

March 2016

US Interest Rates Chartbook

Bottom Line

RESEARCH

BBVA

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

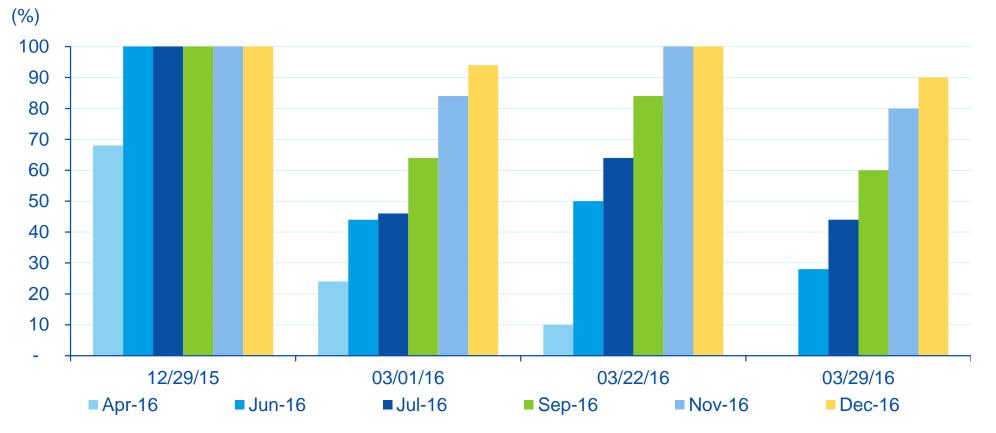
Fed Funds Futures – Most Recent, 1 Week Prior, 1 Month Prior, 3 Months Prior





June Rate Hike Probability at 28%

Fed Funds Futures Implied Probabilities, Second 25bp



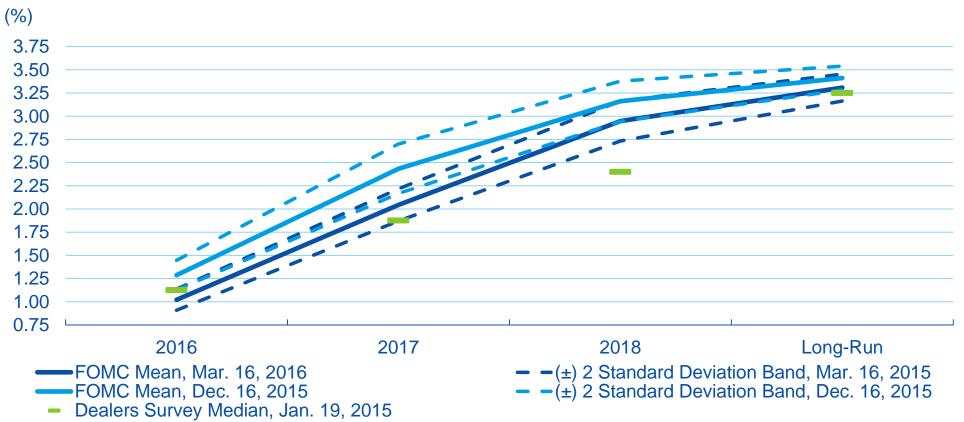
RESEARCH

BBVA

U.S. Interest Rate Chartbook. March 2016

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

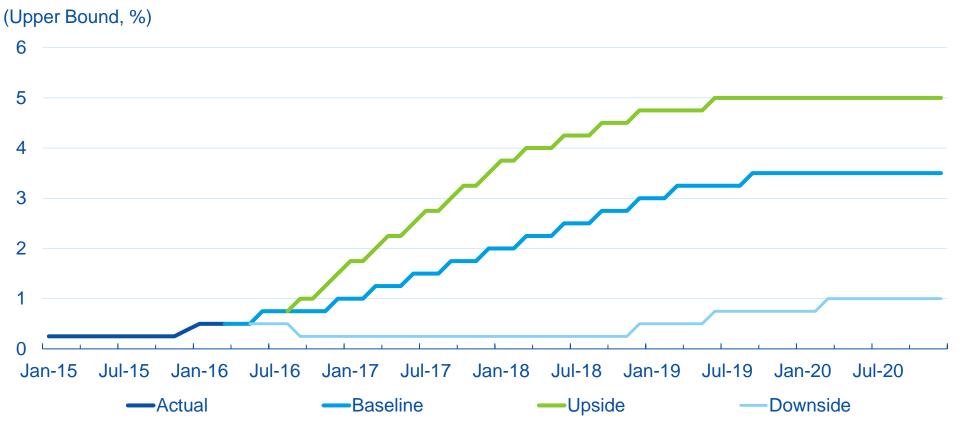
Projected Pace of Policy Firming





BBVA Fed Funds Forecast of the Pace of Firming Remains Unchanged

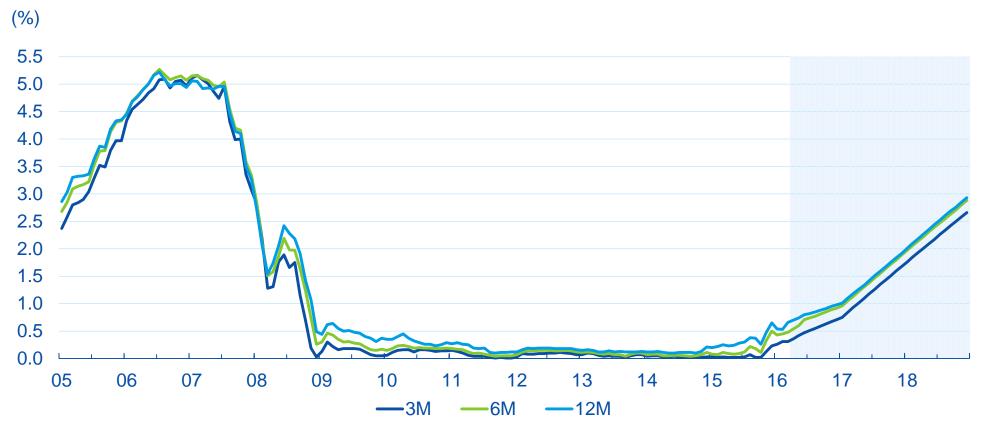
Federal Funds Rate





Treasury Bill Yields Baseline Forecasts

3-Month to 12-Month Rates



RESEARCH

U.S. Interest Rate Chartbook. March 2016

Long-Term Rates Futures Volatility Normalizes Below Historic Mean

10-Year U.S. Treasury Note Volatility

(Daily Index)

BBVA



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

RESEARCH

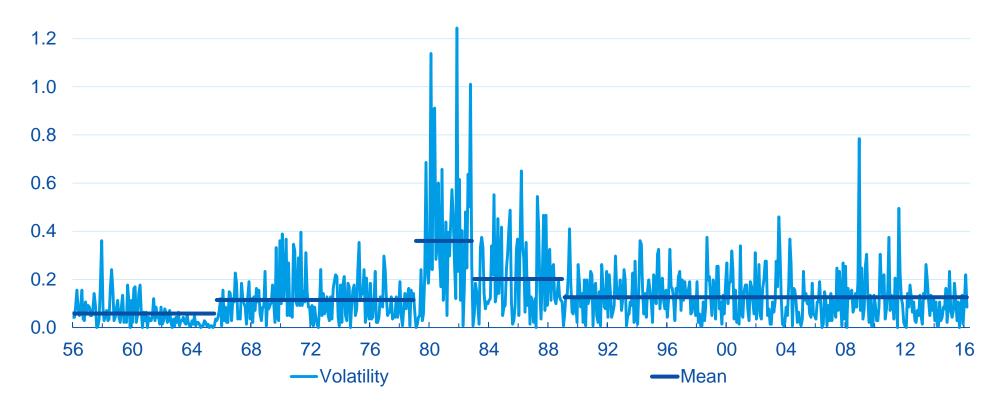
U.S. Interest Rate Chartbook. March 2016

Long-Term Rates Yield Volatility is Near Historic Mean

10-Year U.S. Treasury Yield Volatility

(MoM, %)

BBVA

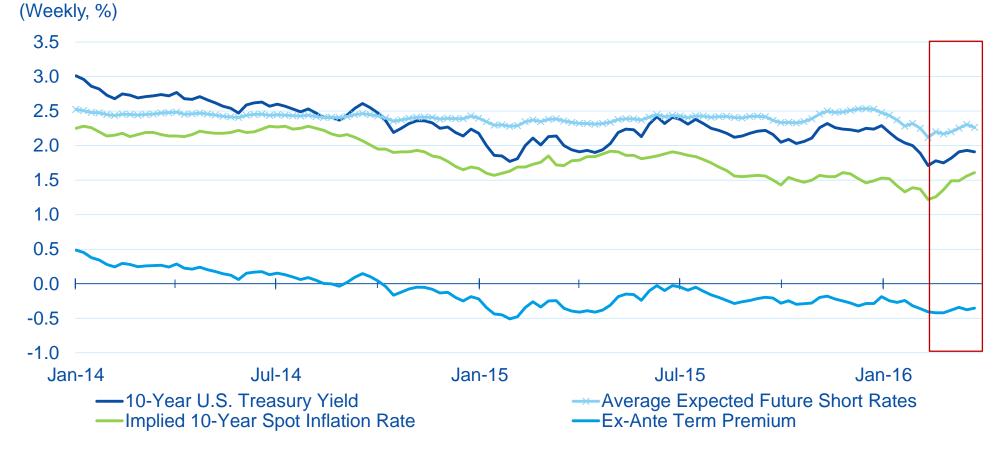


BBVA RESEARCH

U.S. Interest Rate Chartbook. March 2016

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

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



RESEARCH

BBVA

U.S. Interest Rate Chartbook. March 2016

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 Safe Haven 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 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

RESEARCH

BBVA



* 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

16



Yield Curve Slope Forecasts

Treasury Yield Curve Slope

RESEARCH

(10Y-2Y, %)

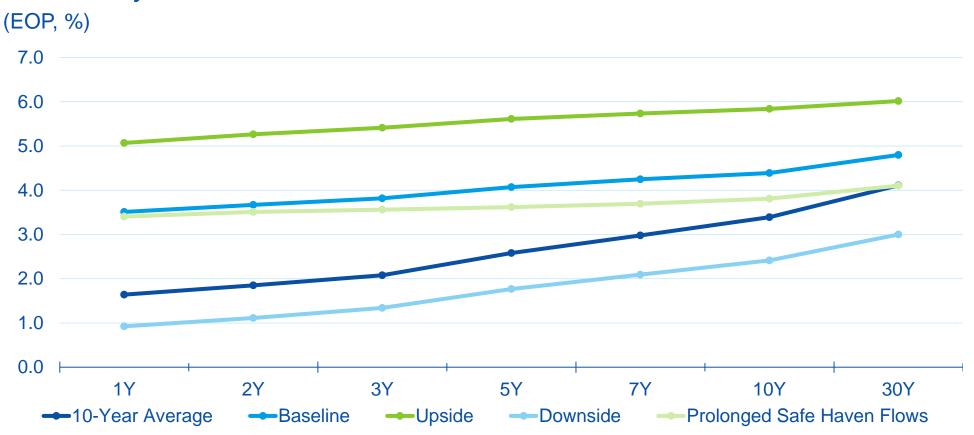
BBVA





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

BBVA

RESEARCH



Swap Curve Baseline Forecasts

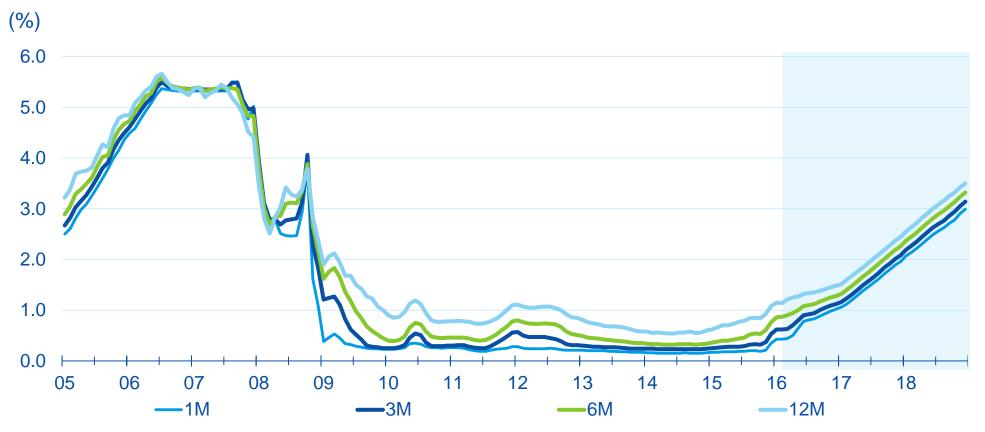
U.S. Swap Rates





LIBOR Curve Baseline Forecasts

U.S. LIBOR Rates





DISCLAIMER

This document was prepared by Banco Bilbao Vizcaya Argentaria's (BBVA) BBVA Research U.S. on behalf of itself and its affiliated companies (each BBVA Group Company) for distribution in the United States and the rest of the world and is provided for information purposes only. Within the US, BBVA operates primarily through its subsidiary Compass Bank. The information, opinions, estimates and forecasts contained herein refer to the specific date and are subject to changes without notice due to market fluctuations. The information, opinions, estimates and forecasts contained in this document have been gathered or obtained from public sources, believed to be correct by the Company concerning their accuracy, completeness, and/or correctness. This document is not an offer to sell or a solicitation to acquire or dispose of an interest in securities.