

# March 2016

## US Interest Rates Chartbook

## **Bottom Line**

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Despite a softer FOMC Fed funds rate projected path, the futures market's disconnect from FOMC projections persists with Fed funds futures priced at only one rate increase in 2016 and no consecutive rate hikes until 2017

FOMC communication had more dovish undertones with last Yellen's speech (FRB Chair, March 29, 2016) than the March press-conference, while Bullard (FRB St. Louis President, March 24, 2016) rightfully underscores the FOMC's struggle to "remain time-consistent" with regard to no-rate hike decision in March

The downward pressure on long-term yields eased with a soft upturn in inflation expectations, while the impact of the global risk-off sentiment and the downgrade of global growth expectations keep term premium in negative territory

The underlying macroeconomic fundamentals continue to suggest sustainable but moderate growth in the U.S.

The downward bias in mid-term to long-term baseline yield forecasts toward a "prolonged flight to safety" scenario remains



## **Unconventional Monetary Policy**

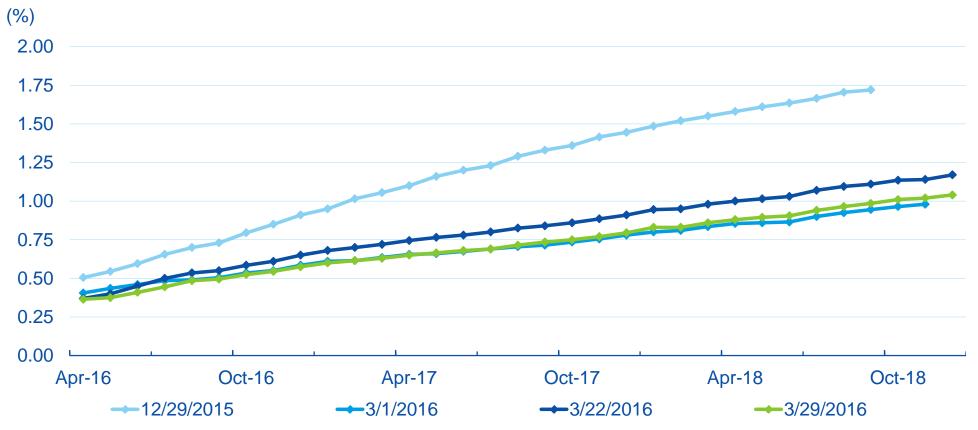
### Federal Funds Rate and 10-Year Treasury Note





### A Flatter Fed Funds Futures Curve

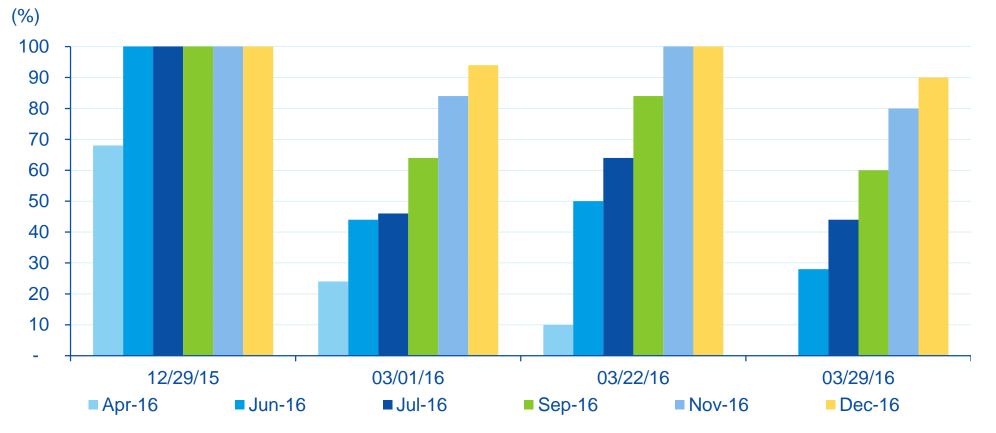
### Fed Funds Futures – Most Recent, 1 Week Prior, 1 Month Prior, 3 Months Prior





## June Rate Hike Probability at 28%

Fed Funds Futures Implied Probabilities, Second 25bp



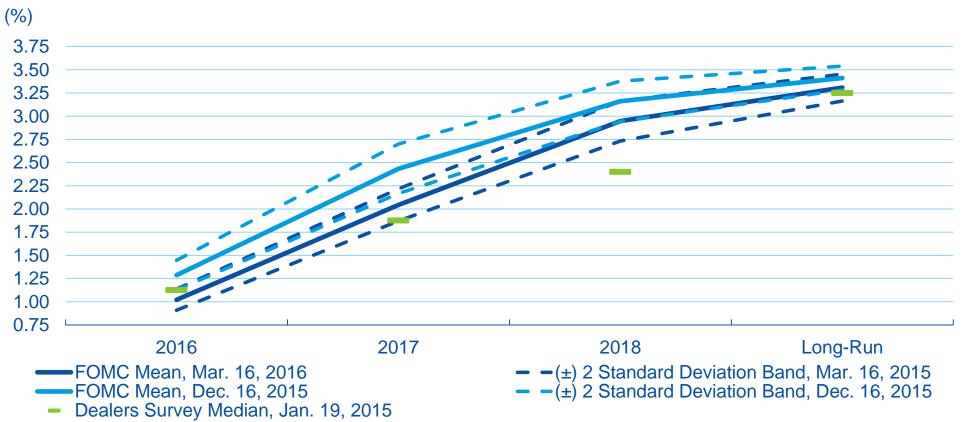
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## FOMC Revised Downwards Policy Firming Path by Average of 30 Basis Points

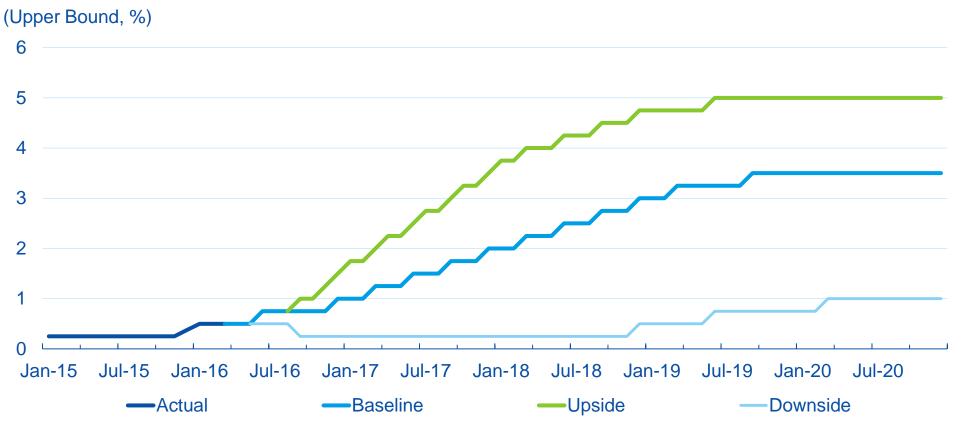
### **Projected Pace of Policy Firming**





## BBVA Fed Funds Forecast of the Pace of Firming Remains Unchanged

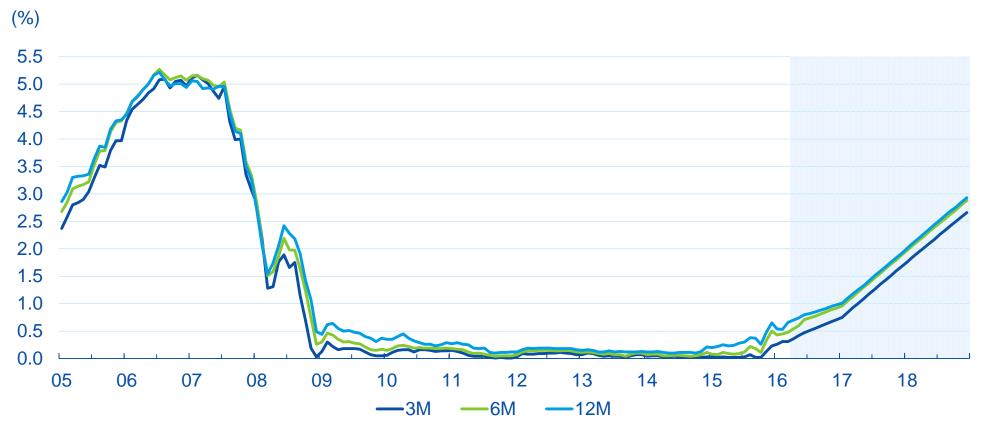
### **Federal Funds Rate**





### **Treasury Bill Yields Baseline Forecasts**

#### 3-Month to 12-Month Rates



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## Long-Term Rates Futures Volatility Normalizes Below Historic Mean

### **10-Year U.S. Treasury Note Volatility**

(Daily Index)

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Index measures a constant 30-day expected volatility of 10-Year Treasury Note futures prices, and is calculated based on transparent pricing from Chicago Board of Trade's actively traded options on the Treasury Note futures.

Source: BBVA Research, Chicago Board Options Exchange and Bloomberg

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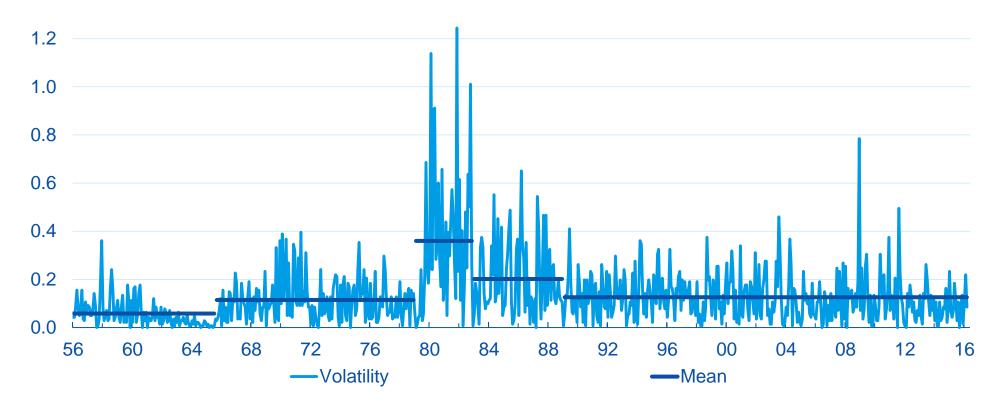
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## Long-Term Rates Yield Volatility is Near Historic Mean

### **10-Year U.S. Treasury Yield Volatility**

(MoM, %)

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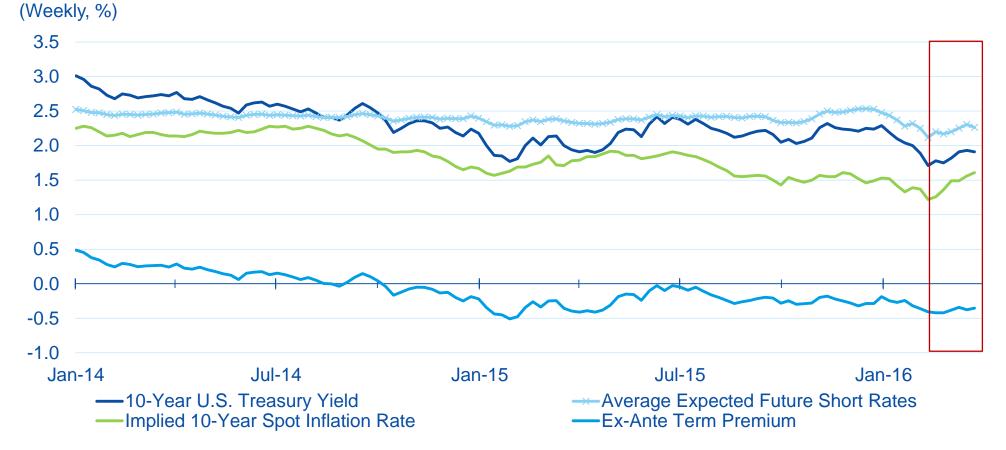


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## Downward Pressure on Term Premium Remains, Turn Around in Inflation Expectations

**10-Year U.S. Treasury Term Premium & Market Inflation Expectations** 



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## Long-Term Duration-Risk Compression Positive but Near Zero

**Duration-Risk Compression** 



Calculated as the difference between 5-Year and 3-Year term premium reported by the New York Fed ACM (Adrian, Crump, and Moench) five-factor, no-arbitrage term structure model incorporating pricing factors.

Source: BBVA Research, Federal Reserve Bank of New York and Haver Analytics



## Mid-Term Duration-Risk Compression Dropped Farther Below Historic Mean

#### **Duration-Risk Compression**



Calculated as the difference between 5-Year and 3-Year term premium reported by the New York Fed ACM (Adrian, Crump, and Moench) five-factor, no-arbitrage term structure model incorporating pricing factors.

Source: BBVA Research, Federal Reserve Bank of New York and Haver Analytics



### Futures Discount at 10bp Raise in 10YTN Yields Over the Next 3 Quarters

**10-Year U.S. Treasury Yield Futures – Most Recent, 1 Week Prior, 1 Month Prior, 3 Months Prior** (%)



### **Treasury Yield Curve Scenarios**

| Averages for 2016-2019                  | Baseline | Prolonged<br>Safe Haven<br>Flows | Downside | Upside |
|---|----------|----------------------------------|----------|--------|
| GDP Growth                              | 2.3%     | 2.3%                             | 1.5%     | 2.9%   |
| Unemployment                            | 4.6%     | 4.9%                             | 6.3%     | 4.2%   |
| CPI Inflation                           | 1.8%     | 1.8%                             | 1.0%     | 2.5%   |
| FFR EOP                                 | 3.5%     | 3.5%                             | 0.75%    | 5.0%   |
| 10-Year Treasury Yield EOP              | 4.4%     | 3.8%                             | 2.4%     | 5.8%   |
| Treasury Yield Curve Slope<br>10Y-2YEOP | 0.7%     | 0.3%                             | 1.3%     | 0.6%   |

\* Prolonged safe heaven flows scenario assumes baseline macro economic conditions but also encompasses intensified safe haven flow conditions such as prolonged global financial volatility and risk-off sentiment.



## **10-Year Treasury Yield Forecasts**

### **10-Year U.S. Treasury Yield**

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\* National Association for Business Economics (NABE) Outlook median forecast compiled from a panel of NABE members. Last release date Mar 28, 2016

\*\* Survey of Professional Forecasters (SPF) conducted by Federal Reserve Bank of Philadelphia. Last release date Feb. 12, 2016

\*\*\* Congressional Budget Office (CBO). Last release date Jan. 25, 2016

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## Yield Curve Slope Forecasts

### **Treasury Yield Curve Slope**

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(10Y-2Y, %)

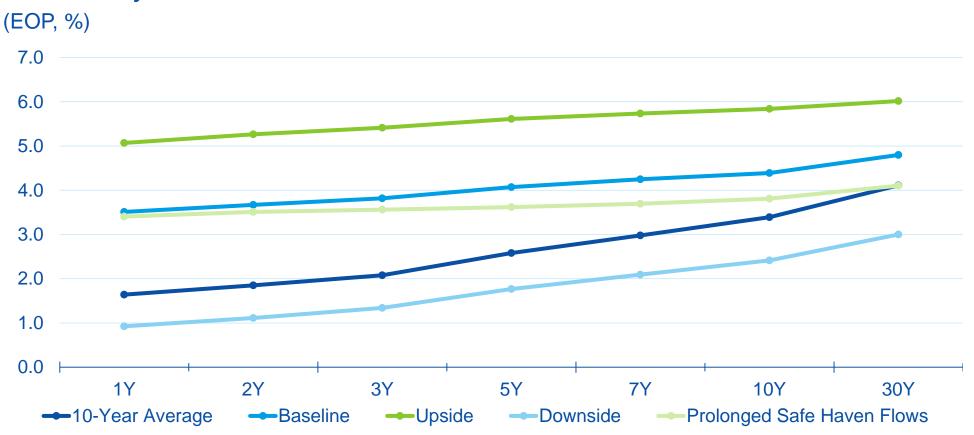
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## **2019 Yield Curve Forecasts**

### **2019 Treasury Yield Curve**



### **Treasury Yield Curve Baseline Forecasts**



Treasury yield curve is estimated with a three-factor no-arbitrage model linked to macroeconomic factors measuring growth, inflation and monetary policy. Estimates are based on BBVA Research baseline forecast for GDP growth, inflation and Fed funds rate.

Source: BBVA Research, Federal Reserve Board and Haver Analytics

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## **Swap Curve Baseline Forecasts**

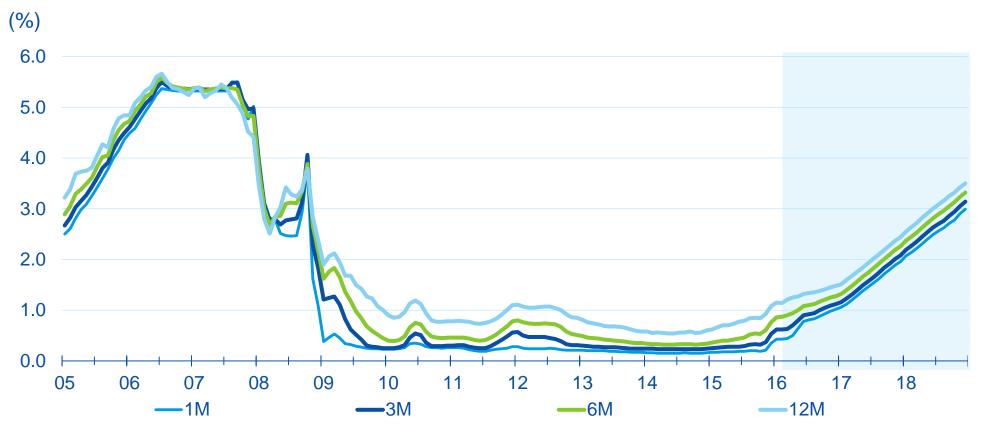
### **U.S. Swap Rates**





## **LIBOR Curve Baseline Forecasts**

### **U.S. LIBOR Rates**





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