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

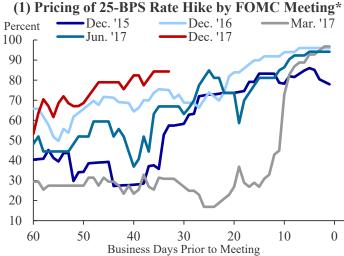
Material for the Briefing on

Financial Developments and Open Market Operations

Simon Potter and Lorie Logan October 31, 2017

Exhibit 1

10/23/20



\*Assumes federal funds futures contracts price in an EFFR decline on monthend dates equivalent to the six-month rolling average of month-end declines. Source: Bloomberg, Desk Calculations

### (3) Asset Price Changes Since Sep. FOMC\*

	Since Sep. FOMC	Current Level
S&P 500 Index	+3.0%	2581
Russell 2000 Index	+4.7%	1508
High Yield Credit Spread	-24 bps	334
Investment Grade Credit Spread	-13 bps	94
U.S. Broad T.W. Dollar	+3.0%	122
Nominal 2-Year TSY Yield	+19 bps	1.59%
Nominal 10-Year TSY Yield	+16 bps	2.41%

<sup>\*</sup>Red indicates tightening of financial conditions, blue indicates loosening of financial conditions.

Source: Barclays, Bloomberg, Federal Reserve Board

### (5) E.M. Asset Price Changes Since Sep. FOMC

	Since Sep. FOMC
E.M. Bond Spread Index	-5 bps
E.M. Equity Index	+0.1%
T.W. Other Important Trading Partners Dollar Index (E.M.)*	+2.5%
Contribution from Mexican Peso	+1.7%
U.S. Dollar - Mexican Peso*	+7.5%

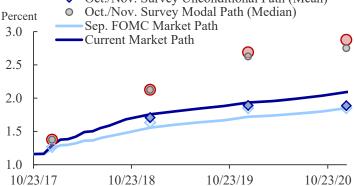
<sup>\*</sup>Positive value indicates U.S. dollar appreciation. Source: Bloomberg, Federal Reserve Board, J.P. Morgan, MSCI

### (2) Implied Path of the Policy Rate\*

Sep. SEP (Median)

Sep. Survey Unconditional Path (Mean)

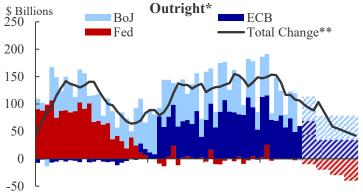
Oct./Nov. Survey Unconditional Path (Mean)



\*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.

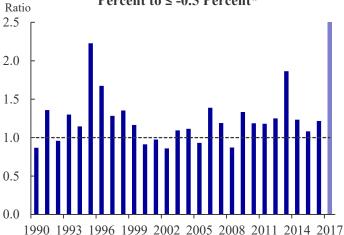
Source: Bloomberg, Desk Calculations, Federal Reserve Board, FRBNY

### (4) Month-to-Month Changes in Securities Held



01/01/13 01/01/14 01/01/15 01/01/16 01/01/17 01/01/18 \*Shaded area indicates projections. ECB data show securities held for monetary policy purposes. BoJ data includes long-term Japanese government bonds, ETFs, and REITS.

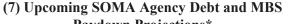
### (6) Ratio of 1-Day Changes in S&P $500 \ge +0.5$ Percent to ≤ -0.5 Percent\*

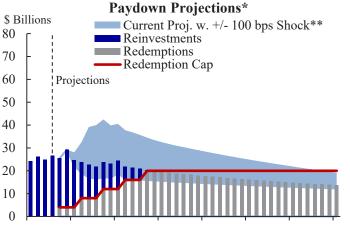


<sup>\*</sup>Ratios are for full year except for 2017, which reflects YTD data. Source: Bloomberg, Desk Calculations

<sup>\*\*</sup>Three-month rolling average of total change. Source: Haver, BoJ, ECB, Federal Reserve Board

Exhibit 2

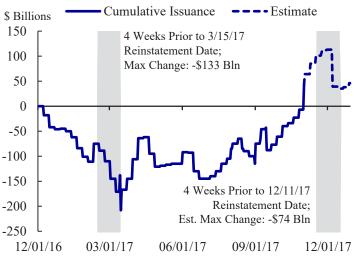




Jun-17 Dec-17 Jun-18 Dec-18 Jun-19 Dec-19 Jun-20 Dec-20

Source: FRBNY

### (9) Estimates for Cumulative Net Bill Issuance



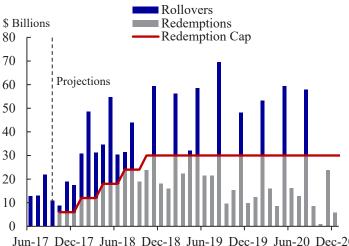
Source: Desk Calculations, U.S. Treasury

### (11) Overnight Unsecured Rates\* EFFR **OBFR** BPS 125 100 75 50 25 0 12/01/16 03/01/17 06/01/17 09/01/17

\*Grey dashed lines indicates quarter-ends. Shaded area reflects target range for the federal funds rate.

Source: FRBNY

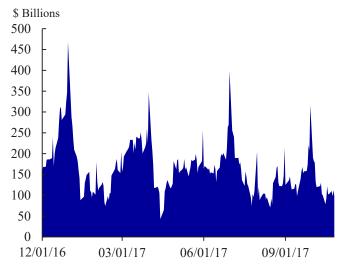
### (8) SOMA Treasury Rollovers



Jun-17 Dec-17 Jun-18 Dec-18 Jun-19 Dec-19 Jun-20 Dec-20

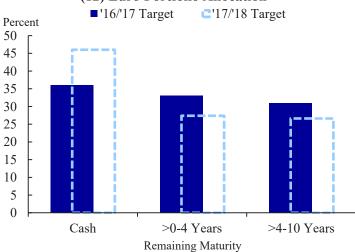
Source: FRBNY

### (10) ON RRP Take-Up



Source: FRBNY

### (12) Euro Portfolio Allocation\*



\*Remaining maturity at the start of each investment period. Source: FRBNY

<sup>\*</sup>Based on baseline market-implied scenario.

<sup>\*\*</sup>Projections are based on forward rates.

Appendix (Last)

#### **Appendix**

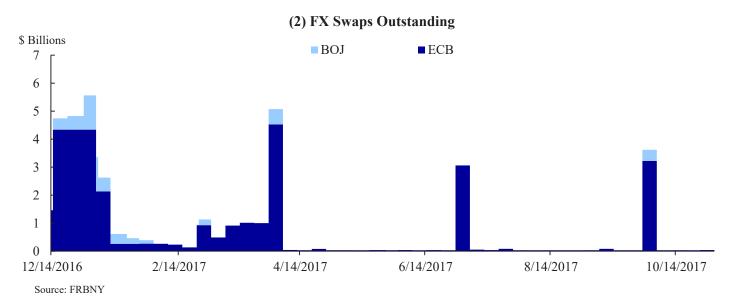
### (1) Summary of Operational Testing

Summary of Operational Tests in prior period:

- Domestic Authorization
  - October 24 and 25: Coupon swaps with unsettled agency MBS holdings for approximately \$20 million, total
- Foreign Authorization
  - October 10: Euro-denominated overnight repo for €1 million
- TDF Test Operation
  - October 19: Conducted 7-day test with total take-up of \$14.1 billion

#### Upcoming Operational Tests:

- Six tests scheduled under the Domestic Authorization
  - November 8: Term repo for no more than \$75 million
  - November 13: Term reverse repo for no more than \$175 million
  - November 16: Overnight reverse repo (with MBS collateral) for no more than \$25 million
  - November 20: Overnight repo for no more than \$75 million
  - November 28 and 29: Outright MBS sales (specified pool) for no more than \$180 million, total
  - December 6: Treasury outright sale of up to \$200 million par
- Four tests scheduled under the 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



### (3) FX Intervention

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

## **Appendix 2: Materials used by Mr. Lebow**

Material for the Briefing on

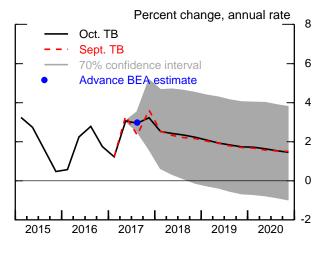
The U.S. Outlook

David E. Lebow October 31, 2017

### **Forecast Summary**

Confidence Intervals for Panels 1, 3, 7, and 8 Based on FRB/US Stochastic Simulations

### 1. Real GDP

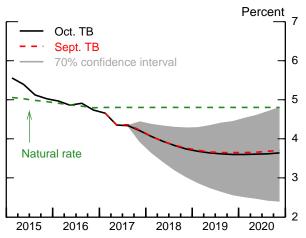


#### 2. Hurricane-Related Effects

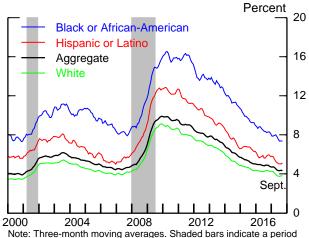
2017	2017	2018
Sept. Oct. Nov.	Q3 Q4	Q1
-200 150 50	-67 67	0
	Sept. Oct. Nov.	2017

<sup>\*</sup> Percentage point contribution at annual rate.

### 3. Unemployment Rate

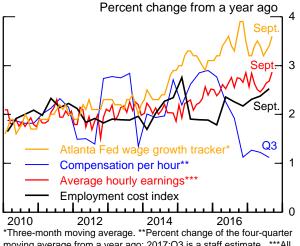


### 4. Unemployment Rates by Race or Ethnicity



of business recession as defined by the NBER.

### 5. Measures of Labor Compensation



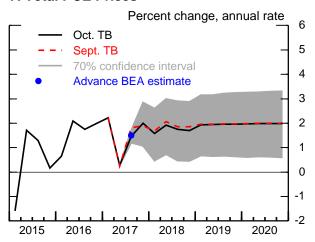
### moving average from a year ago; 2017:Q3 is a staff estimate. \*\*\*All employees.

### 6. Monthly PCE Price Inflation

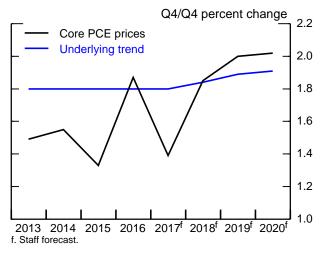


<sup>\*\*</sup> Contribution to change in month shown or to average monthly change in guarter shown, in thousands.

### 7. Total PCE Prices



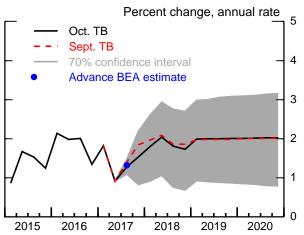
## 9. Core PCE Price Inflation and Its Underlying Trend



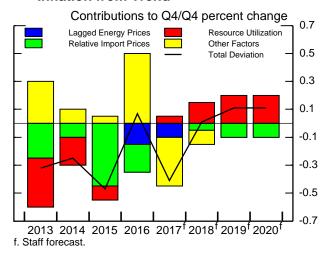
# 11. Core PCE Price Inflation and Its Estimated Common Component



### 8. PCE Prices Excluding Food and Energy



# 10. Decomposition of Deviations of Core Inflation from Trend



## **Appendix 3: Materials used by Ms. Wilson**

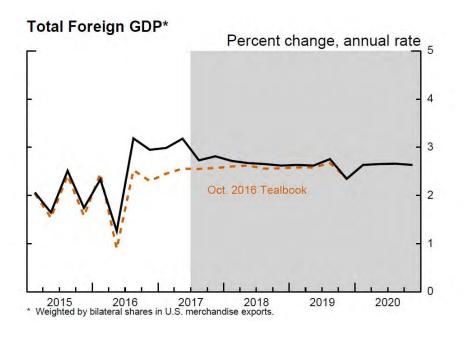
Material for the Briefing on

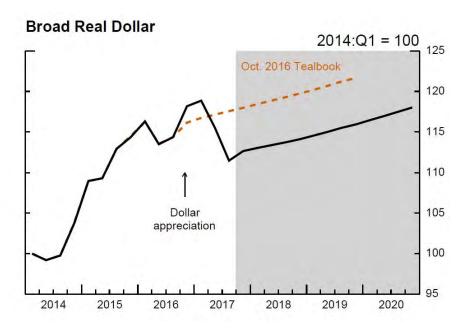
## The International Outlook

Beth Anne Wilson Exhibits by Meghan Letendre October 31, 2017

# Spillovers from Positive Foreign Environment

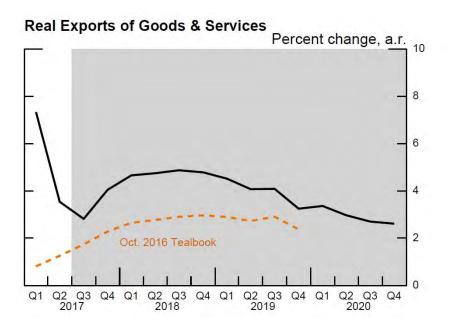
- Since last Halloween
  - Foreign growth has surprised on the upside
    - Almost ½ ppt higher in 2016 and 2017
  - And the dollar on the downside.
    - Level of the dollar is roughly 4¾ percent lower

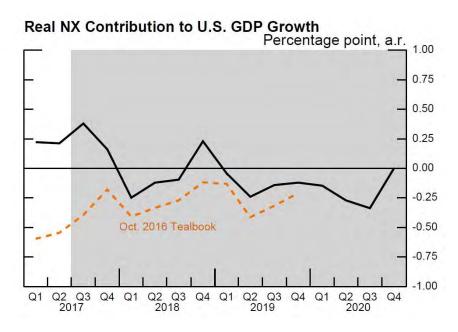




# Boosting U.S. Net Exports

- Consistent with firmer conditions abroad and a weaker dollar, exports have come in stronger
- While imports have been surprisingly weak.
- Leading to a sizable boost in the contribution of net exports to GDP.





# Supporting Domestic Markets

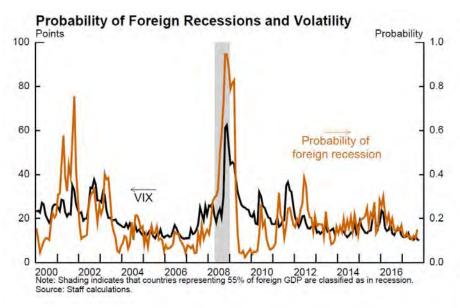
- Benign foreign conditions have boosted foreign equities
- And contributed to strong performance of U.S. firms, especially those with a relatively high share of foreign sales.





# Supporting Domestic Markets

- Also contributed to low volatility in the United States.
- Positive correlation between probability of foreign recessions and option-implied volatility in U.S. equity markets.
- Models of the VIX that include foreign factors account much better for its current low level than do models relying only on U.S. variables.

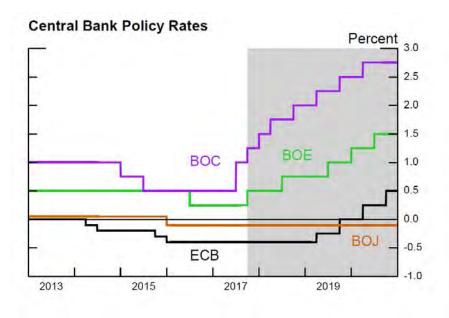


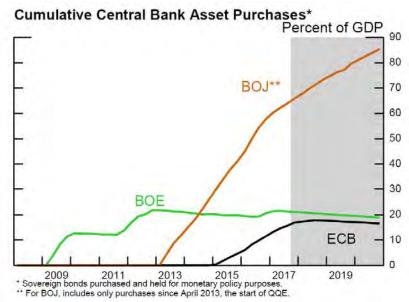


\*\* Adds in Foreign IP growth, Global EPU, and probability of recessions abroad.

# Accommodative Policy Abroad

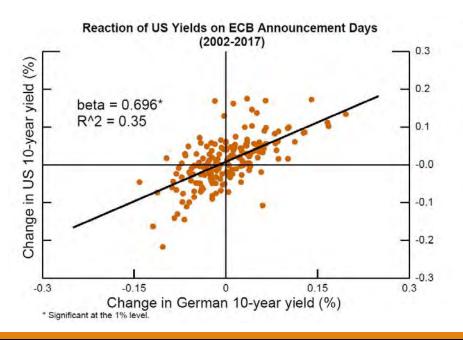
- Policy rates in the AFEs have remained low and balance sheets continue to rise.
- Anticipate only a very gradual reduction in AFE policy accommodation.

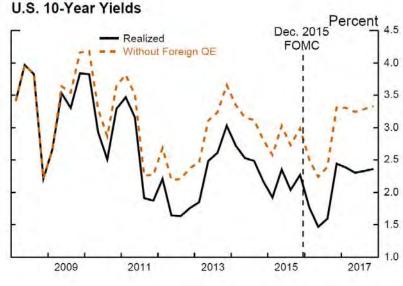




# Likely Lowers U.S. Rates

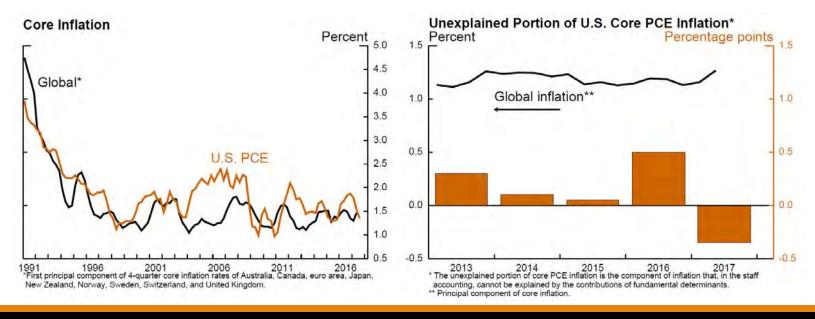
- Event-study analysis around ECB announcements finds positive relationship between changes in German and U.S. 10-year yields.
  - Comparable exercises for other AFEs suggests average pass-through of ½.
- This finding, combined with estimates of impact of foreign QE on own-country rates, suggests foreign purchases have likely pushed U.S. 10-year yields down noticeably relative to where they would be otherwise.





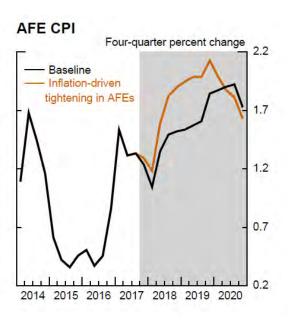
# Global Inflation Effect Less Clear

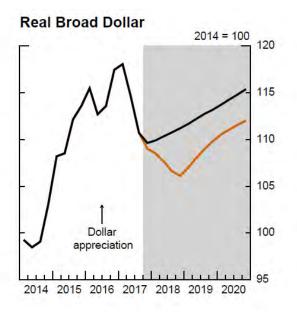
- Do low inflation readings in the U.S. reflect the influence of a common global factor?
- First principal component of core inflation across 9 advanced economies has explained a significant fraction of the variance of national inflation rates.
- However, little evidence that low level of global inflation is responsible for the latest downtick in U.S. inflation.

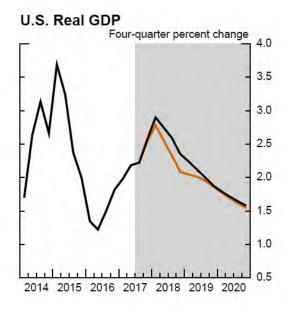


# We Could Still be Tricked: Bounceback in AFE Inflation

- AFE inflation could jump and central banks respond aggressively.
- If that happens, we think sovereign bond yields would rise, credit spreads widen, and the dollar fall as market participants quickly reposition.
- Financial stresses and lower growth abroad would weigh on U.S. growth and inflation, despite weaker dollar.

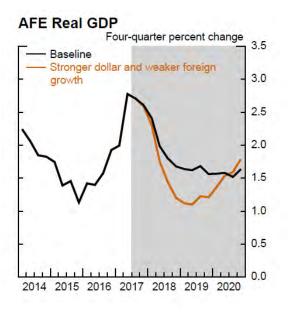


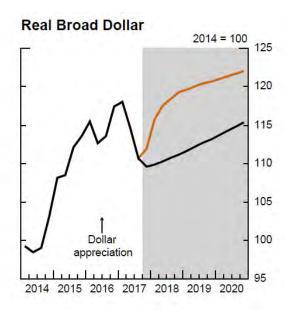


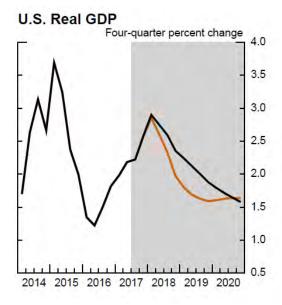


# Political Instability in Europe

- Rise of populist and anti-establishment parties—as well as the Catalan independence movement—could cause political instability.
- Could cause weakening of investor confidence in European institutions, leading to sizable flight-to-safety flows to dollar assets.
- U.S. growth and inflation take a moderate hit.







# Other International Risks: International Financial Stability Matrix

- Overall assessment remained "moderate."
- Some improvements:
  - Recovery in Brazilian growth.
- Remaining concerns:
  - Debt levels in China.
- New category, "Prominence of Risks"-- salient risks not well captured in standard matrix categories:
  - Geopolitical tensions in Korean peninsula.
  - NAFTA and elections in Mexico.

Country	IFSM Assessment October	IFSM Assessment April	Prominence of Risks
Canada	Moderate	Moderate	Low
France	Moderate	Moderate	Medium
Germany	Low	Low	Medium
Italy	Notable	Notable	High
Japan	Moderate	Moderate	Medium
Switzerland	Moderate	Moderate	Low
United Kingdom	Moderate	Moderate	High
Drazil	Notable	Elevated	High
Brazil			High
China	Notable	Notable	Medium
Hong Kong	Moderate	Moderate	Medium
Mexico	Notable	Notable	High
South Korea	Low	Low	High
Turkey	Elevated	Elevated	High



# Transmission of Stress to United States

- New tool based on myriad of
  - judgmental and
  - quantitative assessments.
- Transmission to the U.S. is stronger from AFEs
  - Bigger markets, more GSIFIs.
  - The EME exception is China.
- Good news
  - AFEs tend to have lower vulnerabilities and prominence of risks.
- But EMEs could still strike fear in global markets.

Country	Transmission to U.S.	
Country	Judgmental	Quantitative
Canada	Moderate	Moderate
France	Strong	Strong
Germany	Strong	Strong
Italy	Moderate	Moderate
Japan	Moderate	Moderate
Switzerland	Strong	Strong
United Kingdom	Strong	Strong
		-
Brazil	Weak	Weak
China	Strong	Moderate
Hong Kong	Weak	Moderate
Mexico	Weak	Weak
South Korea	Weak	Weak
Turkey	Weak	Weak

## **Appendix 4: Materials used by Mr. Covitz**

Material for the Briefing on

Financial Stability Developments

Daniel M. Covitz October 31, 2017

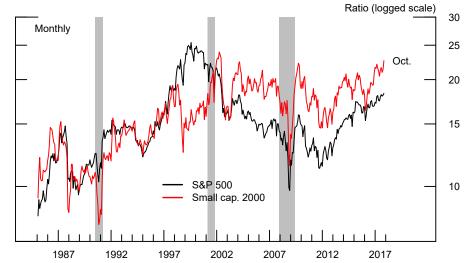
### Valuation Pressures

October 31, 2017

### Summary

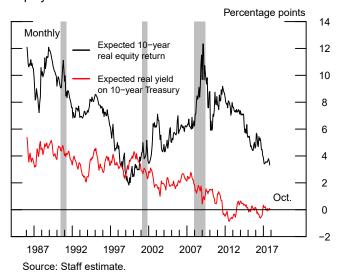
- Valuation pressures have increased a bit further from elevated levels.
- Valuations appear somewhat stretched, even controlling for low interest rates.

### Equity Price to Forward Earnings Ratios

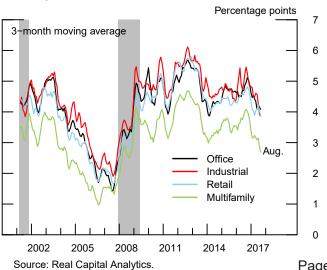


Source: Staff calculations using data from Thomson Reuters Financial.

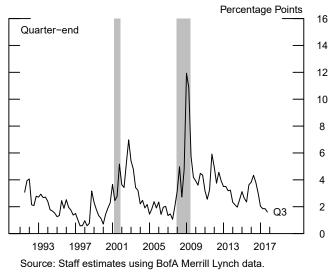
### **Equity Risk Premium**



### Spread of Capitalization Rate at Origination to Treasury Yield



### Risk Premium on High-Yield Bonds



**Empirical Estimates of Potential Price Drops** 

- Estimated distributions of two-year-ahead asset-price changes, unconditionally and conditional on valuations.
- Results suggest negative moves could be larger now.
- Equities: Unconditional 10th percentile is -16 percent, conditional is -36 percent.
- High-yield corporate bonds: Unconditional 90th percentile of yield changes is 175 bps, conditional is 300 bps.

Page 1 of 3

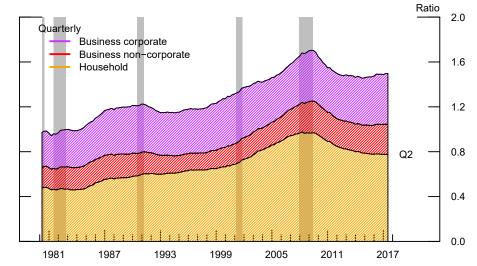
### Leverage and Maturity/Liquidity Transformation

October 31, 2017

### Summary

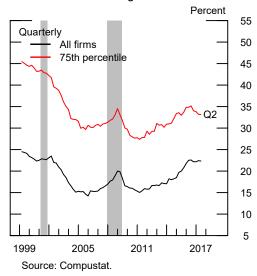
- Nonfinancial leverage remained moderate, on balance.
- Financial leverage continued to be low.
- Maturity and liquidity transformation remained low.

#### Private Nonfinancial Sector Credit-to-GDP



Source: Financial Accounts of the United States and NIPA.

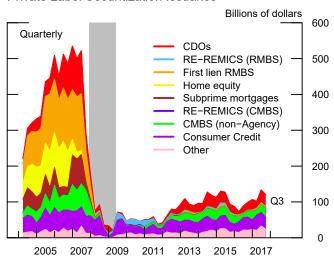
#### Net Business Leverage



### Financial Leverage and Liquidity

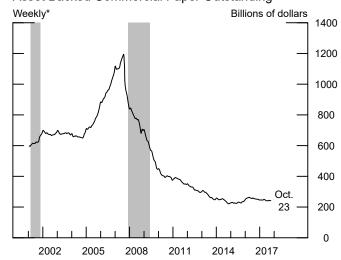
- Banks substantially increased capital and liquidity cushions with post-crisis reforms.
- Insurance companies well capitalized, though pockets of vulnerabilities exist related to FABS and securities lending programs.
- September Senior Credit Officer Opinion Survey showed a modest net fraction of dealers reported hedge funds increased leverage.

#### Private Label Securitization Issuance



Source: Asset-Backed Alert, Commercial Mortgage.

#### Asset Backed Commercial Paper Outstanding



Page 2 of 3 \* Four-week moving average.

Source: Federal Reserve Board using data from DTCC.

October 31, 2017 Class II FOMC - Restricted FR

### Staff Judgment on Levels of Vulnerabilities

Moderate Extremely subdued Low Notable Elevated Key:

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

expect vani	October 2016	portions of time in each of the colored ris  July 2017	October 2017
Valuation Pressures	Treasury term premiums remain well in negative territory  CRE valuations continue to rise as capitalization rates reached historical lows, but sales volumes declined and lending standards tightened  Corporate bond spreads and equity risk premiums are in line with historical norms	The equity price-to-earnings ratio is near its highest value outside of the dot-com era High-yield corporate bond spreads to Treasury yields have decreased further, while issuance of bonds and leveraged loans has been robust	The equity price-to-earnings ratio is near its highest value outside the dotcom era and has edged up further Corporate bond spreads to Treasury yields have compressed a little further, while standards and terms on leveraged loans have deteriorated over the last year CRE prices have continued to rise, although bank lending standards for
		Treasury term premiums remain subdued. Asset valuations appear less excessive, but still stretched, when compared to the current low Treasury yields	CRE loans have tightened somewhat  Asset valuations appear less excessive, but still stretched, when compared to current low Treasury yields
Private Nonfinancial Sector Leverage	Leverage for the nonfinancial corporate sector stayed elevated     Growth of risky corporate debt has been modest recently, but leverage of speculative-grade firms remained elevated     The debt-to-income ratio of households continues to inch down	contributing to slight increases in the credit-to-GDP ratio  However, overall nonfinancial sector leverage continues to be well below	Leverage in the nonfinancial corporate sector remains elevated, but risky debt outstanding has edged down     Household borrowing has moved up mainly for prime borrowers     Overall nonfinancial sector leverage continues to be below trend by most estimates
Financial Sector Leverage	Regulatory capital ratios for banks and insurance companies remain at high levels Measures of leverage in the nonbank sector suggest little change Spillovers related to developments at DB have been limited to equity prices of weakly capitalized European banks with similar business models	Capital positions at banks and insurance companies remain at high levels     Available indicators of leverage at other nonbank financial institutions are little changed	Capital positions at banks and insurance companies remain at high levels     Available indicators of leverage at other nonbank financial institutions are mostly little changed, though there are some signs of leverage increasing
Maturity and Liquidity Trans- formation	<ul> <li>Large BHCs' holdings of liquid assets remain at high levels</li> <li>Prime institutional money market funds have considerably lower AUM, decreasing the risks associated with a run in this sector</li> <li>First-mover advantage, and thus run-risk, remains at some openend bond mutual funds</li> </ul>	Large BHCs' holdings of liquid assets remain at high levels     There has been little growth outside of government funds in potential substitutes for prime money market funds     Insurance companies have seen growth in nontraditional liabilities and their securities lending programs	remain at high levels  There has been little growth outside of government funds in potential substitutes for prime money market funds
Overall Assessment			

## **Appendix 5: Materials used by Mr. Laubach**

## Class I FOMC – Restricted Controlled (FR)

Material for the Briefing on

## **Monetary Policy Alternatives**

Thomas Laubach Exhibits by Laurie Khalfan October 31-November 1, 2017

### **Uncertainty, Risks, and Policy Choices**

### **Current Areas of Uncertainty**

- Is  $u^*$  lower than you currently estimate?
- How much resource pressure will be required to return inflation to 2 percent?
- Could prolonged, tight resource utilization lead to financial instability or a rapid increase in inflation?
- What is the probability of achieving a "soft landing"?

### **Uncertainty and Policy Strategies**

- Level of  $u^*$  consistent with stable inflation.
- Two key parameters of the Phillips curve:
  - Resource utilization-inflation link.
  - Persistence of movements in inflation.
- Three policy strategies.
  - Tradeoffs depend on prevalence of supply shocks.

### Uncertainty and Misperception about *u*

- Previous research: if u<sup>\*</sup> is uncertain, appropriate to focus more strongly on stabilizing inflation.
- This strategy has less force in current circumstances; baseline outlook has:
  - Significant undershooting of unemployment and inflation.
  - A very flat short-run Phillips curve.

### Steeper Phillips Curve

- Under any strategy, unemployment undershooting generates a larger shift up in inflation.
  - Inflation below 1 percent or above 4 percent unlikely.
  - But moving inflation closer to target is costly in terms of unemployment.
- A balanced-approach rule outperforms a rule that responds strongly to inflation.

### **Additional Considerations**

- Could inflation expectations erode?
- Is the loss function symmetric?
  - Is undershooting unemployment less costly than overshooting?
- Could low unemployment lead to the emergence of financial stability risks or hysteresis effects?

### Policy Implications

- Alternative B:
  - Acknowledges downside inflation miss;
  - With a strong labor market and stable inflation expectations, gradual path of rate hikes remains appropriate.
- Alternative A:
  - More forceful policy response to low inflation appropriate.
- Alternative C:
  - Need to slow employment and real activity to sustainable rates.

### SEPTEMBER 2017 FOMC STATEMENT

- 1. Information received since the Federal Open Market Committee met in July indicates that the labor market has continued to strengthen and that economic activity has been rising moderately so far this year. Job gains have remained solid in recent months, and the unemployment rate has stayed low. Household spending has been expanding at a moderate rate, and growth in business fixed investment has picked up in recent quarters. On a 12-month basis, overall inflation and the measure excluding food and energy prices 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. Hurricanes Harvey, Irma, and Maria have devastated many communities, inflicting severe hardship. Storm-related disruptions and rebuilding will affect economic activity 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. Higher prices for gasoline and some other items in the aftermath of the hurricanes will likely boost inflation temporarily; apart from that effect, 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. In October, the Committee will initiate the balance sheet normalization program described in the June 2017 Addendum to the Committee's Policy Normalization Principles and Plans.

### OCTOBER-NOVEMBER 2017 ALTERNATIVE A

- 1. Information received since the Federal Open Market Committee met in July September indicates that, apart from hurricane-related disruptions, the labor market has continued to strengthen and that economic activity has been rising moderately so far this year. Job gains have remained solid in recent months Although the hurricanes caused a drop in payroll employment in September, and the unemployment rate has stayed low 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, overall inflation and the measure excluding food and energy prices 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. Hurricanes Harvey, Irma, and Maria have devastated many communities, inflicting severe hardship. Storm Hurricanerelated 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 expects that, with gradual adjustments in the stance of appropriate monetary policy accommodation, economic activity will expand at a moderate pace, and labor market conditions will strengthen somewhat further. Higher prices for gasoline and some other items in the aftermath of the hurricanes will likely boost inflation temporarily; apart from that effect, 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 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. In October, the Committee will initiate the balance sheet normalization program described in the June 2017 Addendum to the Committee's Policy Normalization Principles and Plans. [ The balance sheet normalization program initiated in October 2017 is proceeding.]

### OCTOBER-NOVEMBER 2017 ALTERNATIVE B

- 1. Information received since the Federal Open Market Committee met in July

  September indicates that the labor market has continued to strengthen and that
  economic activity has been rising moderately so far this year at a solid rate
  despite hurricane-related disruptions. Job gains have remained solid in recent
  months Although the hurricanes caused a drop in payroll employment in
  September, and the unemployment rate has stayed low 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, overall inflation and the measure excluding food and energy
  prices both inflation measures have declined this year and are running below
  2 percent. Market-based measures of inflation compensation remain low; surveybased 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. Hurricanes Harvey, Irma, and Maria have devastated many communities, inflicting severe hardship. Storm 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. Higher prices for gasoline and some other items in the aftermath of the hurricanes will likely boost inflation temporarily; apart from that effect, 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. In October, the Committee will initiate the balance sheet normalization program described in the June 2017 Addendum to the Committee's Policy Normalization Principles and Plans. [ The balance sheet normalization program initiated in October 2017 is proceeding.]

### OCTOBER-NOVEMBER 2017 ALTERNATIVE C

- 1. Information received since the Federal Open Market Committee met in July September indicates that the labor market has continued to strengthen tighten and that economic activity has been rising moderately so far this year at a solid rate despite hurricane-related disruptions. Job gains have remained solid in recent months Although the hurricanes caused a drop in payroll employment in September, and the unemployment rate has stayed low 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. On a 12-month basis, overall inflation and the measure excluding food and energy prices 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. Hurricanes Harvey, Irma, and Maria have devastated many communities, inflicting severe hardship. Storm 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 expects 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 pace to sustainable rates in the medium term, and labor market conditions will strengthen somewhat further. Higher prices for gasoline and some other items in the aftermath of the hurricanes will likely boost inflation temporarily; apart from that effect, 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. Nearterm 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<sup>1</sup>/<sub>4</sub> percent for the time being. 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 <u>further</u> 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. In October, the Committee will initiate the balance sheet normalization program described in the June 2017 Addendum to the Committee's Policy Normalization Principles and Plans. [ The balance sheet normalization program initiated in October 2017 is proceeding.]

### Implementation Note for October-November 2017 Alternatives A, B, and C

Release Date: November 1, 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 <u>statement</u> on <u>September 20 November 1</u>, 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 September 21 November 2, 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 percounterparty limit of \$30 billion per day.

The Committee directs the Desk to continue rolling over at auction Treasury securities maturing during September, and to continue reinvesting in agency mortgage backed securities the principal payments received through September from the Federal Reserve's holdings of agency debt and agency mortgage backed securities.

Effective in October 2017, 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 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 that exceeds \$4 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 the details of operational plans for reducing reinvestments may be found on the Federal Reserve Bank of New York's website.