

U.S. Interest Rates Chartbook

October 2017

Takeaways

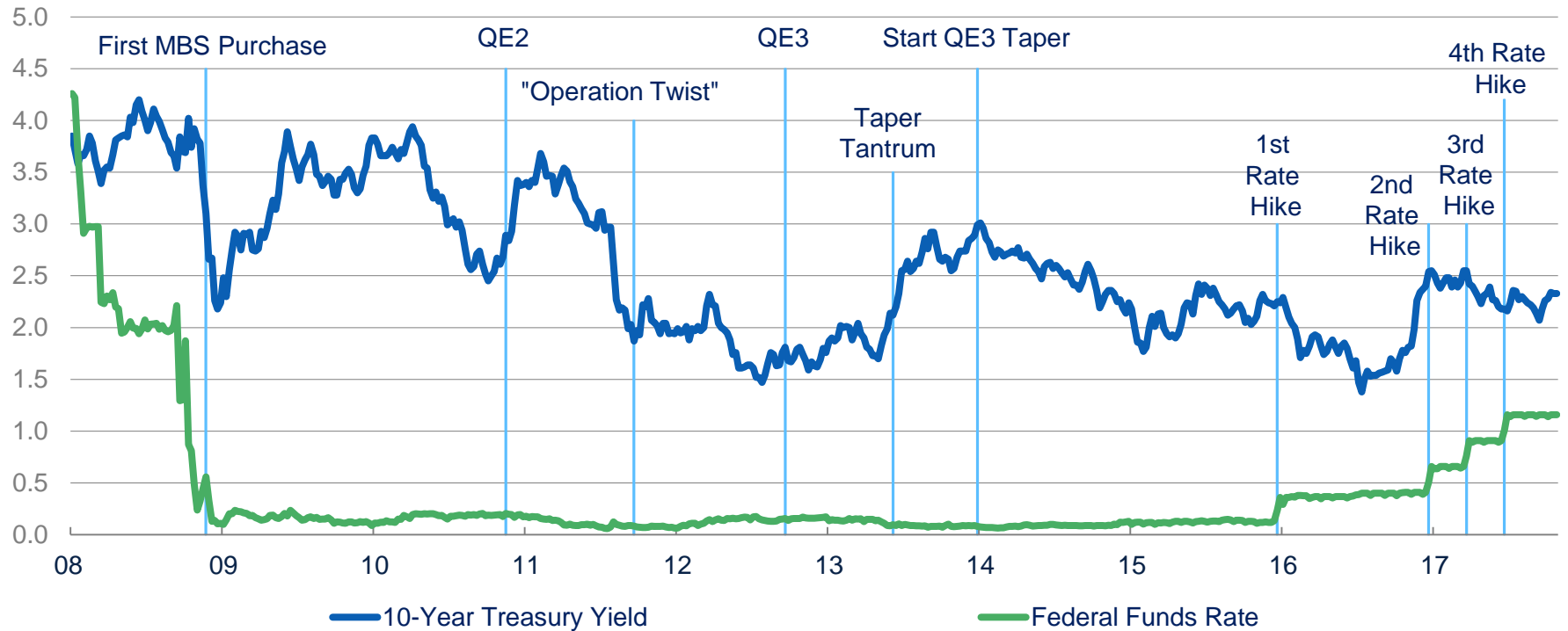
- ◆ The November FOMC meeting is not expected to deliver any policy course alteration. Financial markets will remain watchful of the statement's tweaks on inflation wording.
- ◆ The FOMC September meeting minutes indicated that most officials believe that another Fed funds rate increase is warranted by the end of 2017. However, lingering soft inflation remained a concern for several members whose decision *“would depend importantly on whether the economic data in coming months increased their confidence that inflation was moving up toward the committee's symmetric 2% objective.”*
- ◆ Fed funds futures are pricing in a December rate hike with an implied probability of 98% and are expecting the next rate increase to be in the second quarter of 2018.
- ◆ The Fed intends for its gradual and predictable balance sheet reduction to run on autopilot. At the start of trimming, financial market volatility has been low with no impact on term premium.
- ◆ The 10-Year Treasury yield has adjusted to higher rates in line with both the attrition of the Fed's reinvestment policy and the dissipation of downward pressures from safe haven flows.
- ◆ The baseline is for a gradual increase in long-term yields.



Unconventional Monetary Policy

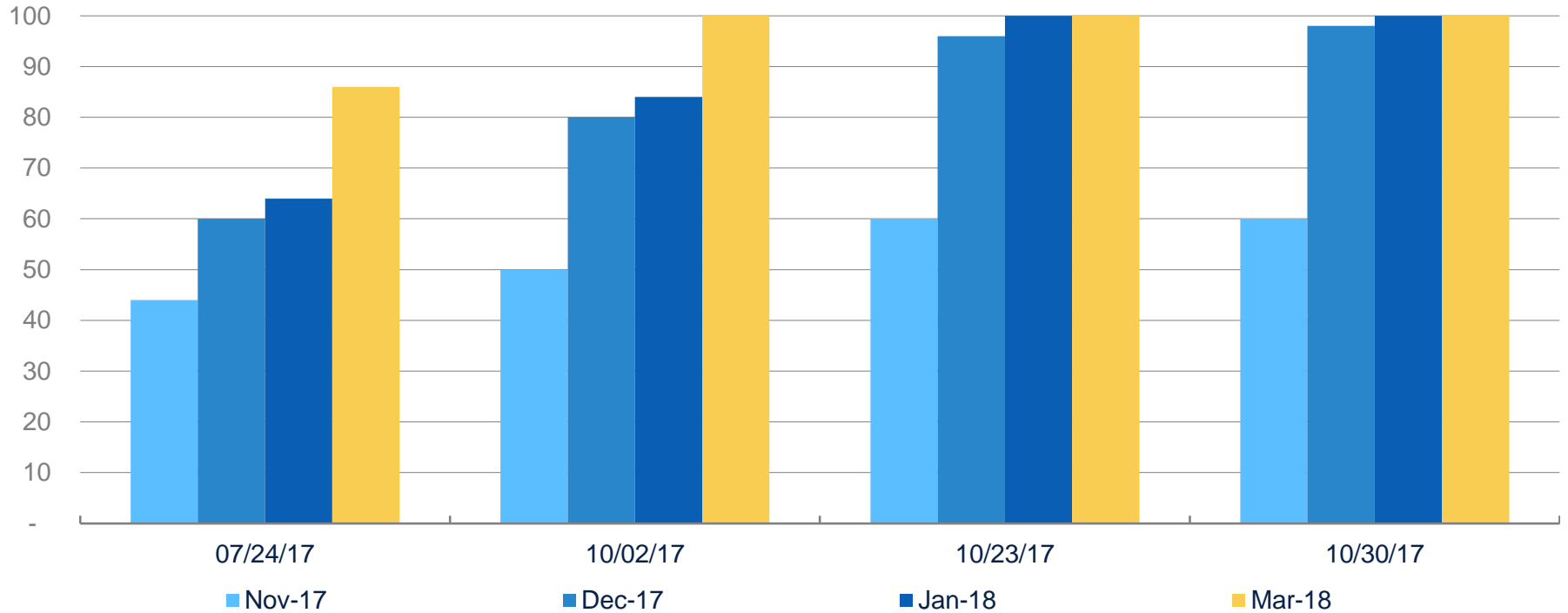
FEDERAL FUNDS RATE AND 10-YEAR TREASURY NOTE

(%)



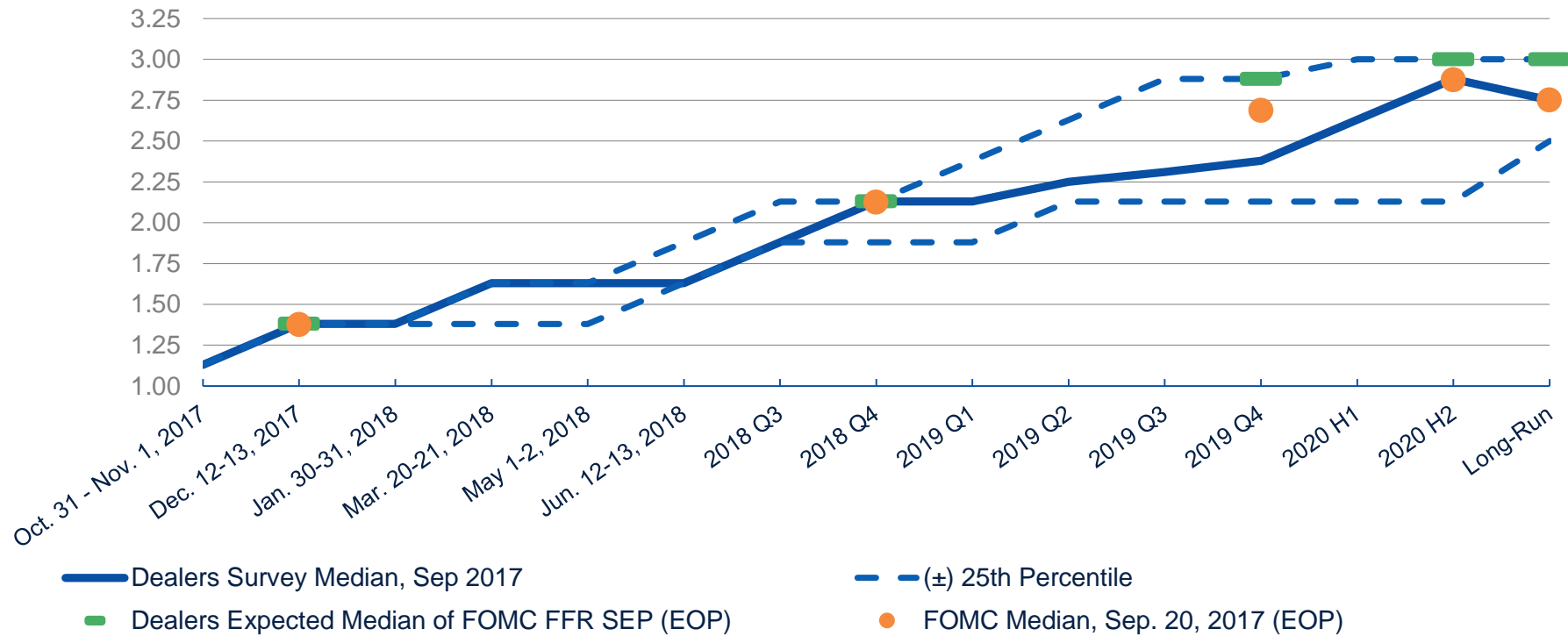
December Rate Hike Probability at 98%

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



Dealers' Expectations for the Long-Run Fed Funds Rate are in Line with the Median FOMC Projection of 2.75%

PROJECTED PACE OF POLICY FIRMING (%)

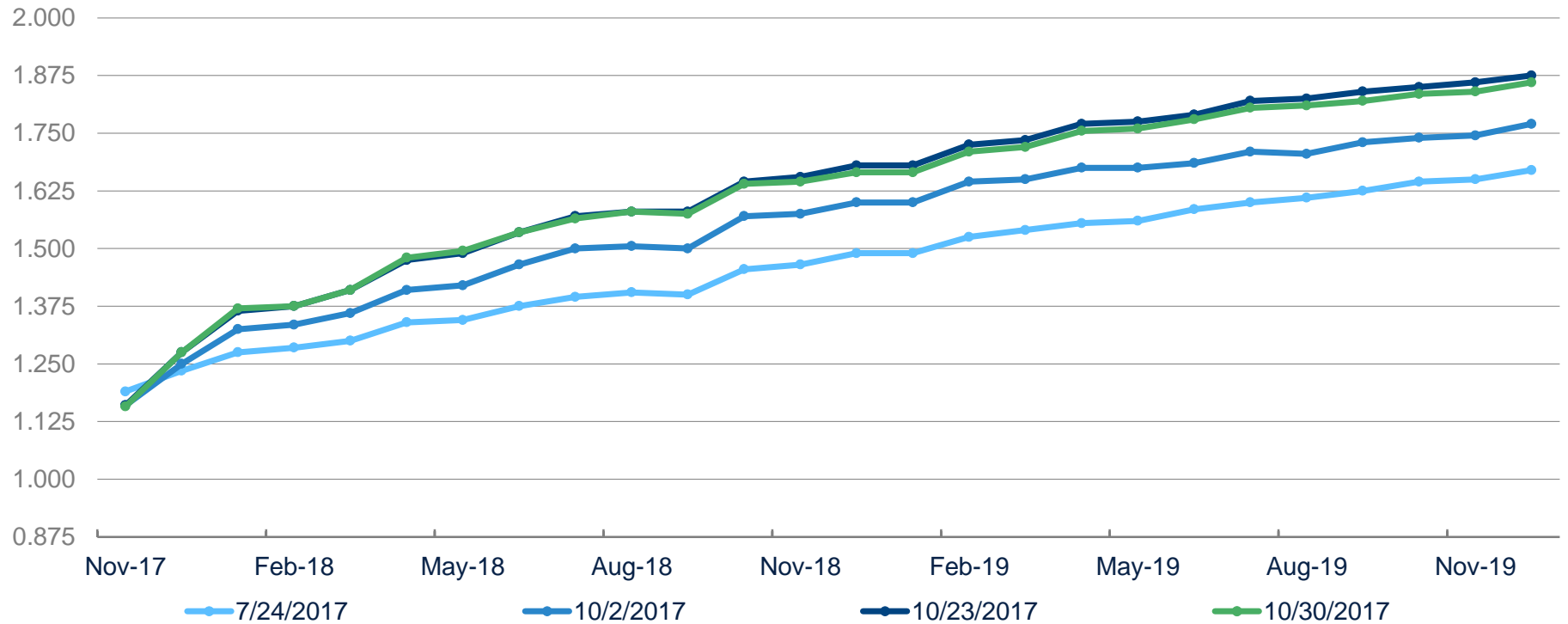


Survey of Primary Dealers is formulated by the Trading Desk at the Federal Reserve Bank of New York. Last received date September 11, 2017

Fed Funds Futures Rise as the FOMC Near-Term Policy Outlook Firms

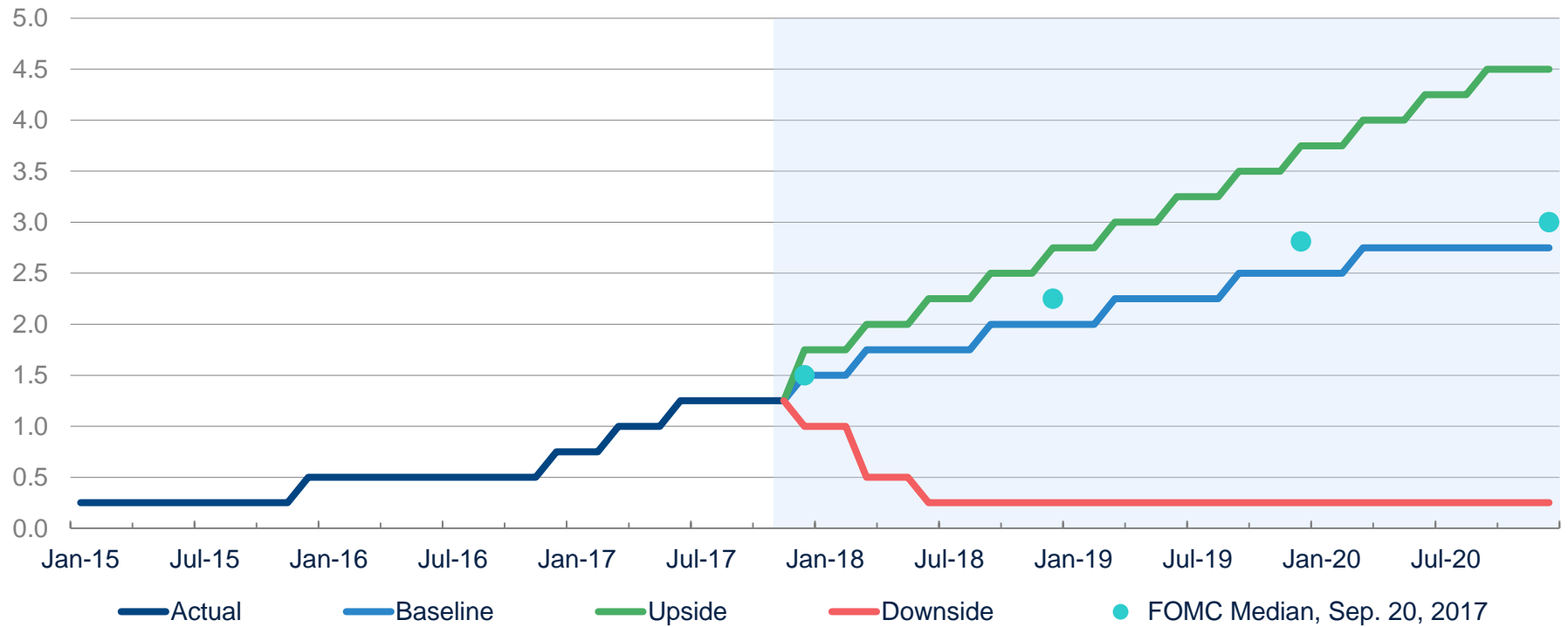
FED FUNDS FUTURES – MOST RECENT, 1 WEEK PRIOR, 1 MONTH PRIOR, 3 MONTHS PRIOR

(%)



Fed Funds Firming Pace Forecast

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

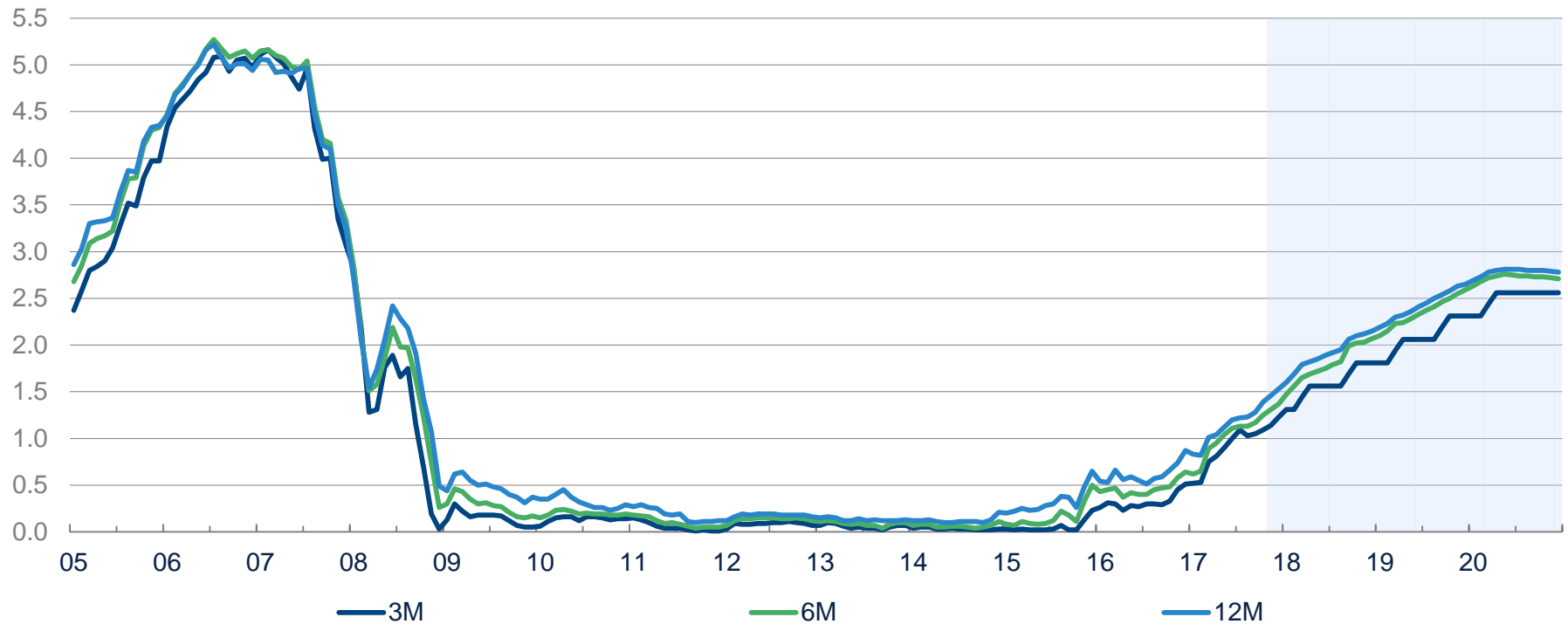


Source: BBVA Research, Federal Reserve Board and Haver Analytics

Baseline Forecasts of Treasury Bill Yield

3-MONTH TO 12-MONTH RATES

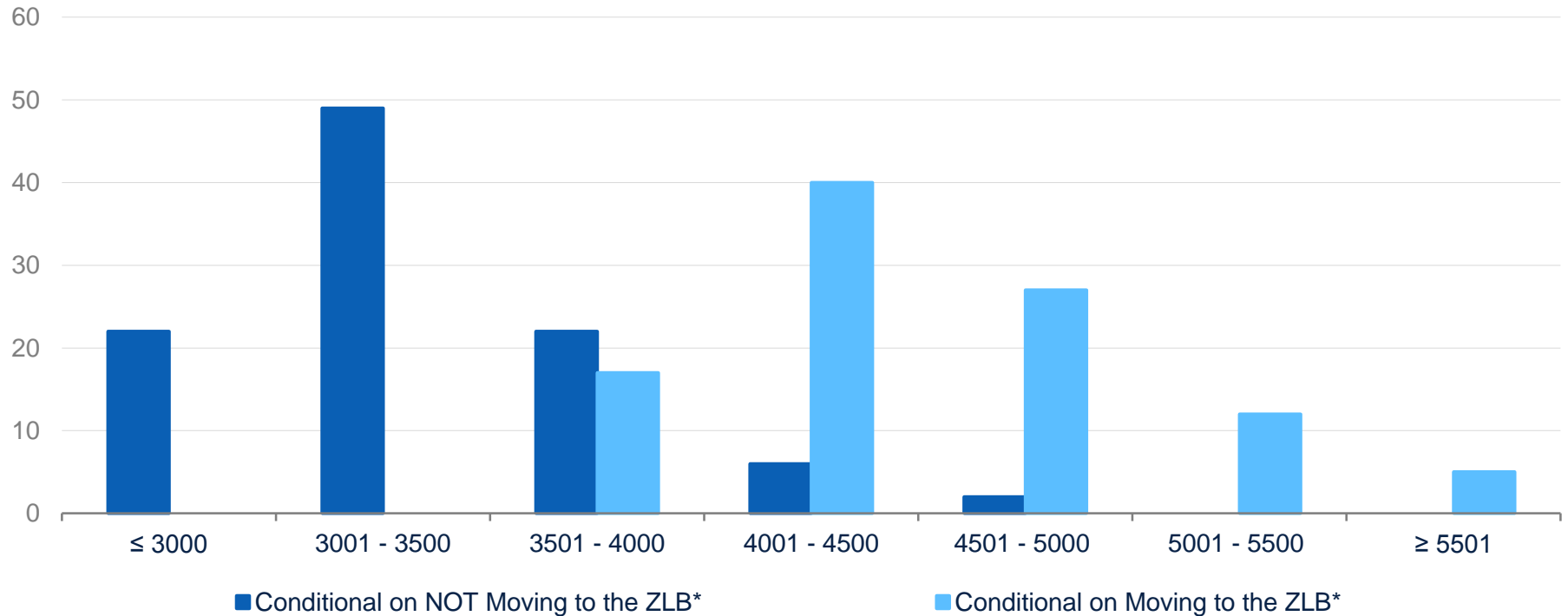
(%)



Source: BBVA Research, Federal Reserve Board and Haver Analytics

Dealers Attach Higher Probability to the Gradual Balance Sheet Reduction Outcome

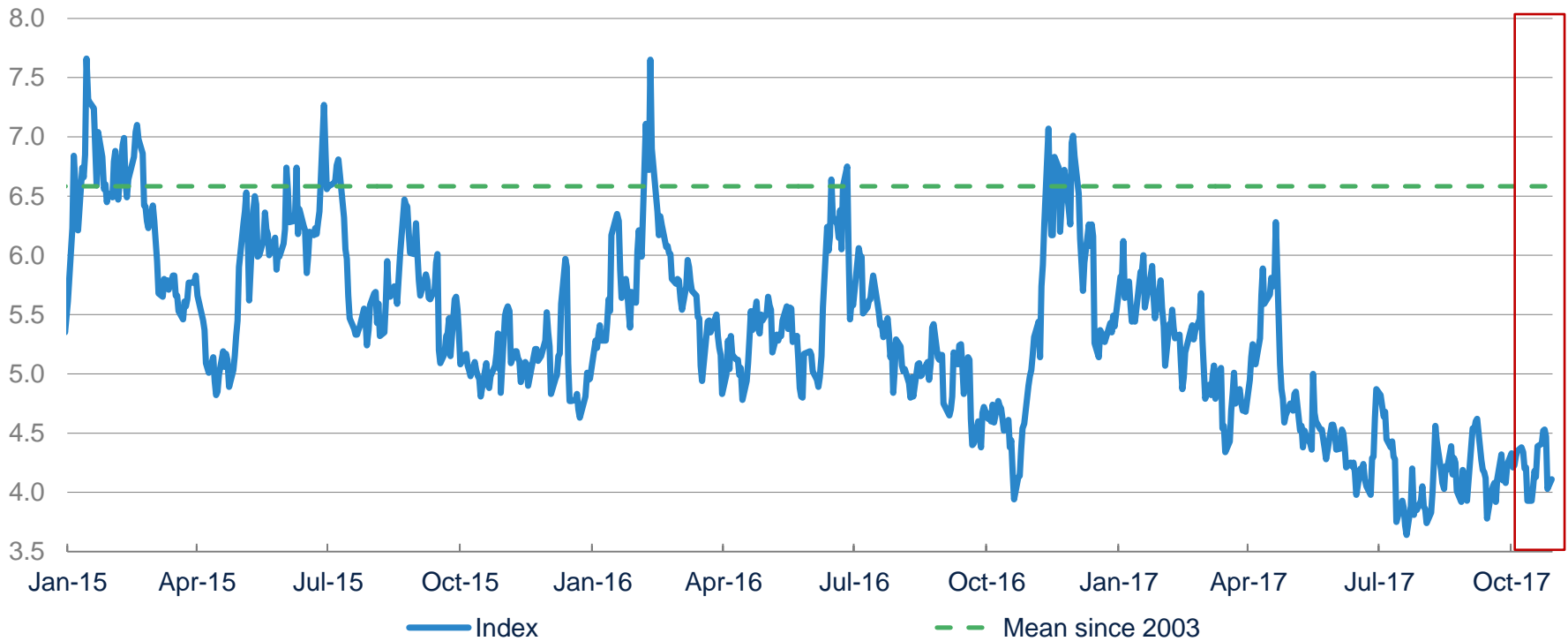
DEALERS' CONDITIONAL EXPECTATIONS OF THE POSSIBLE OUTCOMES FOR THE PAR VALUE OF THE SOMA PORTFOLIO
 (% Chance Attached, EOP 2020)



* Not moving or moving to the ZLB at any point between now and the end of 2020
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Long-Term Yield Volatility Has Stabilized Substantially Below Its Historic Mean

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

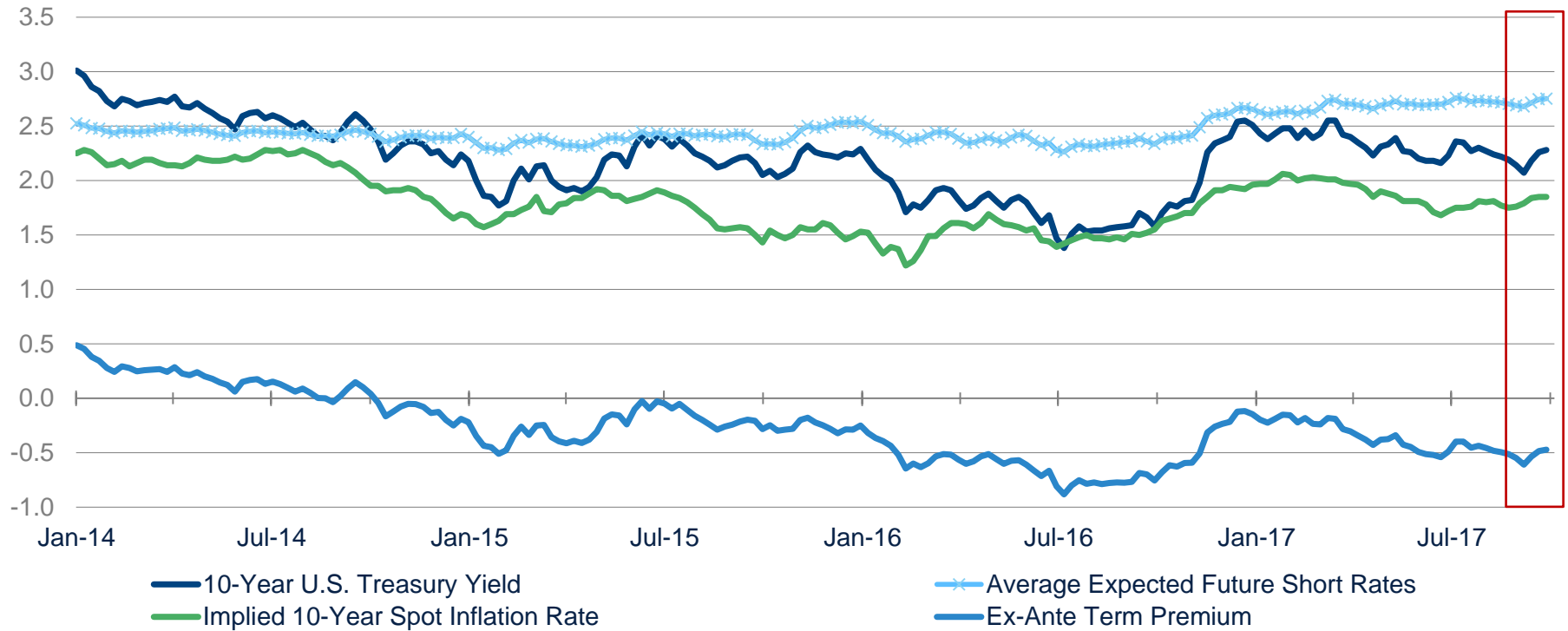


Index measures a constant 30-day expected volatility of 10-Year Treasury Note futures prices, and is calculated based on transparent pricing from the Chicago Board of Trade's actively traded options on the Treasury Note futures

Downward Pressure on Term Premium Unchanged

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

(Weekly, %)

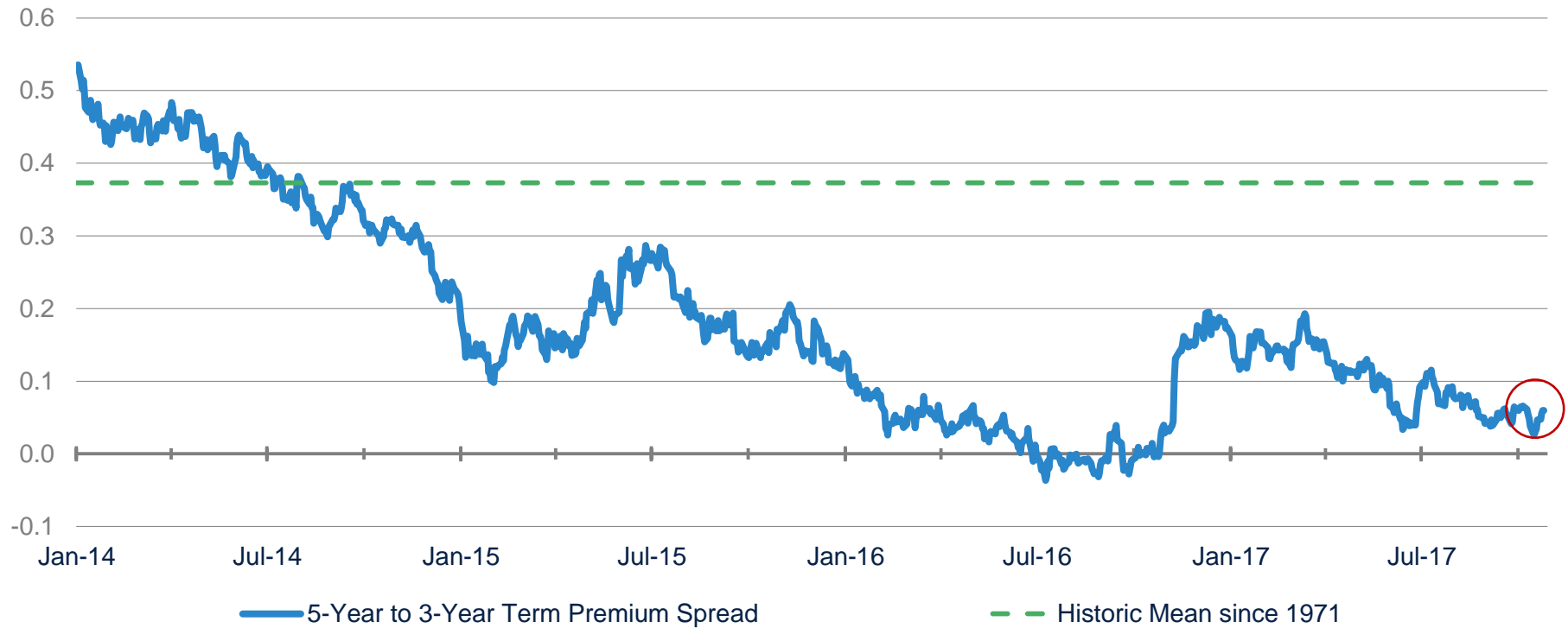


Source: BBVA Research, Federal Reserve Board and Federal Reserve Bank of New York

Mid-Term Duration-Risk Compression Steady at 5 Basis Points

DURATION-RISK COMPRESSION

(Daily, %)

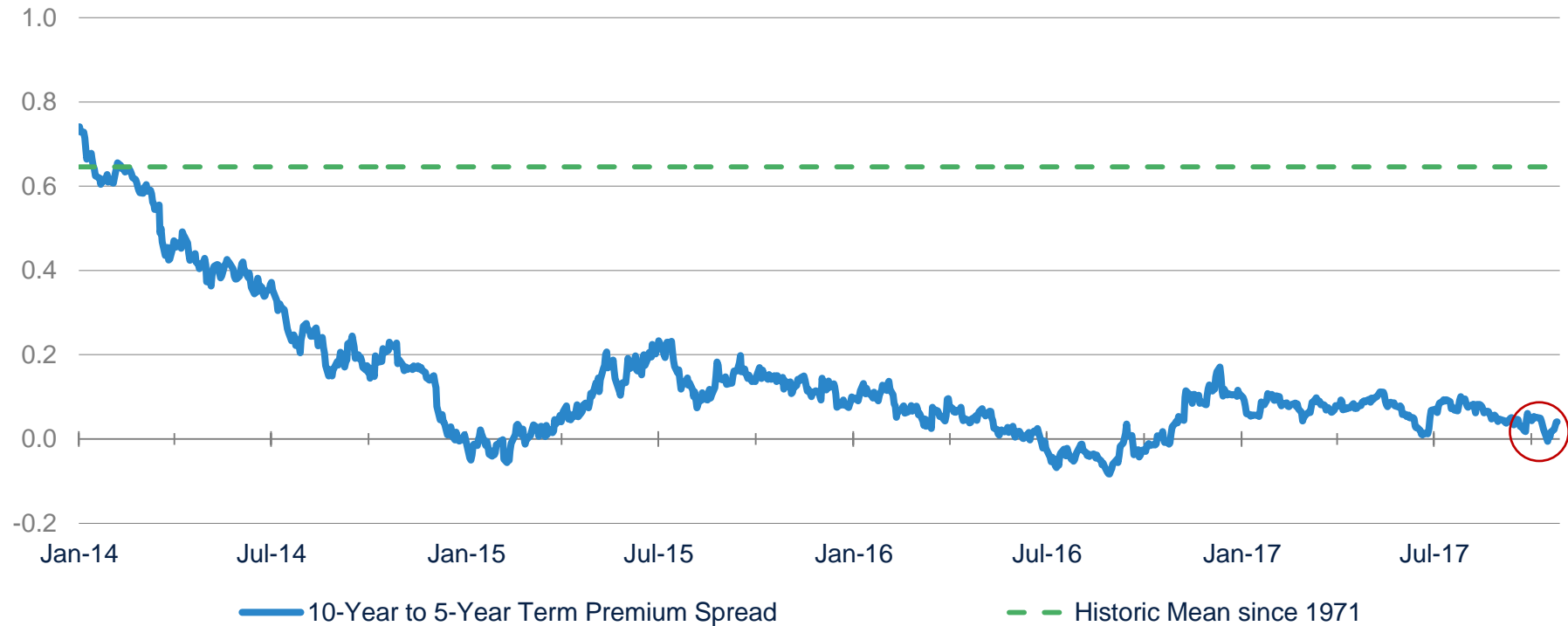


Calculated as the difference between 5-Year and 3-Year term premium reported by the New York Fed ACM (Adrian, Crump, and Moench) five-factor, no-arbitrage term structure model incorporating pricing factors.

Long-Term Duration-Risk Compression Remains Low at 3 Basis Points

DURATION-RISK COMPRESSION

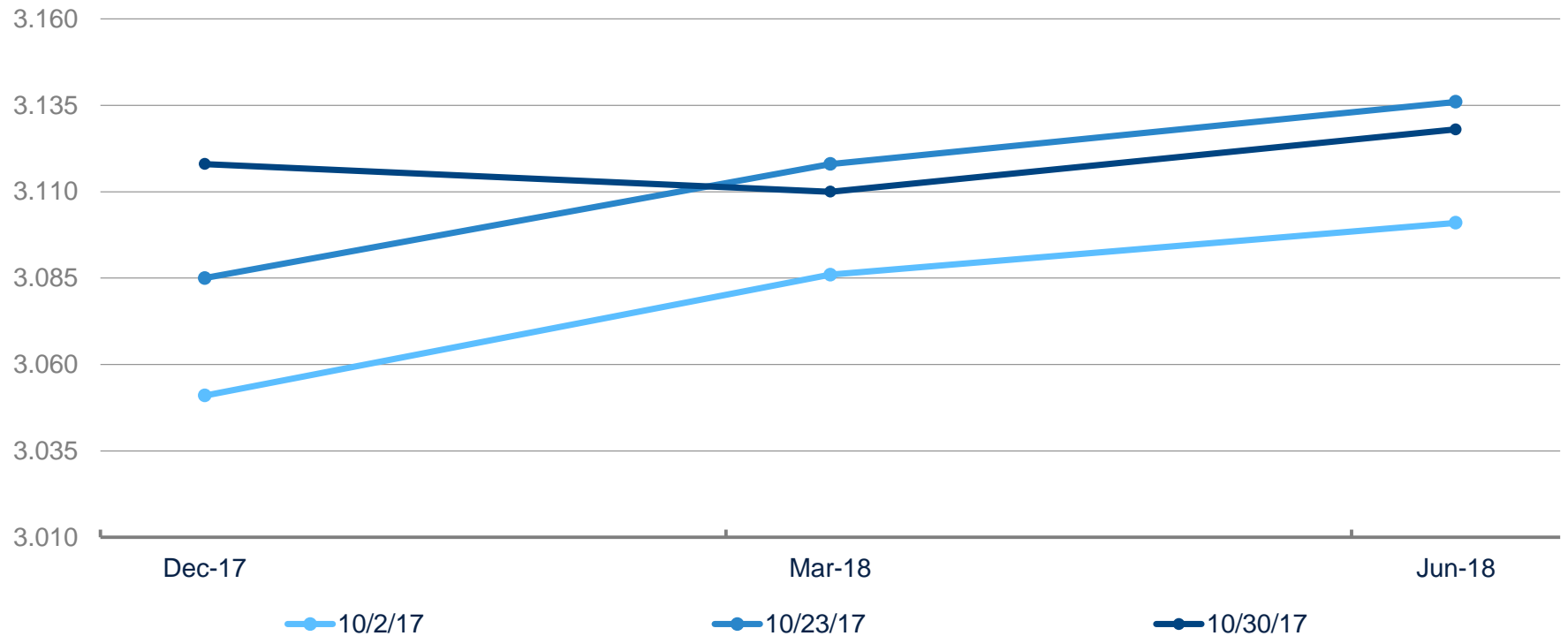
(Daily, %)



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.

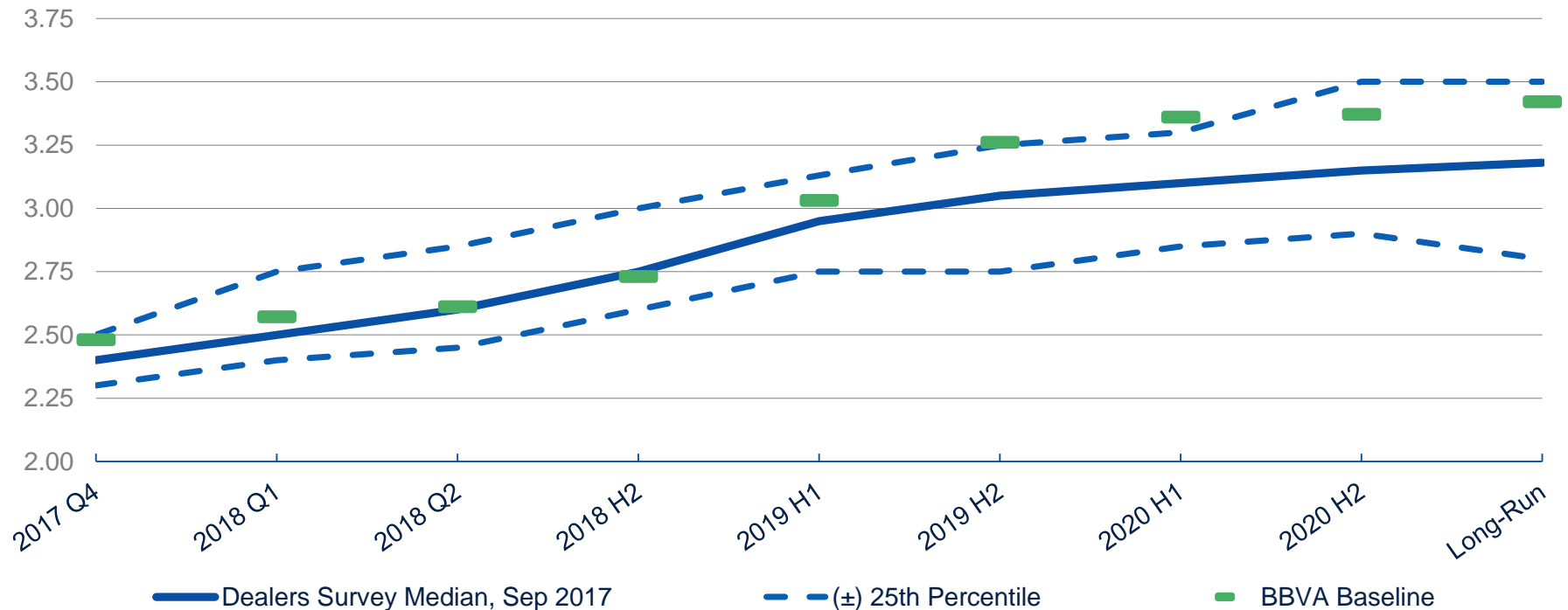
Futures Discount a 1 Basis Point Rise in 10-Year Treasury Yield Over the Next 3 Quarters

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



Dealers Expect Gradual Increase in the 10-year Treasury Yield with Total Rise of 45 Basis Points over the Next Two Years

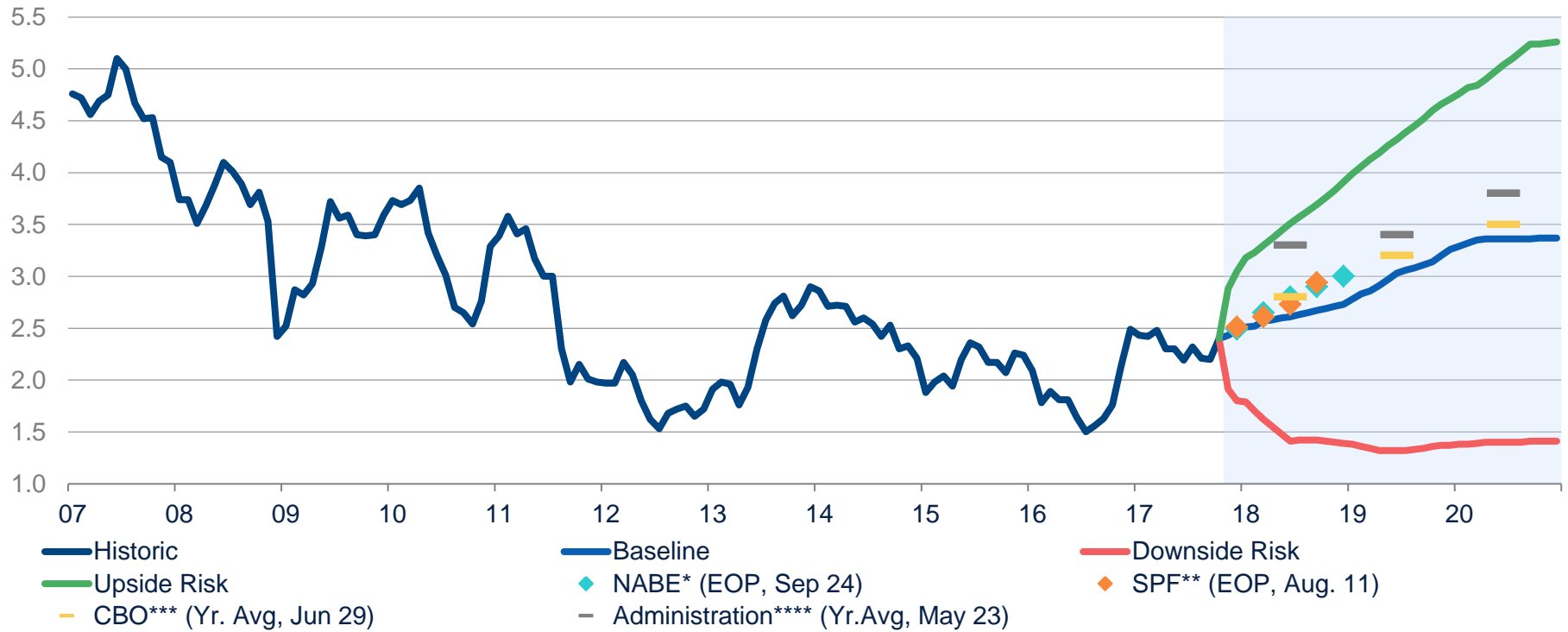
DEALERS' EXPECTATIONS FOR THE 10-YEAR TREASURY YIELD
(%, EOP)



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10-Year Treasury Yield Forecasts

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

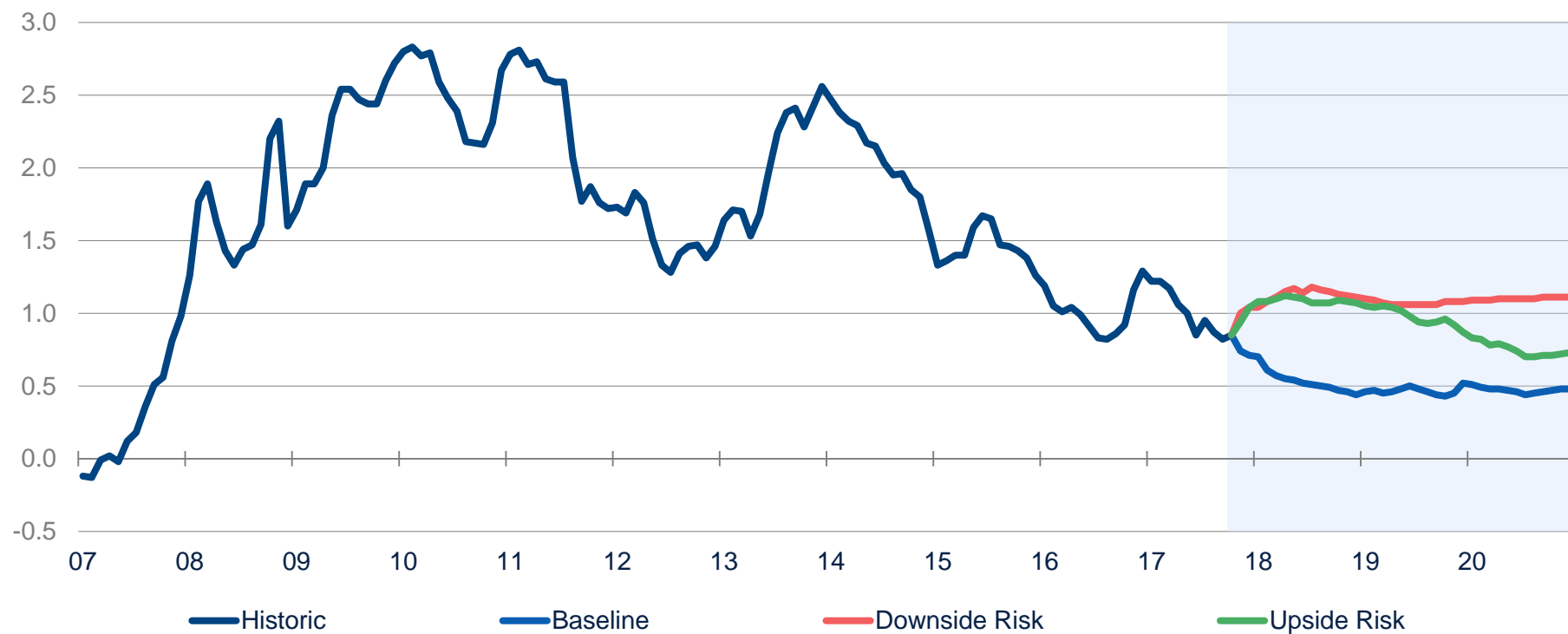


* National Association for Business Economics (NABE) Outlook median forecast compiled from a panel of NABE members. Last release date September 24, 2017
 ** Survey of Professional Forecasters (SPF) conducted by Federal Reserve Bank of Philadelphia. Last release date August 11, 2017
 *** Congressional 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

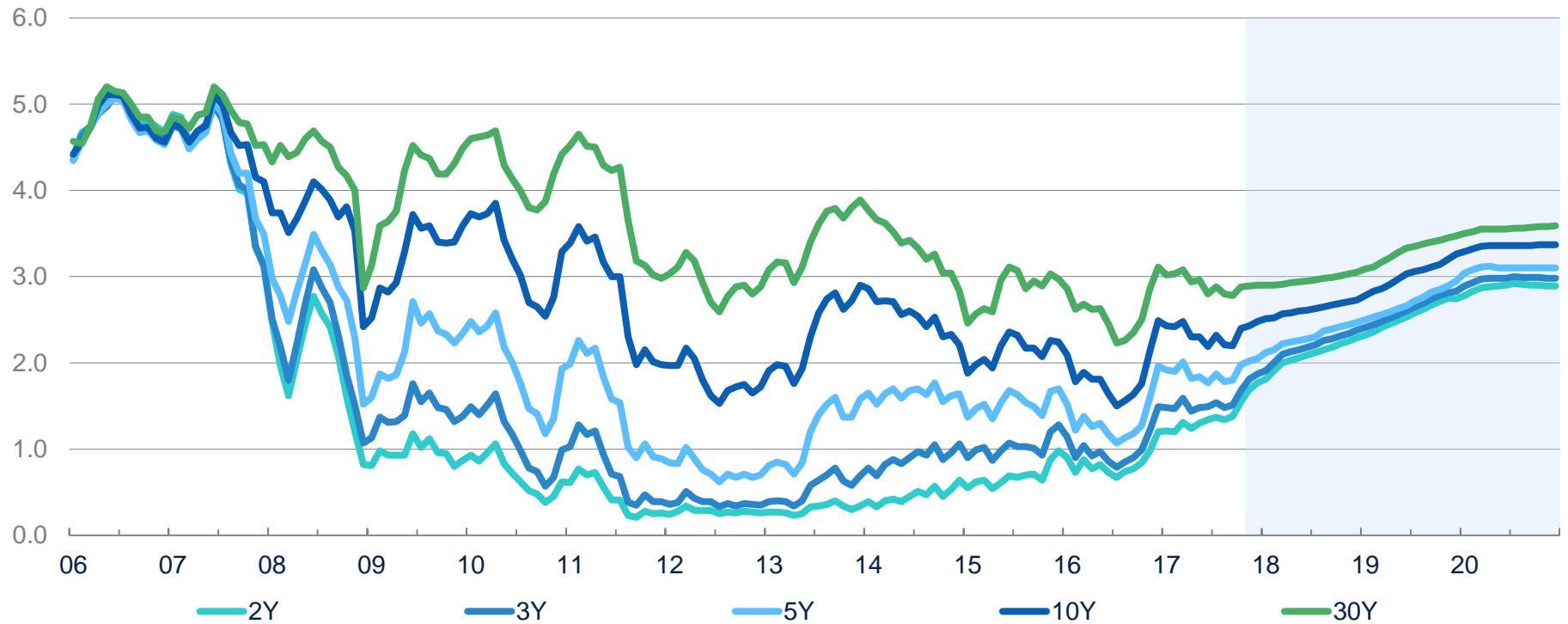
(%, 10Y-2Y)



Source: BBVA Research, Federal Reserve Board and Haver Analytics

Treasury Yield Curve Baseline Forecasts

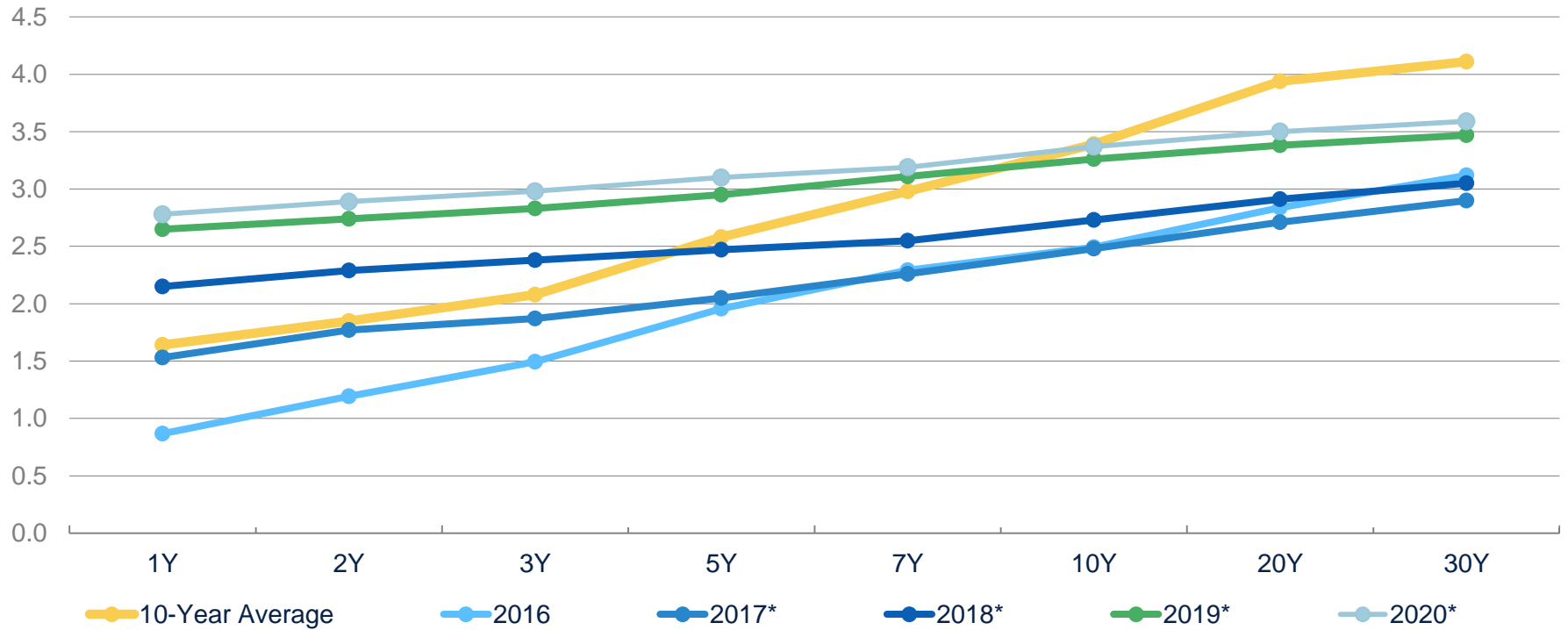
U.S. TREASURY YIELD CURVE
(%)



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)

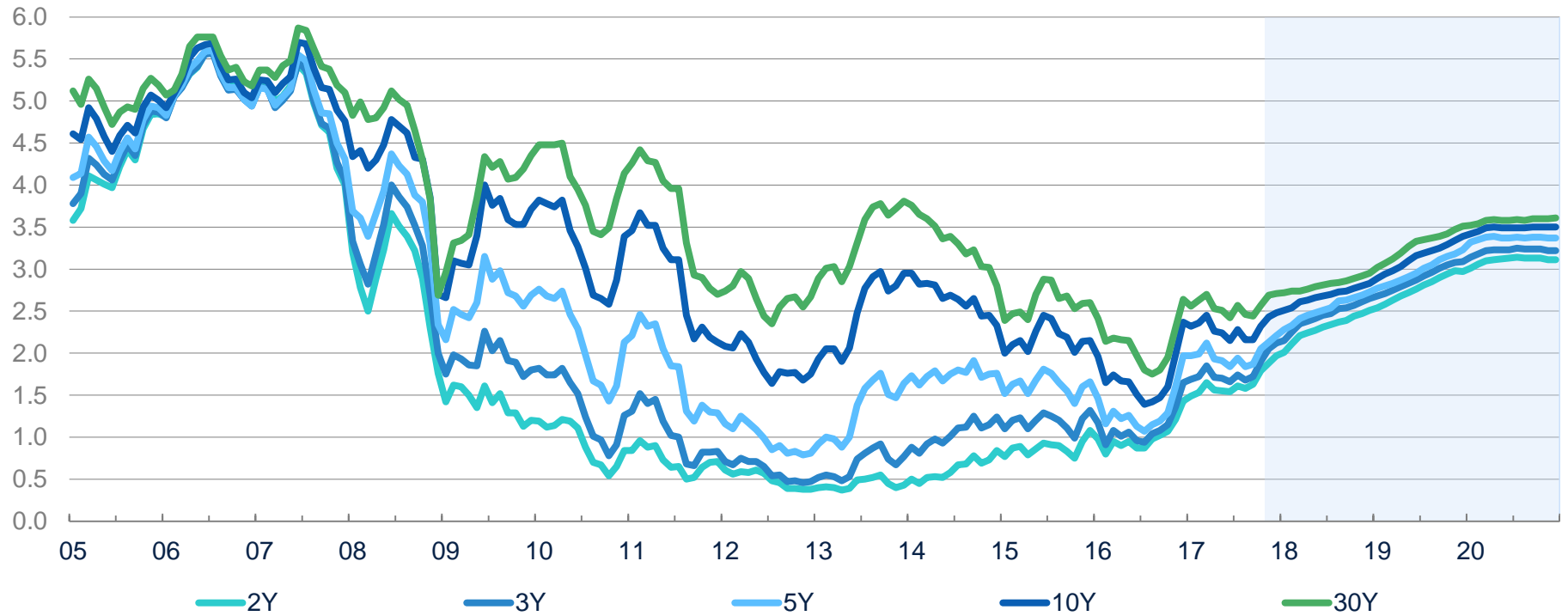


*BBVA Research baseline forecast. Treasury yield curve is estimated with a three-factor no-arbitrage model linked to macroeconomic factors measuring growth, inflation and monetary policy. Estimates are based on BBVA Research baseline forecast for GDP growth, inflation and Fed funds rate.

Swap Curve Baseline Forecasts

U.S. SWAP RATES

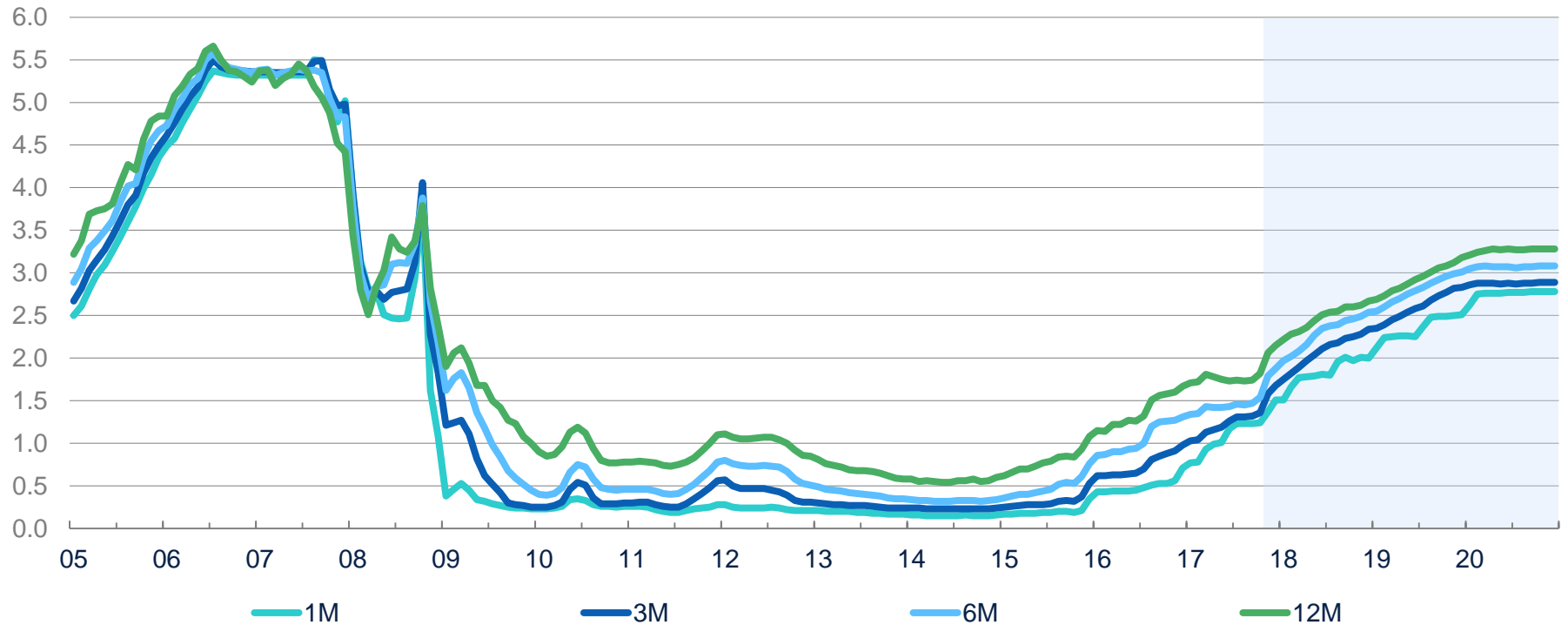
(%)



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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