

# U.S. Interest Rates Chartbook

January 2018

# Takeaways

- ◆ In line with expectations, the FOMC left Fed funds rate unchanged. The changes to the January statement highlighted stronger growth and confidence that inflation will “stabilize” at the target rate of 2% in 2018.

*“The committee expects that economic conditions will evolve in a manner that will warrant further gradual increases in the federal funds rate”*

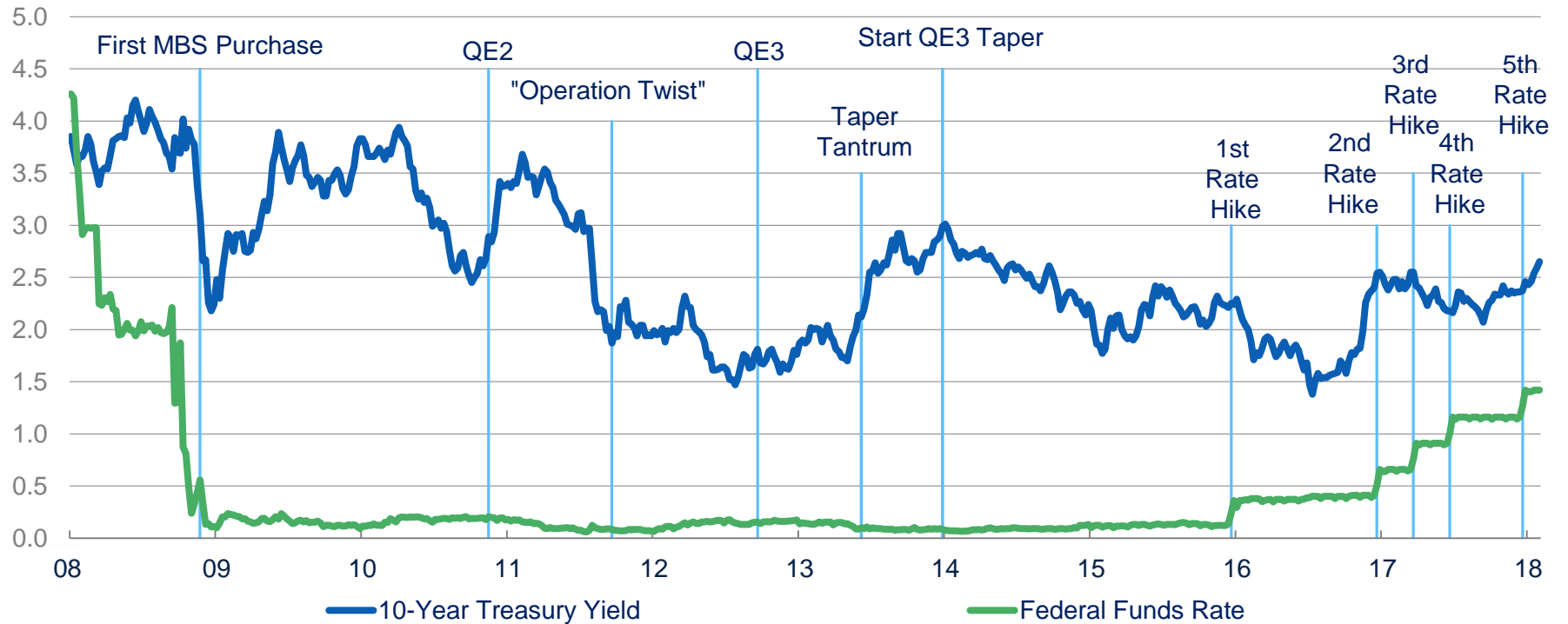
- ◆ Fed funds futures are pricing in three rate increases for 2018. A March rate increase is fully priced in and the implied probability for a subsequent hike in June is at 76%.
- ◆ The 2-year to 30-year Treasury yields have increased in monotone by 25-30 basis points since the end of December. Consumer rates followed suit.
- ◆ An increase in yields is supported by a soft but sustained increase in Inflation expectations. Term premium remains negative coupled with a low market volatility environment.
- ◆ The yield spread between the 2-year and 10-year Treasury notes remains at an average at 55 basis points, its lowest level since Fall 2007.
- ◆ The baseline remains for a gradual increase in long-term yields with an upward bias for 2018 year-end long-term rates. The economic environment over the medium-term implies that the yield curve will flatten further.



# Unconventional monetary policy

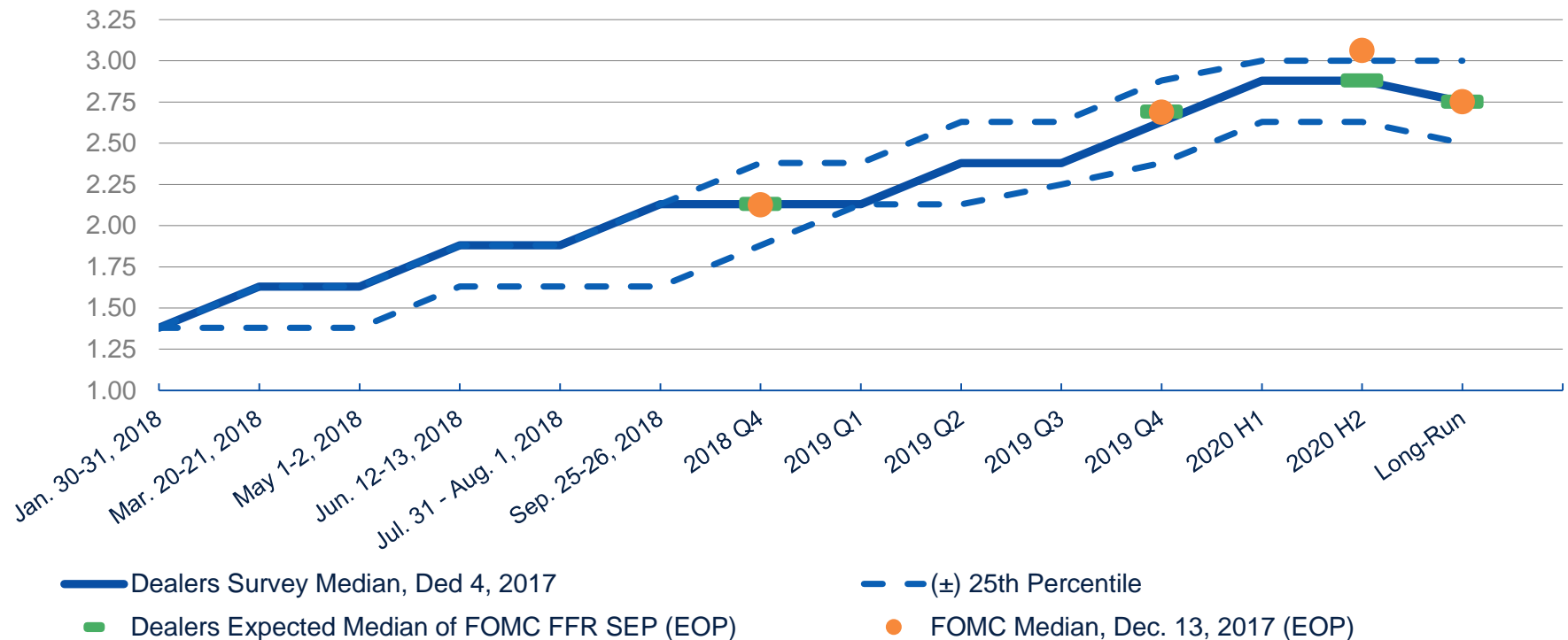
## FEDERAL FUNDS RATE AND 10-YEAR TREASURY NOTE

(%)



# Dealers' expectations for the long-run fed funds rate remain in line with the median FOMC projection of 2.75%

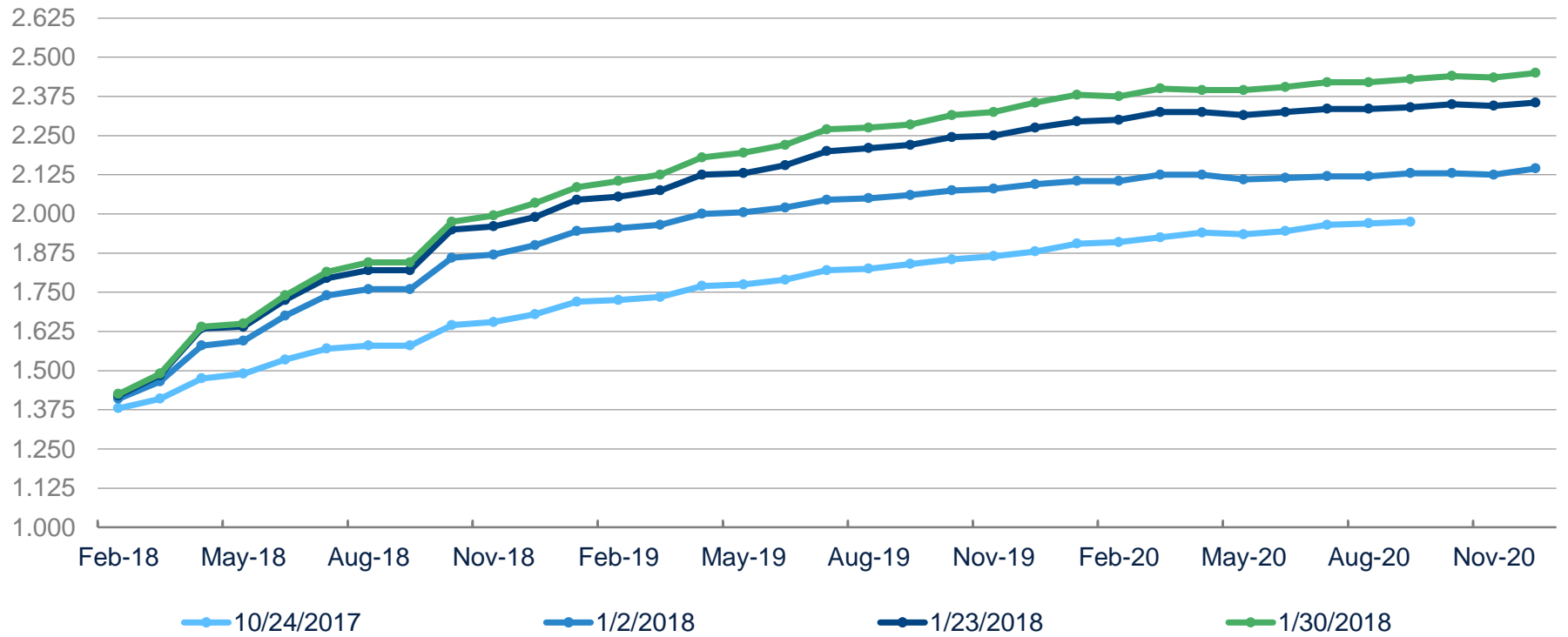
## PROJECTED PACE OF POLICY FIRMING (%)



Survey of Primary Dealers is formulated by the Trading Desk at the Federal Reserve Bank of New York. Last received date December 4, 2017

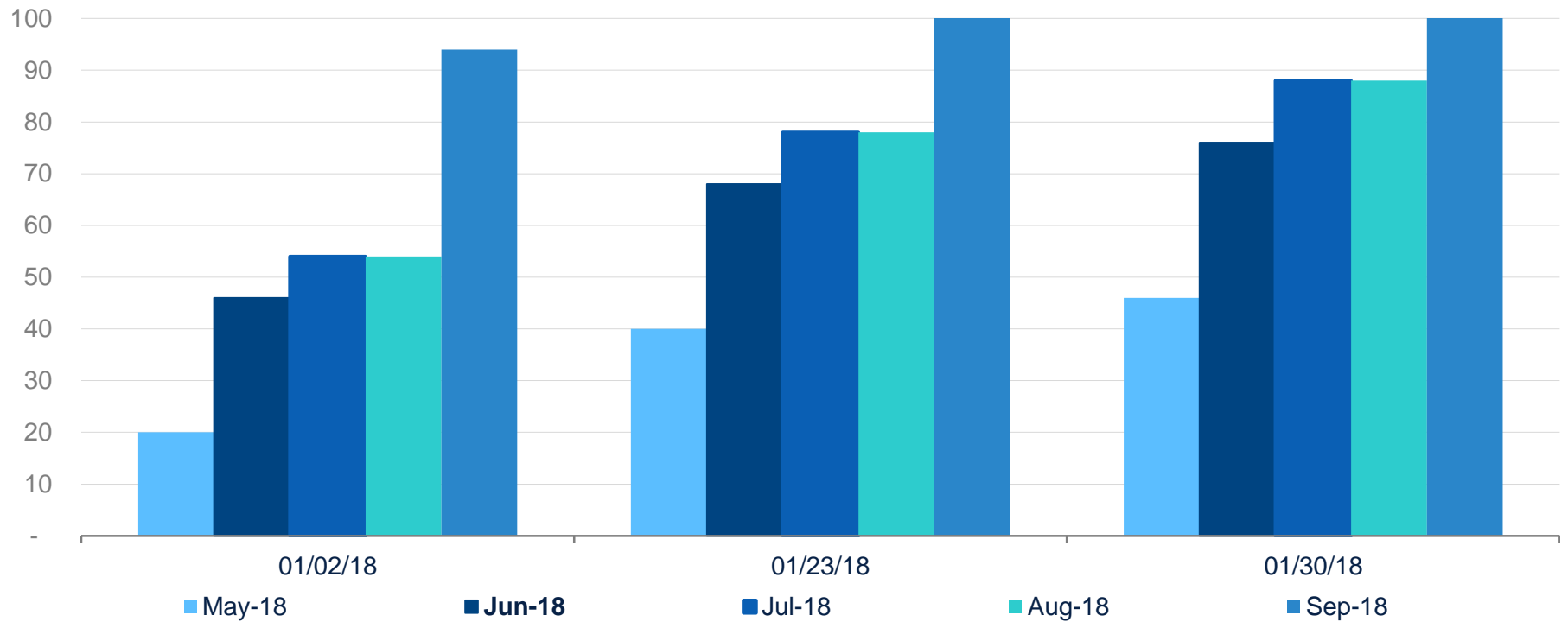
# Fed funds futures continue to align with FOMC 2018 trajectory

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



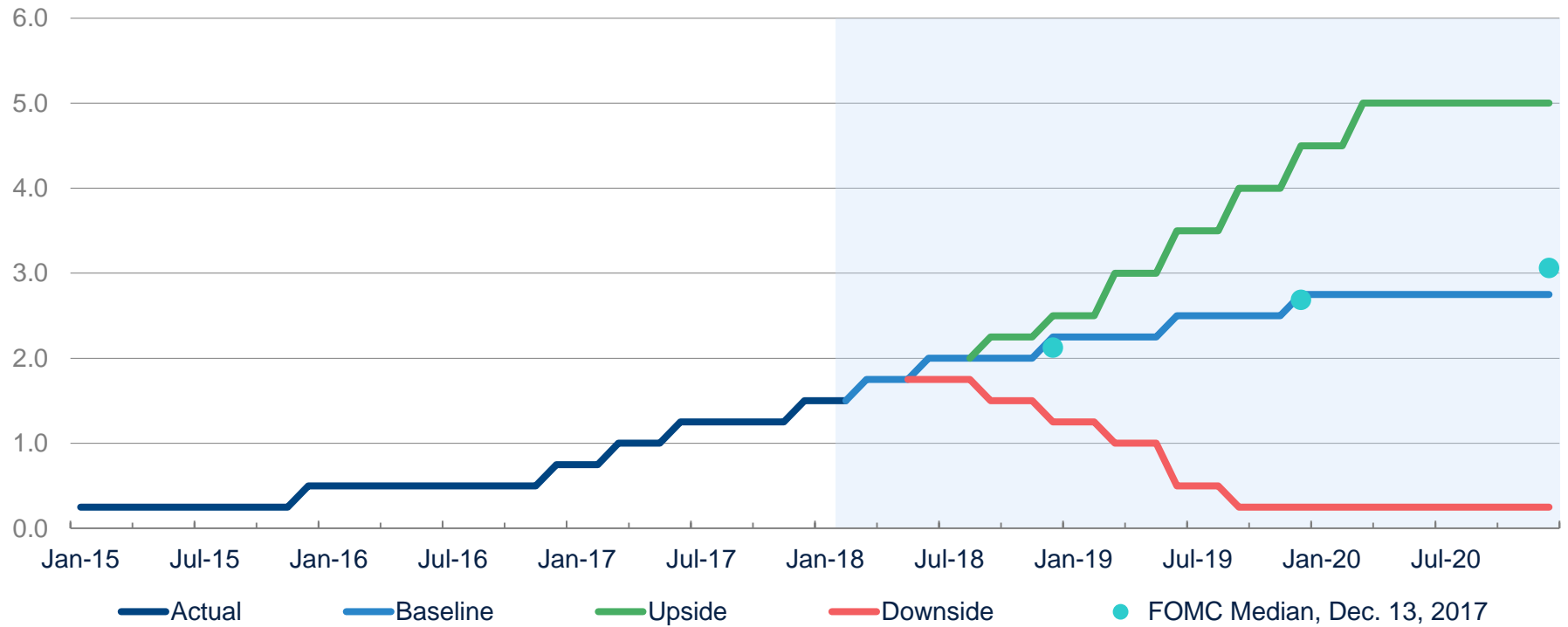
# Fully priced in March rate hike and 76% probability of a seventh rate increase in June

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



# Fed funds firming pace forecast

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

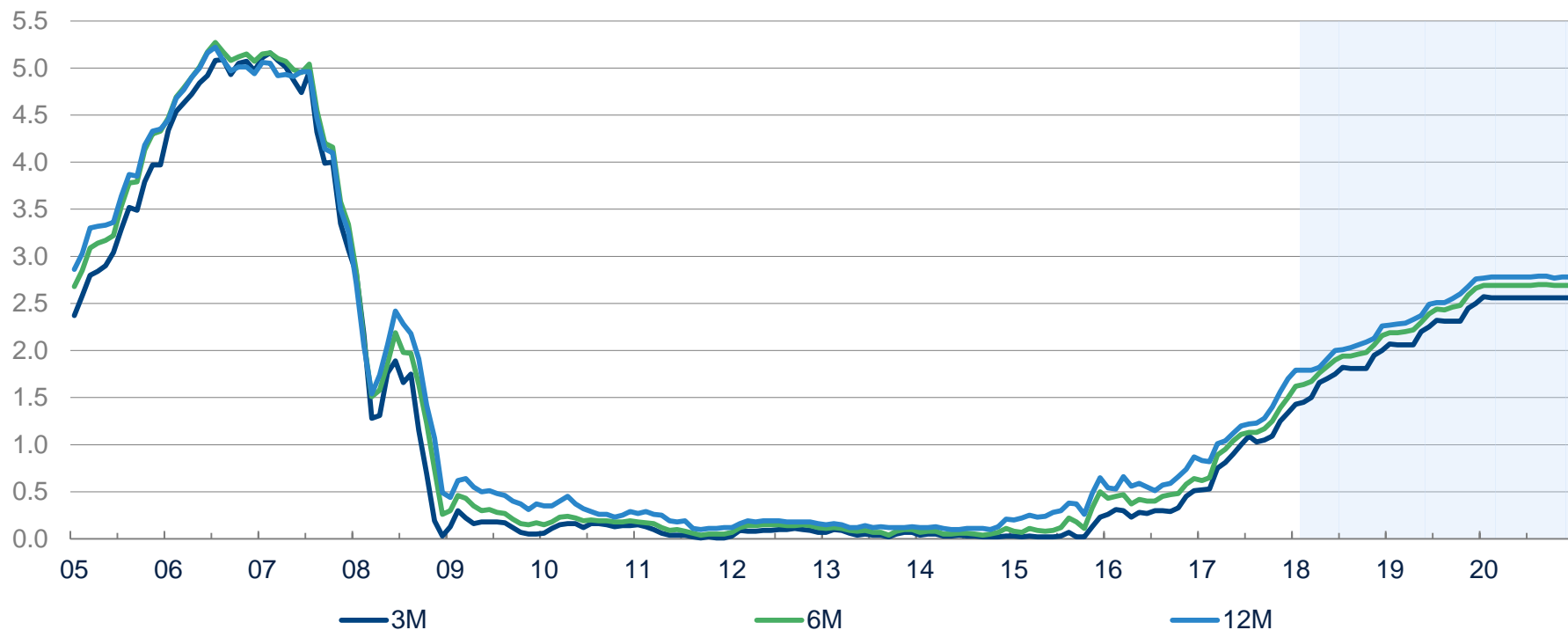


Source: BBVA Research, Federal Reserve Board and Haver Analytics

# 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 remains low relative to historic mean

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

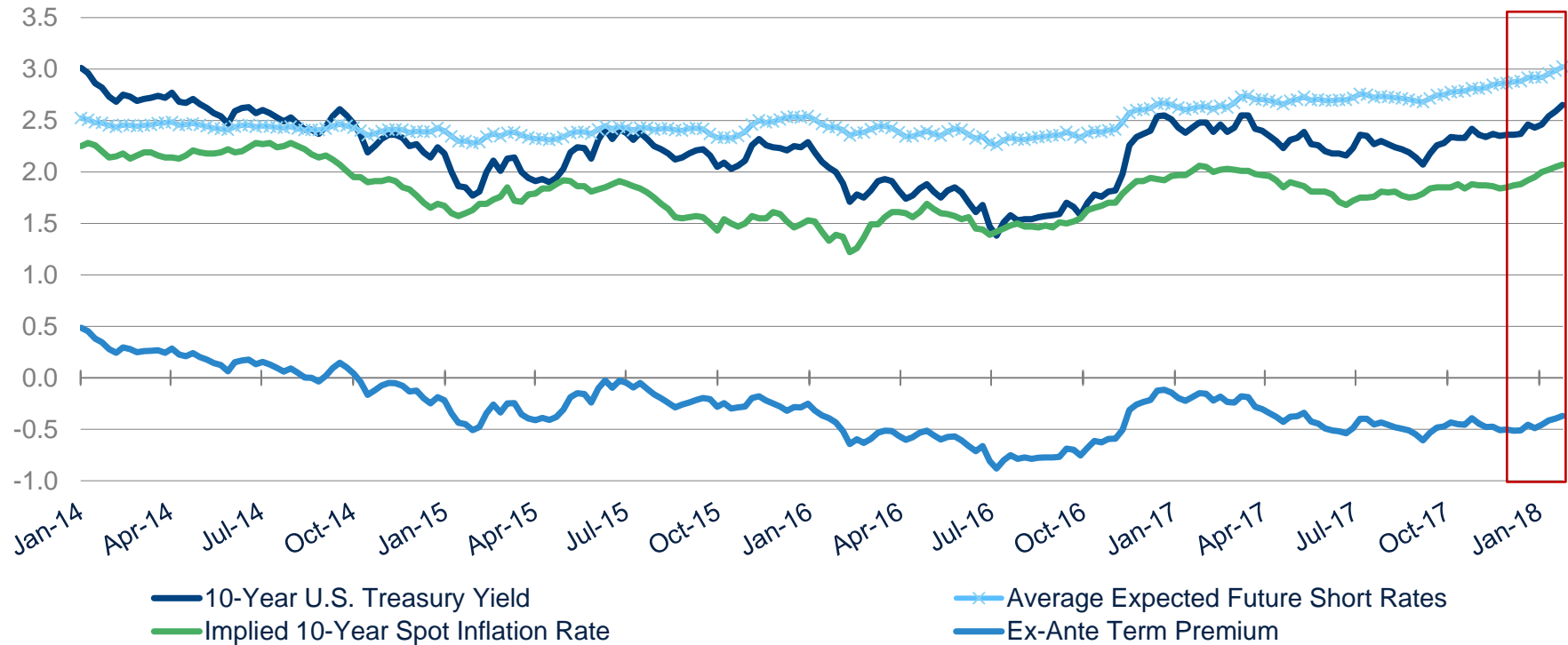


Index measures a constant 30-day expected volatility of 10-Year Treasury Note futures prices, and is calculated based on transparent pricing from the Chicago Board of Trade's actively traded options on the Treasury Note futures

# Upward pressure on inflation expectations while term premium remains negative

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

(Weekly, %)

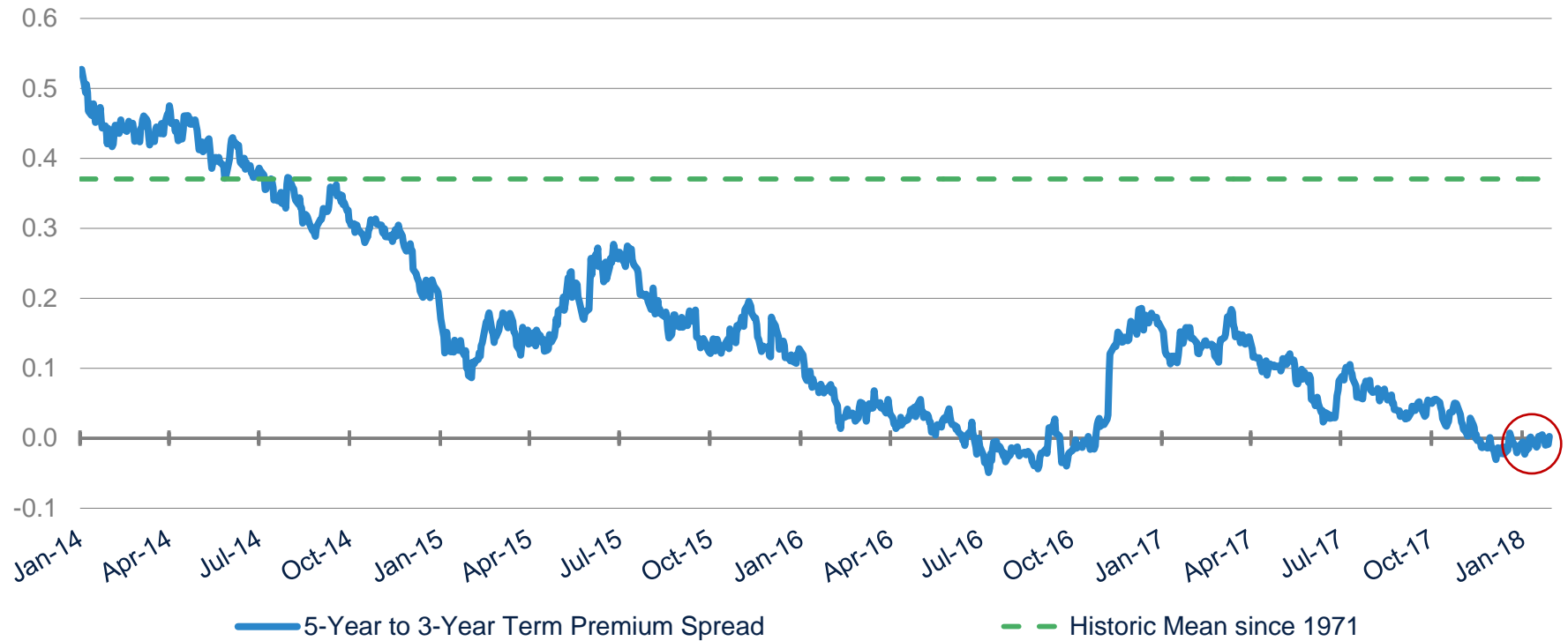


Source: BBVA Research, Federal Reserve Board and Federal Reserve Bank of New York

# Mid-term duration-risk compression remains in near zero territory

## DURATION-RISK COMPRESSION

(Daily, %)

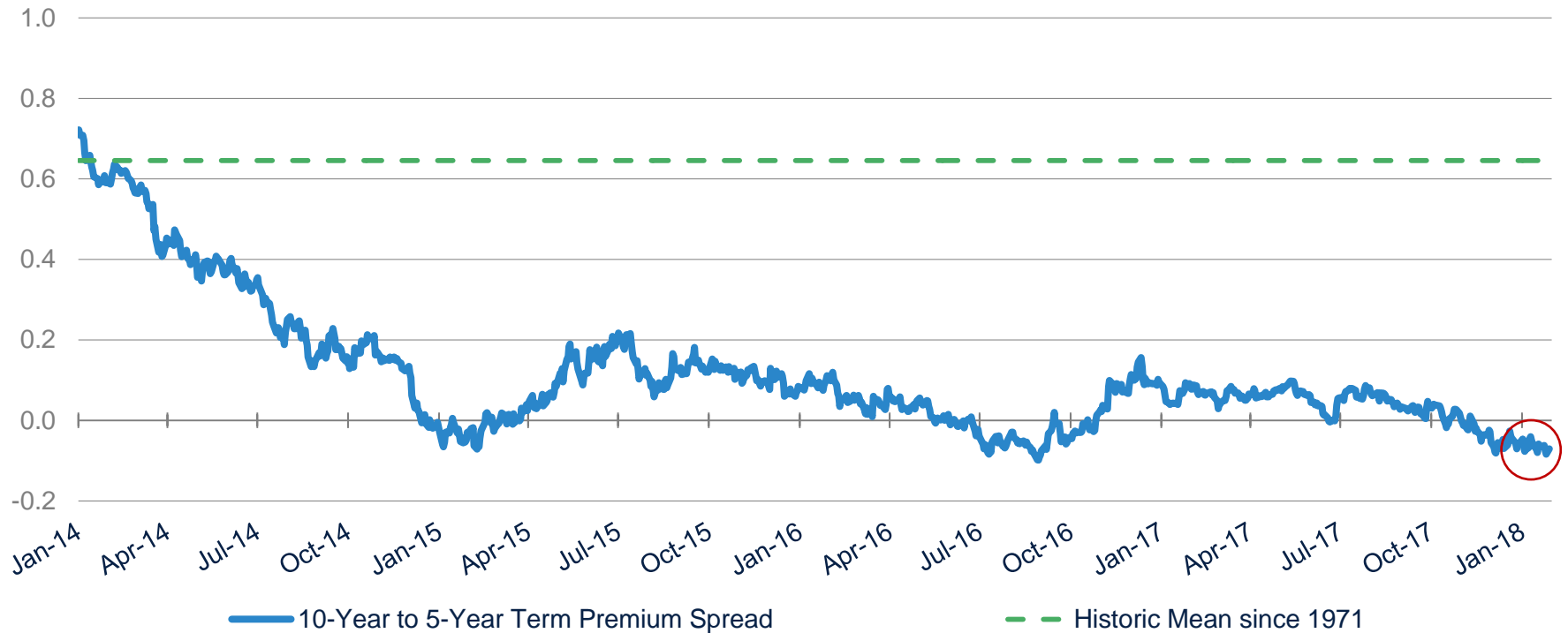


Calculated as the difference between 5-Year and 3-Year term premium reported by the New York Fed ACM (Adrian, Crump, and Moench) five-factor, no-arbitrage term structure model incorporating pricing factors.

# Long-term duration-risk compression remains in negative territory

## DURATION-RISK COMPRESSION

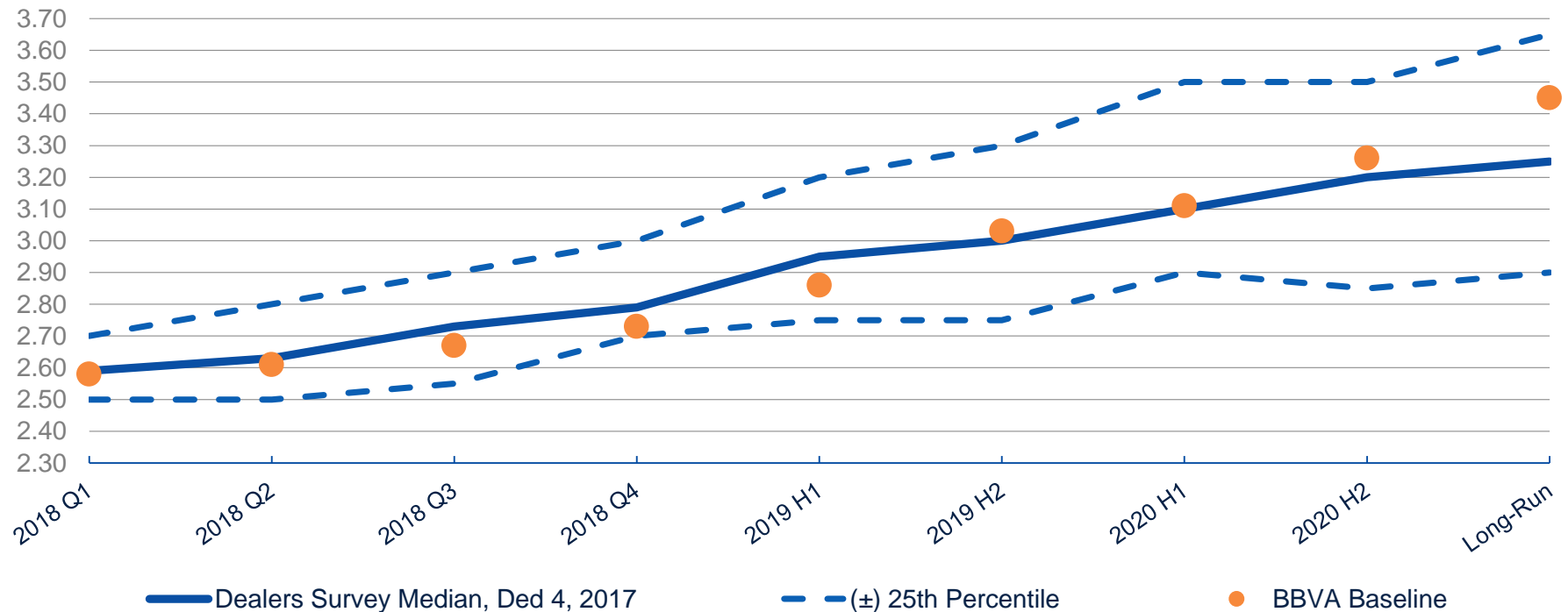
(Daily, %)



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.

# Dealers' expectations are for gradual increase in the 10-year Treasury yield

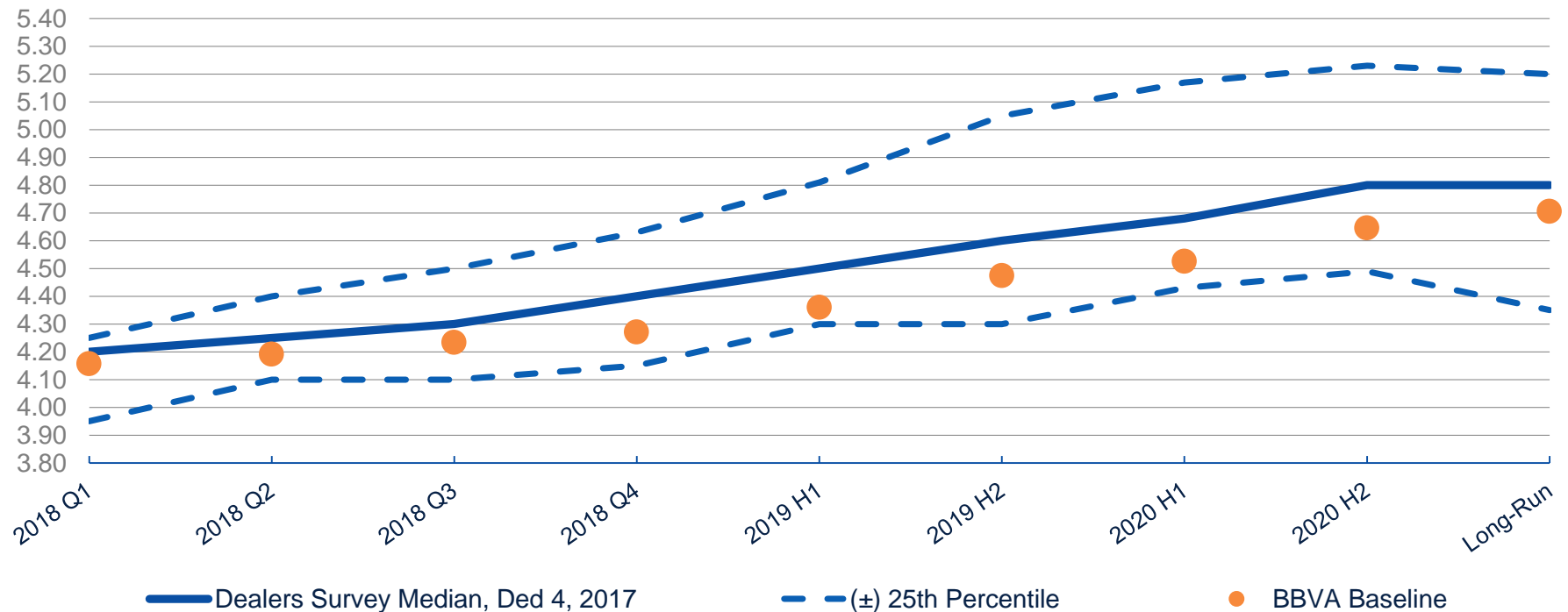
**PROJECTED 10-YEAR TREASURY YIELD (%)**



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# Dealers' expectations are for gradual increase in the mortgage rate stabilizing at 4.8%

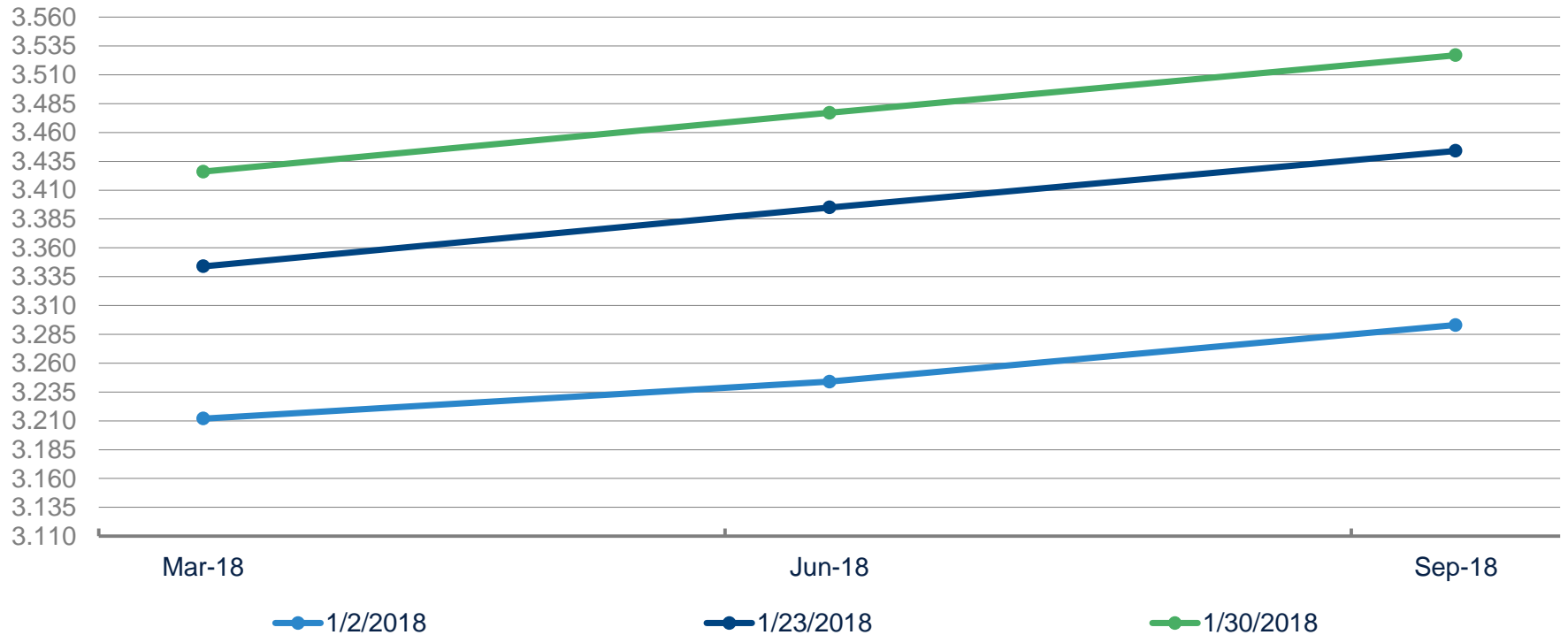
**PROJECTED 30-YEAR FIXED PRIMARY MORTGAGE RATE (%)**



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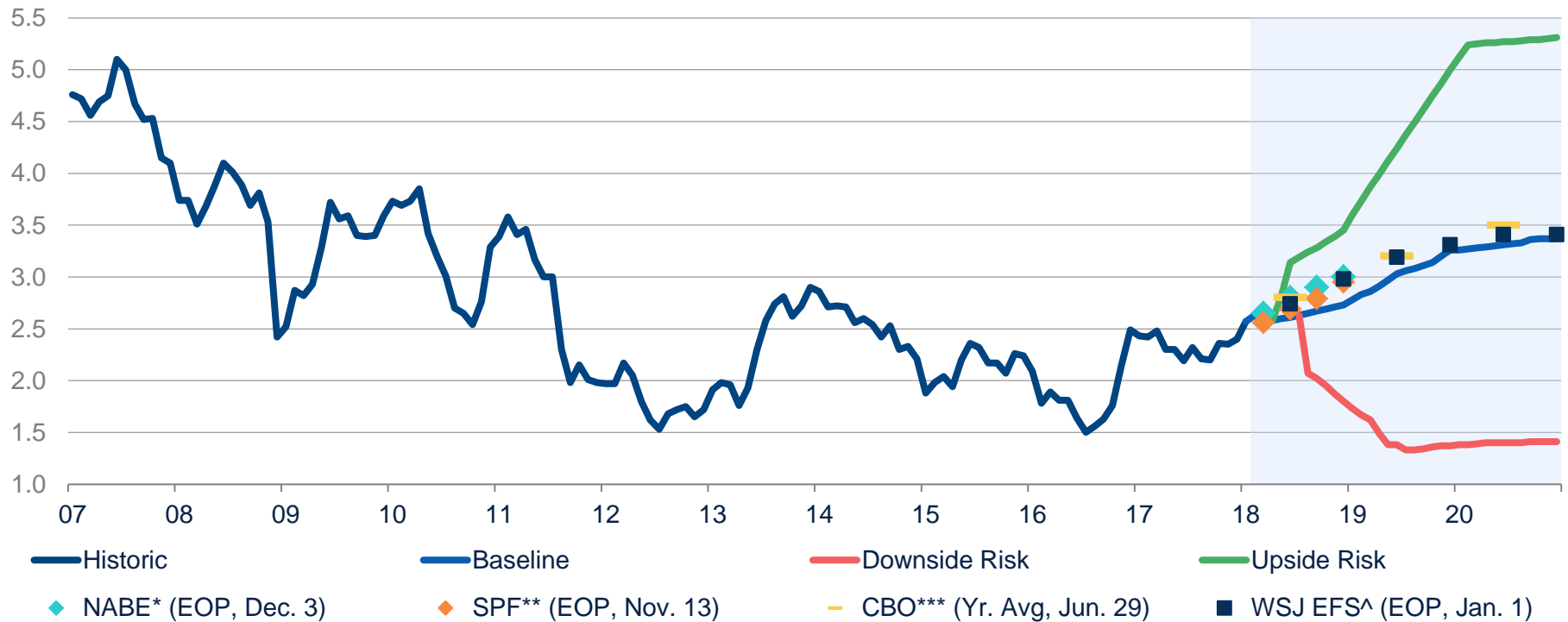
# Futures discount a 10 basis point rise in 10-year Treasury yields over the next 3 quarters

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



# 10-year Treasury yield forecasts

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

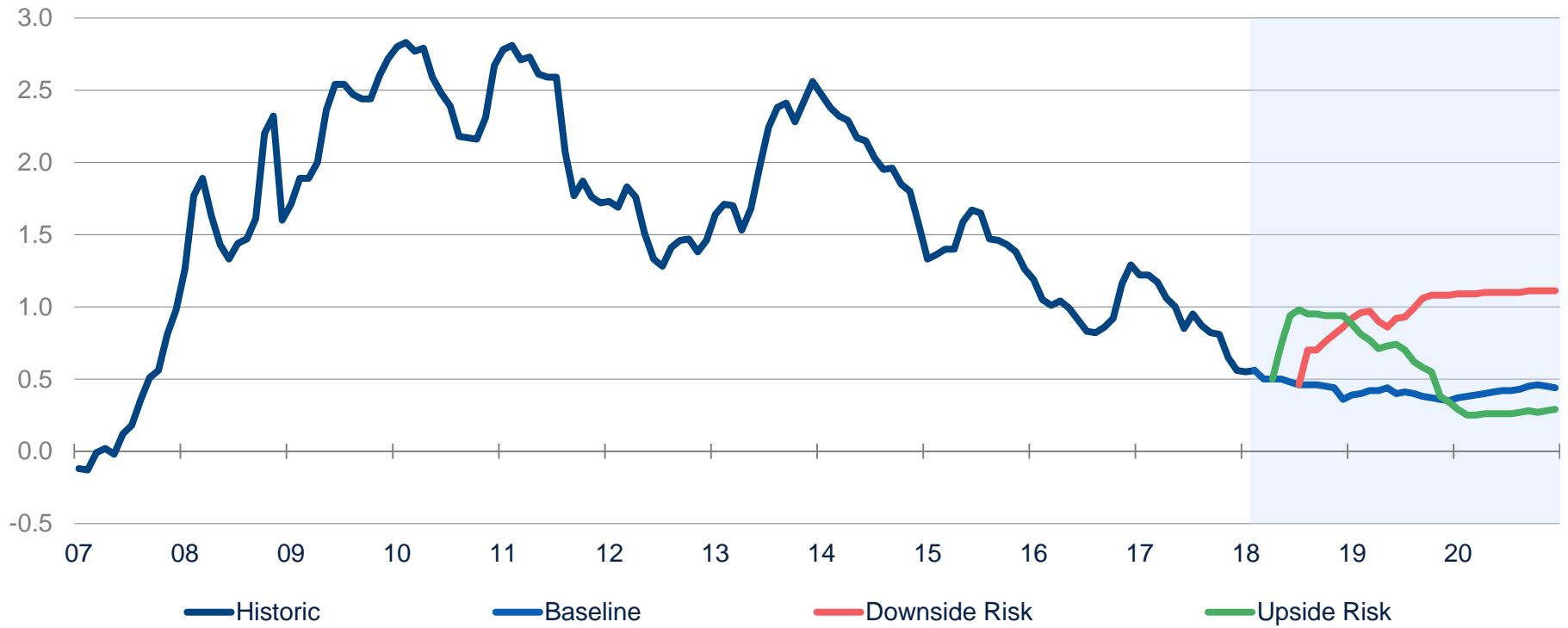


\* National Association for Business Economics (NABE) Outlook median forecast compiled from a panel of NABE members. Last release date December 3, 2017  
 \*\* Survey of Professional Forecasters (SPF) conducted by Federal Reserve Bank of Philadelphia. Last release date November 13, 2017  
 \*\*\* Congressional Budget Office (CBO). Last release date June 29, 2017  
 ^ Economic Forecasting Survey. The Wall Street Journal surveys a group of more than 60 economists on a monthly basis. Last release date January 1, 2018



# Yield curve slope forecasts

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

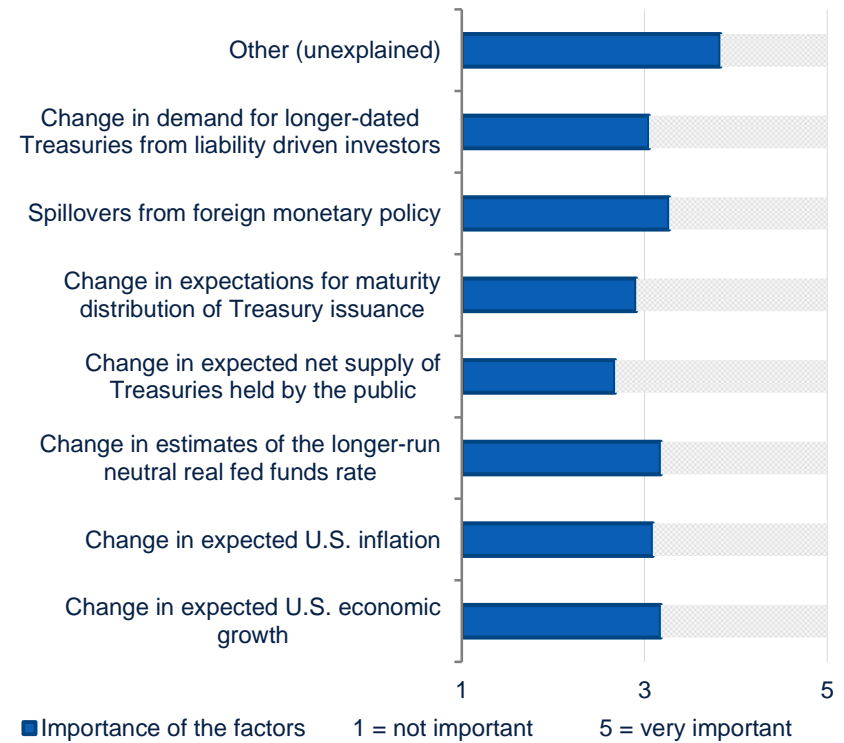
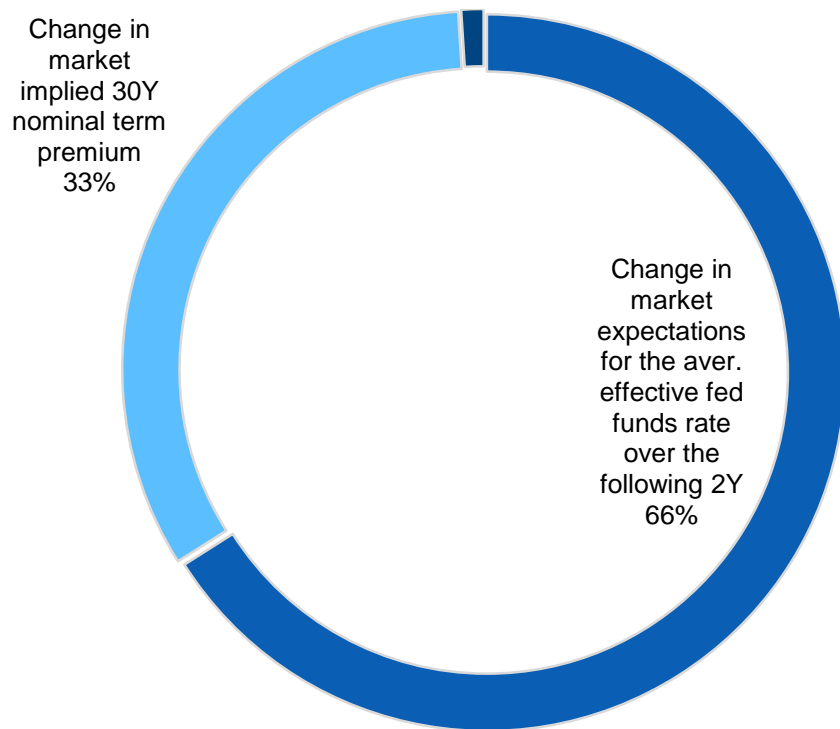


Source: BBVA Research, Federal Reserve Board and Haver Analytics

# Yield curve slope 100 basis points flatter than 2015 while dealers place highest importance on unexplained factors

## FACTORS BEHIND 100 BPS NARROWED SPREAD SINCE DECEMBER 2015

(bps, 30Y-2Y)

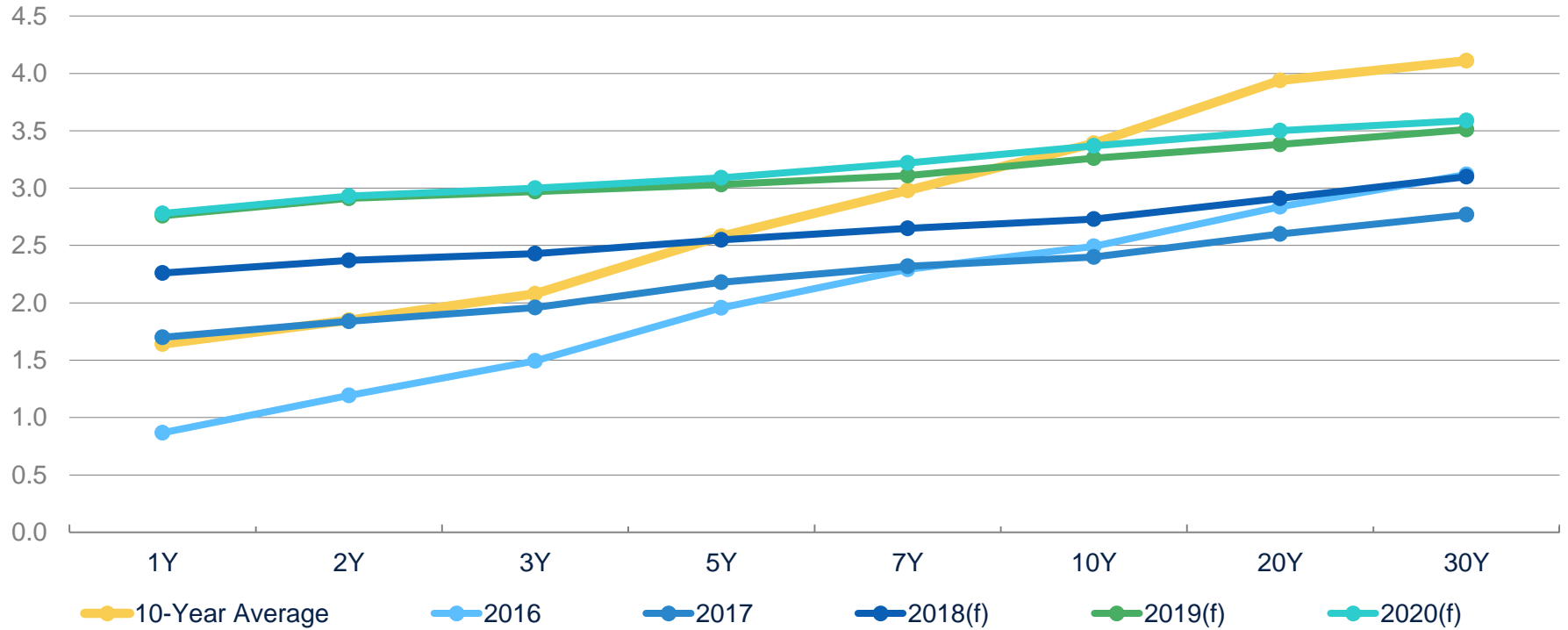


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# Yield curve forecasts

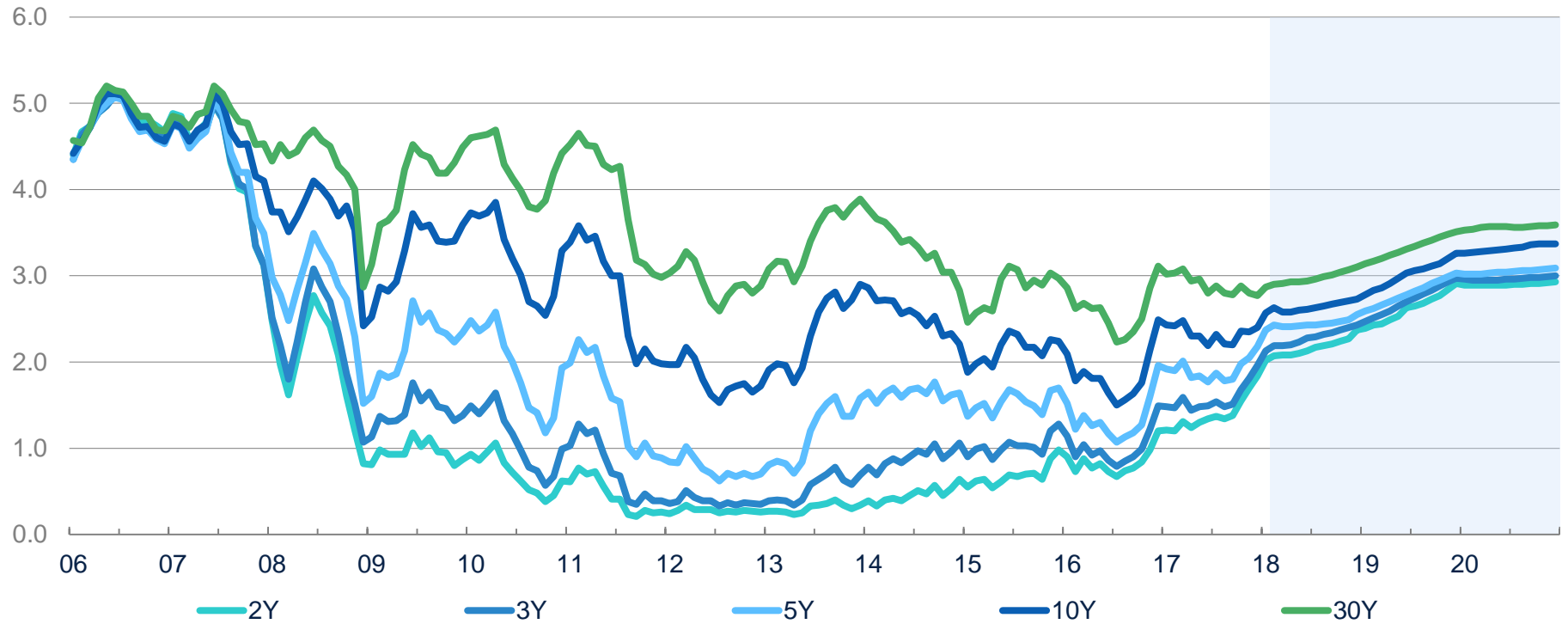
**TREASURY YIELD CURVE BASELINE FORECAST**  
(%, End of Period)



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.

# Treasury yield curve baseline forecasts

**U.S. TREASURY YIELD CURVE**  
(%)

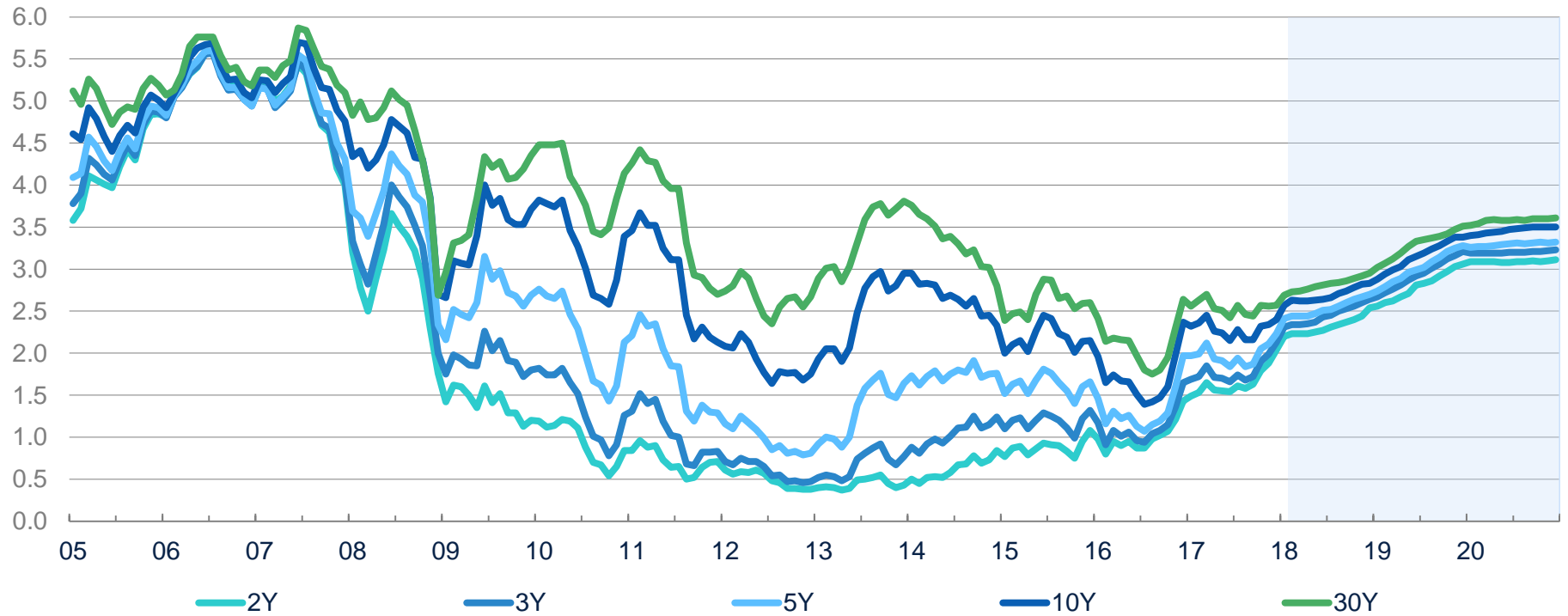


Treasury yield curve is estimated with a three-factor no-arbitrage model linked to macroeconomic factors measuring growth, inflation and monetary policy. Estimates are based on BBVA research baseline forecast for GDP growth, inflation and Fed funds rate.

# Swap curve baseline forecasts

## U.S. SWAP RATES

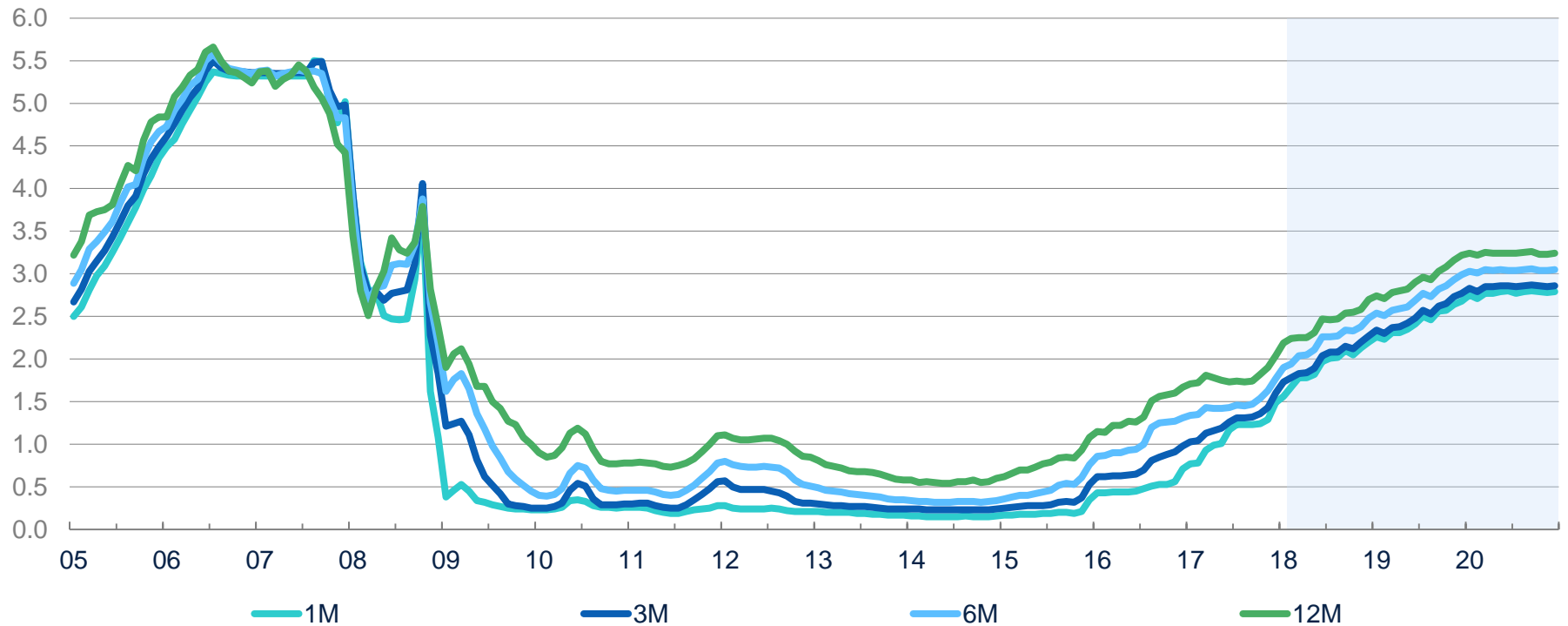
(%)



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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