Appendix 1: Materials used by Ms. Logan

Class II FOMC – Restricted (FR)

Material for the Briefing on

Financial Developments and Open Market Operations

Lorie Logan
March 20, 2018

Class II FOMC – Restricted (FR)

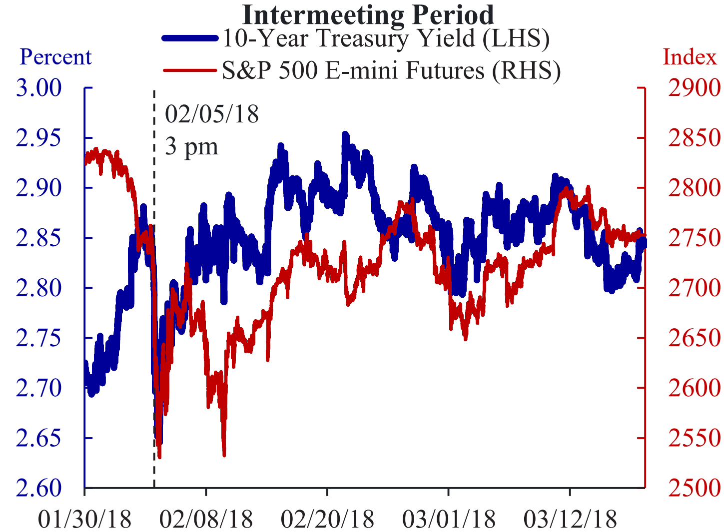
Exhibit 1

(1) Asset Price Changes*

	Since Jan. FOMC	Since Dec. '15 FOMC	Current Level
S&P 500 Index	-2.5%	+34.7%	2752
High-Yield Credit Spread	+22 bps	-328 bps	339 bps
10-Yr Nominal Treasury Yield	+12 bps	+58 bps	2.84%
Bloomberg Dollar Index	+0.9%	-7.9%	1132
MSCI World Index	-3.6%	+29.6%	2134
VIX Index	+1 ppts	-5 ppts	16

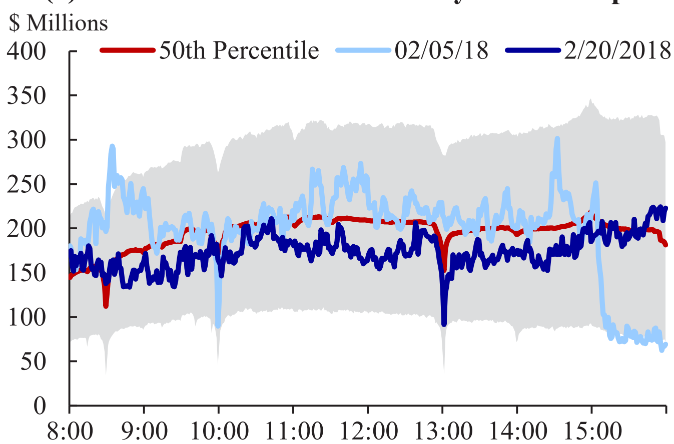
*Red indicates tightening in financial conditions, blue indicates loosening.
Source: Barclays, Bloomberg, MSCI

(2) 10-Year Treasury and S&P 500 Futures Over the Intermeeting Period



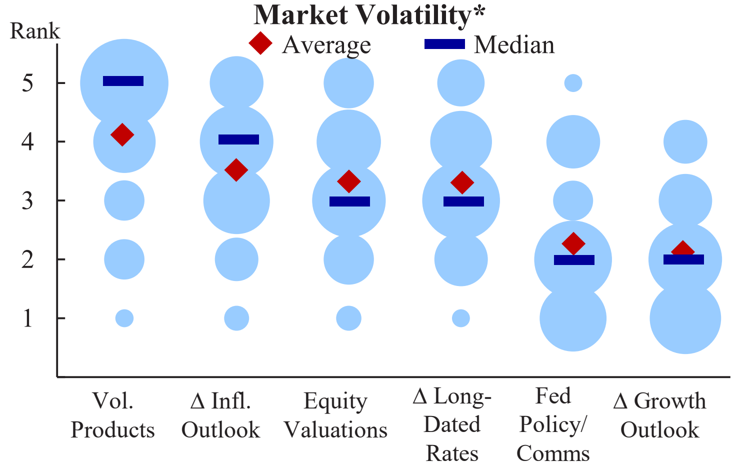
Source: Bloomberg

(3) On-the-Run 10-Year Treasury Market Depth*



*Top of shaded area represents 90th percentile, bottom of shaded area represents 10th percentile. Percentiles based on non-FOMC and non-NFP dates from 2010-2018. Market depth measures quantity of securities available for sale or purchase at the three best bid and offer prices.
Source: Brokertec, Desk Calculations

(4) Importance of Factors Explaining the Equity Market Volatility*



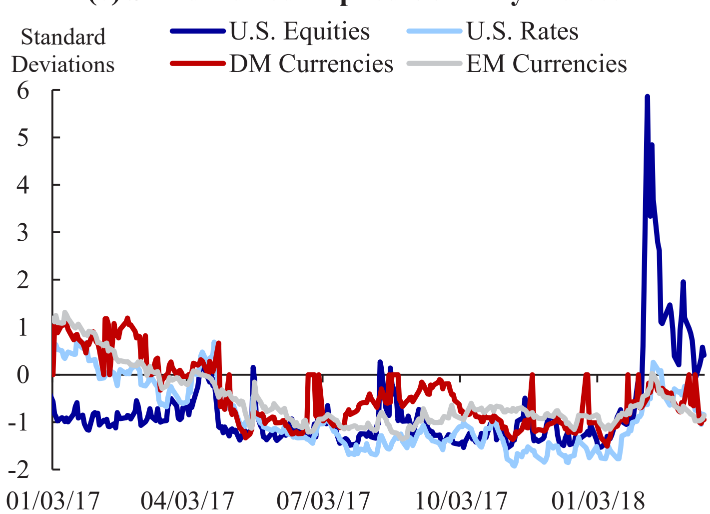
*Based on all responses from the Surveys of Primary Dealers and Market Participants. Dots scaled by percent of respondents. 5=very important, 1=not important.
Source: FRBNY

(5) Volatility-Linked Strategies*

Firm or Strategy Type	Estimated Size (AUM, $ Billions)	Adjustment Horizon
VIX ETPs	~5	≤1 Day
Vol Control	~200-300	2-5 Days
CTA/Momentum:		
Short-Term	~75-125	A Few Weeks
Long-Term	~225-375	
Risk Parity	~300-600	Longer

*AUM estimation based on available data and/or Desk outreach.
Source: Bloomberg, Desk Calculations

(6) Standardized Implied Volatility Indices*

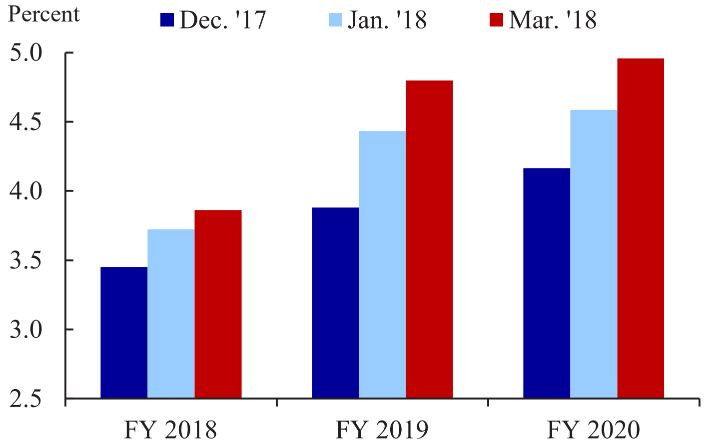


*Standardized since January 2012.
Source: Bloomberg, Desk Calculations

Class II FOMC – Restricted (FR)

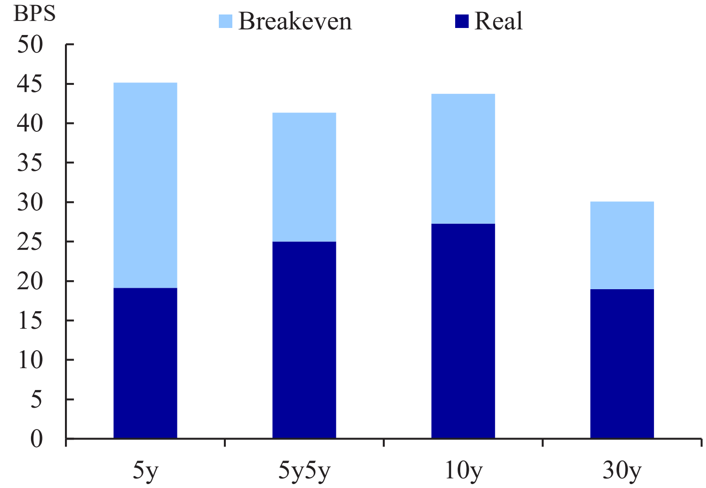
Exhibit 2

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



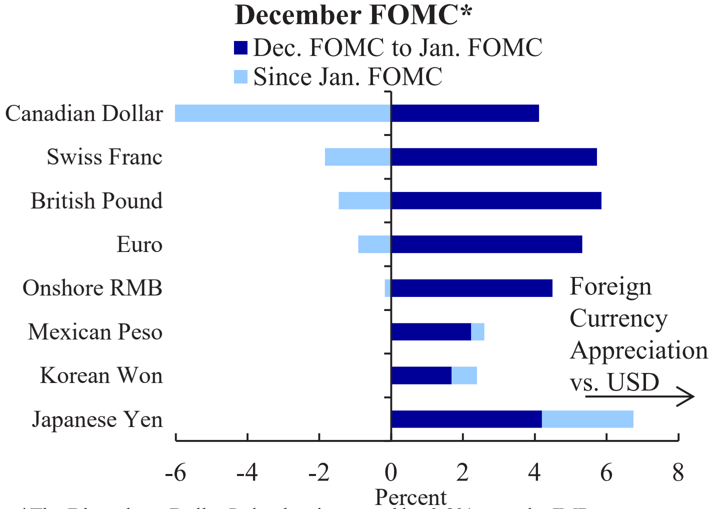
*Based on all responses from the Surveys of Primary Dealers and Market Participants.
Source: FRBNY

(8) Decomposition of Treasury Yield Changes Since December FOMC



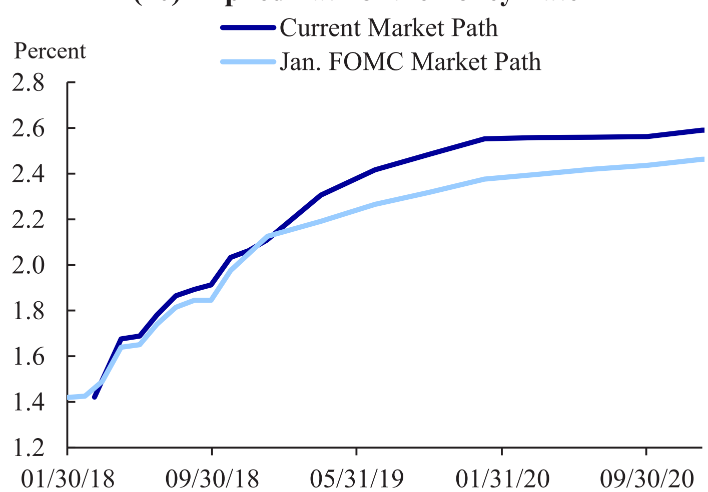
Source: Bloomberg

(9) Currency Performance Against U.S. Dollar Since December FOMC*



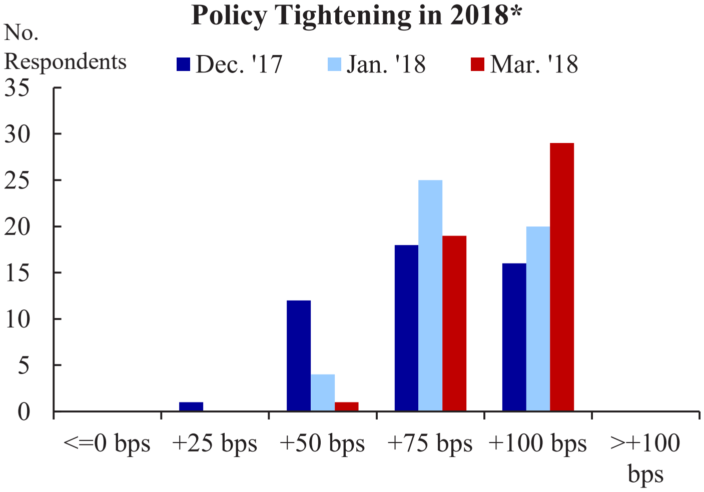
*The Bloomberg Dollar Index has increased by 0.9% over the IMP.
Source: Bloomberg

(10) Implied Path of the Policy Rate*



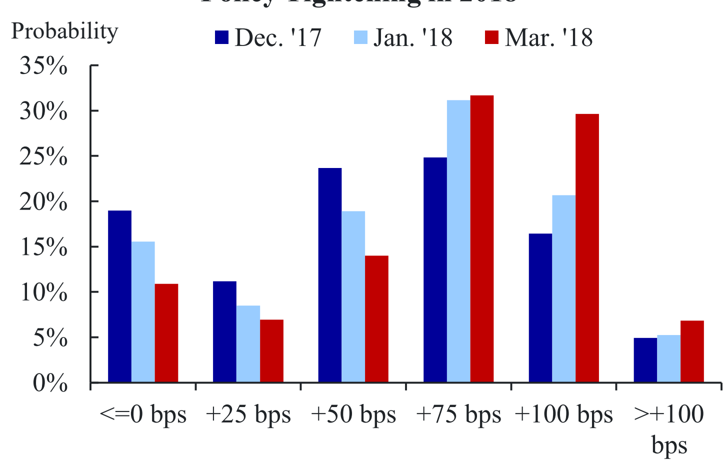
*Market-implied paths derived from federal funds and Eurodollar futures.
Source: Bloomberg, Desk Calculations, FRBNY

(11) Survey Modal Expectations for Basis Points of Policy Tightening in 2018*



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

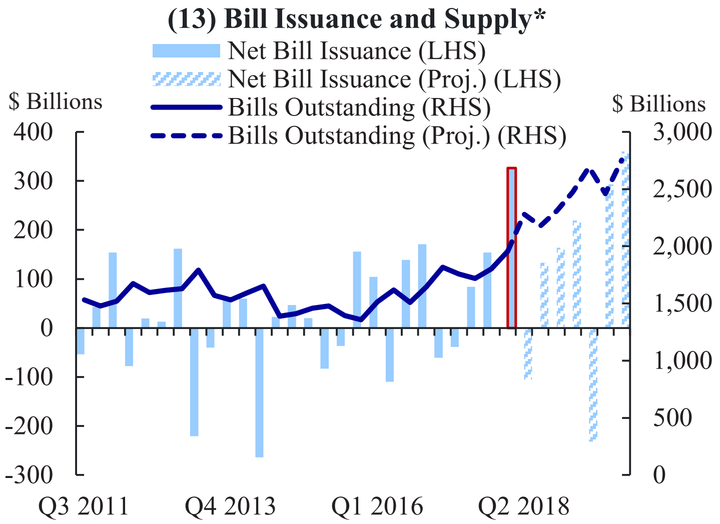
(12) Average Probability Distribution for Basis Points of Policy Tightening in 2018*



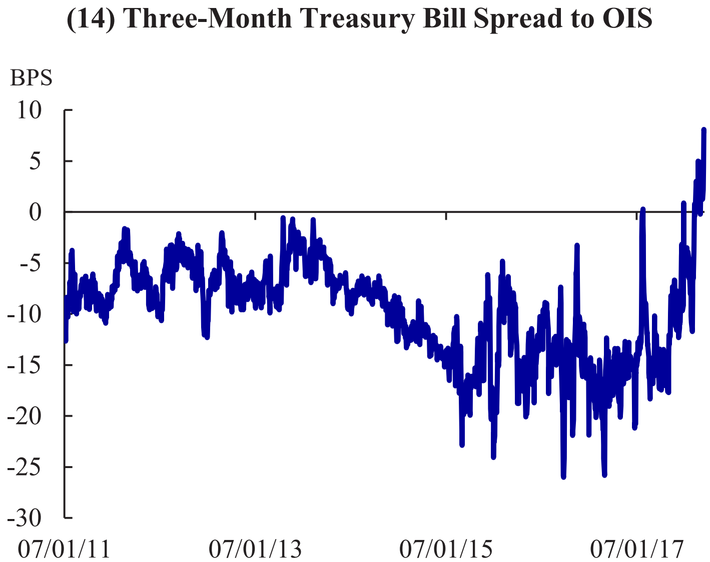
*Based on all responses from the Surveys of Primary Dealers and Market Participants.
Source: FRBNY

Class II FOMC – Restricted (FR)

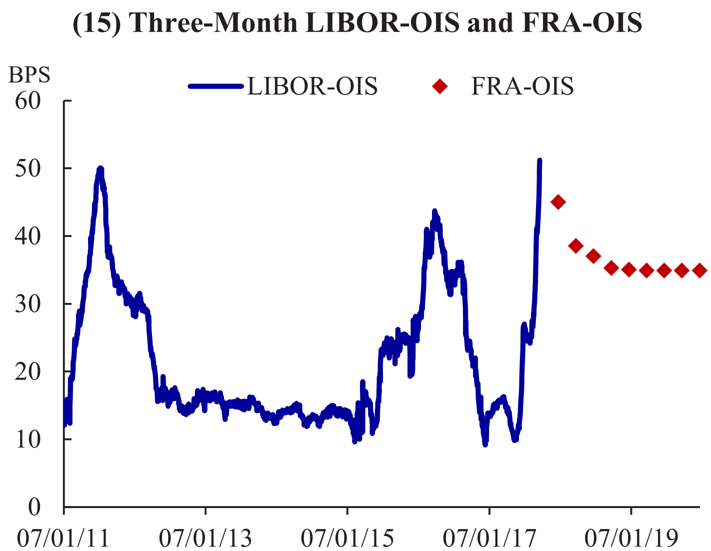
Exhibit 3



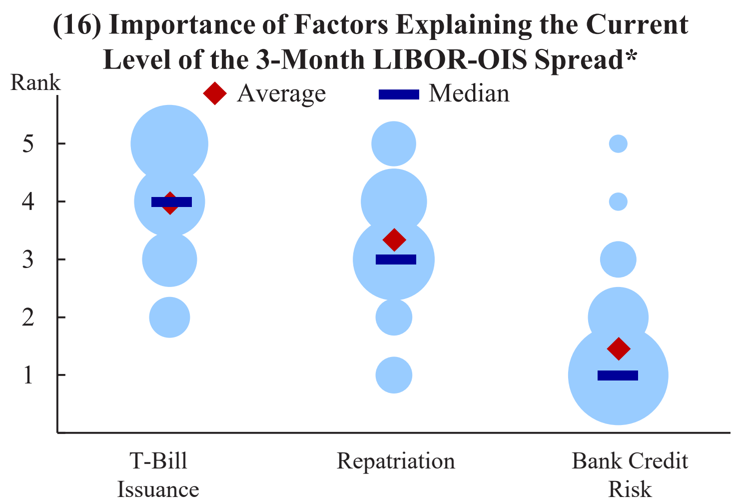
*Dark blue line represents bills outstanding as of the beginning of each quarter. Highlighted bar indicates Q1 2018.
Source: U.S. Treasury, FRBNY, Desk Calculations



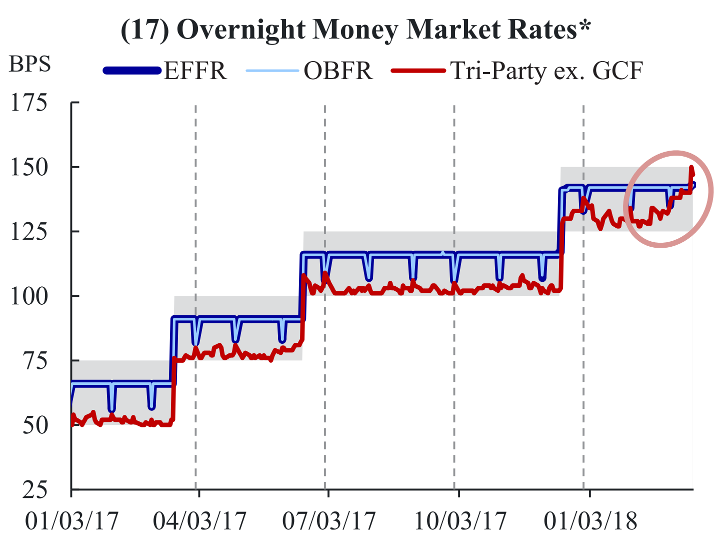
Source: Bloomberg



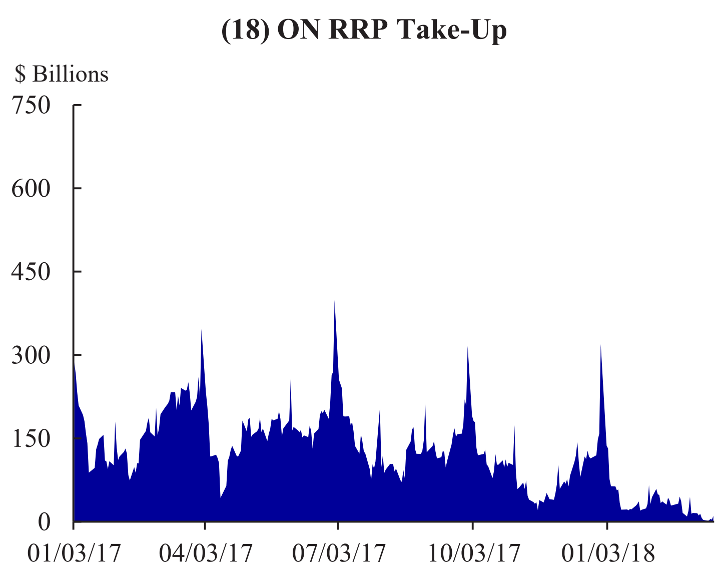
Source: Bloomberg



*Based on all responses from the Surveys of Primary Dealers and Market Participants. Dots scaled by percent of respondents. 5=very important, 1=not important.
Source: FRBNY



*Grey dashed line indicates quarter-end. Shaded area reflects target range for the federal funds rate.
Source: BNY, FRBNY, JPMC



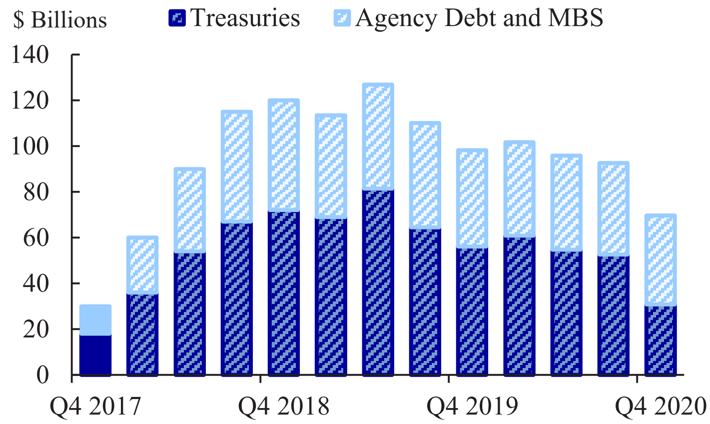
Source: FRBNY

Class II FOMC – Restricted (FR) Exhibit 4

(19) Secured Overnight Financing Rate

- Desk released statement indicating plan to begin publication of SOFR and other Treasury repo reference rates on April 3
- CME announced its intention to launch SOFR futures on May 7
- Desk released its historical series of the morning survey of primary dealers' borrowing rates in the overnight Treasury repo market
- ARRC membership expanded to broader set of market participants; focus expanded to also address LIBOR-related risk outside of derivatives markets

(20) Realized and Projected SOMA Treasury and Agency Debt and MBS Redemptions*



*Dashed bars represent projections. Projected figures are rounded. Agency MBS transactions occur on a mid-month to mid-month basis and are forward settling.
Source: FRBNY

Appendix 1
(1) Summary of Operational Testing

Summary of Operational Tests in prior period:

- Domestic Authorization
    - February 14: Securities lending (utilizing a backup tool) for $78 million
    - February 22: Treasury outright purchase of $100 million
- Foreign Authorization
    - March 12: Euro-denominated callable term deposit with an official institution for €1 million
    - March 19: Early liquidation of a euro-denominated callable term deposit with an official institution for €1 million

Upcoming Operational Tests:

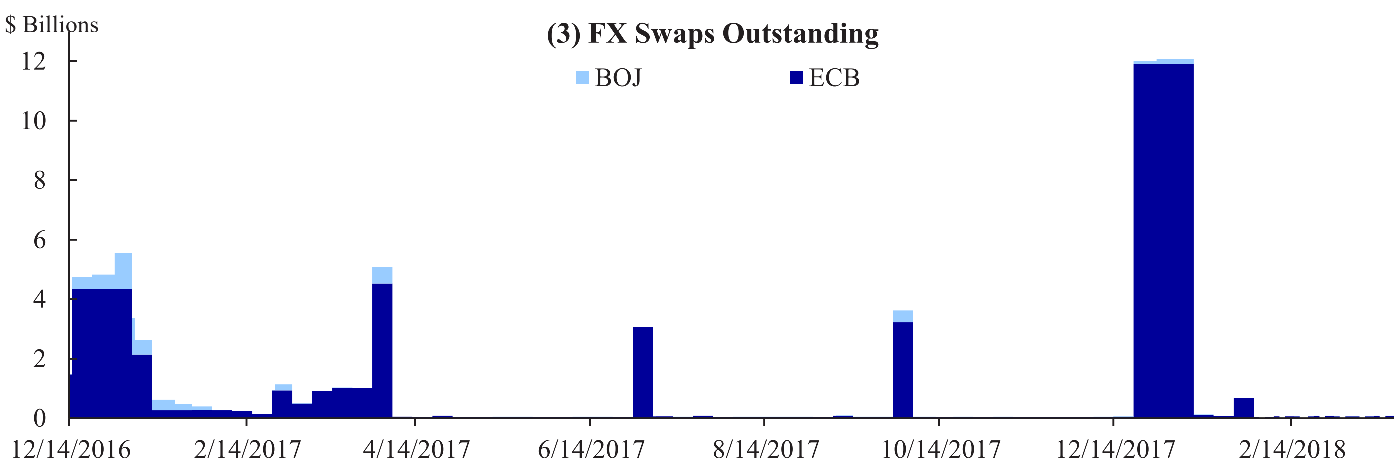
- Two tests scheduled under the Domestic Authorization
    - April 5: Treasury outright sale of up to $200 million
    - April 24 and 25: Coupon swaps with unsettled agency MBS holdings for approximately $20 million, total
- Four tests scheduled under the Foreign Authorization
    - March 22: Swiss franc liquidity swap for CHF 51,000
    - April 10: Euro-denominated sovereign debt sale to private counterparties for €1 million
    - April 19: Euro liquidity swap for €51,000
    - April 24: Canadian dollar liquidity swap for CAD 51,000

(2) MBS Purchase Summary Since Cap Implementation Through March 14, 2018 ($ Millions)

Purchase Period		Actual Paydowns	Cap	Actual Purchases	Net Deviation: Over (Under) Purchase	Cumulative Deviation
Oct	10/16/2017 – 11/13/17	24,353	4,000	20,355	2	2
Nov*	11/14/2017 – 12/13/17	28,316	4,000	24,327	11	13
Dec	12/14/2017 – 01/12/18	24,032	4,000	20,038	6	19
Jan	1/16/2018 – 02/13/18	22,909	8,000	14,921	12	31
Feb	2/14/2018 – 3/13/18	20,689	8,000	12,684	-5	26
Mar**	3/14/2018 – 04/12/18	N/A	8,000	561		

*November included agency debt maturity of $2,366 million.
**Actual purchases ongoing, reflect data through 03/14/18. Target amount for March purchase period is $11,294 million.

(3) FX Swaps Outstanding



Source: FRBNY

(4) 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

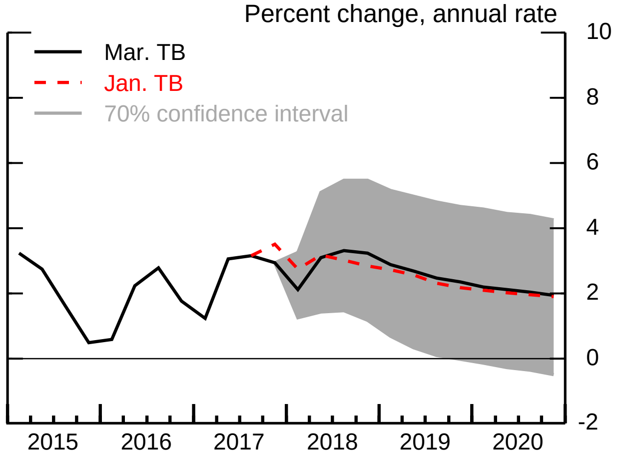
The U.S. Outlook

David W. Wilcox
Exhibits by Bo Yeon Jang and Morgan Smith
March 20, 2018

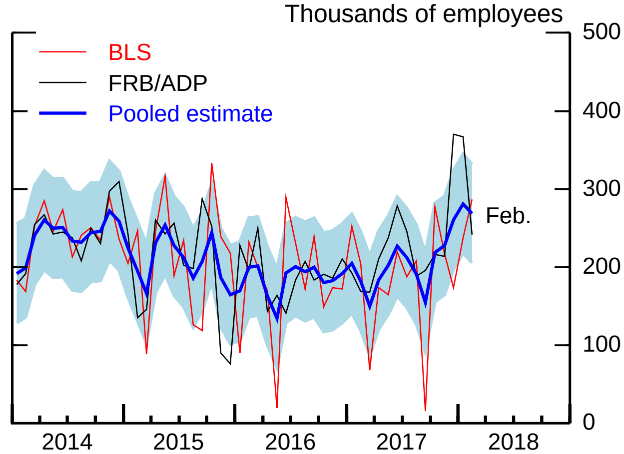
Forecast Summary

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

1. Real GDP



2. Estimates of Private Nonfarm Payroll Gains



Note: Shaded region denotes 90% confidence interval for pooled estimate.

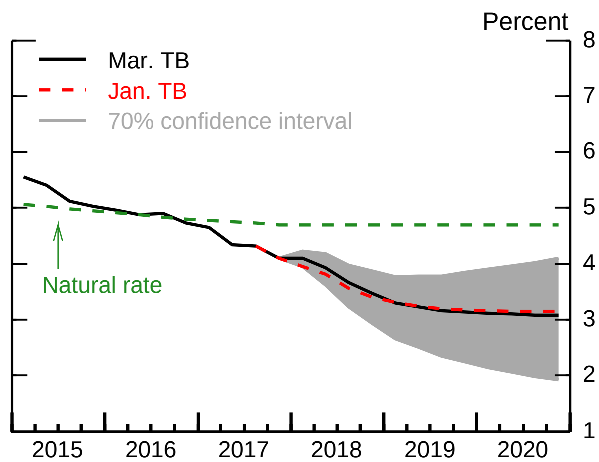
3. Projected Effect of the TCJA and BBA on Real GDP

Cumulative effect on level of real GDP in 2020 (percent)

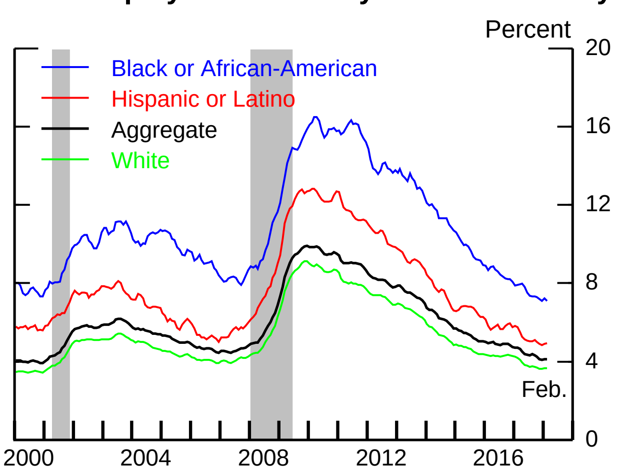
1. Total*	**1.75**
2. Aggregate demand (direct)	1.50
3. Multiplier	0.55
4. Potential output	0.35
5. Financial offsets	-0.70
*6. Total effect, January TB***	*1.25*
Memo:	
*7. Effect on output gap****	*1.40*

*Detail may not sum to total because of rounding. **Total effect of TCJA only. ***Effect on output gap in 2020:Q4 (in percentage points).

4. Unemployment Rate

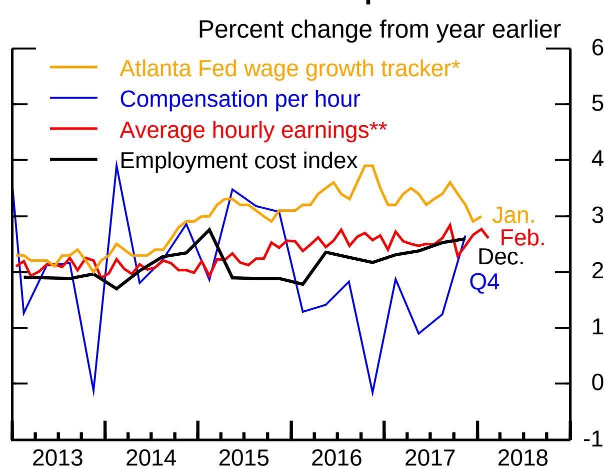


5. Unemployment Rates by Race or Ethnicity



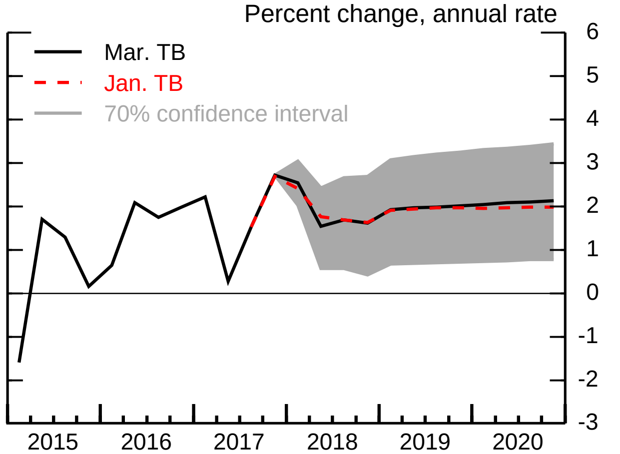
Note: Three-month moving averages. Shaded bars indicate a period of business recession as defined by the NBER.

6. Measures of Labor Compensation

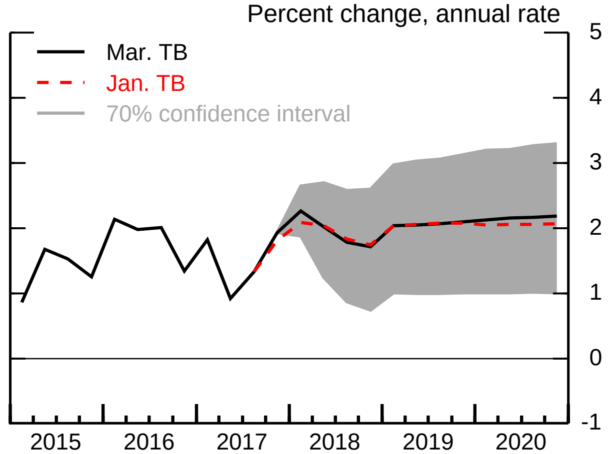


*Three-month moving average. **All employees.

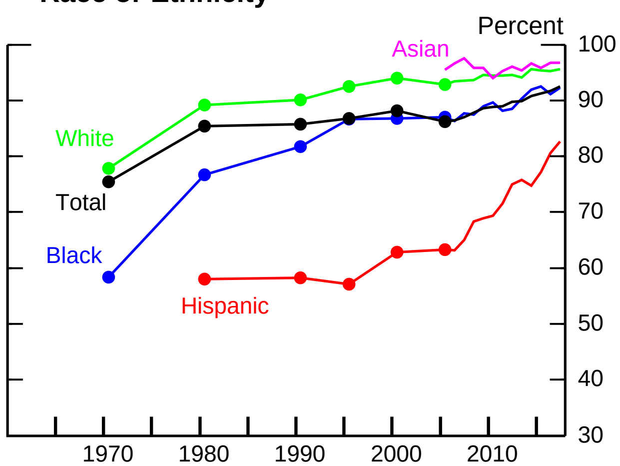
7. Total PCE Prices



8. PCE Prices Excluding Food and Energy

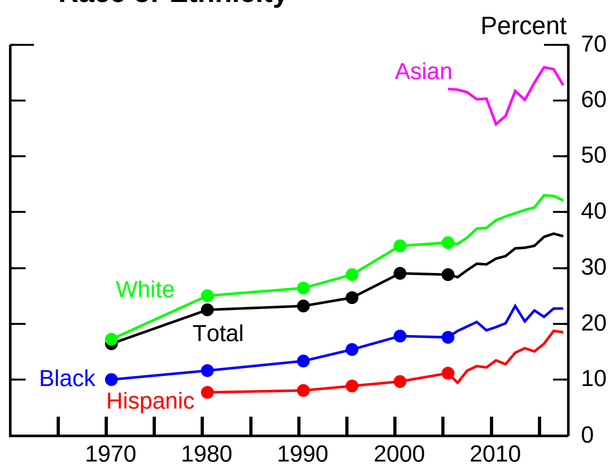


9. High School Completion Rates by Race or Ethnicity



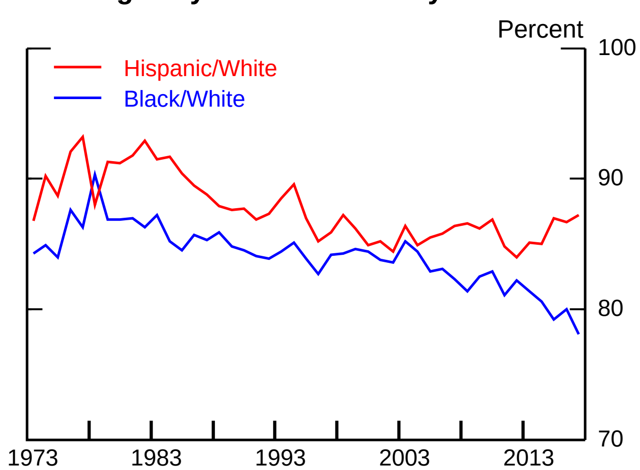
Note: Data cover persons aged 25 to 29 years.

10. College Completion Rates by Race or Ethnicity

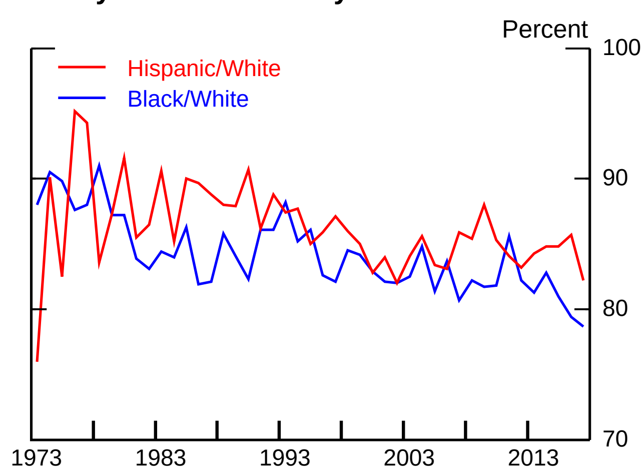


Note: Data cover persons aged 25 to 29 years.

11. High School Degreeholders: Relative Wages by Race or Ethnicity



12. College Degreeholders: Relative Wages by Race or Ethnicity



See following page for additional notes and sources for panels 9 through 12.

Additional notes and sources for panels 9 through 12

High School Completion Rates by Race or Ethnicity: Data prior to 1993 are for persons with four or more years of high school; data in later years are for high school completers (diploma or GED). Observations for whites and blacks in 1970 include persons of Hispanic ethnicity. Data are annual starting in 2005.

College Completion Rates by Race or Ethnicity: Data prior to 1993 are for persons with four or more years of college. Observations for whites and blacks in 1970 include persons of Hispanic ethnicity. Data are annual starting in 2005.

Source: National Center for Education Statistics, *2017 Tables and Figures*, Table 104.20.

High School and College Degreeholders, Relative Wages by Race or Ethnicity: Data cover persons aged 18 to 64 years. Race/ethnicity categories are mutually exclusive.

Source: Economic Policy Institute (EPI) tabulations of CPS outgoing rotation group microdata (accessed from the EPI *State of Working America Data Library*); staff calculations.

Appendix 3: Materials used by Mr. Gruber

Class II FOMC - Restricted (FR)

Material for Briefing on

The International Outlook

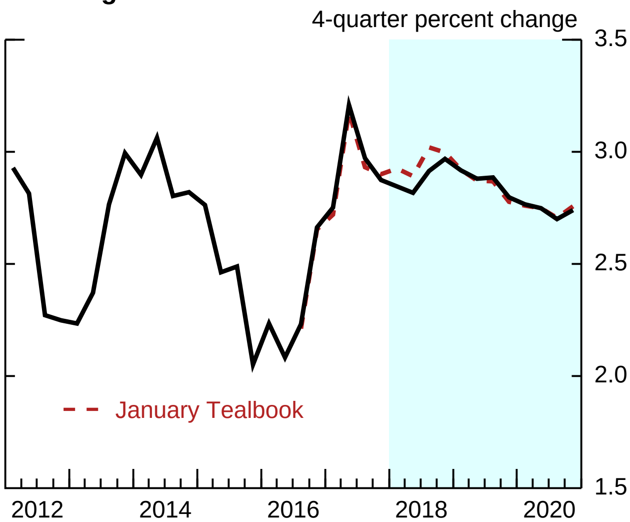
Joseph Gruber
Exhibits by Meghan Letendre and Jessica Liu
March 20, 2018

Class II FOMC - Restricted (FR)

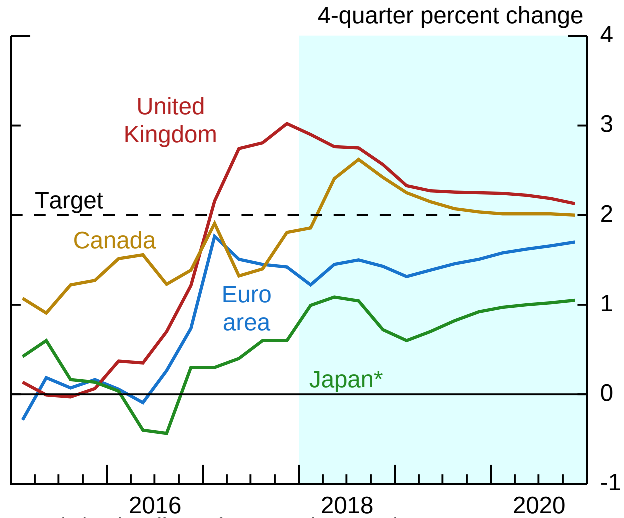
Exhibit 1

International Outlook

1. Foreign GDP

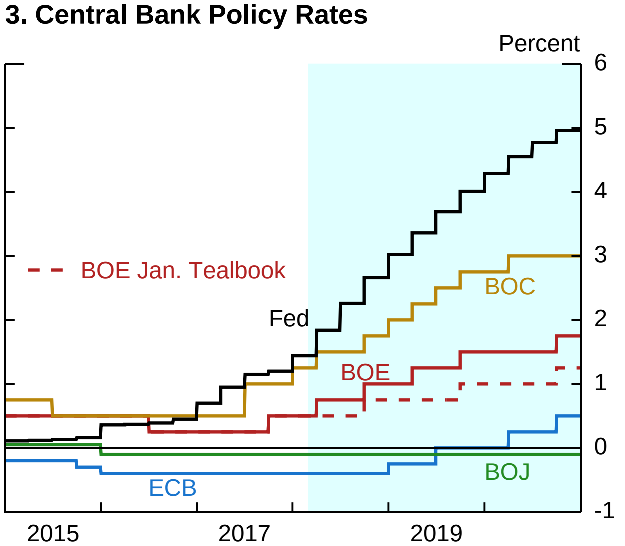


2. Headline Inflation

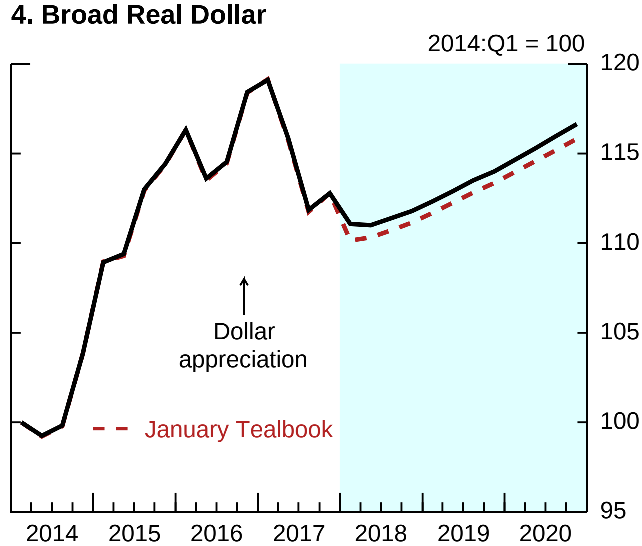


* Excludes the effects of consumption taxes in Japan.

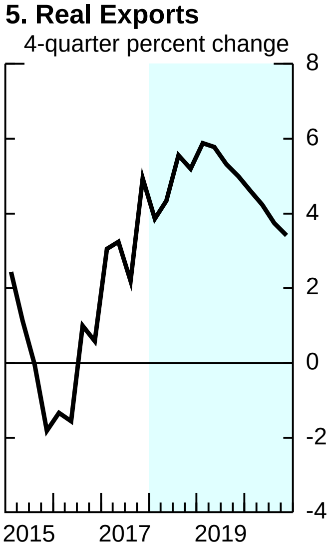
3. Central Bank Policy Rates



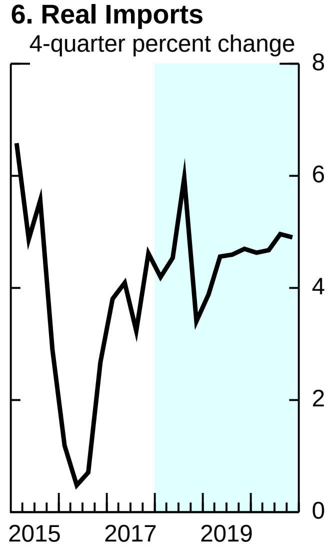
4. Broad Real Dollar



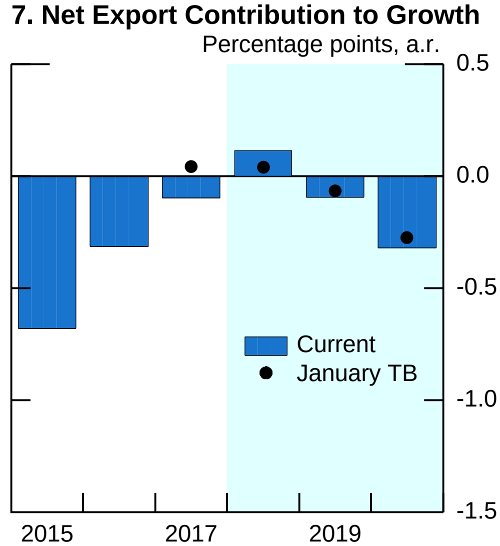
5. Real Exports



6. Real Imports



7. Net Export Contribution to Growth

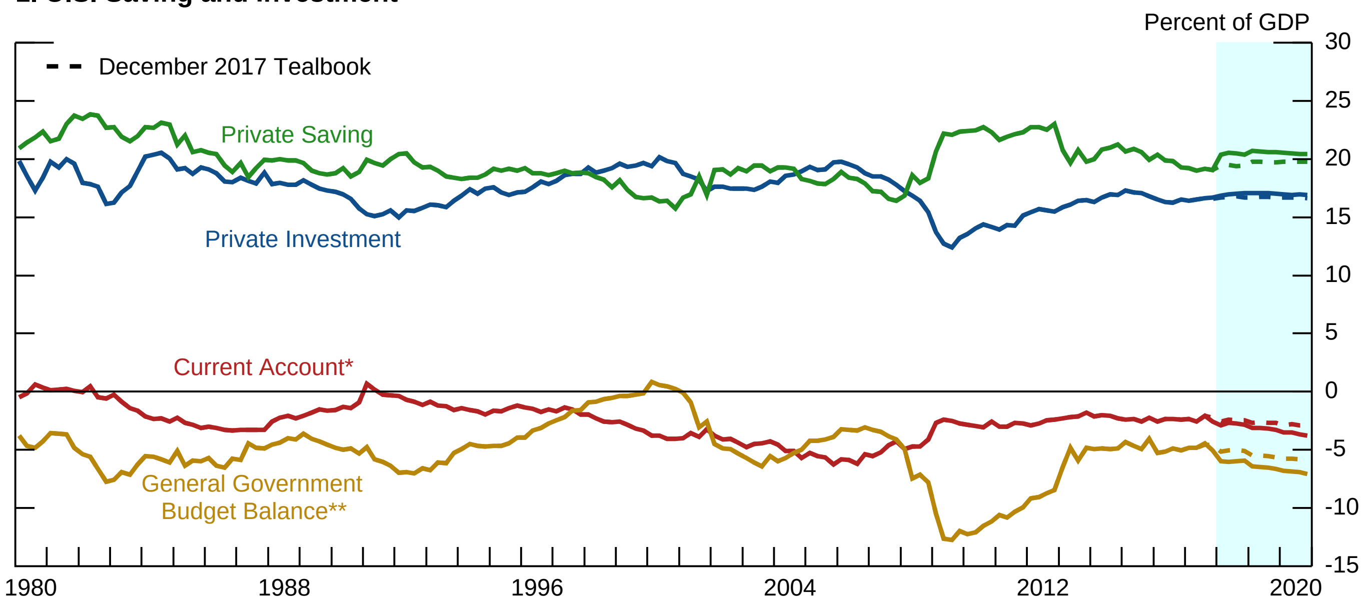


Class II FOMC - Restricted (FR)

Exhibit 2 (last)

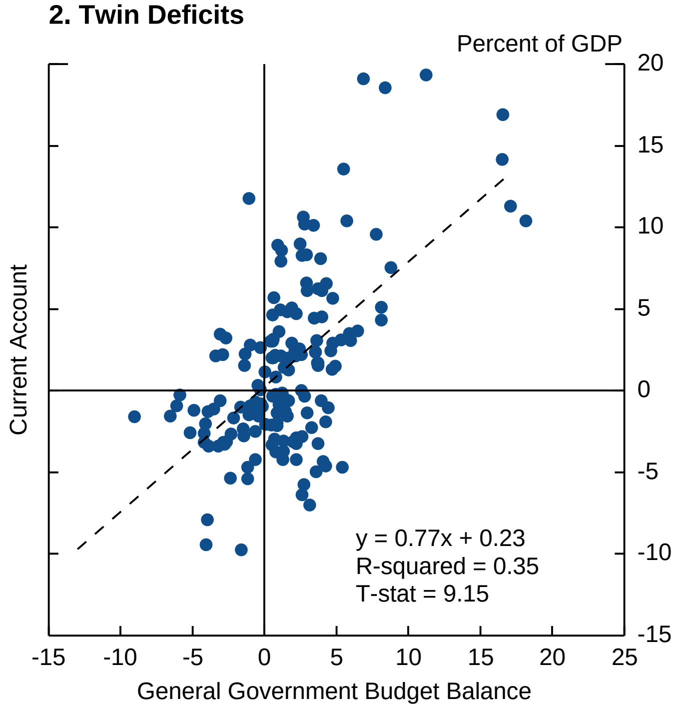
Twin Deficits

1. U.S. Saving and Investment



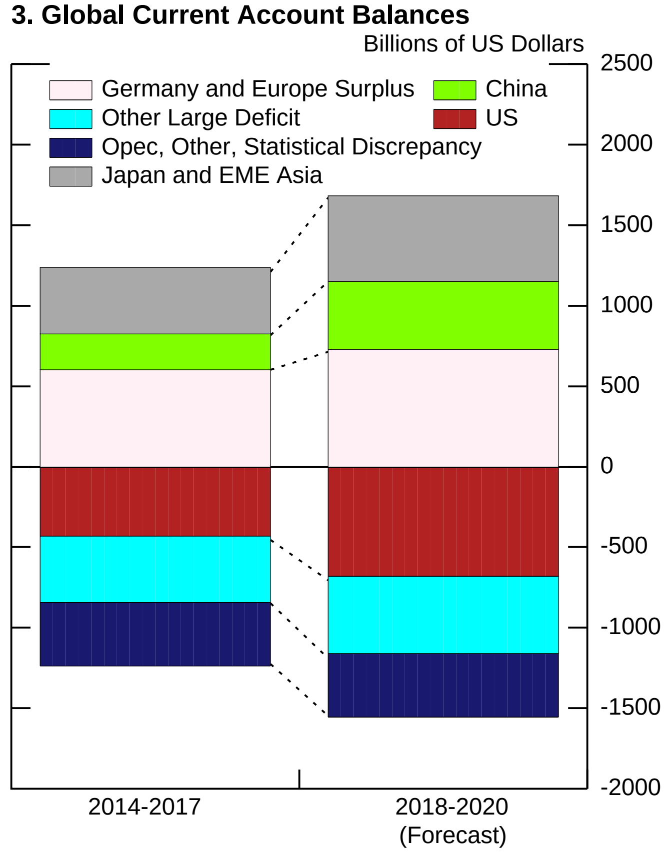
*Balance of Payments basis.
**Government saving less government investment.

2. Twin Deficits



Note: Data for 33 countries with large current account surpluses or deficits. Averages for 1990-1994, 1995-1999, 2000-2008, 2009-2013, and 2014-2017. General Government Budget Balance shown as deviation from GDP-weighted sample mean.
Source: IMF October 2017 WEO. BEA for U.S. data.

3. Global Current Account Balances



Note: 2018-2020 forecast for foreign economies from model relating current account to demographic trends, GDP growth, and government budget balance. Except "OPEC, Other, Statistical Discrepancy" held constant at 2014-2017 value. U.S. forecast from staff outlook. "Other Large Deficit" includes Argentina, Australia, Belgium, Brazil, Canada, France, Greece, India, Indonesia, Mexico, New Zealand, Turkey, and United Kingdom. "Germany and Europe Surplus" includes Austria, Denmark, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, and Switzerland. "Japan and EME Asia" includes Hong Kong, Korea, Malaysia, Singapore, Taiwan, and Thailand.
Source: IMF October 2017 WEO and Staff Calculations.

Appendix 4: Materials used by Mr. Gagnon

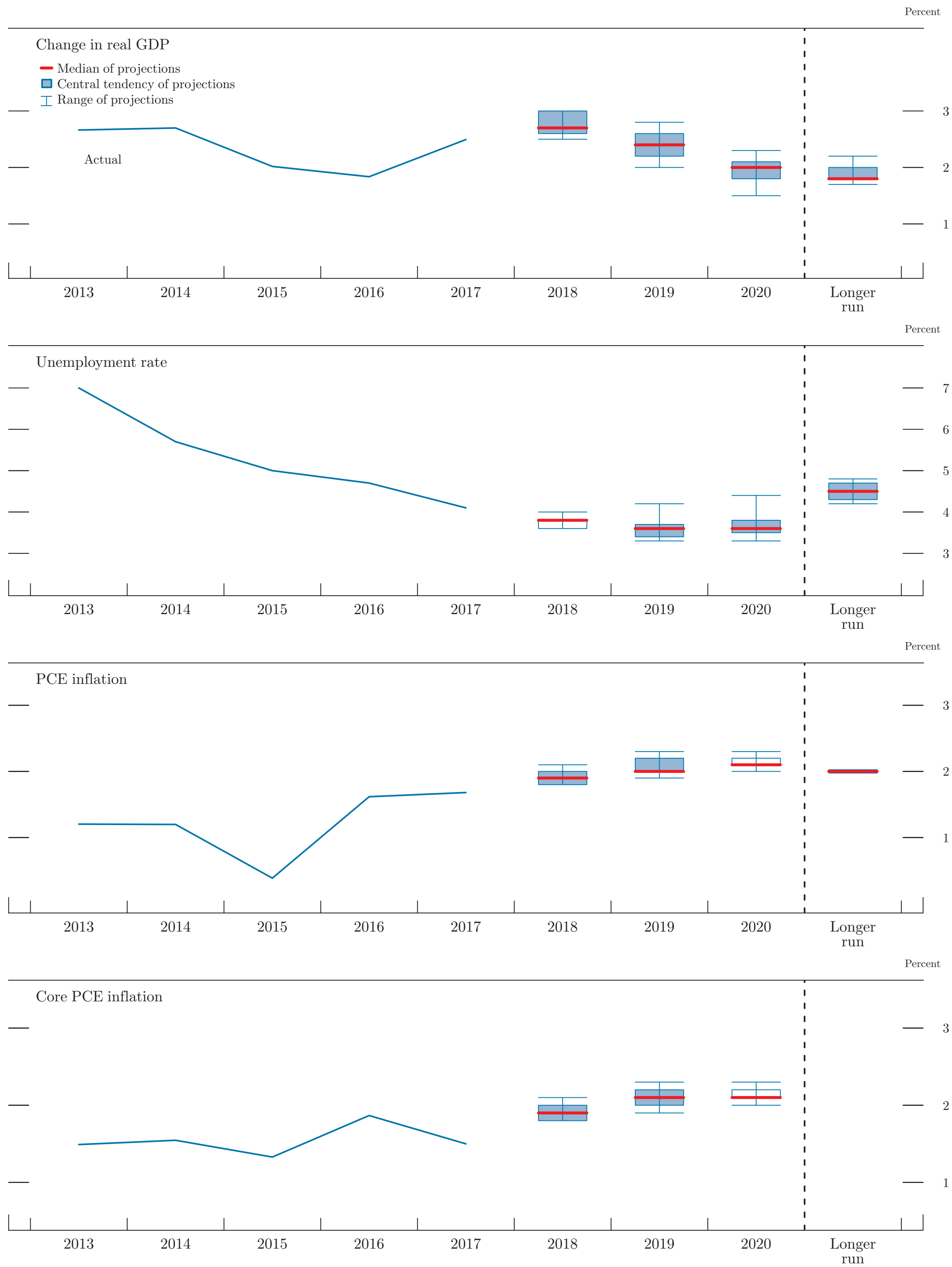
Class I FOMC - Restricted Controlled (FR)

Material for Briefing on

Summary of Economic Projections

Etienne Gagnon
Exhibits by Erik Larsson and Melanie Josselyn
March 20, 2018

Exhibit 1. Medians, central tendencies, and ranges of economic projections, 2018–20 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 for the change in real GDP or the unemployment rate.

Exhibit 2. Economic projections for 2018–20 and over the longer run (percent)

Change in real GDP

	2018	2019	2020	Longer run
Median	2.7	2.4	2.0	1.8
December projection	2.5	2.1	2.0	1.8
Range	2.5 – 3.0	2.0 – 2.8	1.5 – 2.3	1.7 – 2.2
December projection	2.2 – 2.8	1.7 – 2.4	1.1 – 2.2	1.7 – 2.2
Memo: Tealbook	2.9	2.6	2.1	1.7
December projection	2.4	2.0	1.7	1.7

Unemployment rate

	2018	2019	2020	Longer run
Median	3.8	3.6	3.6	4.5
December projection	3.9	3.9	4.0	4.6
Range	3.6 – 4.0	3.3 – 4.2	3.3 – 4.4	4.2 – 4.8
December projection	3.6 – 4.0	3.5 – 4.2	3.5 – 4.5	4.3 – 5.0
Memo: Tealbook	3.5	3.1	3.1	4.7
December projection	3.6	3.5	3.5	4.7

PCE inflation

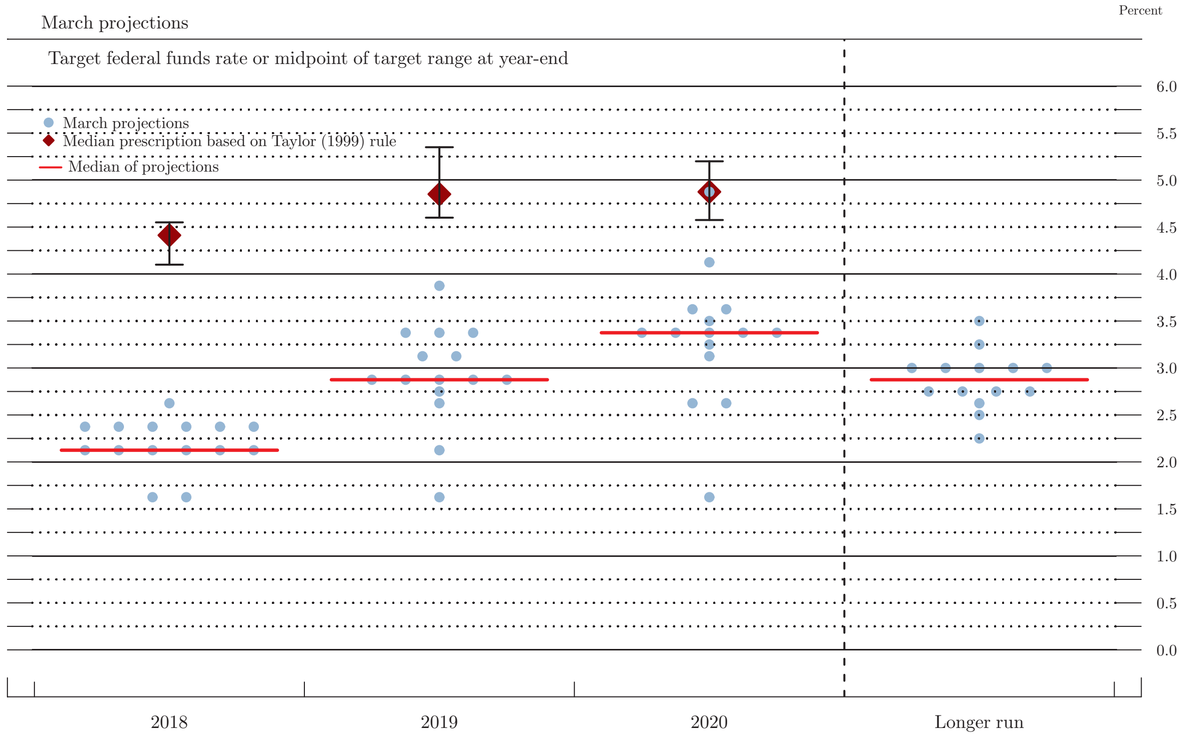
	2018	2019	2020	Longer run
Median	1.9	2.0	2.1	2.0
December projection	1.9	2.0	2.0	2.0
Range	1.8 – 2.1	1.9 – 2.3	2.0 – 2.3	2.0
December projection	1.7 – 2.1	1.8 – 2.3	1.9 – 2.2	2.0
Memo: Tealbook	1.8	2.0	2.1	2.0
December projection	1.7	1.9	2.0	2.0

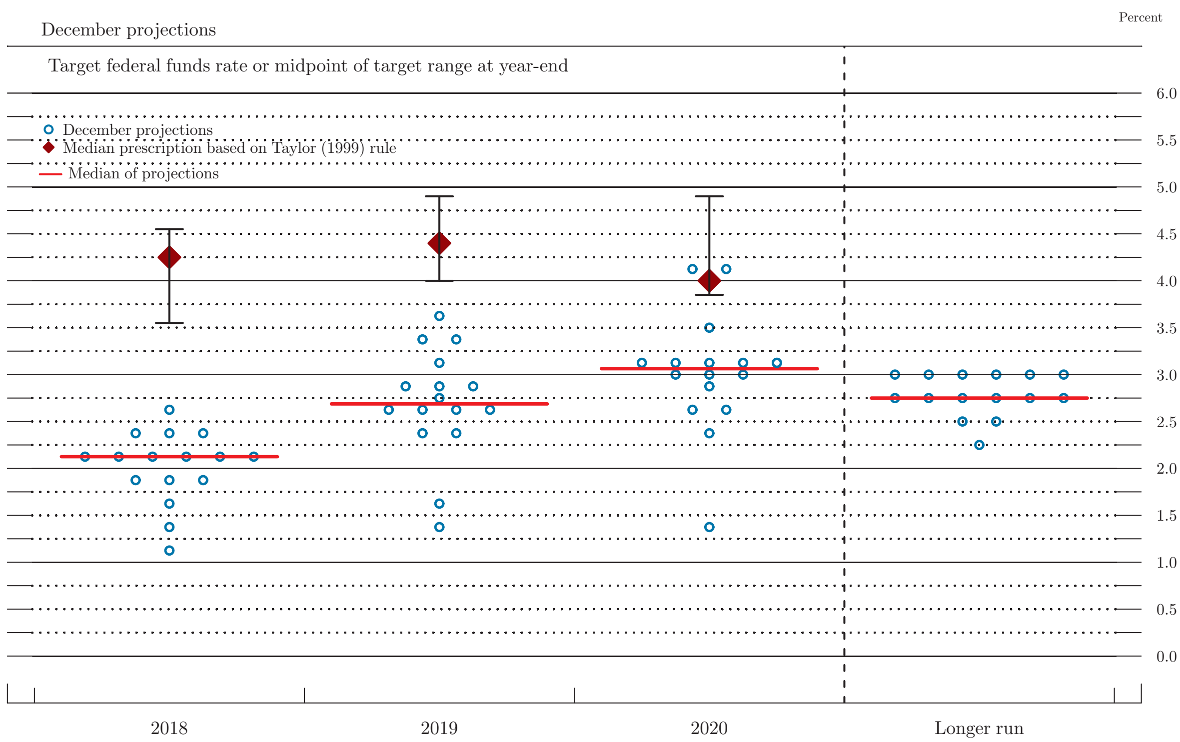
Core PCE inflation

	2018	2019	2020
Median	1.9	2.1	2.1
December projection	1.9	2.0	2.0
Range	1.8 – 2.1	1.9 – 2.3	2.0 – 2.3
December projection	1.7 – 2.0	1.8 – 2.3	1.9 – 2.3
Memo: Tealbook	1.9	2.1	2.2
December projection	1.8	2.0	2.0

NOTE: Updated March Tealbook values are reported. 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 for the change in real GDP, the unemployment rate, or the federal funds rate in conjunction with the December 12–13, 2017, meeting, and one participant did not submit such projections in conjunction with the March 20–21, 2018, meeting.

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

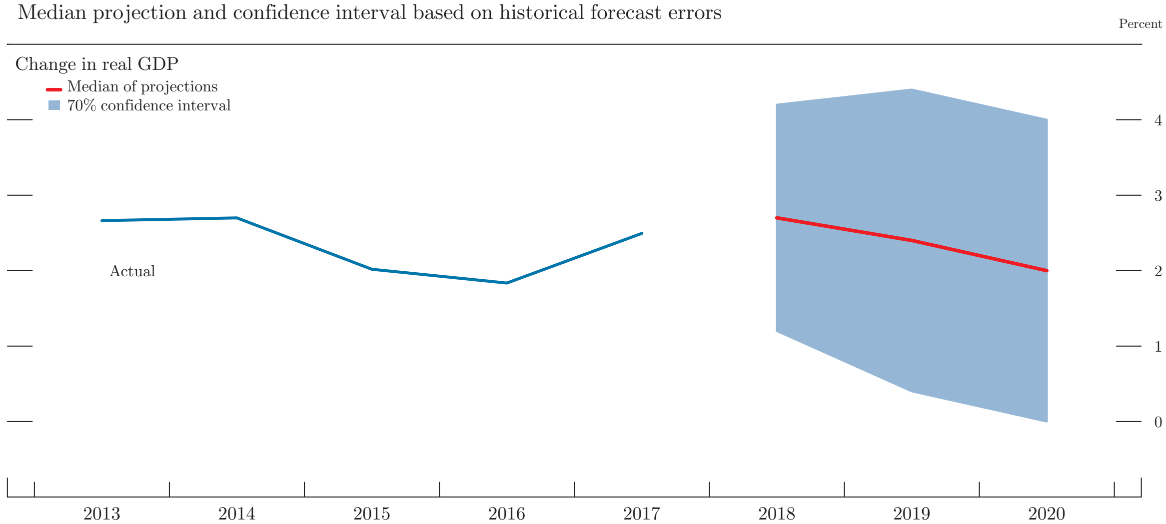




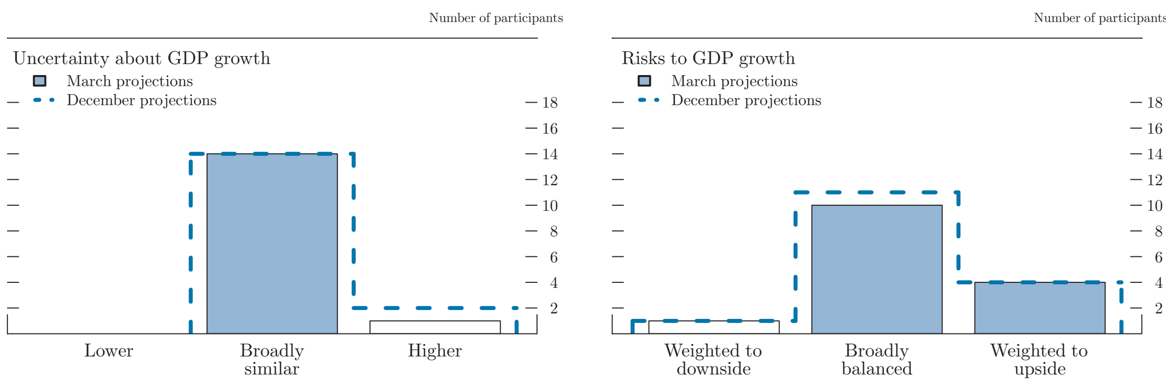
Note: In the two panels above, each circle indicates the value (rounded to the nearest 1/8 percentage point) of an individual participant's judgment of the midpoint of the appropriate target range for the federal funds rate or the appropriate target level for the federal funds rate at the end of the 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 a longer-run projection for the federal funds rate in conjunction with the December 12–13, 2017, meeting, and one participant did not submit such a projection in conjunction with the March 20–21, 2018, meeting.

Exhibit 4.A. Uncertainty and risks in projections of GDP growth

Median projection and confidence interval based on historical forecast errors



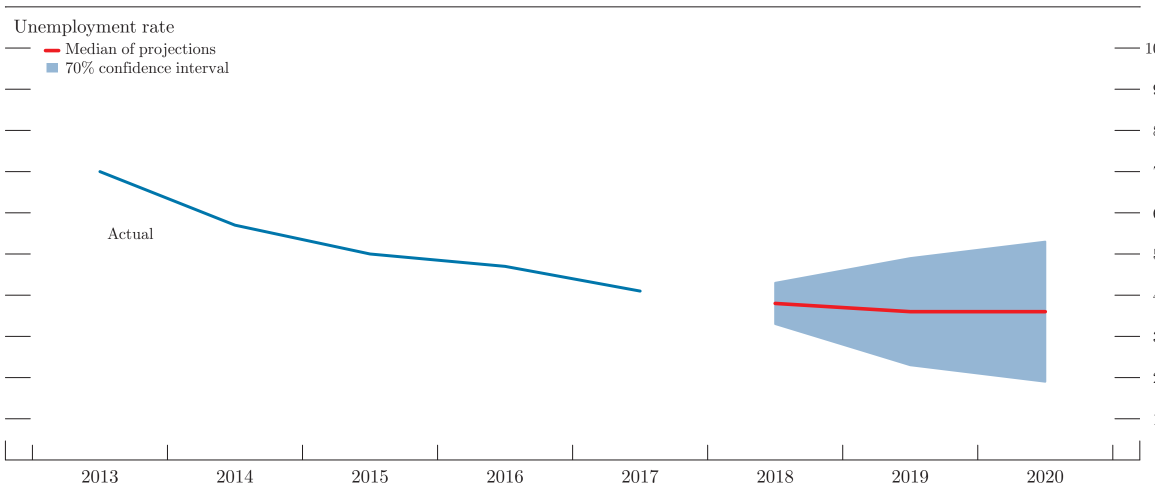
FOMC participants' assessments of uncertainty and risks around their economic projections



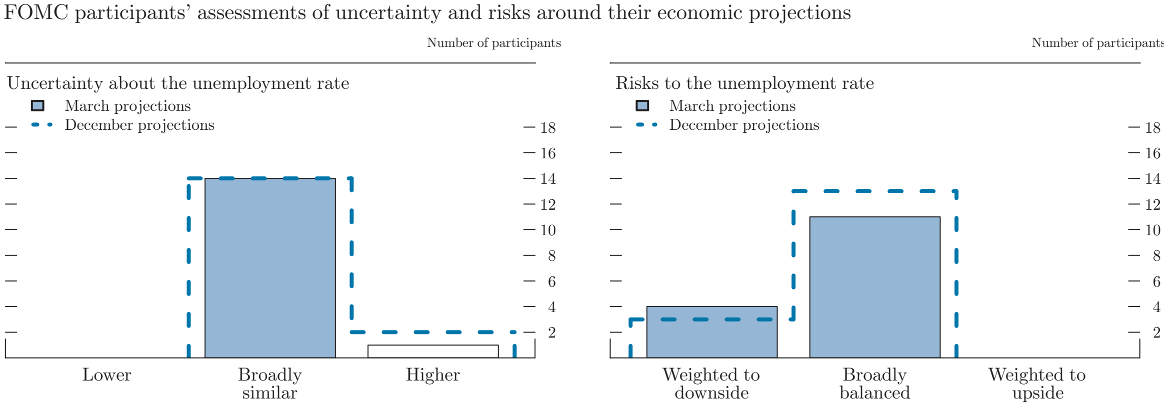
Note: The blue and red lines in the top panel show actual values and median projected values, respectively, of the percent change in real gross domestic product (GDP) from the fourth quarter of the previous year to the fourth quarter of the year indicated. The confidence interval around the median projected values is assumed to be symmetric and is based on root mean squared errors of various private and government forecasts made over the previous 20 years; more information about these data is available in table 2 of the Summary of Economic Projections (SEP). Because current conditions may differ from those that prevailed, on average, over the previous 20 years, the width and shape of the confidence interval estimated on the basis of the historical forecast errors may not reflect FOMC participants' current assessments of the uncertainty and risks around their projections; these current assessments are summarized in the lower panels. Generally speaking, participants who judge the uncertainty about their projections as "broadly similar" to the average levels of the past 20 years would view the width of the confidence interval shown in the historical fan chart as largely consistent with their assessments of the uncertainty about their projections. Likewise, participants who judge the risks to their projections as "broadly balanced" would view the confidence interval around their projections as approximately symmetric. For definitions of uncertainty and risks in economic projections, see the box "Forecast Uncertainty" in the SEP.

Exhibit 4.B. Uncertainty and risks in projections of the unemployment rate

Median projection and confidence interval based on historical forecast errors



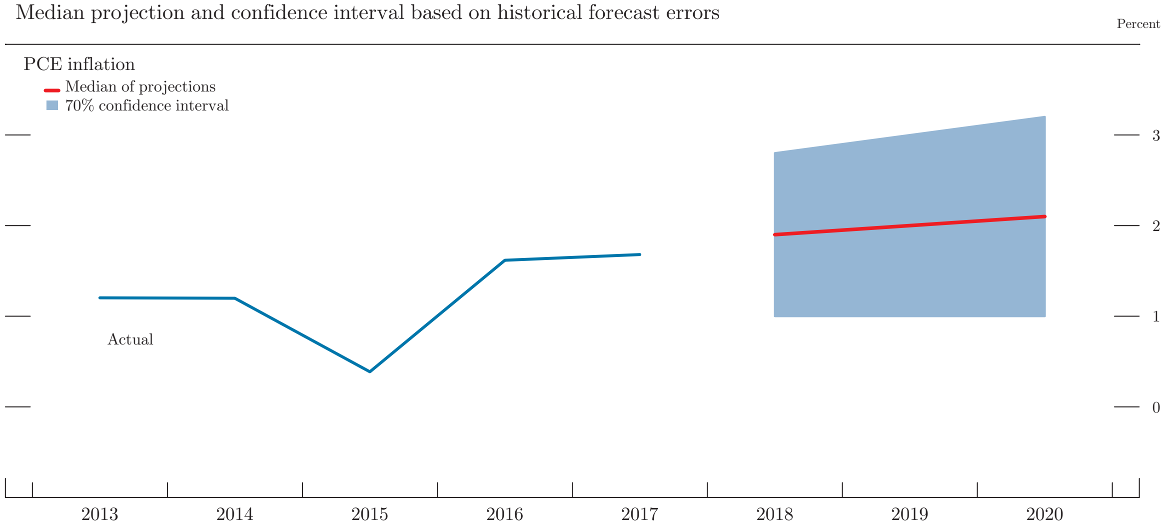
FOMC participants' assessments of uncertainty and risks around their economic projections



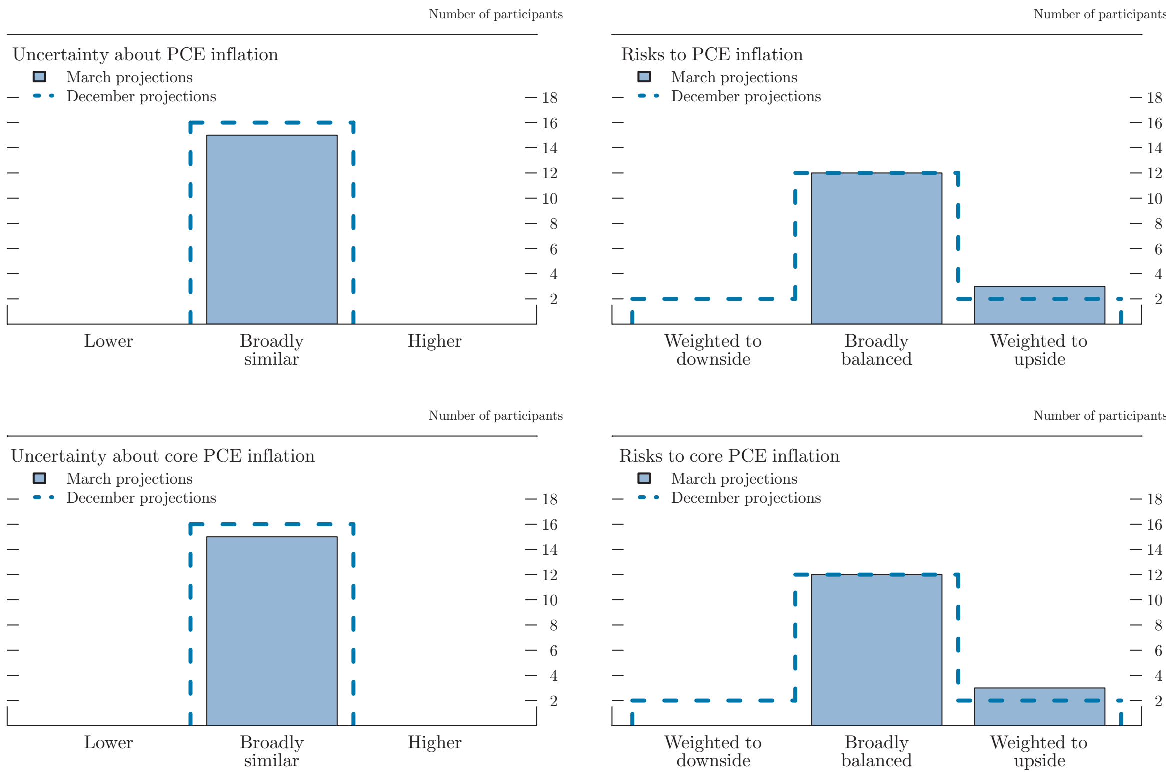
Note: The blue and red lines in the top panel show actual values and median projected values, respectively, of the average civilian unemployment rate in the fourth quarter of the year indicated. The confidence interval around the median projected values is assumed to be symmetric and is based on root mean squared errors of various private and government forecasts made over the previous 20 years; more information about these data is available in table 2 of the Summary of Economic Projections (SEP). Because current conditions may differ from those that prevailed, on average, over the previous 20 years, the width and shape of the confidence interval estimated on the basis of the historical forecast errors may not reflect FOMC participants' current assessments of the uncertainty and risks around their projections; these current assessments are summarized in the lower panels. Generally speaking, participants who judge the uncertainty about their projections as "broadly similar" to the average levels of the past 20 years would view the width of the confidence interval shown in the historical fan chart as largely consistent with their assessments of the uncertainty about their projections. Likewise, participants who judge the risks to their projections as "broadly balanced" would view the confidence interval around their projections as approximately symmetric. For definitions of uncertainty and risks in economic projections, see the box "Forecast Uncertainty" in the SEP.

Exhibit 4.C. Uncertainty and risks in projections of PCE inflation

Median projection and confidence interval based on historical forecast errors

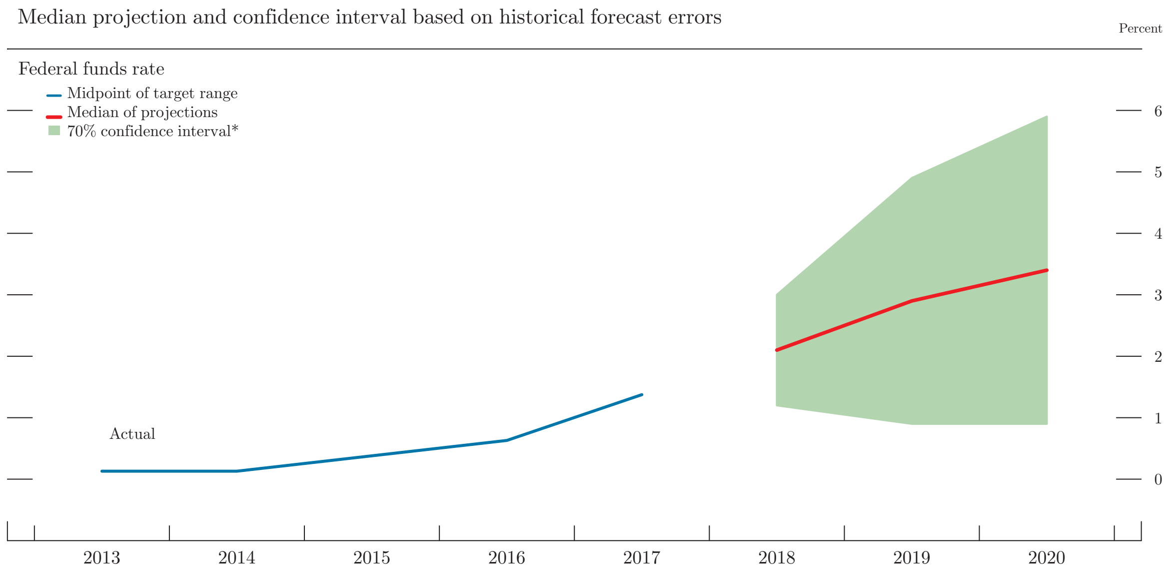


FOMC participants' assessments of uncertainty and risks around their economic projections



NOTE: The blue and red lines in the top panel show actual values and median projected values, respectively, of the percent change in the price index for personal consumption expenditures (PCE) from the fourth quarter of the previous year to the fourth quarter of the year indicated. The confidence interval around the median projected values is assumed to be symmetric and is based on root mean squared errors of various private and government forecasts made over the previous 20 years; more information about these data is available in table 2 of the Summary of Economic Projections (SEP). Because current conditions may differ from those that prevailed, on average, over the previous 20 years, the width and shape of the confidence interval estimated on the basis of the historical forecast errors may not reflect FOMC participants' current assessments of the uncertainty and risks around their projections; these current assessments are summarized in the lower panels. Generally speaking, participants who judge the uncertainty about their projections as "broadly similar" to the average levels of the past 20 years would view the width of the confidence interval shown in the historical fan chart as largely consistent with their assessments of the uncertainty about their projections. Likewise, participants who judge the risks to their projections as "broadly balanced" would view the confidence interval around their projections as approximately symmetric. For definitions of uncertainty and risks in economic projections, see the box "Forecast Uncertainty" in the SEP.

Exhibit 5. Uncertainty in projections of the federal funds rate



NOTE: The blue and red lines are based on actual values and median projected values, respectively, of the Committee's target for the federal funds rate at the end of the year indicated. The actual values are the midpoint of the target range; the median projected values are based on either the midpoint of the target range or the target level. The confidence interval around the median projected values is based on root mean squared errors of various private and government forecasts made over the previous 20 years. The confidence interval is not strictly consistent with the projections for the federal funds rate, primarily because these projections are not forecasts of the likeliest outcomes for the federal funds rate, but rather projections of participants' individual assessments of appropriate monetary policy. Still, historical forecast errors provide a broad sense of the uncertainty around the future path of the federal funds rate generated by the uncertainty about the macroeconomic variables as well as additional adjustments to monetary policy that may be appropriate to offset the effects of shocks to the economy.

The confidence interval is assumed to be symmetric except when it is truncated at zero—the bottom of the lowest target range for the federal funds rate that has been adopted in the past by the Committee. This truncation would not be intended to indicate the likelihood of the use of negative interest rates to provide additional monetary policy accommodation if doing so was judged appropriate. In such situations, the Committee could also employ other tools, including forward guidance and large-scale asset purchases, to provide additional accommodation. Because current conditions may differ from those that prevailed, on average, over the previous 20 years, the width and shape of the confidence interval estimated on the basis of the historical forecast errors may not reflect FOMC participants' current assessments of the uncertainty and risks around their projections.

* The confidence interval is derived from forecasts of the average level of short-term interest rates in the fourth quarter of the year indicated; more information about these data is available in table 2 of the Summary of Economic Projections. The shaded area encompasses less than a 70 percent confidence interval if the confidence interval has been truncated at zero.

Appendix 5: Materials used by Mr. Laubach

Class I FOMC – Restricted Controlled (FR)

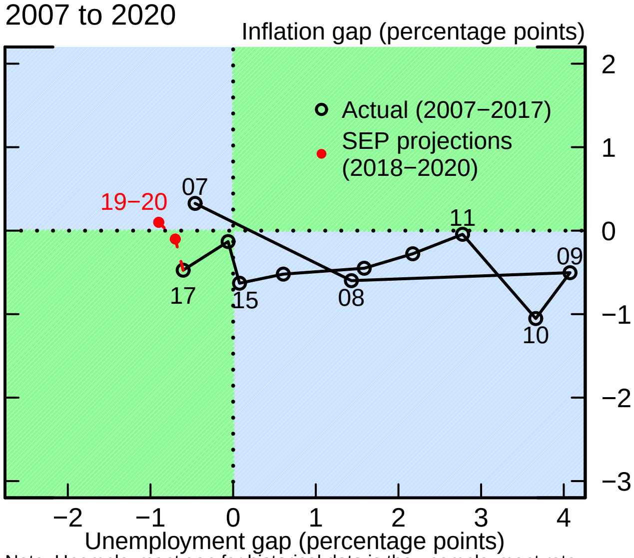
Material for the Briefing on

Monetary Policy Alternatives

Thomas Laubach
Exhibits by Laurie Khalfan
March 20-21, 2018

Monetary Policy Considerations

Macroeconomic Outcomes and Projections: 2007 to 2020

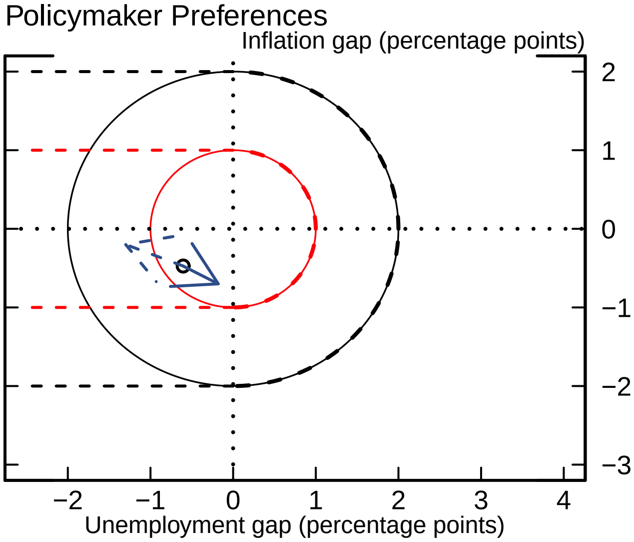


Note: Unemployment gap for historical data is the unemployment rate less the staff's estimate of the natural rate. The inflation gap is 12−month core PCE inflation in December minus 2 percent.
Source: March 2018 SEP; U.S. Bureau of Labor Statistics; FRB staff estimates.

Implications of Gap Combinations

- Blue quadrants: No policy tradeoffs
  - Northwest: Policy should be restrictive
  - Southeast: Policy should be accommodative
- Green quadrants: Potential policy tradeoffs
  - Southwest: Should you be concerned about u < u*?

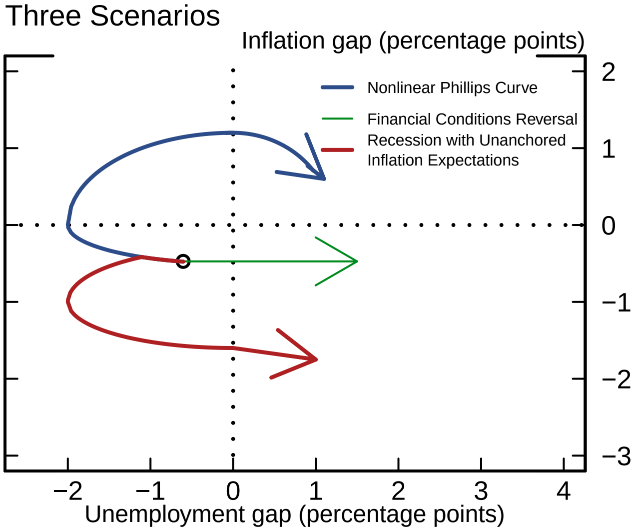
Policymaker Preferences



Two Loss Functions

- Solid: Symmetric, equal weights on squared unemployment gap and squared inflation gap
- Dashed: Asymmetric, no loss from u < u*
- Symmetric: Bring unemployment back to u* at the cost of lower inflation
- Asymmetric: Reduce unemployment further to raise inflation faster

Three Scenarios



Policy Considerations

- Risks from high resource utilization: Higher inflation (blue) or financial instability (green)
  - Alternative C emphasizes need to slow economic growth
- Risks from continued low inflation (red)
  - Alternative A focuses on anchoring inflation expectations at 2 percent
- Alternative B balances risks, maintains continuity in reaction function

JANUARY 2018 FOMC STATEMENT

1. Information received since the Federal Open Market Committee met in December indicates that the labor market has continued to strengthen and that economic activity has been rising at a solid rate. Gains in employment, household spending, and business fixed investment have been solid, and the unemployment rate has stayed low. On a 12-month basis, both overall inflation and inflation for items other than food and energy have continued to run below 2 percent. Market-based measures of inflation compensation have increased in recent months but 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 further gradual adjustments in the stance of monetary policy, economic activity will expand at a moderate pace and labor market conditions will remain strong. Inflation on a 12-month basis is expected to move up this year and to stabilize around the Committee's 2 percent objective over the medium term. Near-term risks to the economic outlook appear roughly balanced, but the Committee is monitoring inflation developments closely.

3. In view of realized and expected labor market conditions and inflation, the Committee decided to maintain the target range for the federal funds rate at 1-1/4 to 1-1/2 percent. The stance of monetary policy remains accommodative, thereby supporting strong 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 further 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.

ALTERNATIVE A FOR MARCH 2018

1. Information received since the Federal Open Market Committee met in ~~December~~ **January** indicates that the labor market has ~~continued to strengthen~~ **remained strong** ~~and that~~ **while growth in** economic activity has ~~been rising at a solid rate~~ **moderated**. **Job** gains ~~in employment, household spending, and business fixed investment~~ have been ~~solid~~ **strong in recent months**, and the unemployment rate has stayed low. **Household spending and business fixed investment appear to be expanding at a moderate pace.** On a 12-month basis, both overall inflation and inflation for items other than food and energy have continued to run below 2 percent. Market-based measures of inflation compensation ~~have increased in recent months but~~ 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 ~~further gradual adjustments in the stance of~~ **appropriate** monetary policy **accommodation**, economic activity will expand at a moderate pace and labor market conditions will remain strong. Inflation on a 12-month basis is expected to move up this year and to stabilize around the Committee's 2 percent objective over the medium term. Near-term risks to the economic outlook appear roughly balanced, but the Committee is monitoring inflation developments closely.

3. In view of realized and expected labor market conditions and inflation, the Committee decided to maintain the target range for the federal funds rate at 1-1/4 to 1-1/2 percent. The stance of monetary policy remains accommodative, thereby supporting strong labor market conditions and a sustained return to 2 percent inflation. **A temporary period of inflation modestly above 2 percent would be consistent with the Committee's symmetric inflation objective and may be needed to ensure that longer-run inflation expectations are consistent with that objective.**

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 further 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.~~

ALTERNATIVE B FOR MARCH 2018

1. Information received since the Federal Open Market Committee met in ~~December~~ **January** indicates that the labor market has continued to strengthen and that economic activity has been rising at a ~~solid~~ **moderate** rate. **Job** gains ~~in employment, household spending, and business fixed investment~~ have been ~~solid~~ **strong in recent months**, and the unemployment rate has stayed low. **Recent data suggest that growth rates of household spending and business fixed investment have moderated from their strong fourth-quarter** ~~rates~~ **readings.** On a 12-month basis, both overall inflation and inflation for items other than food and energy have continued to run below 2 percent. Market-based measures of inflation compensation have increased in recent months but 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 economic outlook has strengthened in recent months.** The Committee expects that, with further gradual adjustments in the stance of monetary policy, economic activity will expand at a moderate pace **in the medium term** and labor market conditions will remain strong. Inflation on a 12-month basis is expected to move up ~~this year~~ **in coming months** and to stabilize around the Committee's 2 percent objective over the medium term. Near-term risks to the economic outlook appear roughly balanced, but the Committee is monitoring inflation developments closely.

3. In view of realized and expected labor market conditions and inflation, the Committee decided to ~~maintain~~ **raise** the target range for the federal funds rate ~~at 1-1/4~~ to 1-1/2 **to 1-3/4** percent. The stance of monetary policy remains accommodative, thereby supporting strong 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 further 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.

Alternative C for March 2018

1. Information received since the Federal Open Market Committee met in ~~December~~ **January** indicates that the labor market has continued to strengthen and that economic activity has been rising at a solid rate. **Job** gains ~~in employment, household spending, and business fixed investment~~ have been ~~solid~~ **strong in recent months**, and the unemployment rate has stayed low. **Household spending and business fixed investment have been growing at solid rates, on average, in recent quarters.** On a 12-month basis, both overall inflation and inflation for items other than food and energy have **increased from their lows last summer but have** continued to run below 2 percent. Market-based measures of inflation compensation have increased in recent months ~~but 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 economic outlook has strengthened in recent months.** The Committee expects that, with further gradual adjustments in the stance of monetary policy, economic activity **and employment** will expand at ~~a moderate pace and labor market conditions will remain strong~~ **sustainable rates in the medium term**. Inflation on a 12-month basis is expected to move up ~~this year~~ **in coming months** and **then** to stabilize around the Committee's 2 percent objective ~~over the medium term~~. Near-term risks to the economic outlook appear roughly balanced~~, but the Committee is monitoring inflation developments closely~~.

3. In view of realized and expected labor market conditions and inflation, the Committee decided to ~~maintain~~ **raise** the target range for the federal funds rate ~~at 1-1/4~~ to 1-1/2 **to 1-3/4** percent. The stance of monetary policy remains accommodative, thereby supporting strong 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 further 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.

Implementation Note for March 2018 Alternative A

Release Date: March 21, 2018

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 ~~January 31~~ **March 21**, 2018:

- The Board of Governors of the Federal Reserve System voted **[** unanimously **]** to maintain the interest rate paid on required and excess reserve balances at 1.50 percent, effective ~~February 1~~ **March 22**, 2018.

- 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 ~~February 1~~ **March 22**, 2018, 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 1-1/4 to 1-1/2 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 1.25 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 at auction the amount of principal payments from the Federal Reserve's holdings of Treasury securities maturing during ~~each calendar month~~ **March** that exceeds $12 billion, and to continue reinvesting in agency mortgage-backed securities the amount of principal payments from the Federal Reserve's holdings of agency debt and agency mortgage-backed securities received during ~~each calendar month~~ **March** that exceeds $8 billion. **Effective in April, the Committee directs the Desk to roll over at auction the amount of principal payments from the Federal Reserve's holdings of Treasury securities maturing during each calendar month that exceeds $18 billion, and to reinvest in agency mortgage-backed securities the amount of principal payments from the Federal Reserve's holdings of agency debt and agency mortgage-backed securities received during each calendar month that exceeds $12 billion.** Small deviations from these amounts for operational reasons are acceptable.

> 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."

- In a related action, the Board of Governors of the Federal Reserve System voted [unanimously] to approve the establishment of the primary credit rate at the existing level of 2.00 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.

More information regarding open market operations and reinvestments may be found on the Federal Reserve Bank of New York's website.

Implementation Note for March 2018 Alternatives B and C

Release Date: March 21, 2018

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 ~~January 31~~ **March 21**, 2018:

- The Board of Governors of the Federal Reserve System voted **[** unanimously **]** to ~~maintain~~ **raise** the interest rate paid on required and excess reserve balances ~~at~~ **to** ~~1.50~~ **1.75** percent, effective ~~February 1~~ **March 22**, 2018.

- 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 ~~February 1~~ **March 22**, 2018, 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 ~~1-1/4 to~~ 1-1/2 **to 1-3/4** 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 ~~1.25~~ **1.50** 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 at auction the amount of principal payments from the Federal Reserve's holdings of Treasury securities maturing during ~~each calendar month~~ **March** that exceeds $12 billion, and to continue reinvesting in agency mortgage-backed securities the amount of principal payments from the Federal Reserve's holdings of agency debt and agency mortgage-backed securities received during ~~each calendar month~~ **March** that exceeds $8 billion. **Effective in April, the Committee directs the Desk to roll over at auction the amount of principal payments from the Federal Reserve's holdings of Treasury securities maturing during each calendar month that exceeds $18 billion, and to reinvest in agency mortgage-backed securities the amount of principal payments from the Federal Reserve's holdings of agency debt and agency mortgage-backed securities received during each calendar month that exceeds $12 billion.** Small deviations from these amounts for operational reasons are acceptable.

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."

- In a related action, the Board of Governors of the Federal Reserve System voted [unanimously] to approve ~~the establishment of~~ **a 1/4 percentage point increase in** the primary credit rate ~~at the existing level of 2.00~~ **to 2.25** percent**, effective March 22, 2018**. 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.

More information regarding open market operations and reinvestments may be found on the Federal Reserve Bank of New York's website.