financial developments.
3. In view of realized and expected labor market conditions and inflation, the Committee decided to ~~raise~~ **maintain** the target range for the federal funds rate ~~to~~ **at** 3/4 to 1 percent. The stance of monetary policy remains accommodative, thereby supporting some further strengthening in labor market conditions and a sustained 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. The Committee will carefully monitor actual and expected inflation developments relative to its symmetric inflation goal. The Committee expects that economic conditions will evolve in a manner that will warrant 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.

MAY 2017 ALTERNATIVE C

1. Information received since the Federal Open Market Committee met in ~~February~~ **March** indicates that the labor market has continued to strengthen and that **tighten in recent months even as growth in** economic activity ~~has continued to expand at a moderate pace~~ **slowed**. Job gains ~~remained~~ **were solid, on average, in recent months,** and the unemployment rate ~~was little changed in recent months~~ **declined**. **Although growth in household spending has continued to rise moderately slowed, restraining growth in economic activity, households' real income and wealth continued to rise and consumer sentiment remained high.** ~~while Business fixed investment appears to have firmed somewhat~~ **and housing investment expanded strongly**. Inflation has increased in recent quarters, moving close to the Committee's 2 percent longer-run objective; excluding energy and food prices, inflation was little changed and continued to run somewhat below 2 percent. Market-based measures of inflation compensation ~~remain low;~~ **and** survey-based measures of longer-term inflation expectations are little changed, on balance.
2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee **views the slowing in growth during the first quarter as likely to be transitory and** expects that, with **further** gradual adjustments in the stance of monetary policy, economic activity will expand at a moderate pace, labor market conditions will strengthen somewhat further, and inflation will stabilize around 2 percent over the medium term. Near-term risks to the economic outlook appear roughly balanced. The Committee continues to closely monitor inflation indicators and global economic and financial developments.
3. In view of realized and expected labor market conditions and inflation, the Committee decided to raise the target range for the federal funds rate ~~to 3/4~~ to 1 **to 1-1/4** percent. The stance of monetary policy remains accommodative, thereby supporting some further strengthening in labor market conditions and a sustained 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. The Committee will carefully monitor actual and expected inflation developments relative to its symmetric inflation goal. The Committee expects that economic conditions will evolve in a manner that will warrant **additional** 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 for May 2017 Alternatives A and B

Release Date: ~~March 15~~ **May 3**, 2017

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 ~~March 15~~ **May 3**, 2017:

- The Board of Governors of the Federal Reserve System voted unanimously to ~~raise~~ **maintain** the interest rate paid on required and excess reserve balances to **at** 1.00 percent, ~~effective March 16, 2017~~.
- 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 ~~March 16~~ **May 4**, 2017, 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 3/4 to 1 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 0.75 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 voted unanimously to approve a ~~1/4 percentage point increase in~~ **the establishment of** the primary credit rate to **at the existing level of** 1.50 percent, ~~effective March 16, 2017. In taking this action, the Board approved requests to establish that rate submitted by the Boards of Directors of the Federal Reserve Banks of Boston, Philadelphia, Cleveland, Richmond, Atlanta, Chicago, Kansas City, Dallas, and San Francisco.~~

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 for May 2017 Alternative C

Release Date: ~~March 15~~ **May 3**, 2017

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 ~~March 15~~ **May 3**, 2017:

- The Board of Governors of the Federal Reserve System voted unanimously to raise the interest rate paid on required and excess reserve balances to ~~1.00~~ **1.25** percent, effective ~~March 16~~ **May 4**, 2017.
- 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 ~~March 16~~ **May 4**, 2017, 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 ~~3/4 to 1~~ **to 1-1/4** 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 ~~0.75~~ **1.00** 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 voted unanimously to approve a 1/4 percentage point increase in the primary credit rate to ~~1.50~~ **1.75** percent, effective ~~March 16~~ **May 4**, 2017. In taking this action, the Board approved requests to establish that rate 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 6: Materials used by Ms. Logan

Class I FOMC – Restricted Controlled (FR)

Material for the Briefing on

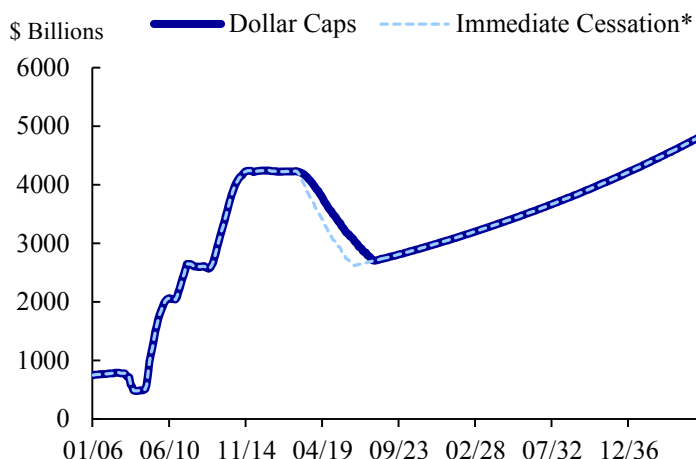
**System Open Market Account Reinvestment
Policy**

Lorie Logan
May 3, 2017

(1) Reinvestment Proposal

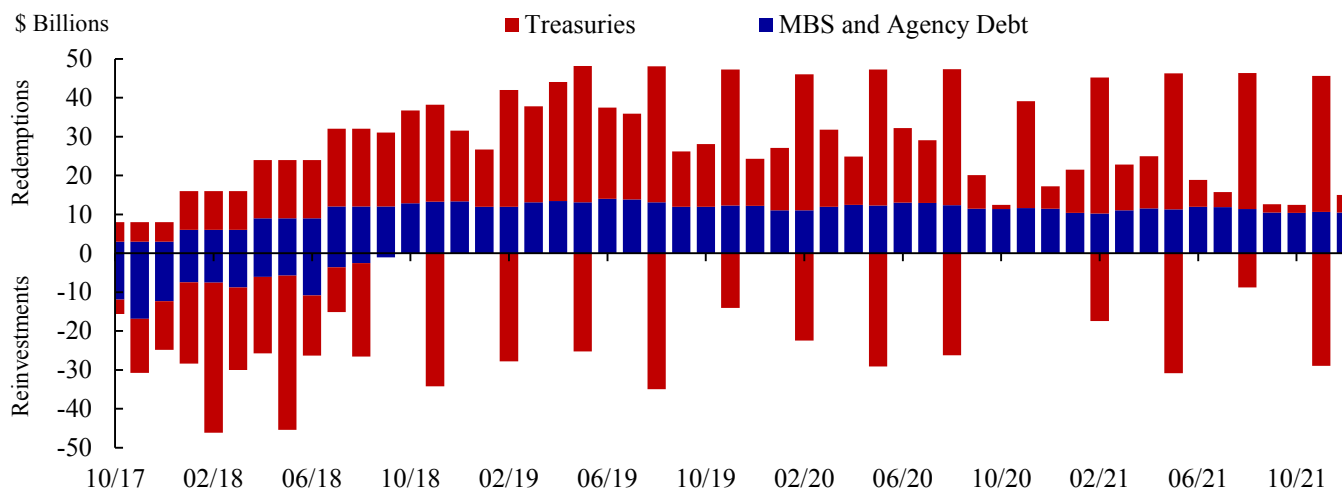
- Approach: Gradually increasing limits (caps) on the dollar amounts by which Treasury and agency holdings are allowed to decline each month
- Length: Increase caps over an 18-month period; then maintain fixed maximum caps through normalization
- Adjustments: Increase Treasury caps by \$5 billion each quarter up to a maximum cap of \$35 billion per month; increase agency caps by \$3 billion each quarter up to a maximum of \$21 billion per month

(2) SOMA Holdings



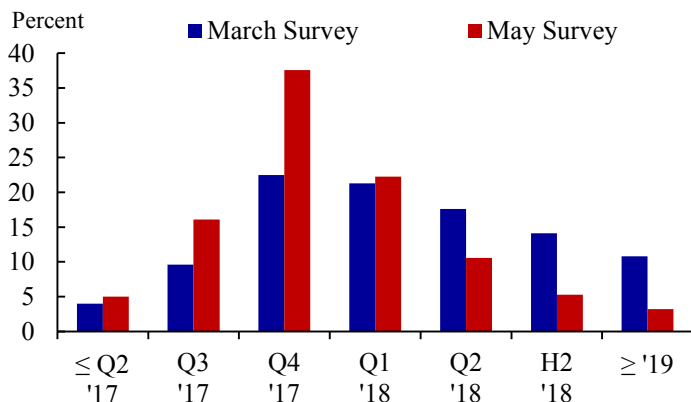
*March Tealbook B scenario: \$500 billion reserves
Source: Federal Reserve Board

(3) Projected Redemptions (Reinvestment)



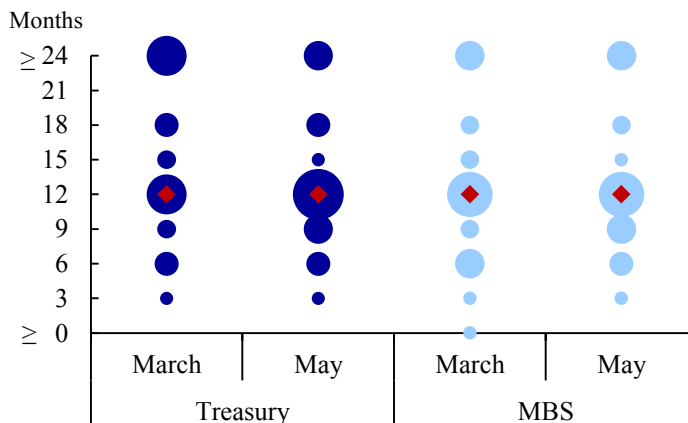
Source: Federal Reserve Board

(4) Average PDF of Expected Time of First Announced Change in Reinvestment Policy*



*Conditional on non-zero probability assigned to reinvestments either being ceased all at once or phased out over time. Based on all responses from the March and May Surveys of Primary Dealers and Market Participants. Source: FRBNY

(5) Expected Duration of a Phase-Out of Reinvestments*



*Conditional on reinvestments being phased out over time. Based on all responses from the Surveys of Primary Dealers and Market Participants. Source: FRBNY

Communicating a Plan for Ceasing or Phasing Out Reinvestment

- The Committee intends to reduce the Federal Reserve’s holdings of securities by gradually reducing its reinvestment of repayments of principal on securities held in the System Open Market Account.
 - Specifically, the Committee intends to set a cap on the amount of the Federal Reserve’s holdings of maturing Treasury securities that will be allowed to roll off each month; the Committee anticipates that the cap will increase from \$5 billion to \$35 billion in equal quarterly steps over 1½ years.
 - Similarly, the Committee intends to reinvest in agency MBS, each month, principal repayments that the Federal Reserve receives from its holdings of agency debt and mortgage-backed securities only to the extent that such repayments exceed a specified cap; the Committee anticipates that the cap will increase from \$3 billion to \$21 billion per month in equal quarterly steps over 1½ years.
 - The Committee also anticipates that the caps will remain in place once they reach their respective maximums so that the Federal Reserve’s securities holdings will continue to decline in a gradual and predictable manner until the Committee judges that the Federal Reserve is holding no more securities than necessary to implement monetary policy efficiently and effectively.
- The Committee currently anticipates gradually reducing the quantity of reserve balances to a level appreciably below that seen in recent years but large enough to enable routine fluctuations in the demand for reserves, or in autonomous factors that affect the supply of reserve balances, to be absorbed without significant fluctuations in the effective federal funds rate and without frequent open market operations to adjust the level of reserves.

OR

- The Committee anticipates gradually reducing the supply of reserve balances to a level appreciably smaller than in recent years but larger than before the financial crisis.
- The Committee is prepared to adjust details of its planned approach to reducing the Federal Reserve’s securities holdings in light of unexpected economic and financial developments. In particular, the Committee is prepared to increase or fully resume reinvestments if a future deterioration in the economic outlook warrants a [sizable] reduction in the Committee’s target for the federal funds rate.

[All] participants also agreed that the Committee will use changes in the target range for the federal funds rate as its primary means for adjusting the stance of monetary policy. However, the Committee is prepared to use its full range of tools, including adjusting the size and composition of its balance sheet, if future economic conditions warrant a more accommodative stance of monetary policy than can be achieved solely by reducing the federal funds rate.

Questions for Discussion

- 1) What are your views on the staff’s proposed operational plan for phasing out reinvestments?
 - a) Do you prefer phasing out reinvestment or ceasing it all at once?
 - b) Conditional on phasing out reinvestments, how long a phase-out period would you prefer?
 - c) Do you think that caps for redemptions of Treasury securities and/or MBS should be part of such a plan?
- 2) What are your views on the proposal for communicating to the public additional details of the Committee’s plans for phasing out reinvestments and for the evolution of the balance sheet?
 - a) What guidance would you issue about the conditions that will trigger beginning to phase out (or ceasing) reinvestment?
 - b) How and when would you issue such guidance?