

U.S. Interest Rates Chartbook

August 2017

Takeaways

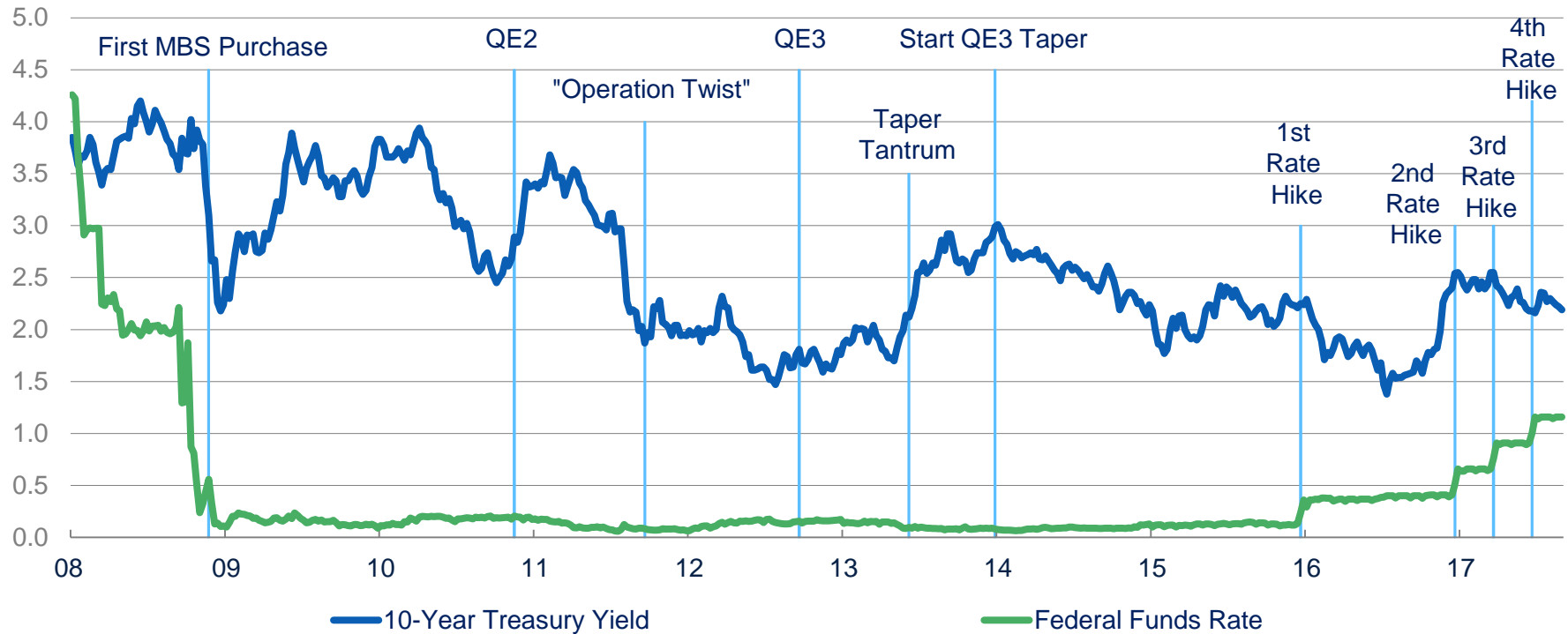
- ◆ Minutes from the July FOMC meeting revealed that some members continue to raise concern with tame inflation. However, FOMC members have echoed agreement to start shrinking the balance sheet soon
- ◆ The primary dealers July survey has revealed a 25 basis point lower long-term Fed funds rate expectation relative to the FOMC June projection
- ◆ The 10-Year Treasury yield at the end of August has dropped to a 9-month low of 2.13 percent as geopolitical risks put further downward pressure on term premium
- ◆ Long-term yield volatility has remained at historic lows
- ◆ In the long-run, the yield curve is expected to flatten due to upward pressure on short-term rates from the Fed funds rate hikes while long-term yields will remain under downward pressure from low term-premium, a decline in inflation expectations, and from continued risk-off sentiment



Unconventional Monetary Policy

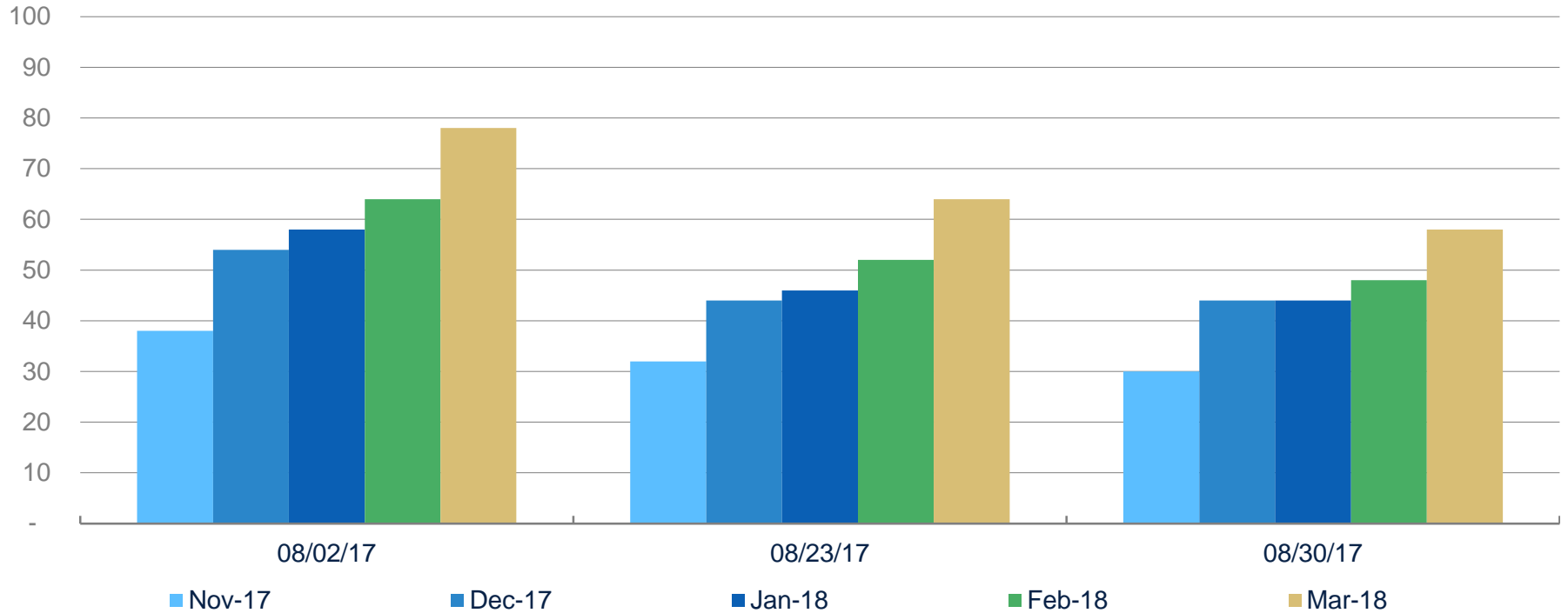
FEDERAL FUNDS RATE AND 10-YEAR TREASURY NOTE

(%)



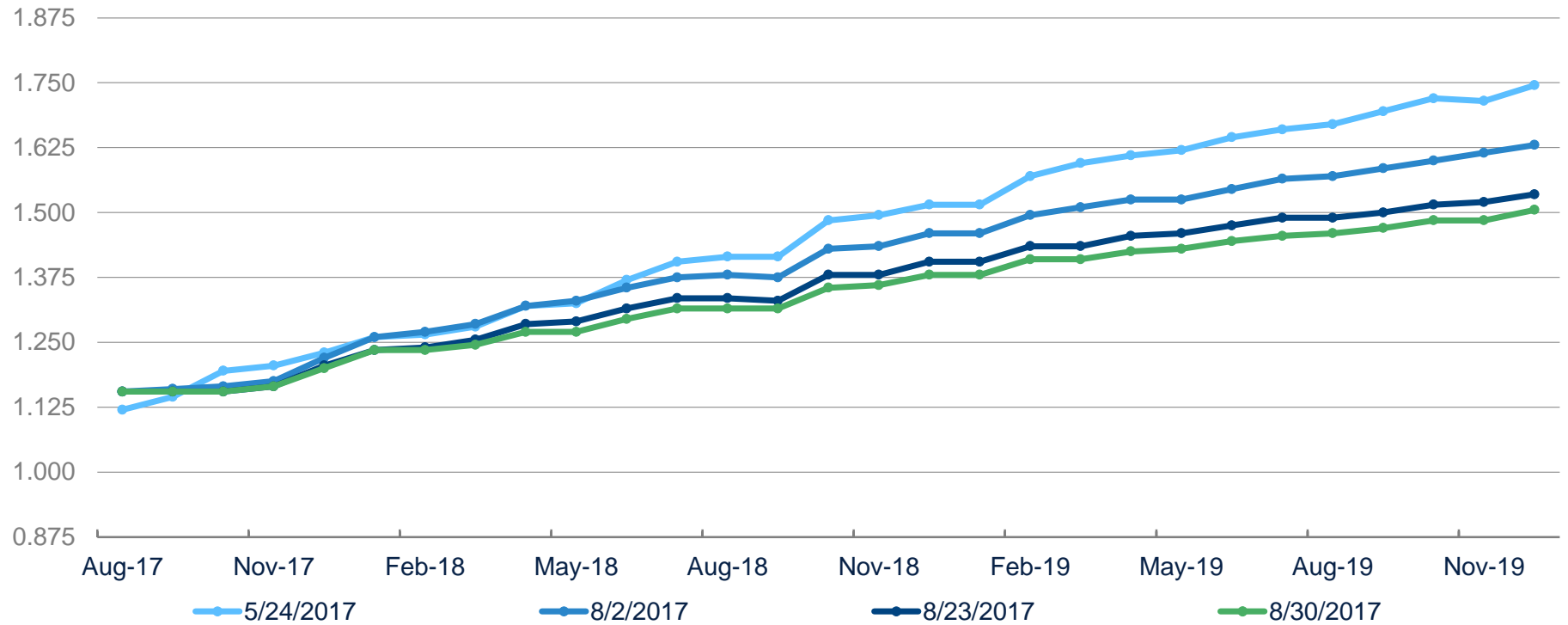
A Fifth Rate Hike is Priced in for 1Q18

FED FUNDS FUTURES IMPLIED PROBABILITIES, FIFTH 25BP HIKE
(%)



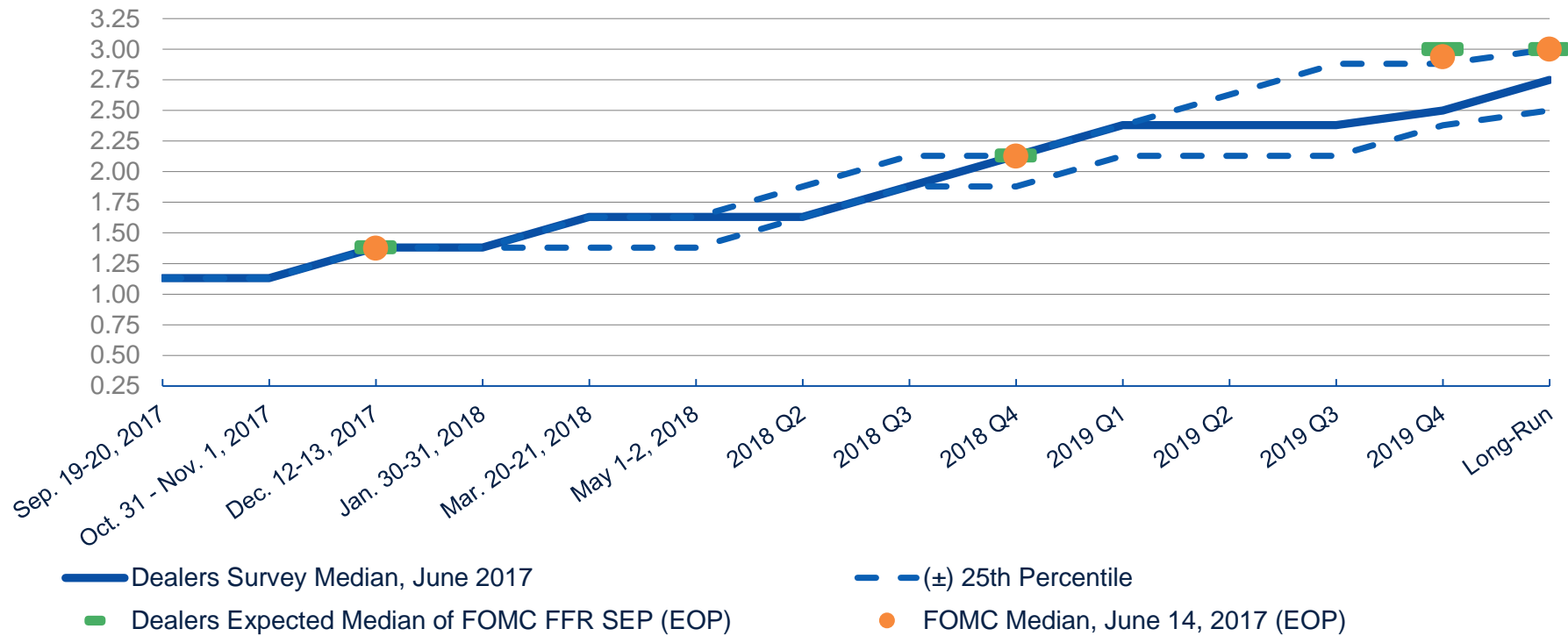
A Flatter Fed Funds Futures Curve

FED FUNDS FUTURES – MOST RECENT, 1 WEEK PRIOR, 1 MONTH PRIOR, 3 MONTHS PRIOR
(%)



Dealers' Expectations for the Long-Run Fed Funds Rate Have Declined to 2.75%, Diverging from the FOMC's 3.00%

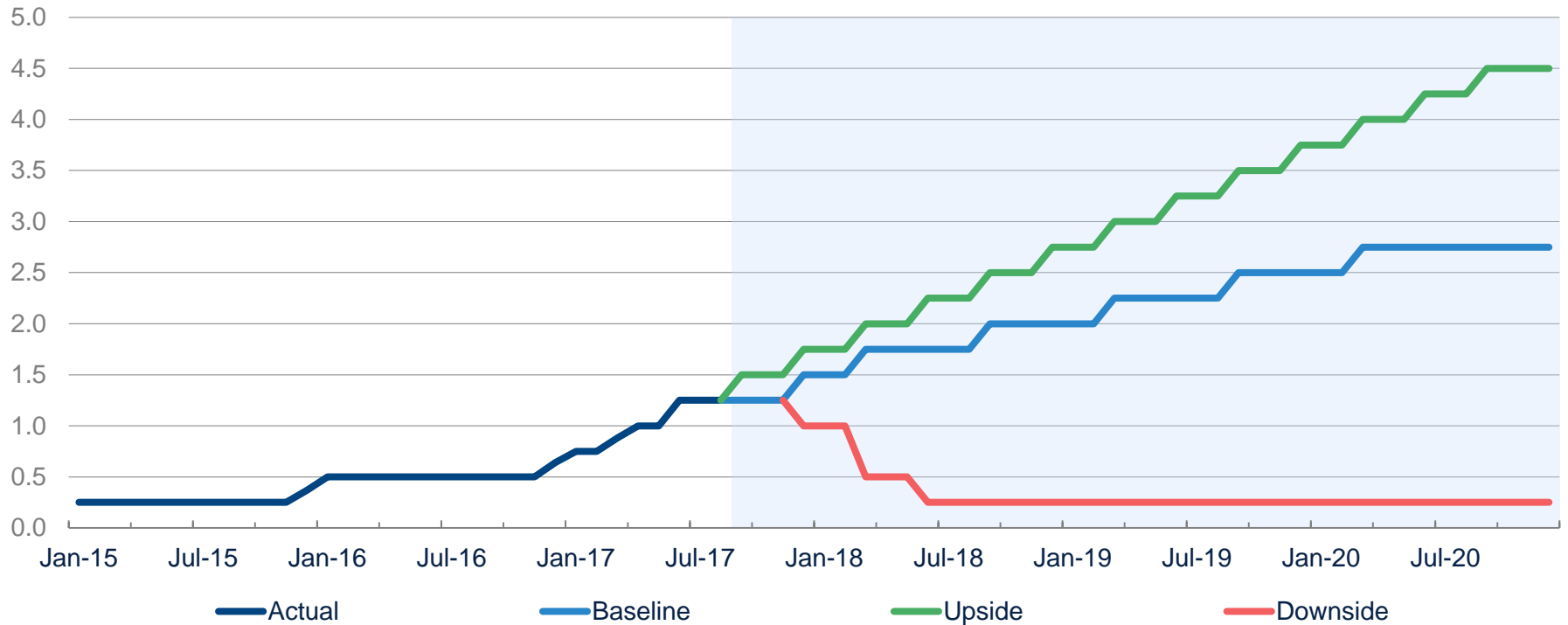
PROJECTED PACE OF POLICY FIRMING (%)



Survey of Primary Dealers is formulated by the Trading Desk at the Federal Reserve Bank of New York. Last received date June 5, 2017

Fed Funds Firming Pace Forecast

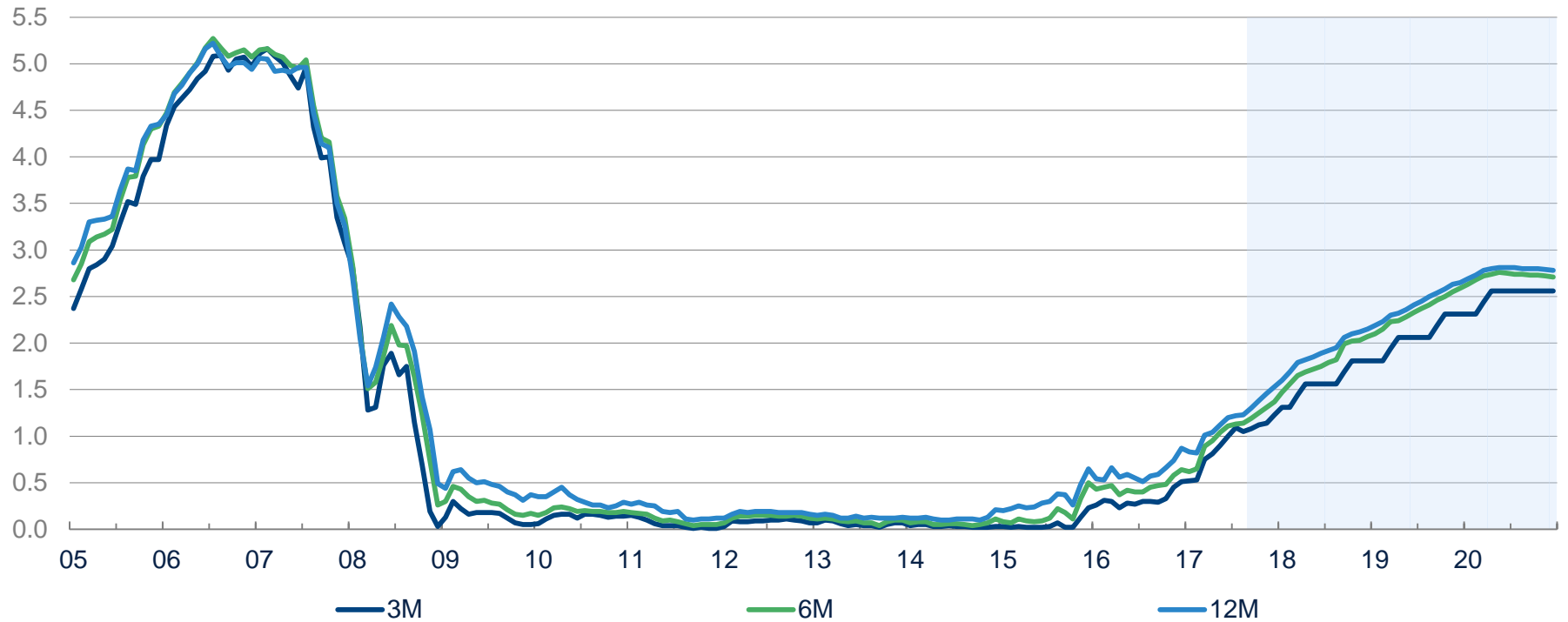
FEDERAL FUNDS RATE
(%, Upper Bound, End of Period)



Source: BBVA Research, Federal Reserve Board and Haver Analytics

Baseline Forecasts of Treasury Bill Yield

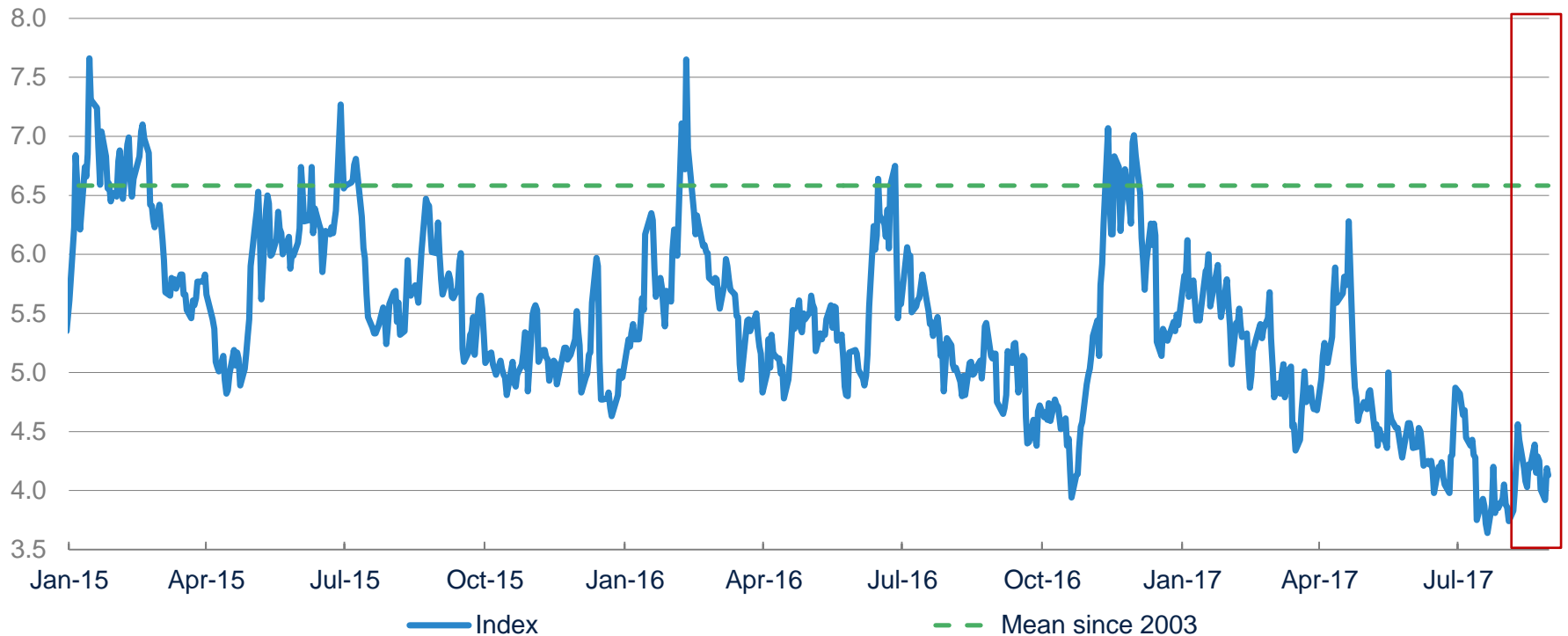
3-MONTH TO 12-MONTH RATES
(%)



Source: BBVA Research, Federal Reserve Board and Haver Analytics

Long-Term Yield Volatility Has Normalized Substantially Below Its Historic Mean

10-YEAR U.S. TREASURY NOTE VOLATILITY
(Daily index)

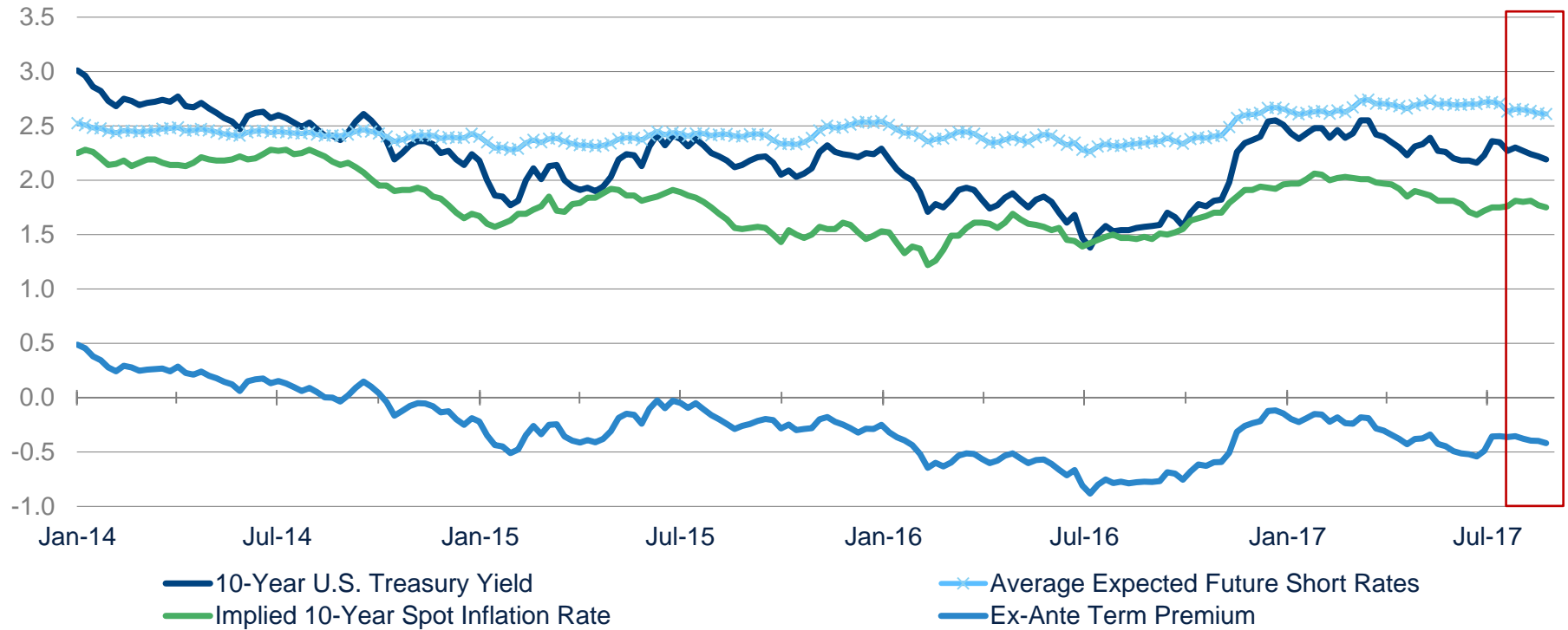


Index measures a constant 30-day expected volatility of 10-Year Treasury Note futures prices, and is calculated based on transparent pricing from the Chicago Board of Trade's actively traded options on the Treasury Note futures

Sustained Downward Pressure on Term Premium

10-YEAR U.S. TREASURY TERM PREMIUM & MARKET INFLATION EXPECTATIONS

(Weekly, %)

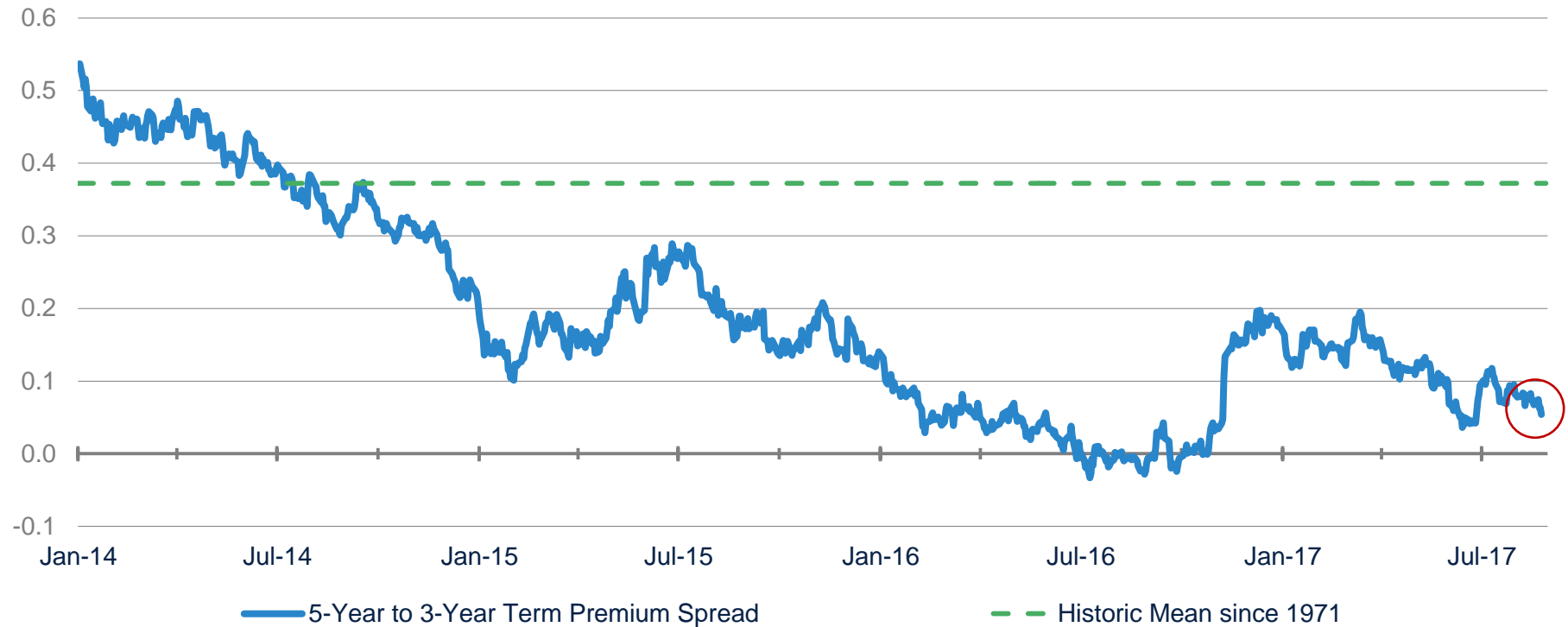


Source: BBVA Research, Federal Reserve Board and Federal Reserve Bank of New York

Mid-Term Duration-Risk Compression Has Normalized at 9 Basis Points

DURATION-RISK COMPRESSION

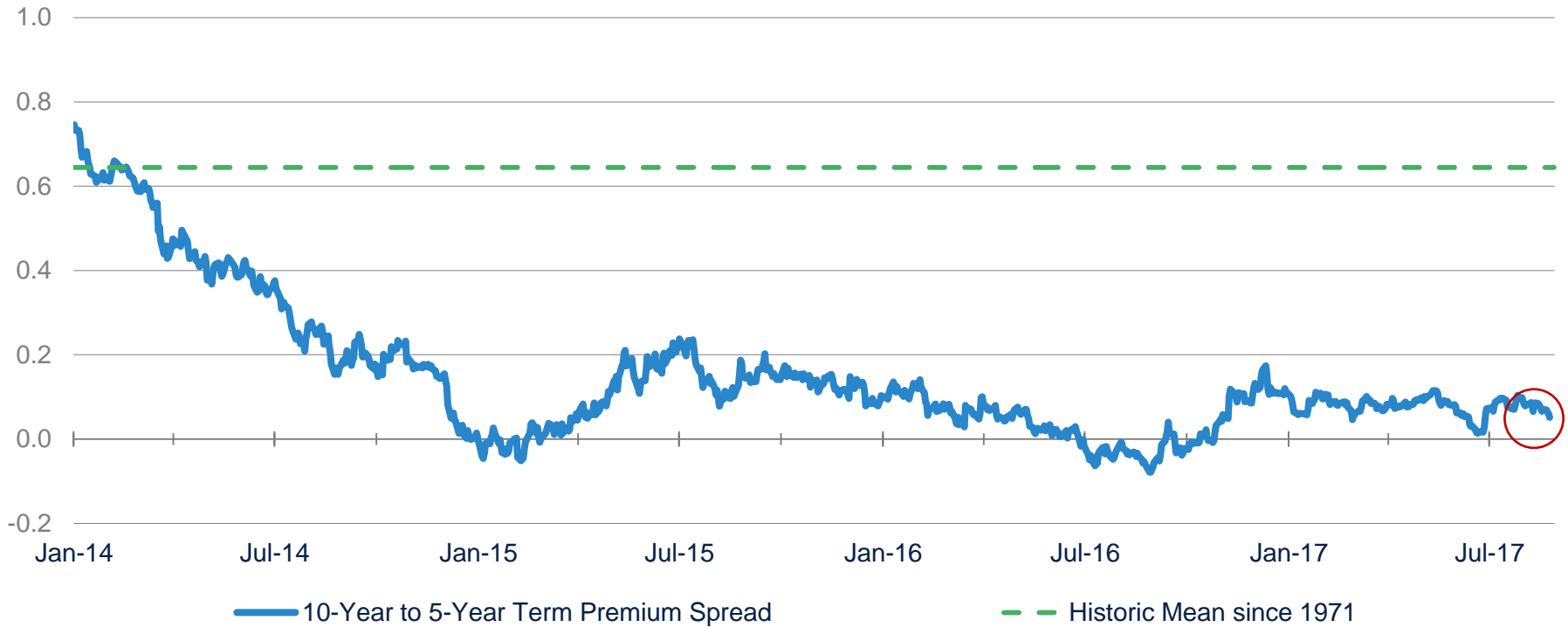
(Daily, %)



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.

Long-Term Duration-Risk Compression Has Declined to 5 Basis Points

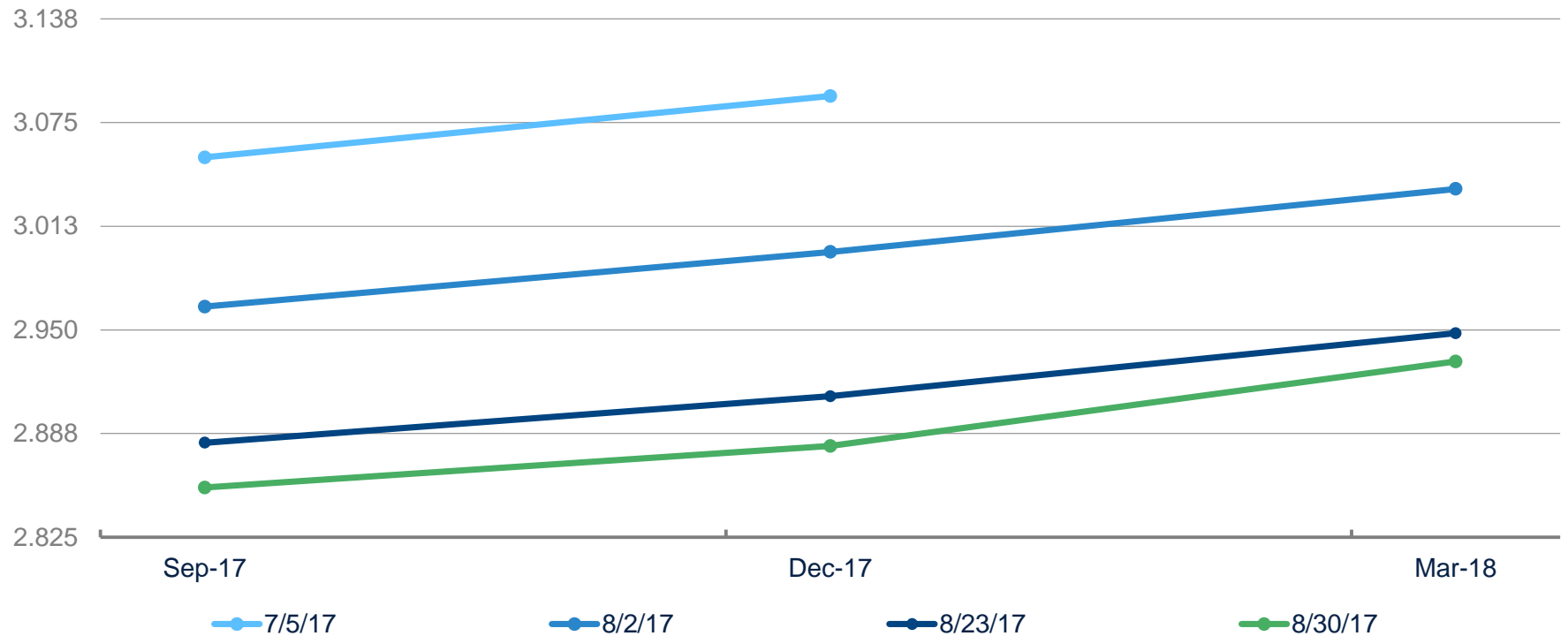
DURATION-RISK COMPRESSION
(Daily, %)



Calculated as the difference between 10-Year and 5-Year term premium reported by the New York Fed ACM (Adrian, Crump, and Moench) five-factor, no-arbitrage term structure model incorporating pricing factors.

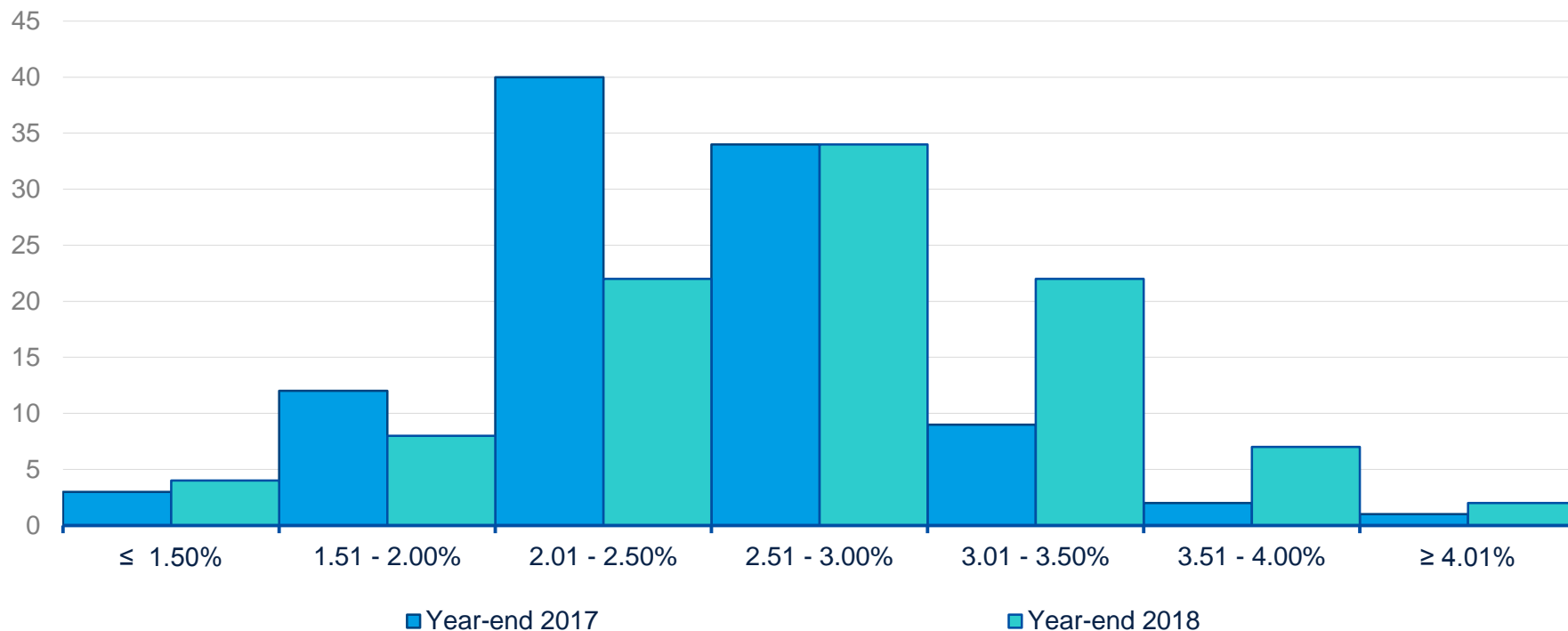
Futures Discount an 8 Basis Points Raise in 10-Year Treasury Yield Over the Next 3 Quarters

10-YEAR U.S. TREASURY YIELD FUTURES – MOST RECENT, 1 WEEK PRIOR, 4 WEEKS PRIOR, 8 WEEKS PRIOR (%)



Primary Dealers Expect 10-Year Treasury Yield to Remain in the Range of 2.01-2.50% at Year-end 2017

Percent Chance Attached to 10-Year U.S. Treasury Yield Falling in Each of the Following Ranges (% , Average)



Survey of Primary Dealers is formulated by the Trading Desk at the Federal Reserve Bank of New York. Last received date July 17, 2017

10-Year Treasury Yield Forecasts

10-YEAR U.S. TREASURY YIELD (%)



* National Association for Business Economics (NABE) Outlook median forecast compiled from a panel of NABE members. Last release date June 4, 2017

** Survey of Professional Forecasters (SPF) conducted by Federal Reserve Bank of Philadelphia. Last release date August 11, 2017

*** Congressional Budget Office (CBO). Last release date June 29, 2017

**** Administration: 2018 Budget. Last release date May 23, 2017

Yield Curve Slope Forecasts

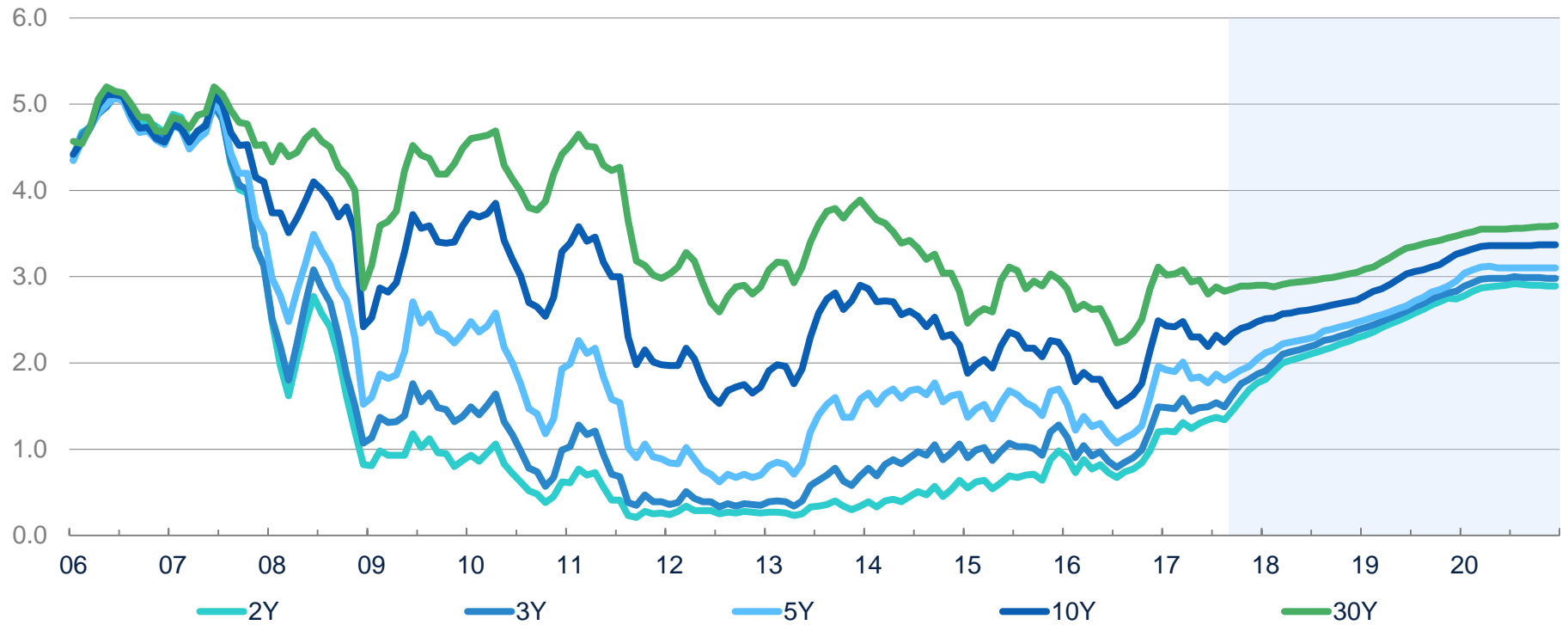
TREASURY YIELD CURVE SLOPE
(%, 10Y-2Y)



Source: BBVA Research, Federal Reserve Board and Haver Analytics

Treasury Yield Curve Baseline Forecasts

U.S. TREASURY YIELD CURVE
(%)

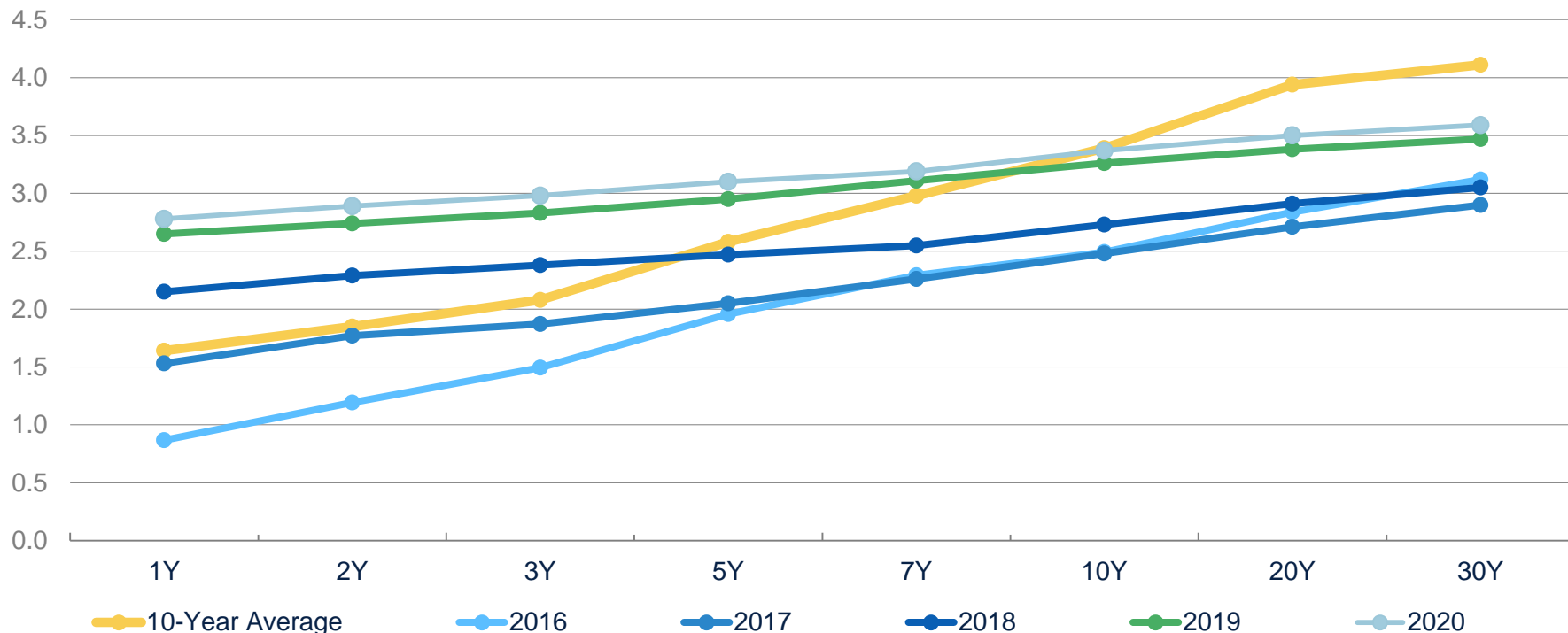


Treasury yield curve is estimated with a three-factor no-arbitrage model linked to macroeconomic factors measuring growth, inflation and monetary policy. Estimates are based on BBVA research baseline forecast for GDP growth, inflation and Fed funds rate.

Yield Curve Forecasts

TREASURY YIELD CURVE BASELINE FORECAST

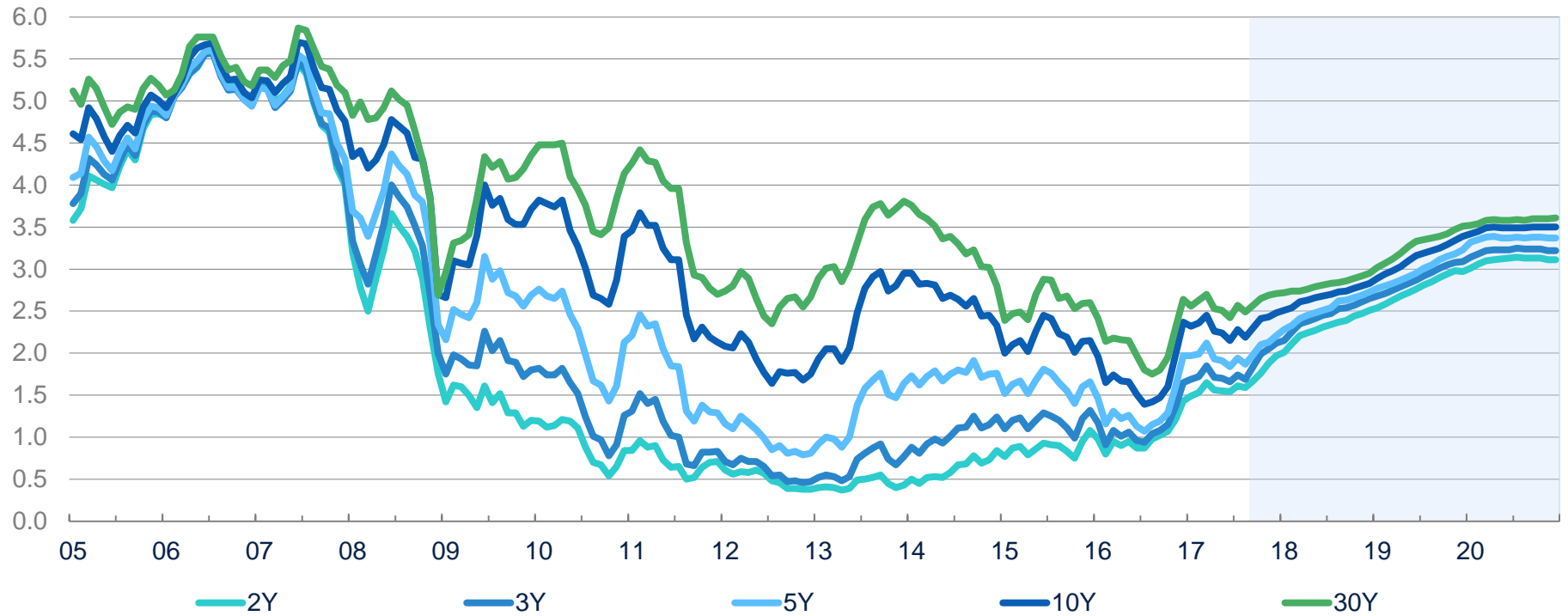
(%, End of Period)



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.

Swap Curve Baseline Forecasts

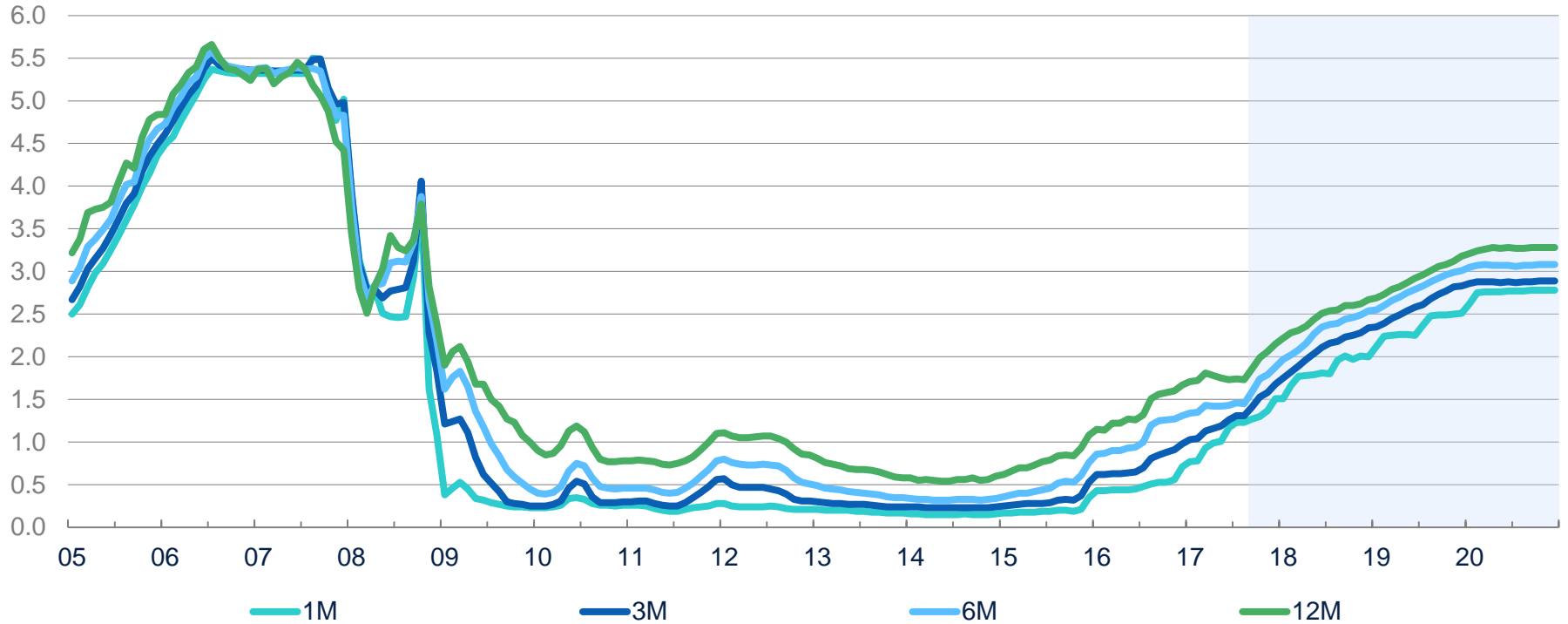
U.S. SWAP RATES
(%)



Source: BBVA Research, Federal Reserve Board and Haver Analytics

LIBOR Curve Baseline Forecasts

U.S. DOLLAR LIBOR RATES
(%)



Source: BBVA Research, Federal Reserve Board and Haver Analytics

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