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

Class II FOMC – Restricted (FR)

Material for Briefing on

Financial Developments and Open Market Operations

Simon Potter and Lorie K. Logan
December 12, 2017

Class II FOMC – Restricted (FR)

Exhibit 1

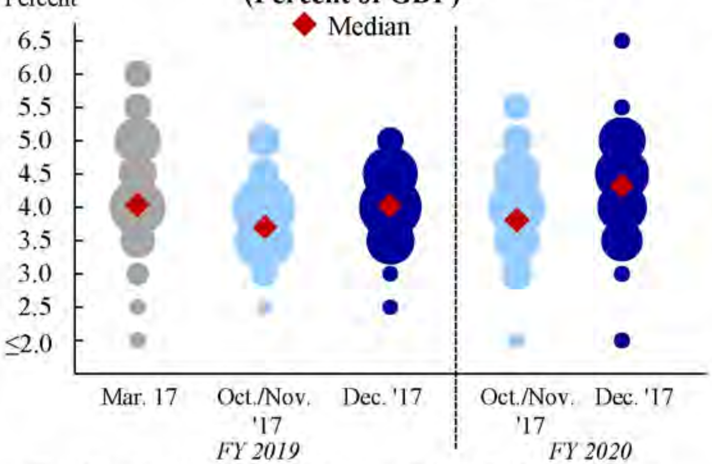
(1) Implied Path of the Policy Rate*

*Market-implied paths derived from federal funds and Eurodollar futures. Unconditional survey path is the average PDF-implied means from the Surveys of Primary Dealers and Market Participants.
Source: Bloomberg, Desk Calculations, Federal Reserve Board, FRBNY

(2) Amount of Tightening Priced In Over 2018

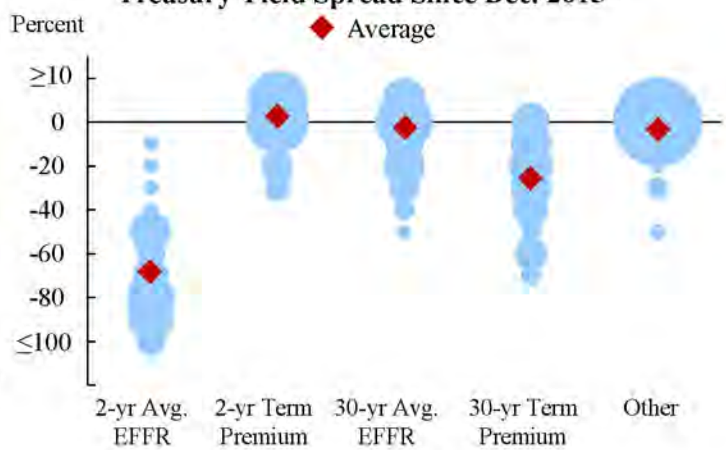
*Computed as Jan. '19 less Jan. '18 federal funds futures-implied rates.
**Computed as Apr. '18 less Jan. '18 federal funds futures-implied rates.
Source: Bloomberg

(3) U.S. Federal Fiscal Deficit Forecast (Percent of GDP)*



*Based on all responses from the Surveys of Primary Dealers and Market Participants. Dots scaled by percent of respondents.
Source: FRBNY

(4) Decomposition of the 100 bps Decline in 2s30s Treasury Yield Spread Since Dec. 2015*



*Based on all responses from the Surveys of Primary Dealers and Market Participants. Dots scaled by percent of respondents.
Source: FRBNY

(5) Asset Price Changes*

	Since Dec. '15 FOMC	Since Oct./Nov. FOMC	Percentile (Level, Since 2009)
S&P 500 Index	+29.8%	+3.0%	-
High Tax	+27.8%	+6.3%	-
Low Tax	+46.6%	+0.5%	-
High-Yield Credit Spread	-320 bps	+9 bps	4
10-Yr Real Treasury Yield	-28 bps	-1 bps	56
U.S. Broad T.W. Dollar	-1.5%	-0.5%	82
VIX Index	-11 ppts	-1 ppts	0

*Red indicates tightening of financial conditions, green indicates loosening.
Source: Bloomberg, Federal Reserve Board, Goldman Sachs

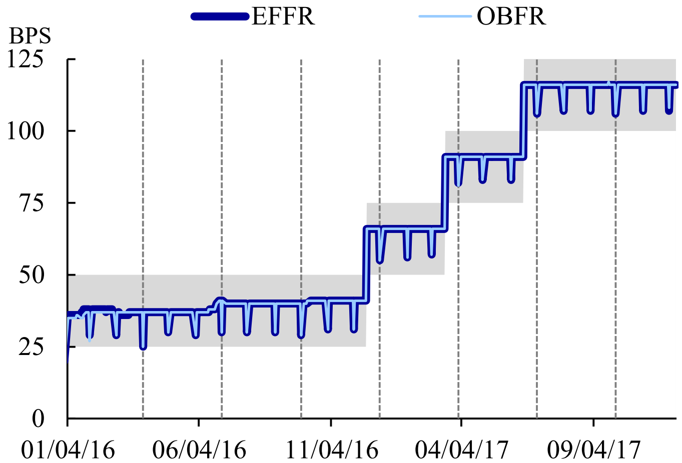
(6) 10-Year Chinese Government Bond and Currency

Source: Bloomberg

Class II FOMC – Restricted (FR)

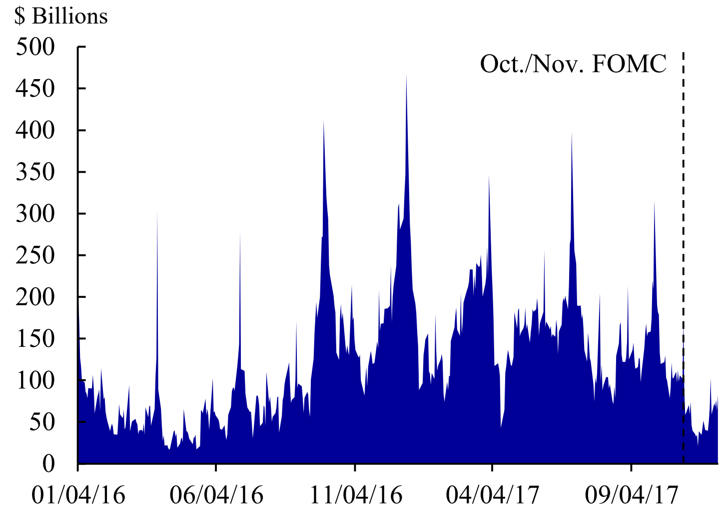
Exhibit 2

(7) Overnight Unsecured Rates*



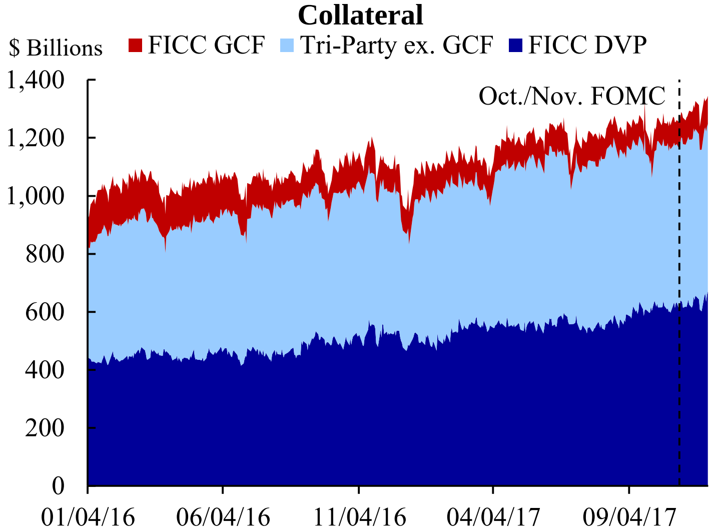
*Vertical grey dashed lines indicate quarter-end. Shaded area reflects target range for the federal funds rate.
Source: FRBNY

(8) ON RRP Take-Up



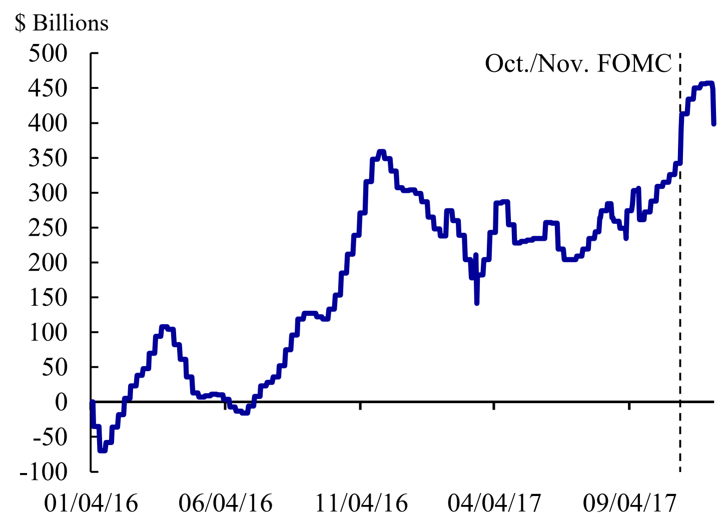
Source: FRBNY

(9) Overnight Repo Volumes for OMO-Eligible Collateral



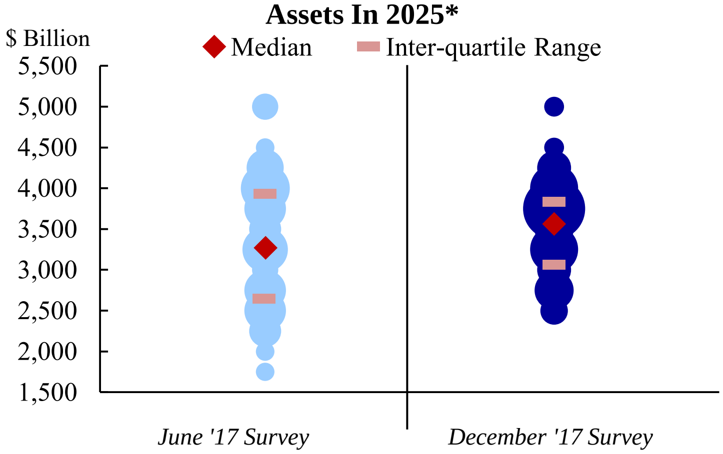
Source: BNYM, FICC, FRBNY, JPMC

(10) Cumulative Net Bill Issuance Since Jan. 2016



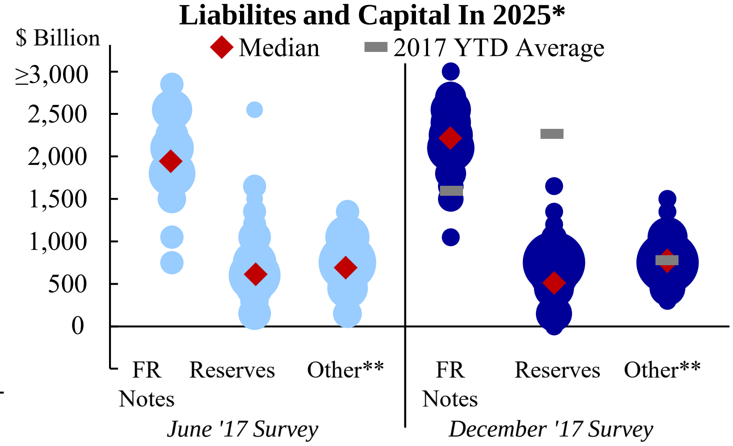
Source: U.S. Treasury

(11) Expected Average Level of Federal Reserve Assets In 2025*



*Based on all responses from the Surveys of Primary Dealers and Market Participants. Conditional on not moving to the ZLB before end of 2025. Dots scaled by percent of respondents.
Source: FRBNY

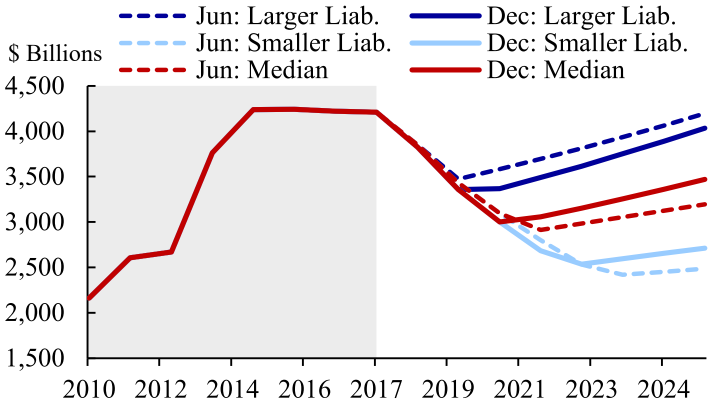
(12) Expected Average Level of Federal Reserve Liabilites and Capital In 2025*



*Based on all responses from the Surveys of Primary Dealers and Market Participants. Conditional on not moving to the ZLB before end of 2025. Dots scaled by percent of respondents.
**Includes TGA, FIMA, RRP, other deposits & all other liabilities & capital.
Source: FRBNY

Class II FOMC – Restricted (FR) Exhibit 3

(13) Projected SOMA Domestic Securities Holdings: Alternative Liabilities Scenarios*



*Figures in shaded area are historical settled holdings. Smaller and larger liab. are based, respectively, on 25th and 75th percentile responses to a question about the size and composition of the Fed's 2025 balance sheet in the Surveys of Primary Dealers and Market Participants. Projected figures are rounded.
Source: FRBNY

(14) Reference Rate Update

- Federal Register Notice (FRN) on Secured Overnight Financing Rate (SOFR)
    - Received 12 responses; summarized and addressed publicly in final FRN
    - Based on feedback, will publish rate at around 8:00 a.m. rather than 8:30 a.m. Eastern time
- Effective Federal Funds Rate (EFFR) and Overnight Bank Funding Rate (OBFR)
    - Plan to release IOSCO Statement of Compliance by early next year

Appendix

(1) Operational Readiness Framework

- Three main components of operational readiness framework:
    1. Catalog of existing and potential SOMA operations
    2. Standards for readiness
    3. Annual planning process
- Staff identifies operations that should be subject to small value tests in coming year
- Desk submits memo ahead of the January FOMC meeting providing advance notice of tests

(2) Summary of Operational Testing

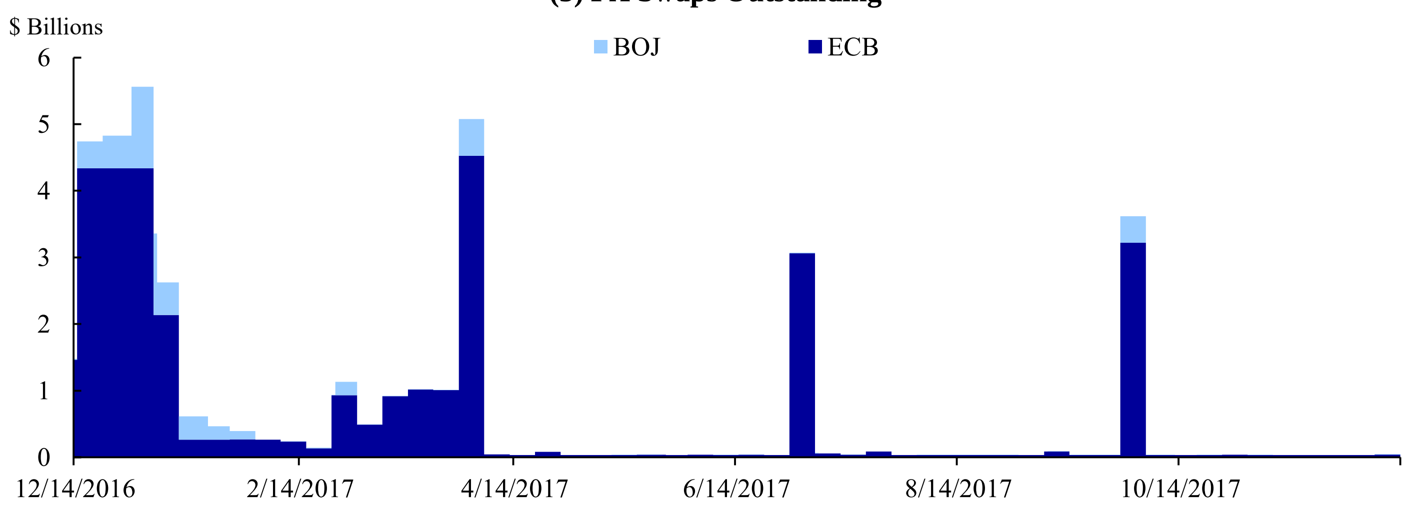
Summary of Operational Tests in prior period:

- Domestic Authorization
    - November 8: Term repo for $65 million
    - November 13: Term reverse repo for $109 million
    - November 16: Overnight reverse repo (with MBS collateral) for $22 million
    - November 20: Overnight repo for $66 million
    - November 28 and 29: Outright MBS sales (specified pool) for $168 million, total
    - December 6: Treasury outright sale of $200 million par
- Foreign Authorization
    - November 7: Euro-denominated overnight reverse repo for €1 million
    - November 13: Liquidity swap with the Bank of Japan for ¥51 thousand
    - November 16: Liquidity swaps with the Bank of Canada, Bank of England, European Central Bank, and Swiss National Bank for $51 thousand, each
    - November 28: Liquidity swap with the Bank of England for £51 thousand

Upcoming Operational Tests:

- No tests scheduled under the Domestic Authorization
- No tests scheduled under the Foreign Authorization

(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 Messrs. Stevens and Ahmed

Class II FOMC – Restricted (FR)

Material for

Staff Presentation on the Economic and Financial Situation

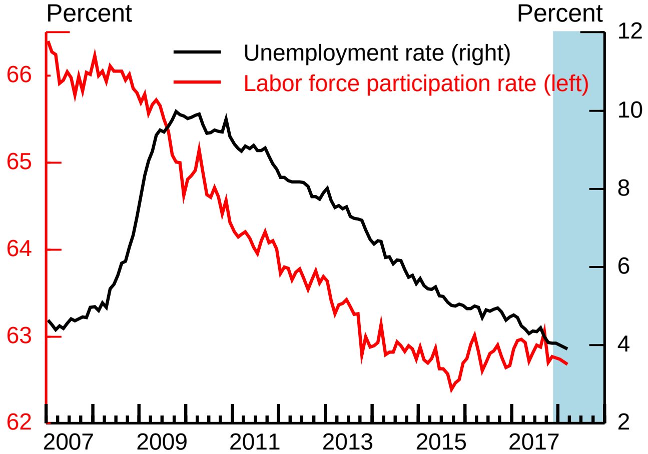
John J. Stevens and Shaghil Ahmed

December 12, 2017

Exhibit 1

Labor Market Developments

1. Unemployment Rate and Labor Force Participation Rate

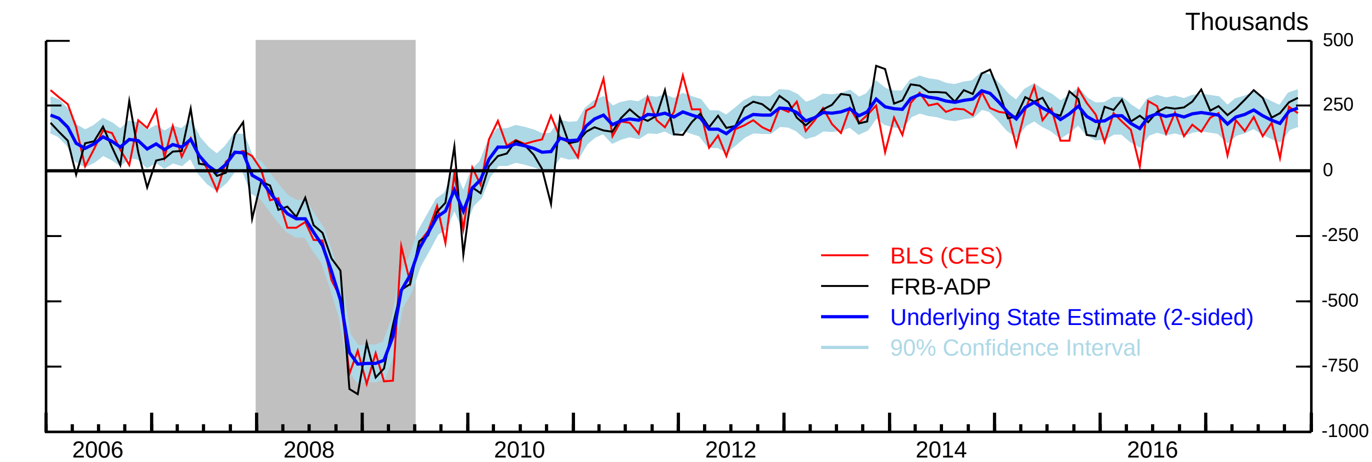


Note: Shaded blue region indicates forecast period.

2. Payroll Employment

- BLS estimates payroll employment rose 228,000 in November; three-month change was 170,000.
- We have been working with ADP's weekly payroll data to construct a complementary measure of payroll employment.
- Our new indicator is distinct from ADP's own National Employment Report.
- Objective is to sharpen our assessment of the true state of the jobs market.

3. Combining BLS and ADP Monthly Private Employment Changes with the Kalman Filter



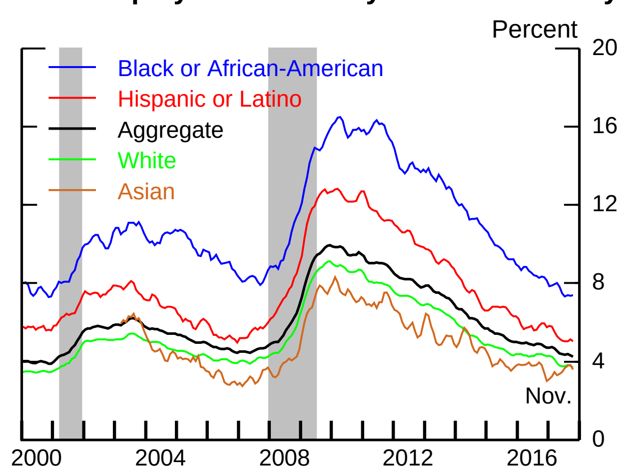
Note: The shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research. Data are seasonally adjusted.
Optimal weights: CES changes 0.51 and ADP changes 0.49.
Source: Bureau of Labor Statistics; ADP microdata; internal calculations.

4. Reserve Bank Inquiries of District Business Contacts

	Percent Dec. 2015	Dec. 2016	Dec. 2017
Plan to increase employment	45	46	54
Plan to raise starting pay*:			
For most job categories	20	25	30
For selected job categories	43	41	45
Cannot find workers with required skills	45	46	49

Note: Average across Federal Reserve Districts.
*As a share of firms planning to increase employment.

5. Unemployment Rates by Race or Ethnicity

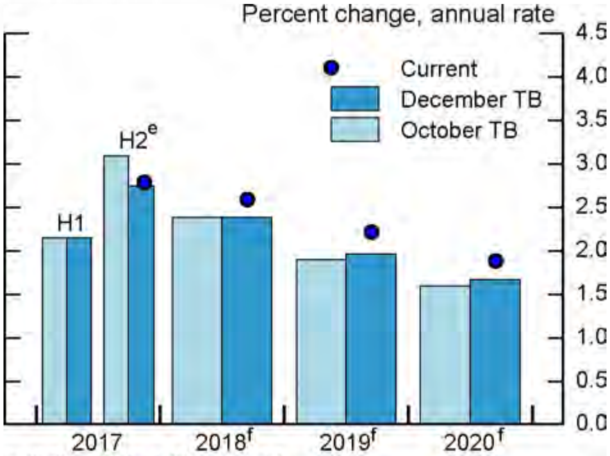


Note: Three-month moving averages. Shaded bars indicate a period of business recession as defined by the NBER.

Exhibit 2

Forecast Summary

1. Real GDP



e: Staff estimate. f: Staff forecast.

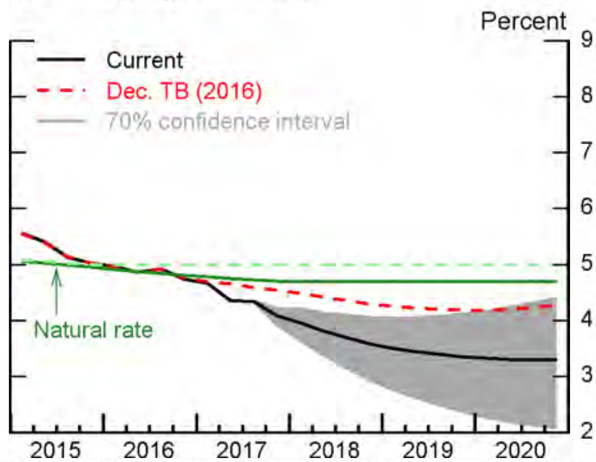
2. Potential Effects of Tax Legislation

- Estimate average annual revenue reduction of $220 billon (1 percent of GDP) through 2020.
- Aggregate demand
  - PCE boosted by higher incomes and wealth.
  - BFI boosted by lower user cost of capital and a positive cash flow effect.
- Aggregate supply
  - Lower marginal tax rates increase labor supply.
  - Increases in BFI raise the capital stock and boost labor productivity.

3. Fiscal Policy Assumptions

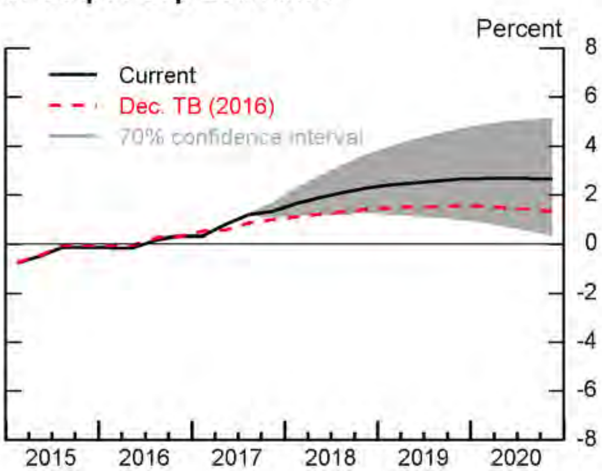
Cumulative Effect on Level in 2020 (percent)	
1. GDP	1.05
2. December 2017 Tealbook	*.40*
Of which:	
3. Fiscal Impetus (FI)	.75
4. Multiplier from FI	.30
5. Financial reaction	-.35
6. Potential GDP	.35
Memo (percentage point):	
7. Output gap	.70

4. Unemployment Rate



Note: Confidence intervals for panels 4 and 5 are based on FRB/US stochastic simulations.

5. Output Gap Estimates



6. Federal Funds Rate

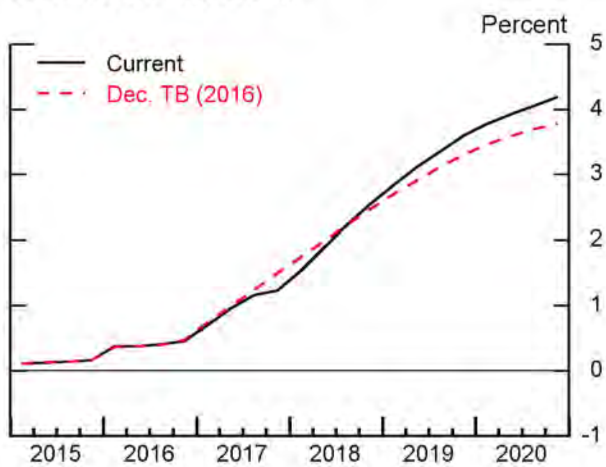
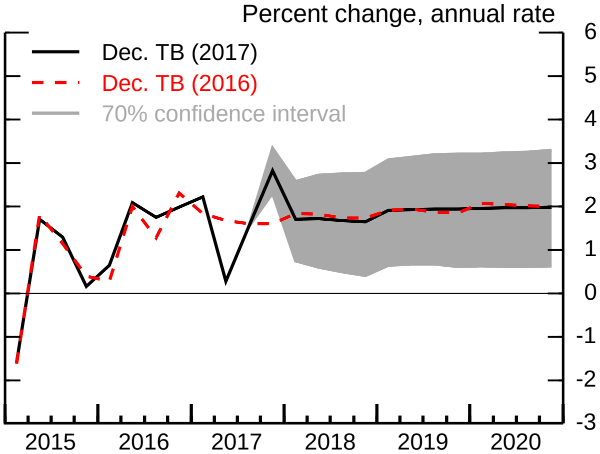


Exhibit 3

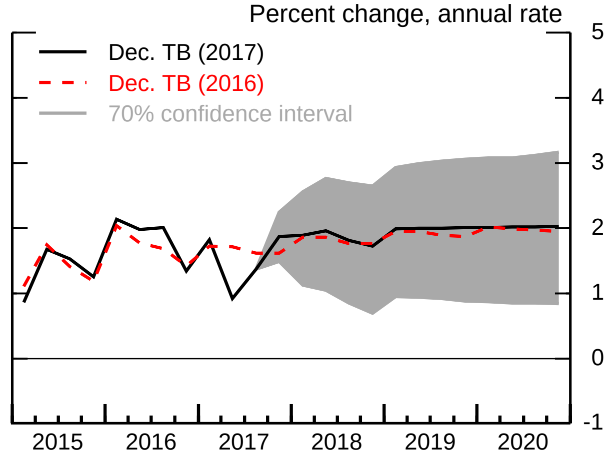
Inflation

1. PCE Prices

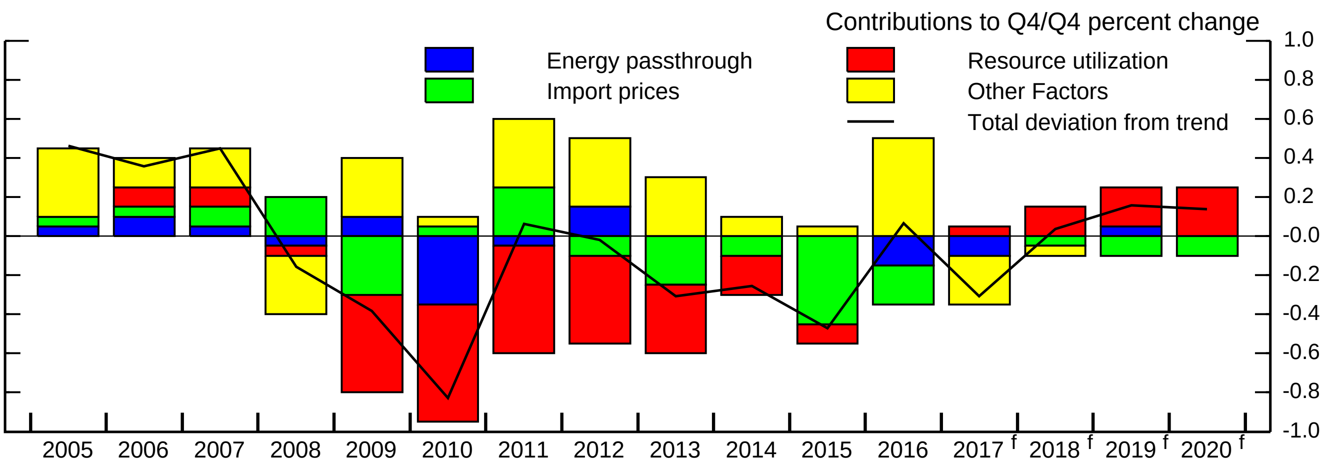


Note: Confidence intervals for panels 1 and 2 are based on FRB/US stochastic simulations.

2. PCE Prices Excluding Food and Energy

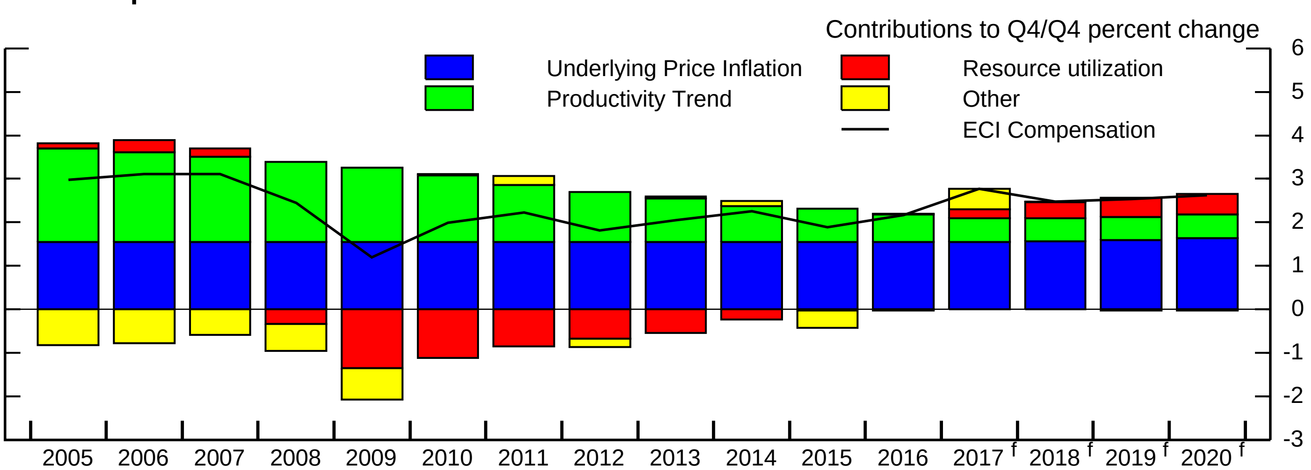


3. Core PCE Price Inflation: Decompositions of Deviations from Trend



f. Staff forecast.

4. Decomposition of ECI

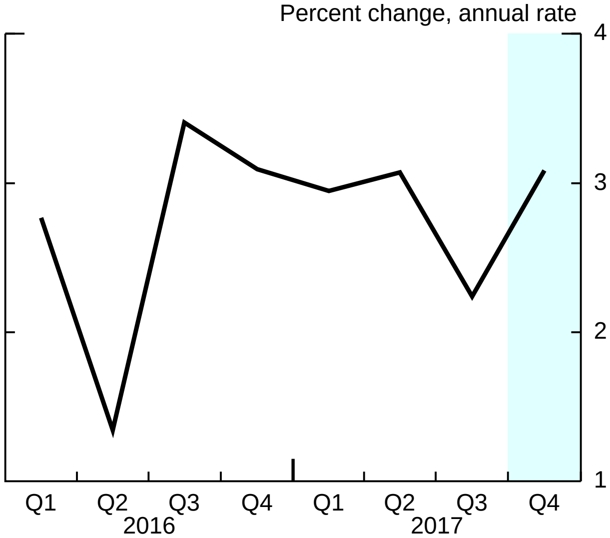


f. Staff forecast.

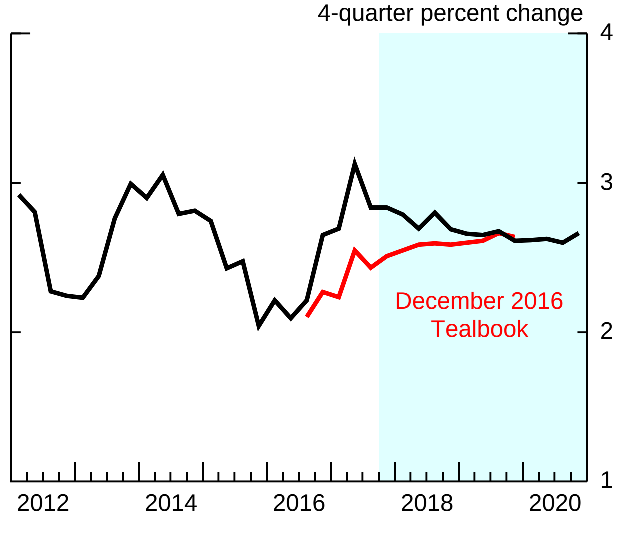
Exhibit 4

Foreign Outlook

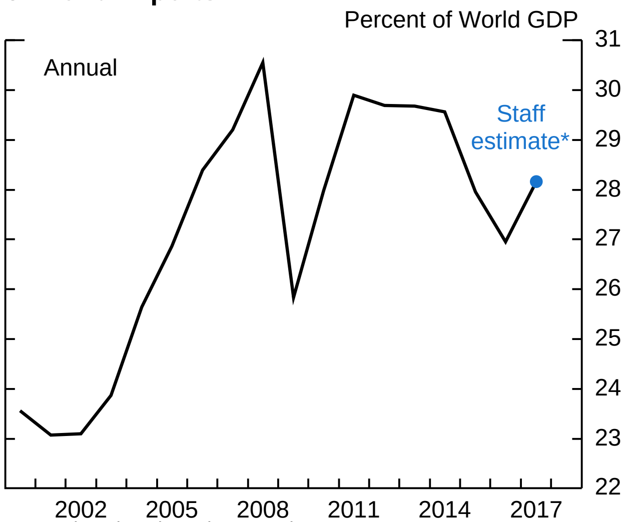
1. Foreign GDP



2. Foreign GDP

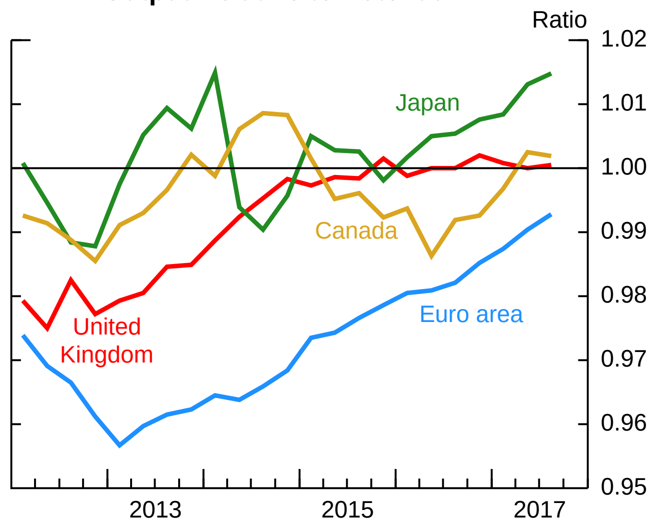


3. World Imports

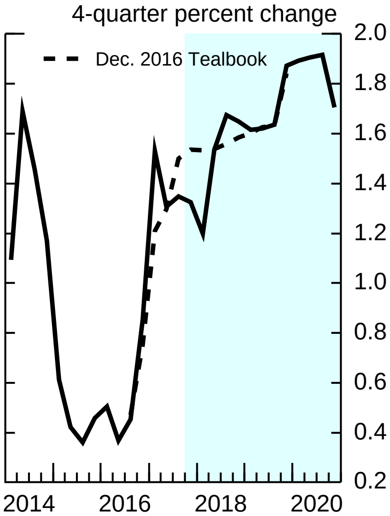


* Based on data through September.
Source: World Bank, World Development Indicators (2018).

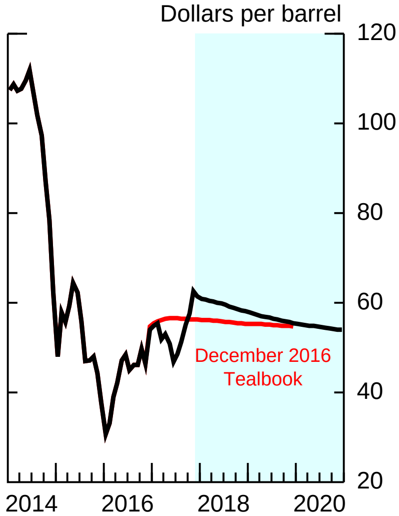
4. AFE Output Relative to Potential



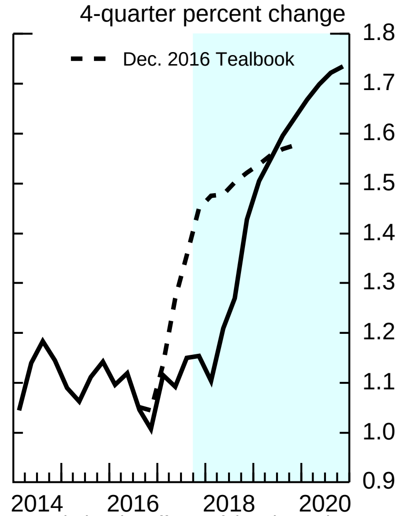
5. AFE Consumer Prices



6. Brent Oil Prices



7. AFE Core Consumer Prices*

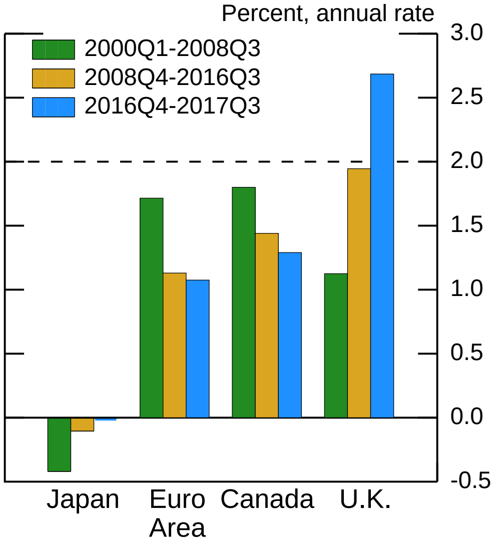


* Excludes the effects of the planned consumption tax hike in Japan.

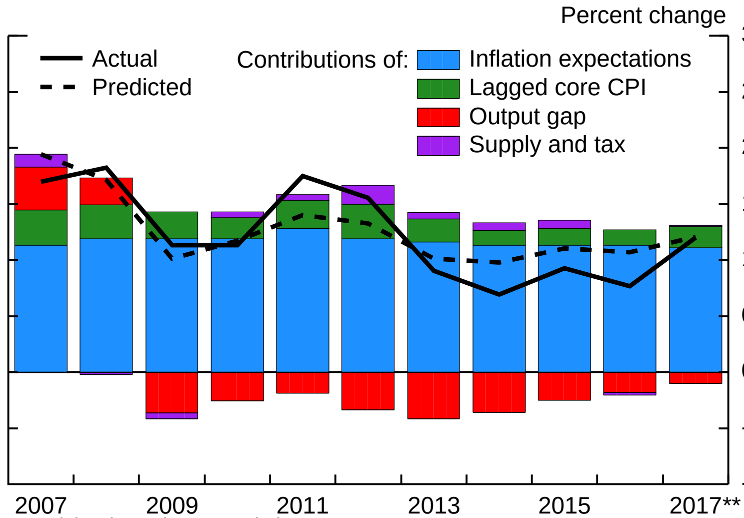
Exhibit 5

AFE Inflation and Monetary Policy

1. Core Inflation



2. Euro Area Core CPI Model*



* Model estimated at quarterly frequency.
** Based on data through Q3.

3. Trend Core Inflation

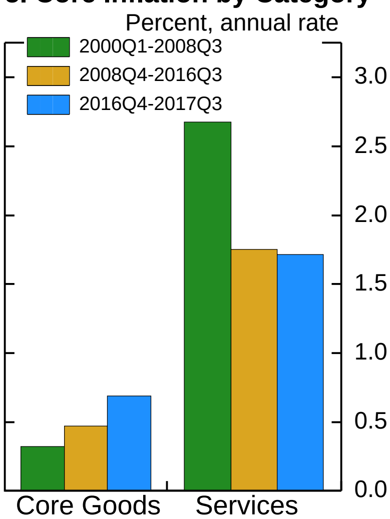
- Using Stella/Stock (2013) statistical model, for each country, jointly estimate trends in inflation and unemployment.

Japan:	0.3%
Euro Area:	1.1%
Canada:	1.5%
United Kingdom:	2.3%

4. Low Underlying Inflation: Potential Explanations

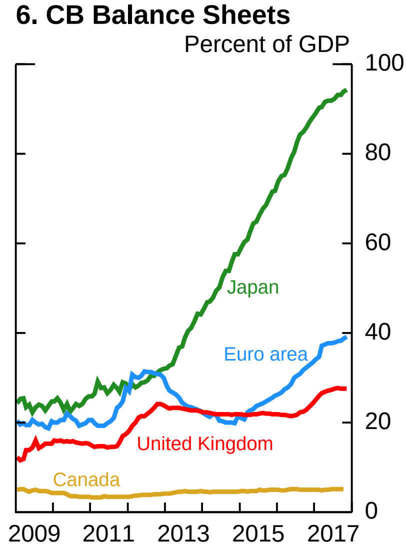
- True inflation expectations may be lower than survey-based ones.
- Greater slack than we think.
- Global slack might matter in addition.
- Other global factors, such as rise of China and growth of value chains.

5. Core Inflation by Category*



* Major AFEs ex Japan.

6. CB Balance Sheets



7. Policy Rates

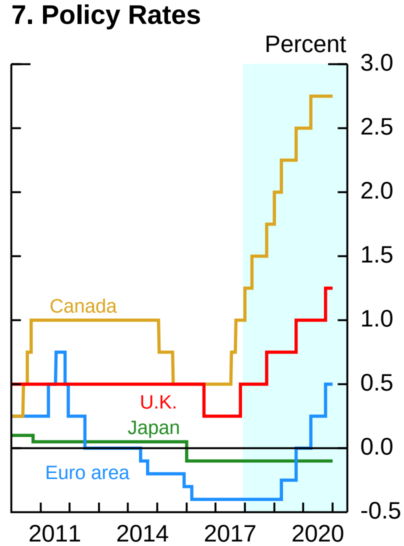
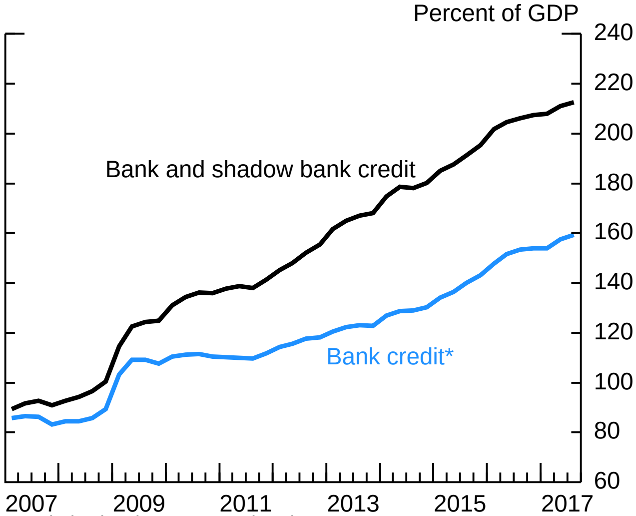


Exhibit 6

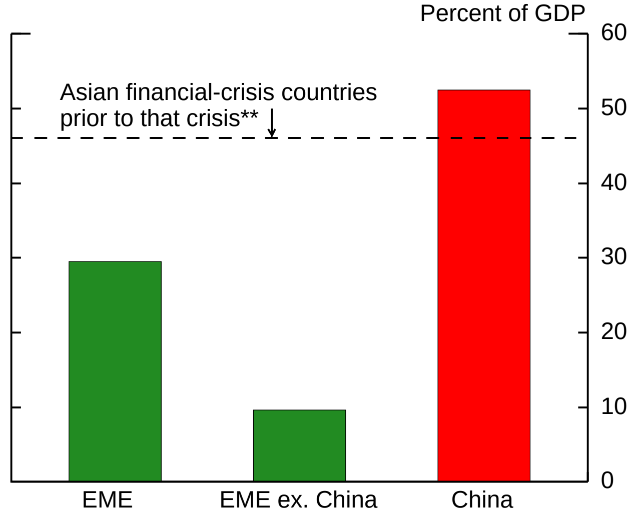
China Risks

1. Credit



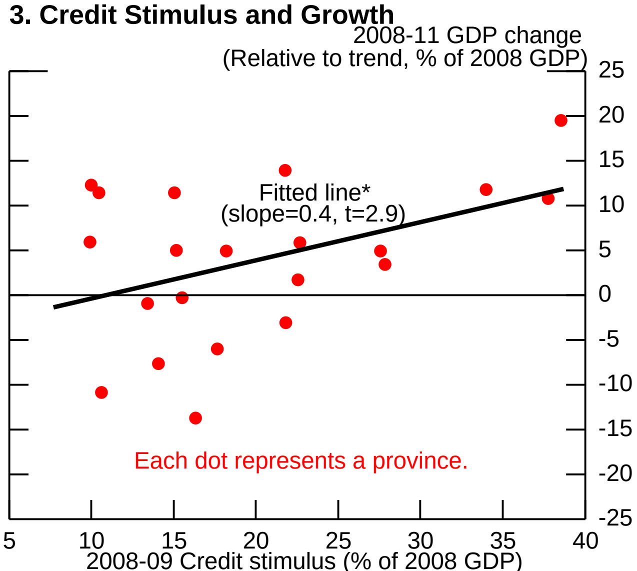
* Includes local government bond swaps.

2. EME NFC Debt-at-Risk*: 2017:Q1



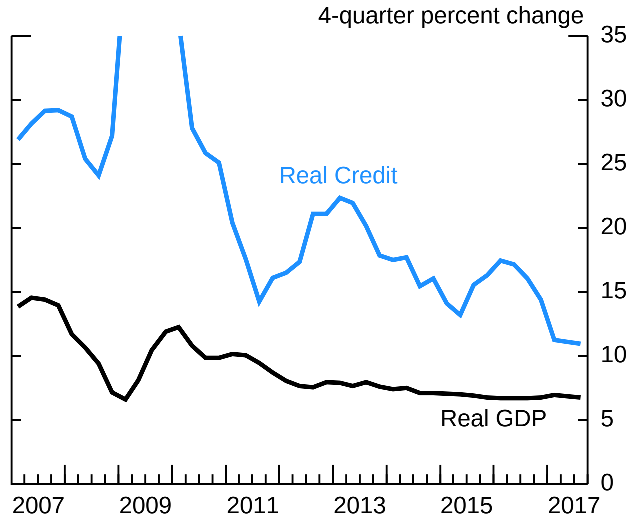
* Debt of firms with ratio of earnings (EBITDA) to interest expenses < 2.
** Hong Kong, Singapore, South Korea, and Thailand in 1996.

3. Credit Stimulus and Growth

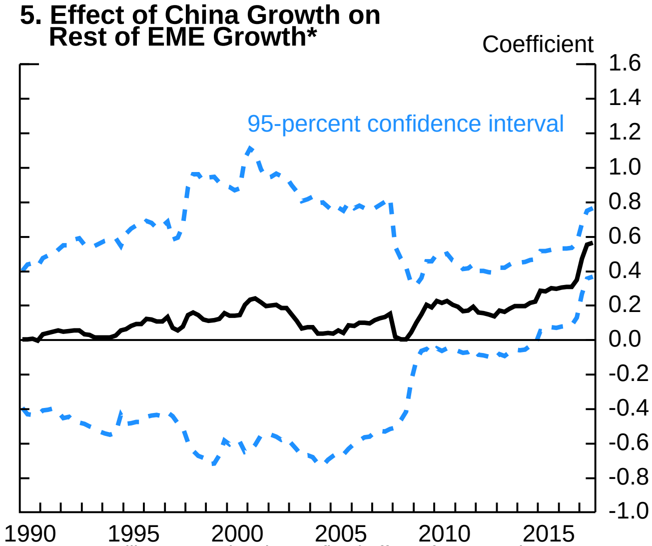


* Controls for initial differences across provinces.

4. Credit and Growth



5. Effect of China Growth on Rest of EME Growth*



* 10-year rolling regression; keeps fixed effect of AE growth.

6. U.S. Real GDP

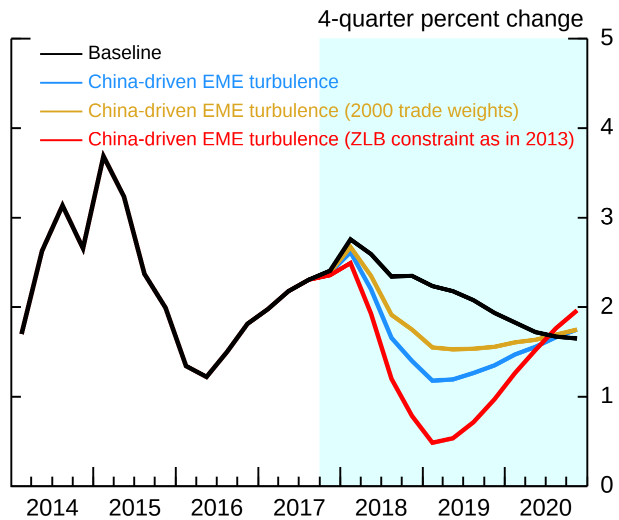
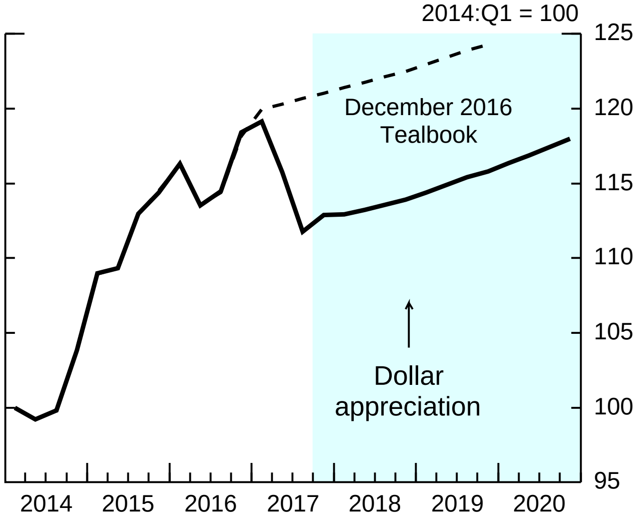


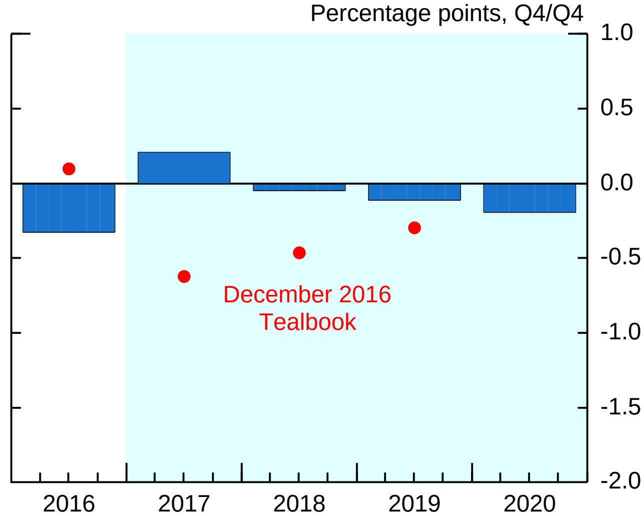
Exhibit 7

U.S. External Sector

1. Broad Real Dollar



2. Net Export Contribution to U.S. Real GDP Growth



Appendix 3: Materials used by Mr. Tetlow

Class I FOMC – Restricted Controlled (FR)

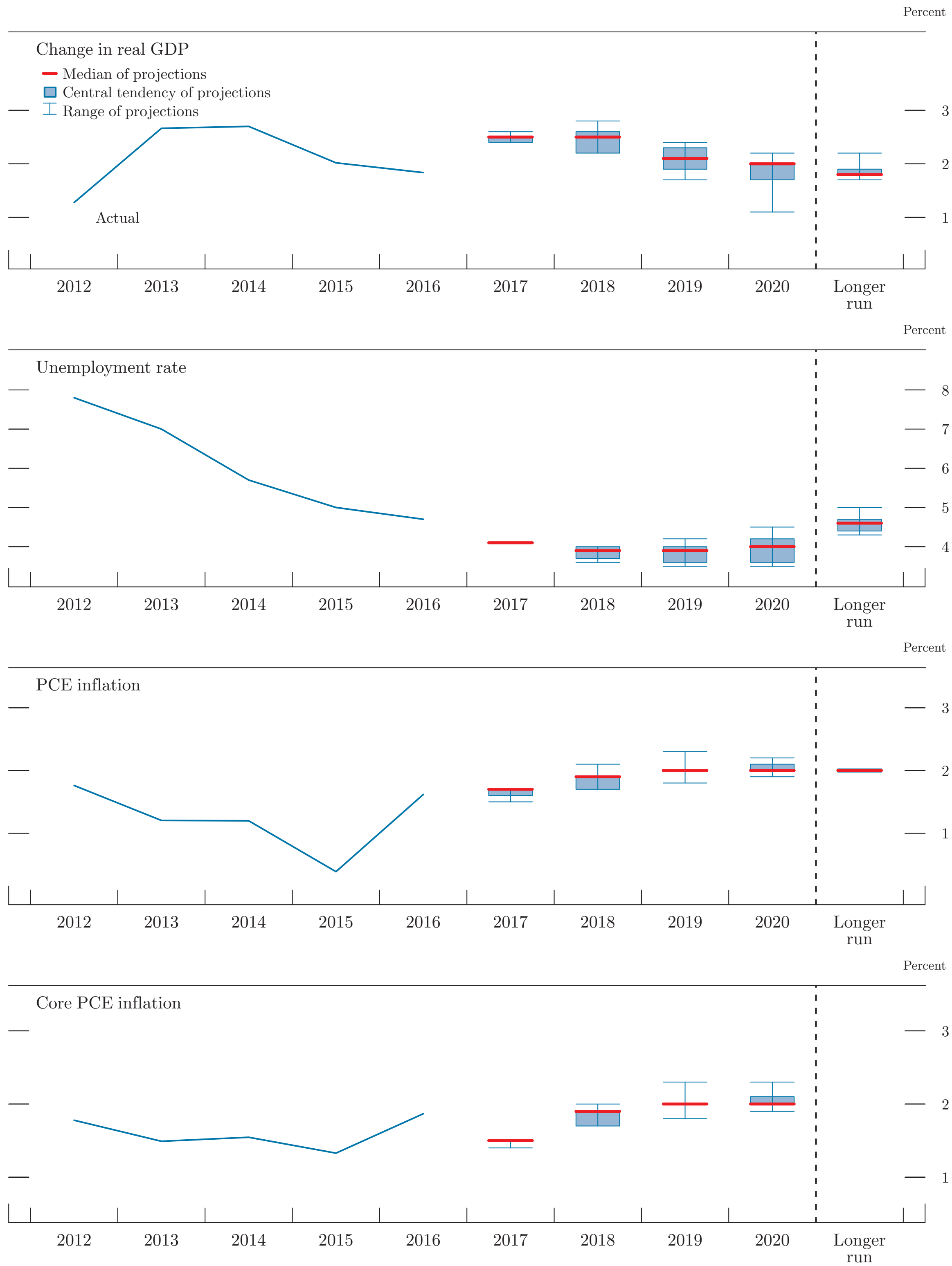
Material for Briefing on the

Summary of Economic Projections

Robert Tetlow

December 12, 2017

Exhibit 1. Medians, central tendencies, and ranges of economic projections, 2017–20 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 2017–20 and over the longer run (percent)

Change in real GDP

	2017	2018	2019	2020	Longer run
Median	2.5	2.5	2.1	2.0	1.8
September projection	2.4	2.1	2.0	1.8	1.8
Range	2.4 – 2.6	2.2 – 2.8	1.7 – 2.4	1.1 – 2.2	1.7 – 2.2
September projection	2.2 – 2.7	1.7 – 2.6	1.4 – 2.3	1.4 – 2.0	1.5 – 2.2
Memo: Tealbook	2.4	2.6	2.2	1.9	1.7
September projection	2.6	2.3	1.9	1.6	1.7

Unemployment rate

	2017	2018	2019	2020	Longer run
Median	4.1	3.9	3.9	4.0	4.6
September projection	4.3	4.1	4.1	4.2	4.6
Range	4.1	3.6 – 4.0	3.5 – 4.2	3.5 – 4.5	4.3 – 5.0
September projection	4.2 – 4.5	3.9 – 4.5	3.8 – 4.5	3.8 – 4.8	4.4 – 5.0
Memo: Tealbook	4.1	3.6	3.4	3.3	4.7
September projection	4.2	3.8	3.7	3.7	4.8

PCE inflation

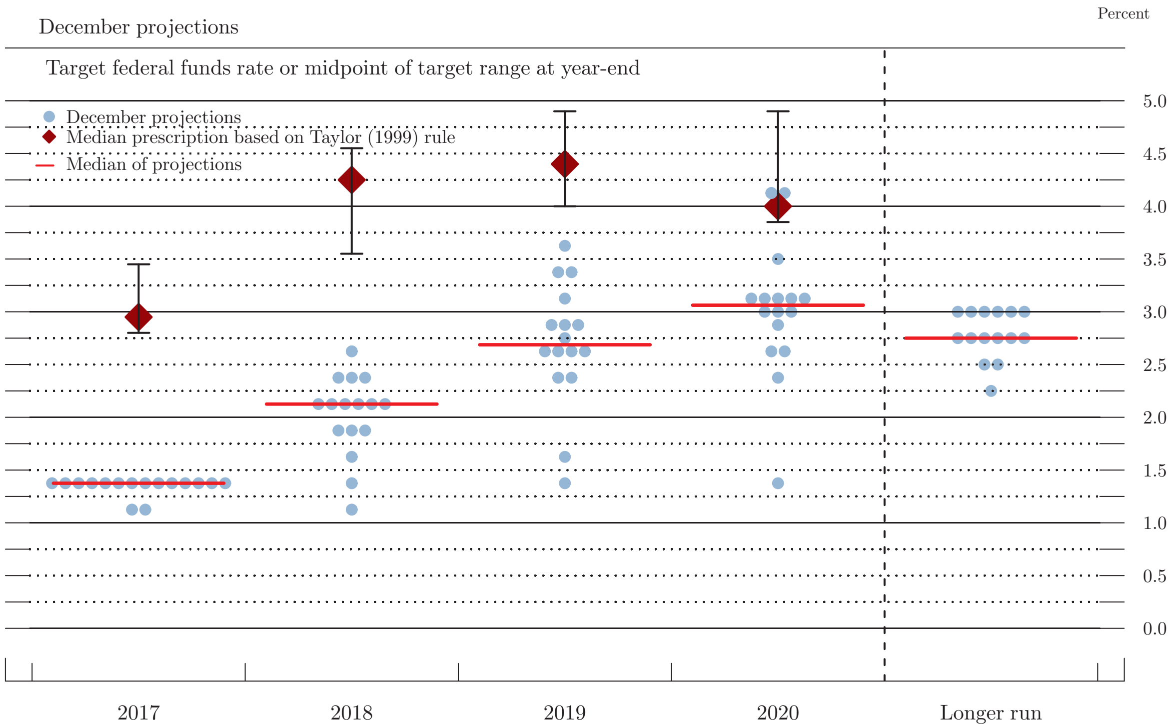
	2017	2018	2019	2020	Longer run
Median	1.7	1.9	2.0	2.0	2.0
September projection	1.6	1.9	2.0	2.0	2.0
Range	1.5 – 1.7	1.7 – 2.1	1.8 – 2.3	1.9 – 2.2	2.0
September projection	1.5 – 1.7	1.7 – 2.0	1.8 – 2.2	1.9 – 2.2	2.0
Memo: Tealbook	1.7	1.7	1.9	2.0	2.0
September projection	1.5	1.9	2.0	2.0	2.0

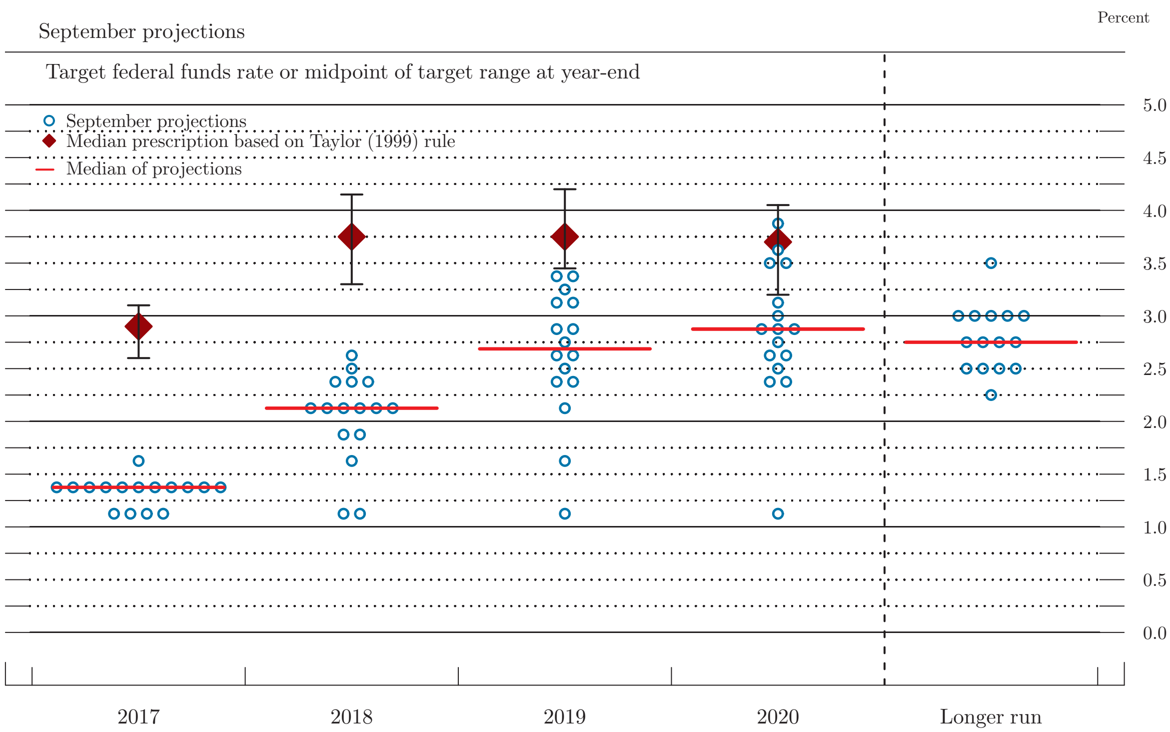
Core PCE inflation

	2017	2018	2019	2020
Median	1.5	1.9	2.0	2.0
September projection	1.5	1.9	2.0	2.0
Range	1.4 – 1.5	1.7 – 2.0	1.8 – 2.3	1.9 – 2.3
September projection	1.4 – 1.7	1.7 – 2.0	1.8 – 2.2	1.9 – 2.2
Memo: Tealbook	1.5	1.8	2.0	2.0
September projection	1.5	1.9	2.0	2.0

NOTE: Updated December 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 September 19–20, 2017, meeting, and one participant did not submit such projections in conjunction with the December 12–13, 2017, meeting.

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

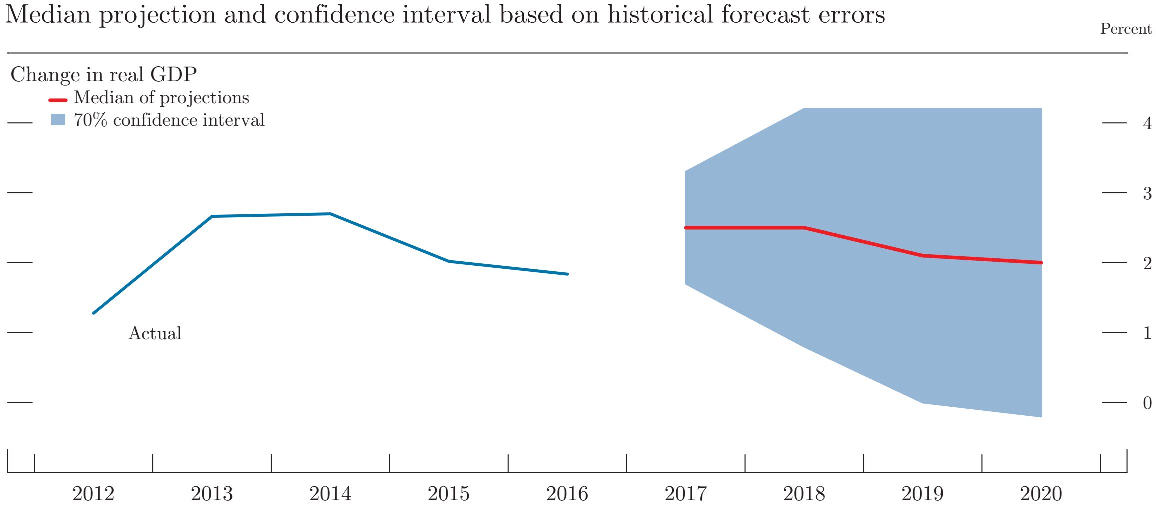




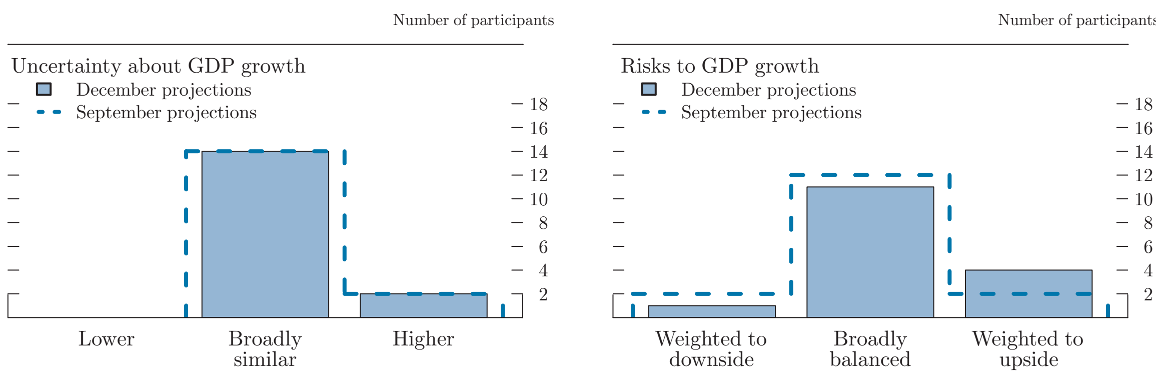
NOTE: In the two panels above, each circle indicates the value (rounded to the nearest 1/8 percentage point) of an individual participant's judgment of the midpoint of the appropriate target range for the federal funds rate or the appropriate target level for the federal funds rate at the end of the 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 September 19–20, 2017, meeting, and one participant did not submit such a projection in conjunction with the December 12–13, 2017, meeting.

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

Median projection and confidence interval based on historical forecast errors



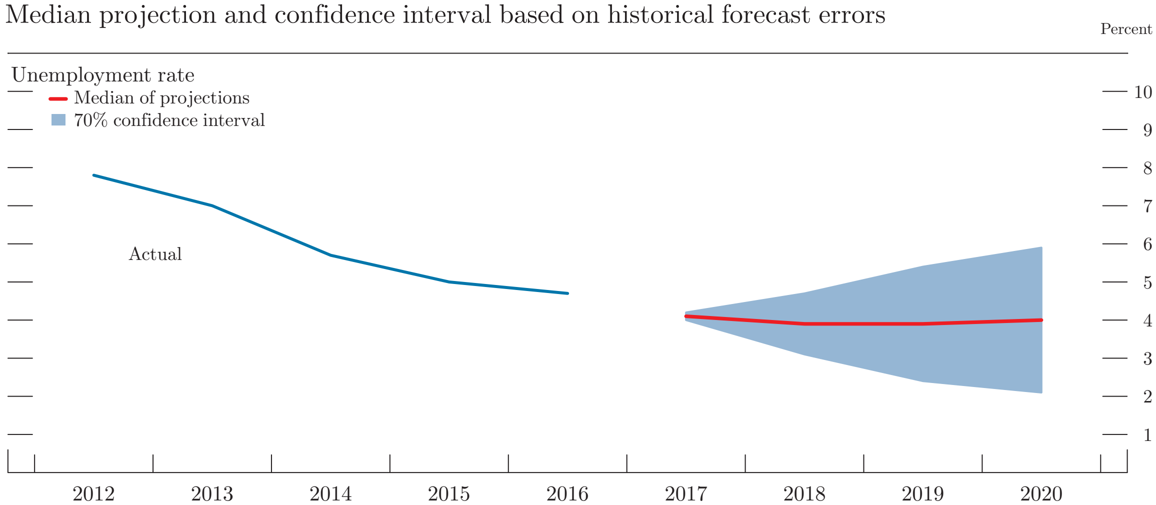
FOMC participants' assessments of uncertainty and risks around their economic projections



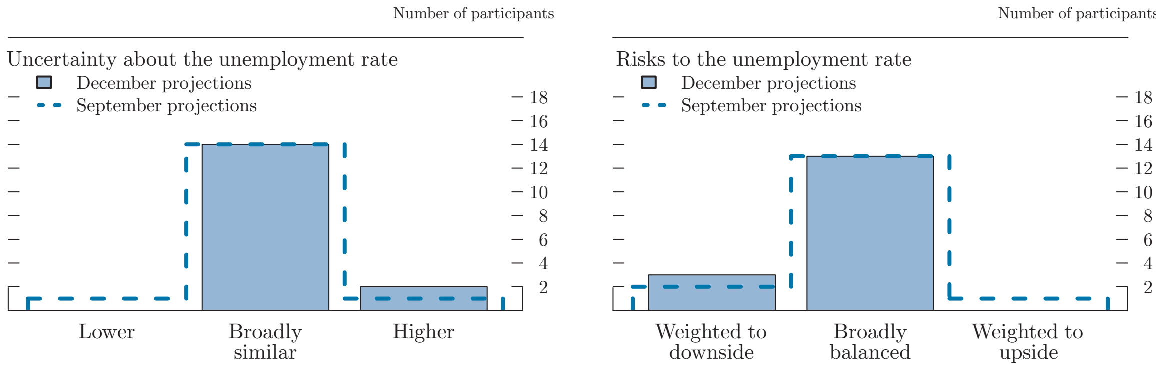
NOTE: The blue and red lines in the top panel show actual values and median projected values, respectively, of the percent change in real gross domestic product (GDP) from the fourth quarter of the previous year to the fourth quarter of the year indicated. The confidence interval around the median projected 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



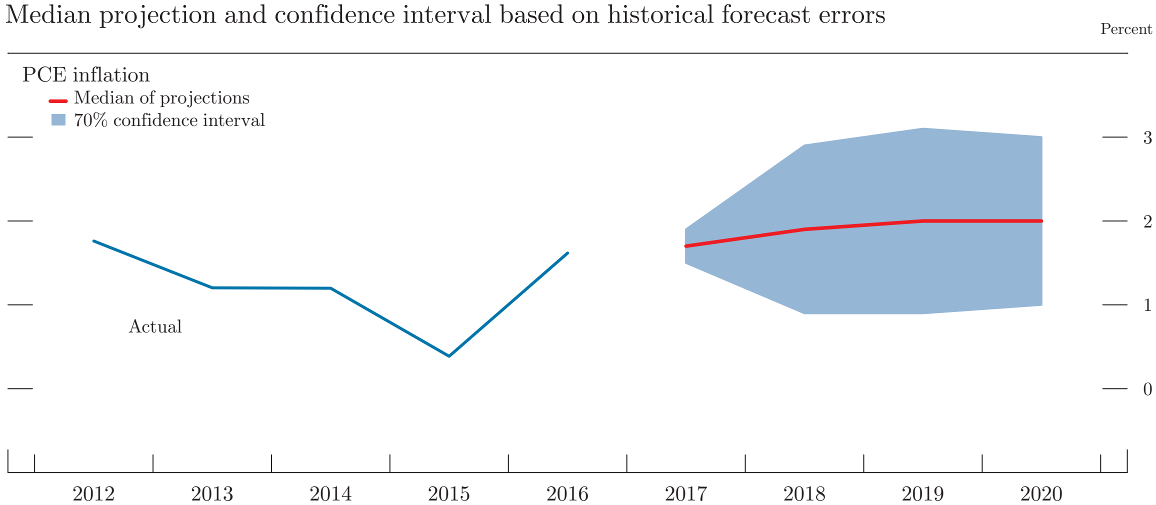
FOMC participants' assessments of uncertainty and risks around their economic projections



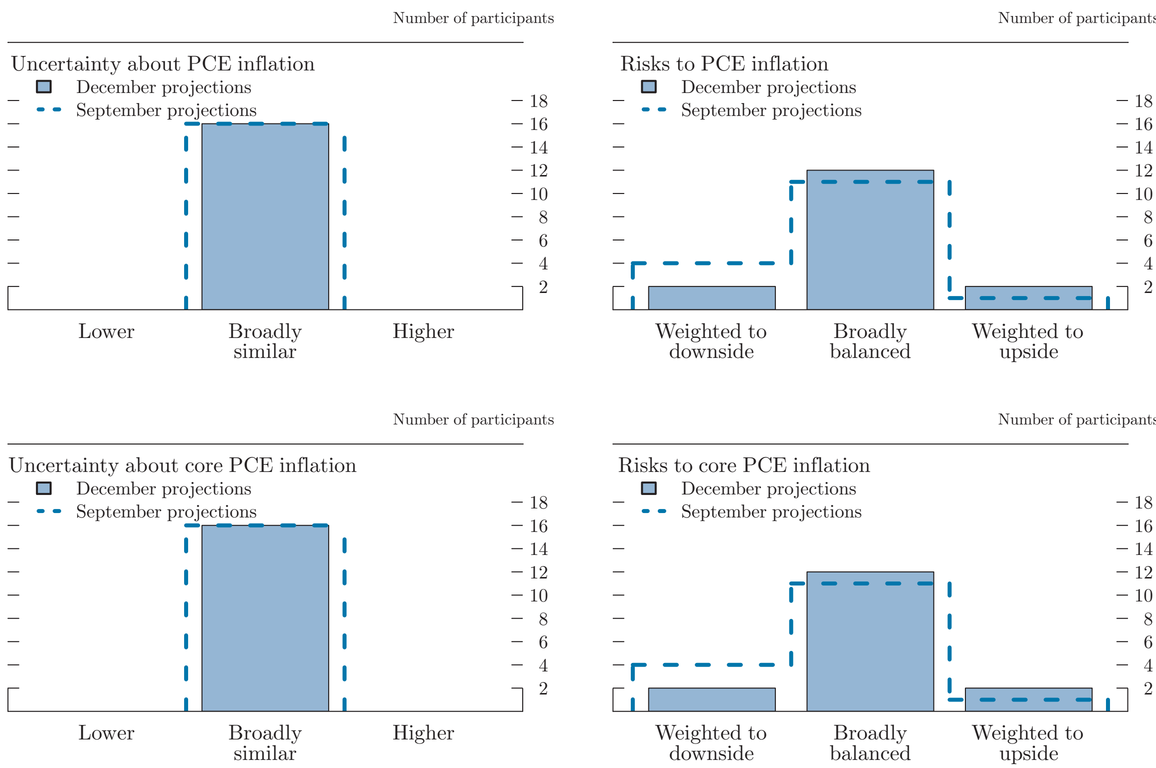
NOTE: The blue and red lines in the top panel show actual values and median projected values, respectively, of the average civilian unemployment rate in the fourth quarter of the year indicated. The confidence interval around the median projected values is assumed to be symmetric and is based on root 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



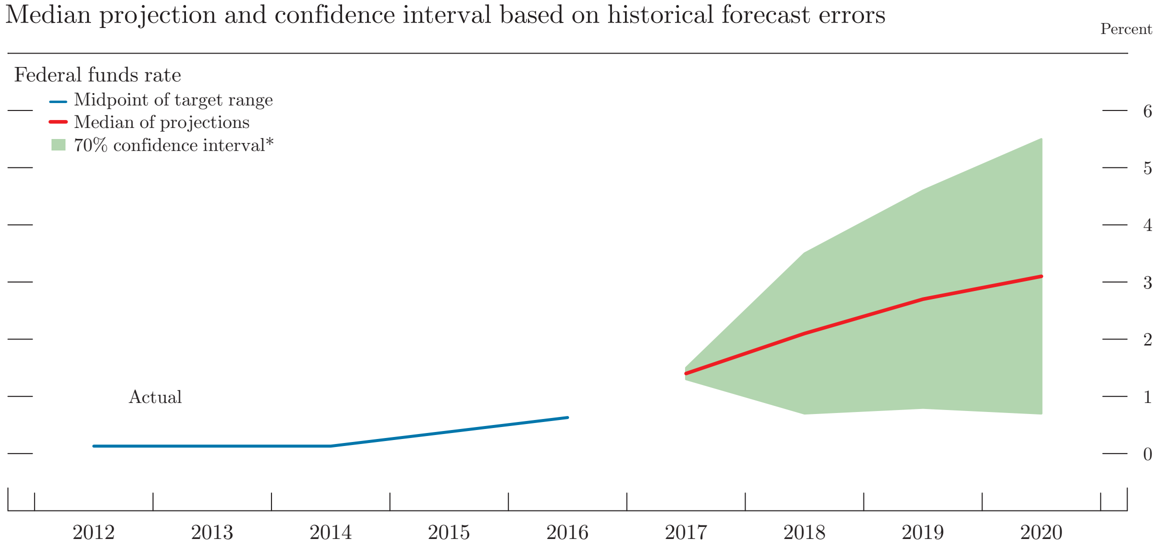
FOMC participants’ assessments of uncertainty and risks around their economic projections



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

Median projection and confidence interval based on historical forecast errors



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 4: Materials used by Mr. Wilcox

Class II FOMC – Restricted (FR)

Material for

Consumer Price Index Update

David W. Wilcox

December 13, 2017

Recent Changes in Consumer Price Indexes

(Percent changes)

	Monthly change			Nov./Nov. change	
	Sept.	Oct.	Nov.	2016	2017
Total CPI	**0.5**	**0.1**	**0.4**	**1.7**	**2.2**
December TB			*0.4*		*2.2*
Food	0.1	0.0	0.0		
December TB			*0.2*		
Energy	6.1	−1.0	3.9		
December TB			*3.3*		
Core CPI	**0.1**	**0.2**	**0.1**	**2.1**	**1.7**
December TB			*0.2*		*1.8*

Note: November 2017 CPI data released at 8:30 a.m. on December 13, 2017.

Appendix 5: Materials used by Mr. Laubach

Class I FOMC – Restricted Controlled (FR)

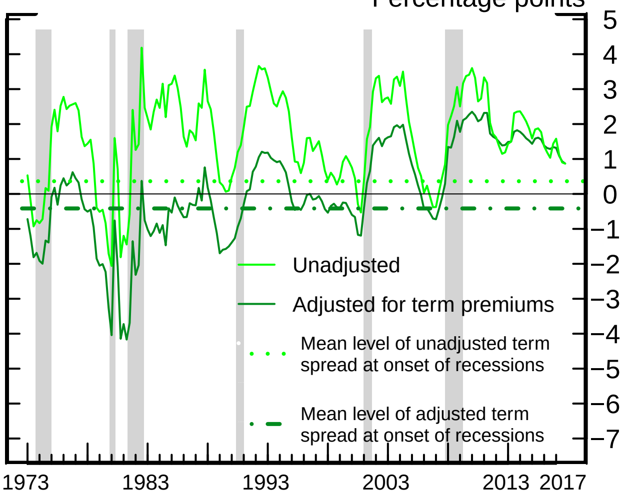
Material for the Briefing on

Monetary Policy Alternatives

Thomas Laubach
Exhibits by Laurie Khalfan
December 12–13, 2017

The Yield Curve Slope and Recession Probabilities

Treasury Term Spread

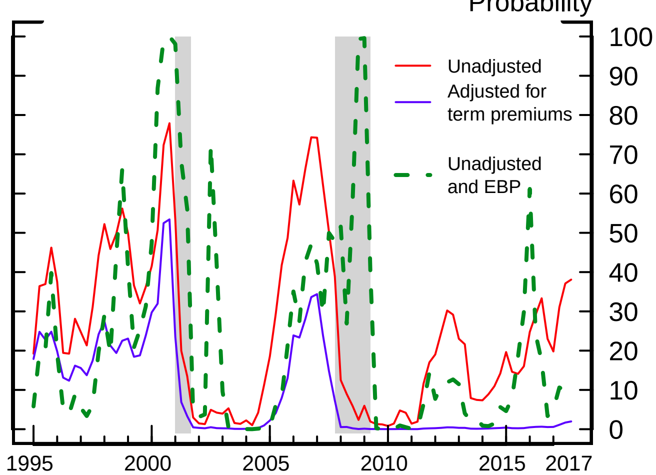


Note: Spreads are 10−year minus 3−month yields. The adjusted series subtracts the term premium component from the 10−year yield.

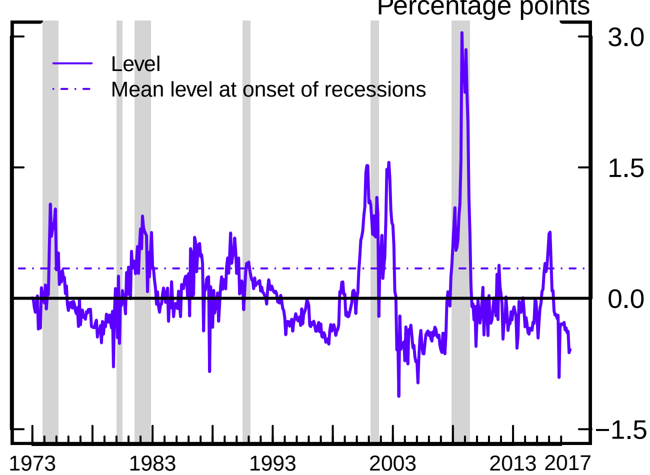
Estimated Recession Probabilities

- Estimate regressions relating financial variables to the event of being in recession at some future date.
- Current probability of a recession occurring over the next four quarters:
  - Regression using unadjusted spread: 38%
  - Regression using adjusted spread: 2%
  - Regression using unadjusted spread and the excess bond premium: 7%

Recession Probabilities



Excess Bond Premium



Note: Excess bond premium developed by Gilchrist and Zakrajsek (2012) and updated by Board staff.

Market Participants' Views

- Conversations with market participants do not reveal heightened concern about the decline in the yield spread
- Flattening in large part due to
  - Low longer−run federal funds rate
  - Low inflation risk premium
  - Low global yields and volatility

Policy Considerations?

- B: A gradual path of removing accommodation appropriate to balance the risks of continuing to miss your inflation objective and an overheated labor market
- C: More urgent need to slow growth in output and employment to sustainable rates
- A: Willingness to tolerate a larger undershooting of the unemployment rate to forestall a decline in inflation expectations

NOVEMBER 2017 FOMC STATEMENT

1. Information received since the Federal Open Market Committee met in September indicates that the labor market has continued to strengthen and that economic activity has been rising at a solid rate despite hurricane-related disruptions. Although the hurricanes caused a drop in payroll employment in September, the unemployment rate declined further. Household spending has been expanding at a moderate rate, and growth in business fixed investment has picked up in recent quarters. Gasoline prices rose in the aftermath of the hurricanes, boosting overall inflation in September; however, inflation for items other than food and energy remained soft. On a 12-month basis, both inflation measures have declined this year and are running 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. Hurricane-related disruptions and rebuilding will continue to affect economic activity, employment, and inflation in the near term, but past experience suggests that the storms are unlikely to materially alter the course of the national economy over the medium term. Consequently, the Committee continues to expect that, with gradual adjustments in the stance of monetary policy, economic activity will expand at a moderate pace, and labor market conditions will strengthen somewhat further. Inflation on a 12-month basis is expected to remain somewhat below 2 percent in the near term but 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 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 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 balance sheet normalization program initiated in October 2017 is proceeding.

December 2017 Alternative A

1. Information received since the Federal Open Market Committee met in ~~September~~ **November** indicates that the labor market has continued to strengthen and that economic activity has been rising at a solid rate ~~despite hurricane-related disruptions~~. ~~Although the hurricanes caused a drop in payroll employment in September~~ **Averaging through hurricane-related fluctuations, job gains have been solid**, **and** the unemployment rate declined further. Household spending has been expanding at a moderate rate, and growth in business fixed investment has picked up in recent quarters. ~~Gasoline prices rose in the aftermath of the hurricanes, boosting overall inflation in September; however, inflation for items other than food and energy~~ **In contrast, inflation has** remained soft. On a 12-month basis, both **overall** inflation ~~measures~~ **and inflation for items other than food and energy** have declined this year and are running 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. Hurricane-related disruptions and rebuilding ~~will continue to~~ **have** affect**ed** economic activity, employment, and inflation in ~~the near term,~~ **recent months** but ~~past experience suggests that the storms are unlikely to~~ **have not** materially alter**ed** the ~~course of~~ **outlook for** the national economy ~~over the medium term~~. ~~Consequently,~~ The Committee ~~continues to~~ expect**s** that, with ~~gradual adjustments in the stance of~~ **appropriately accommodative** monetary policy**, inflation will gradually rise to the Committee's 2 percent objective over the medium term**, economic activity will expand at a moderate pace, and labor market conditions will strengthen somewhat further. ~~Inflation on a 12-month basis is expected to remain somewhat below 2 percent in the near term but 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 to 1-1/4 percent **while assessing incoming information that bears on the outlook for inflation**. 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~~ **whether to** adjust~~ments 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 balance sheet normalization program initiated in October 2017 is proceeding.~~

DECEMBER 2017 ALTERNATIVE B

1. Information received since the Federal Open Market Committee met in ~~September~~ **November** indicates that the labor market has continued to strengthen and that economic activity has been rising at a solid rate ~~despite hurricane-related disruptions~~. ~~Although the hurricanes caused a drop in payroll employment in September~~ **Averaging through hurricane-related fluctuations, job gains have been solid**, **and** the unemployment rate declined further. Household spending has been expanding at a moderate rate, and growth in business fixed investment has picked up in recent quarters. ~~Gasoline prices rose in the aftermath of the hurricanes, boosting overall inflation in September; however, inflation for items other than food and energy remained soft.~~ On a 12-month basis, both **overall** inflation ~~measures~~ **and inflation for items other than food and energy** have declined this year and are running 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. Hurricane-related disruptions and rebuilding ~~will continue to~~ **have** affect**ed** economic activity, employment, and inflation in ~~the near term,~~ **recent months** but ~~past experience suggests that the storms are unlikely to~~ **have not** materially alter**ed** the ~~course of~~ **outlook for** the national economy ~~over the medium term~~. Consequently, the Committee continues to expect that, with gradual adjustments in the stance of monetary policy, economic activity will expand at a moderate pace~~,~~ and labor market conditions will ~~strengthen somewhat further~~ **remain strong**. Inflation on a 12-month basis is expected to remain somewhat below 2 percent in the near term but 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~~ to 1-1/4 **to 1-1/2** percent. The stance of monetary policy remains accommodative, thereby supporting ~~some further strengthening in~~ **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 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 balance sheet normalization program initiated in October 2017 is proceeding.~~

DECEMBER 2017 ALTERNATIVE C

1. Information received since the Federal Open Market Committee met in ~~September~~ **November** indicates that the labor market has continued to ~~strengthen~~ **tighten** and that economic activity has been rising at a solid rate ~~despite hurricane-related disruptions~~. ~~Although the hurricanes caused a drop in payroll employment in September~~ **Averaging through hurricane-related fluctuations, job gains have been solid**, **and** the unemployment rate declined further. Household spending has been expanding at a moderate rate, and growth in business fixed investment has picked up in recent quarters. ~~Gasoline prices rose in the aftermath of the hurricanes, boosting overall inflation in September; however, inflation for items other than food and energy remained soft.~~ On a 12-month basis, both **overall** inflation ~~measures~~ **and inflation for items other than food and energy** have declined this year and are running 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. Hurricane-related disruptions and rebuilding ~~will continue to~~ **have** affect**ed** economic activity, employment, and inflation in ~~the near term,~~ **recent months** but ~~past experience suggests that the storms are unlikely to~~ **have not** materially alter**ed** the ~~course of~~ **outlook for** the national economy ~~over the medium term~~. ~~Consequently,~~ The Committee ~~continues to~~ expect**s** that, with **further** gradual ~~adjustments in the stance of~~ **reductions in** monetary policy **accommodation**, **growth in** economic activity **and employment** will ~~expand at a~~ moderate **to sustainable rates in the medium term** ~~pace, and labor market conditions will strengthen somewhat further~~. Inflation on a 12-month basis is expected to remain somewhat below 2 percent in the near term but 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~~ to 1-1/4 **to 1-1/2** percent. The stance of monetary policy remains accommodative, thereby supporting ~~some further strengthening in~~ **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.

~~5. The balance sheet normalization program initiated in October 2017 is proceeding.~~

Implementation Note for December 2017 Alternative A

Release Date: December 13, 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 ~~November 1~~ **December 13**, 2017:

- The Board of Governors of the Federal Reserve System voted **[** unanimously **]** to maintain the interest rate paid on required and excess reserve balances at 1.25 percent.

- As part of its policy decision, the Federal Open Market Committee voted to authorize and direct the Open Market Desk at the Federal Reserve Bank of New York, until instructed otherwise, to execute transactions in the System Open Market Account in accordance with the following domestic policy directive:

> "Effective ~~November 2~~ **December 14**, 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 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 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 at auction the amount of principal payments from the Federal Reserve's holdings of Treasury securities maturing during ~~each calendar month~~ **December** that exceeds $6 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~~ **December** that exceeds $4 billion. **Effective in January, 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 $12 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 $8 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 1.75 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 December 2017 Alternatives B and C

Release Date: December 13, 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 ~~November 1~~ **December 13**, 2017:

- 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 1.25~~ **to 1.50** percent**, effective December 14, 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 ~~November 2~~ **December 14**, 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 ~~1~~ **1-1/4** to ~~1-1/4~~ **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 ~~1.00~~ **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~~ **December** that exceeds $6 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~~ **December** that exceeds $4 billion. **Effective in January, 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 $12 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 $8 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 1.75~~ **to 2.00** percent**, effective December 14, 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.

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