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Are Low Long-Term Rates Here to Stay?

The Fed's Liftoff vs. Downward Pressures on Long-Term Rates

Houston, TX

April 28, 2015

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Meeting Details

Topic: Are Low Long-Term Rates Here to Stay?

The Fed's Liftoff vs. Downward Pressures on Long-Term Rates

Date: Tuesday, April 28, 2015

Time: 10:00 am, Central Standard Time (Chicago, GMT-06:00)

Meeting Number / Access Code: 717 715 398

Meeting Password: bbva1234

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Long-Term Rates in the Current Economic Setting

Monetary Policy Normalization on the Horizon

- Unprecedented monetary policy accommodations to tighten with the end of QE3 in December 2014 and with the Fed's expected liftoff in 2H15 (BBVA baseline – September 2015)

Moderate Pace of Economic Expansion

- 2015 GDP growth projection is 2.9%. Diminishing underutilization of labor resources as the unemployment rate approaches 5% by the end of 2015
- Downward pressure on headline inflation from a drop in energy prices has pushed our 2015 CPI headline inflation forecast to 0.6% with no significant pass- through to core inflation (2015 Core CPI inflation 1.6%)

10-Year U.S. Treasury yield hit a bottom of 1.68% in January 2015

- Lowest level since 2H12, which followed Fed's "Operation Twist" and the start of QE3

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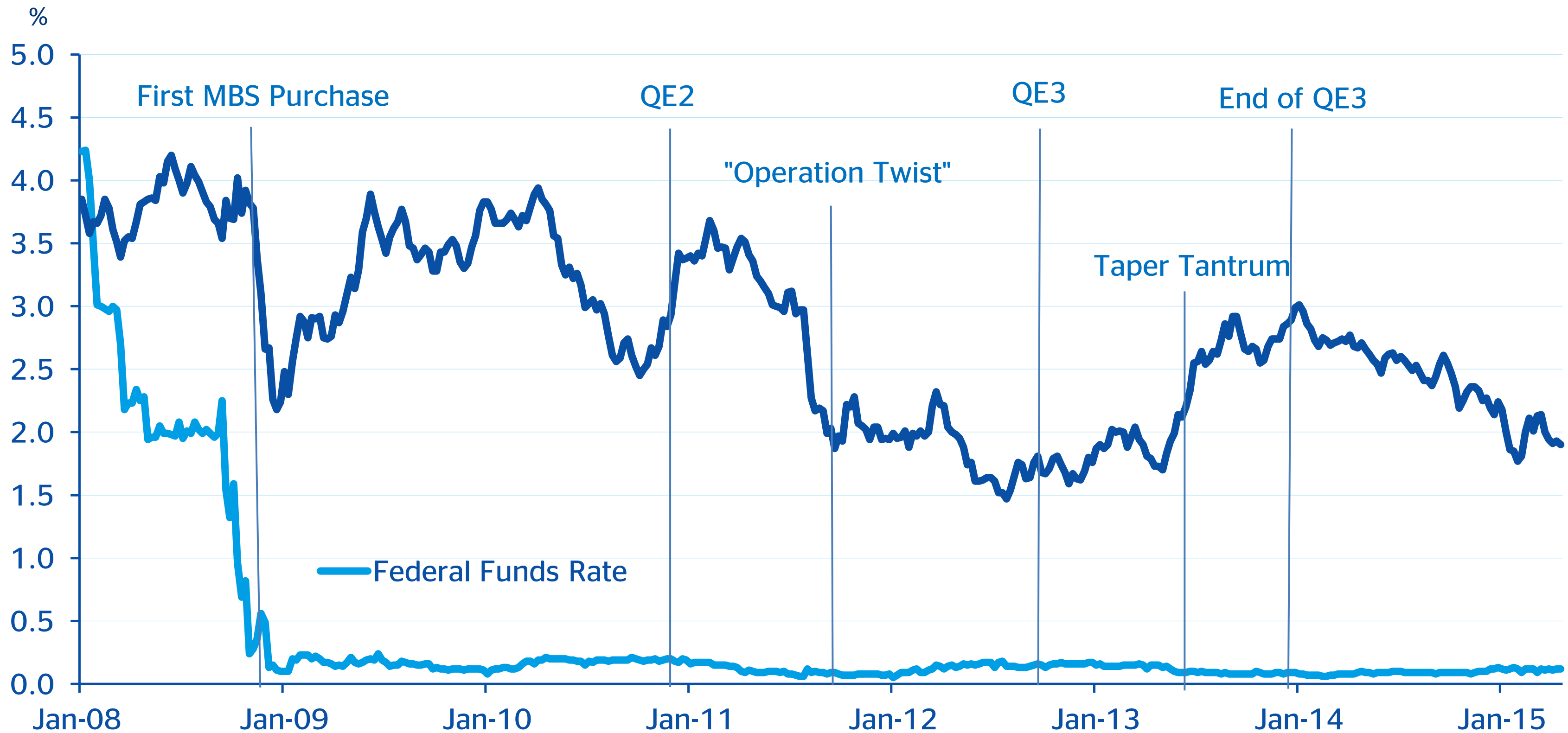
Long-Term Rates in the Current Economic Setting

Fed to kick off the normalization process after seven years of unconventional monetary policy

FFR and 10-Year Treasury Note



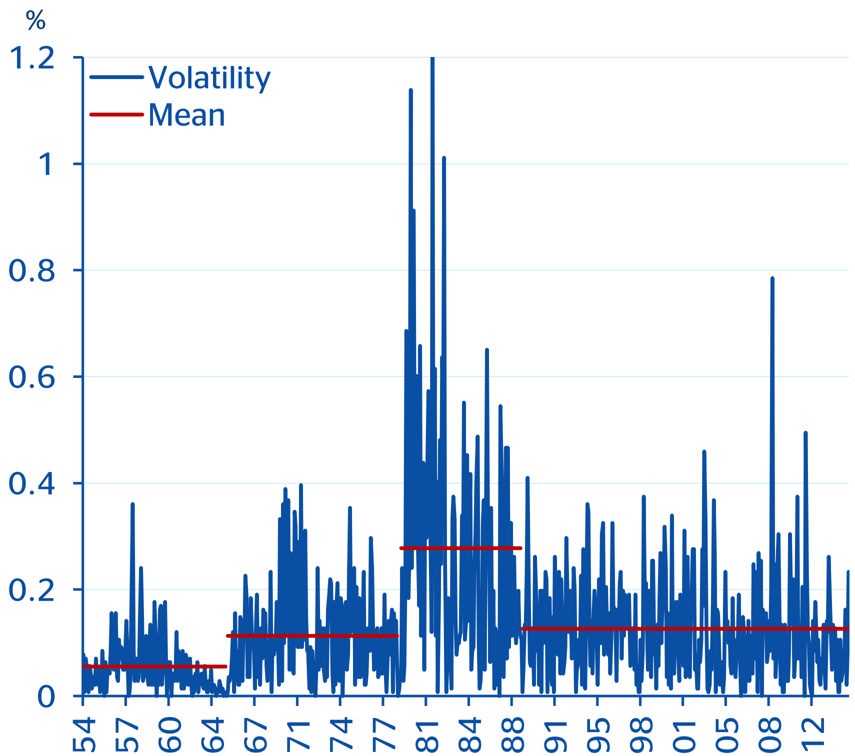
Source: FRB & BBVA Research

Long-Term Rates in the Current Economic Setting

Seven years of unconventional monetary policy has not affected volatility

- Volatility has remained stable since the 1990s (13bp mean)

10-Year U.S. Treasury Yield Volatility



Source: BBVA Research

10-Year U.S. Treasury Note Volatility

Source: CBOE & BBVA Research

Long-Term Rates in the Current Economic Setting

Low long-term rates are a direct result of the post-recession environment and financial regulations

- Structural changes in market dynamics
- Structural and cyclical factors in macroeconomic fundamentals (lower potential output and low inflation)

Forces behind low long-term rates

- Low inflation risk
- Reduced monetary policy uncertainty
- Reduced duration risk due to supply-demand imbalance

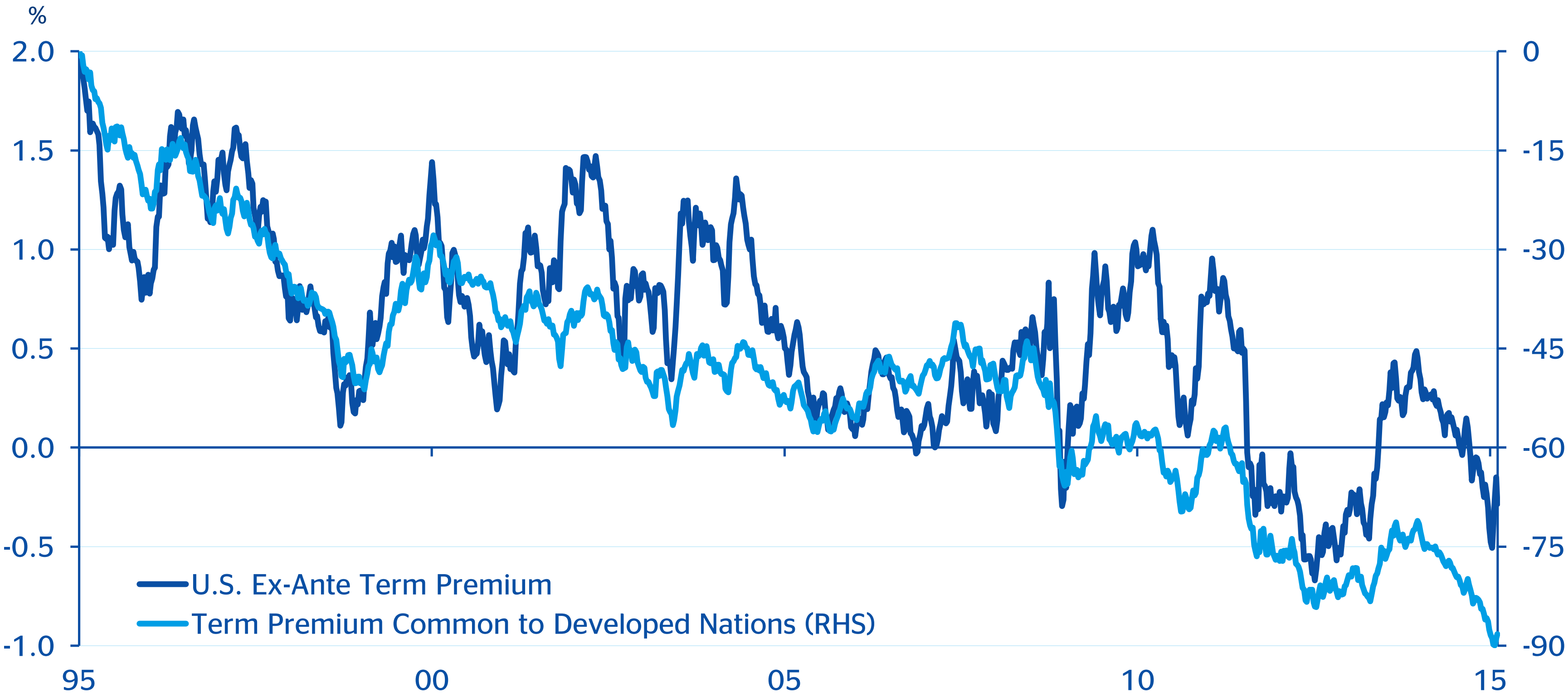
Downward pressure on long-term rates will remain

- Structural issues affecting the current low equilibrium level of long-term Treasury yields are unlikely to dissipate quickly

Forces Behind Low Long-Term Rates

Common term premium among developed nations: U.S., Canada, Germany, UK, Japan, and Australia has sloped downward since mid 1990s

U.S. and Developed Nations Term Premium



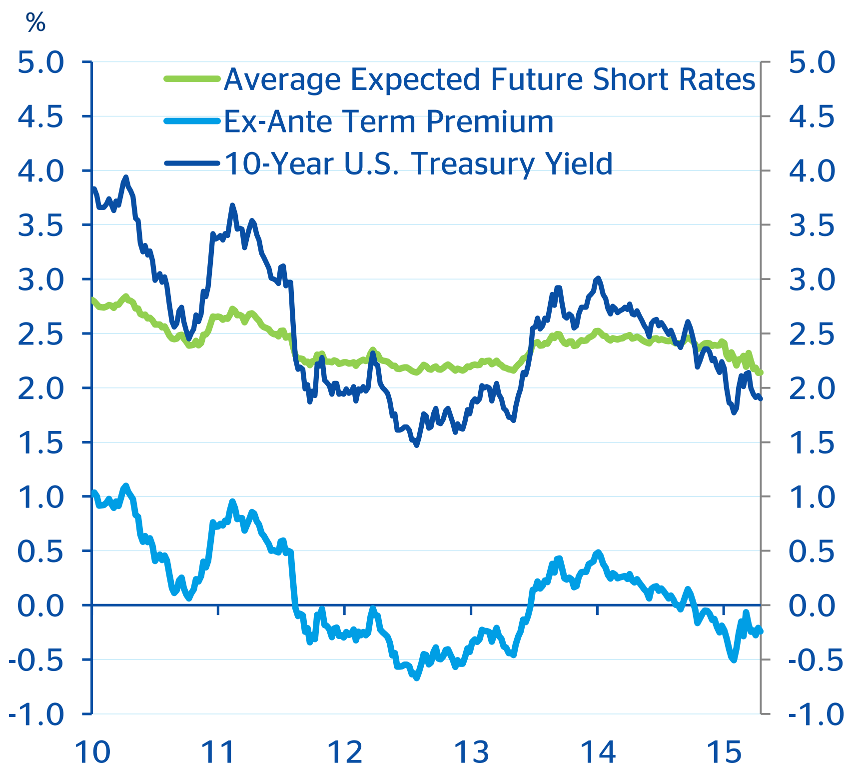
Source: BBVA Research

Forces Behind Low Long-Term Rates: Inflation Risk

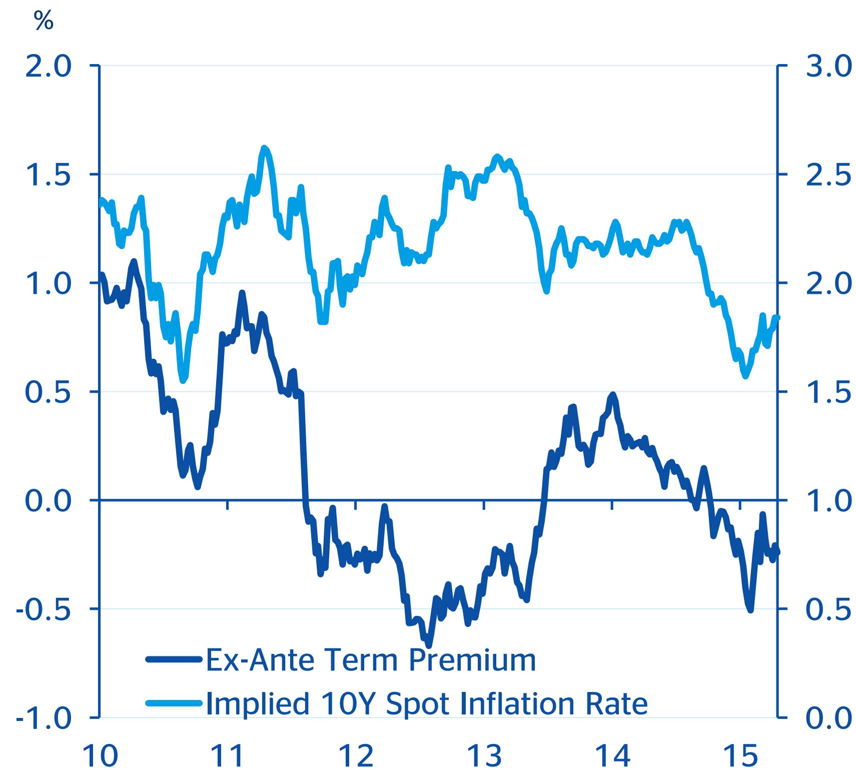
This is the second lasting episode of negative term premium

- Since 2014, both term premium and inflation expectations have declined

10-Year U.S. Treasury Yield and Term Premium



Term Premium and Inflation Expectations



Source: FRB & BBVA Research

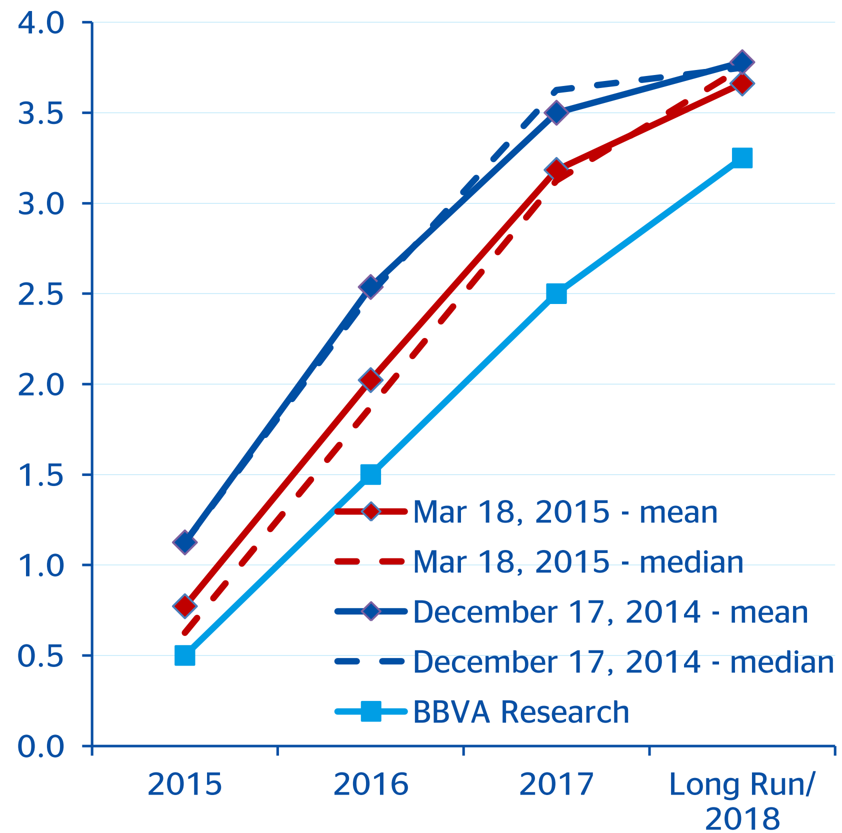
Forces Behind Low Long-Term Rates: Reduced Monetary Uncertainty

Since the "Taper Tantrum," the Fed has learned to avoid market surprises

- Fed communications have been crafted to align market expectations with the Fed's future reaction function
- Former Fed governor Stein: "to avoid unsettling markets, Fed officials have an incentive to stick to the path investors infer." (WSJ, March 17, 2015)
- FOMC's March projections of the appropriate pace of policy firming, flattened

FOMC Pace of Policy Firming and BBVA FFR Path

%, EOP



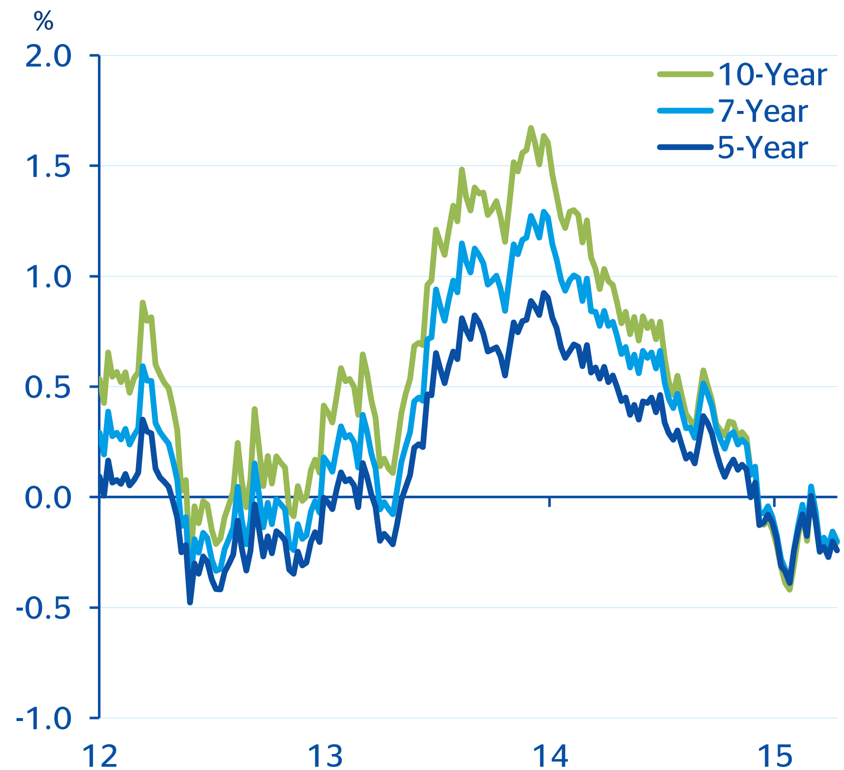
Source: FRB & BBVA Research

Forces Behind Low Long-Term Rates: Supply-Demand Imbalance

Decline in duration risk resulted in a one of a kind historic event:
Compression of term premium curves in medium to long-term treasuries

Term Premium Spread

Term Premium



Source: FRBNY & BBVA Research

Forces Behind Low Long-Term Rates: Supply-Demand Imbalance

Portfolio

- Supply-demand imbalance is an outcome of

Balance

- a reduction in the aggregated amount of longer-term bonds which shortens the average maturity of outstanding securities

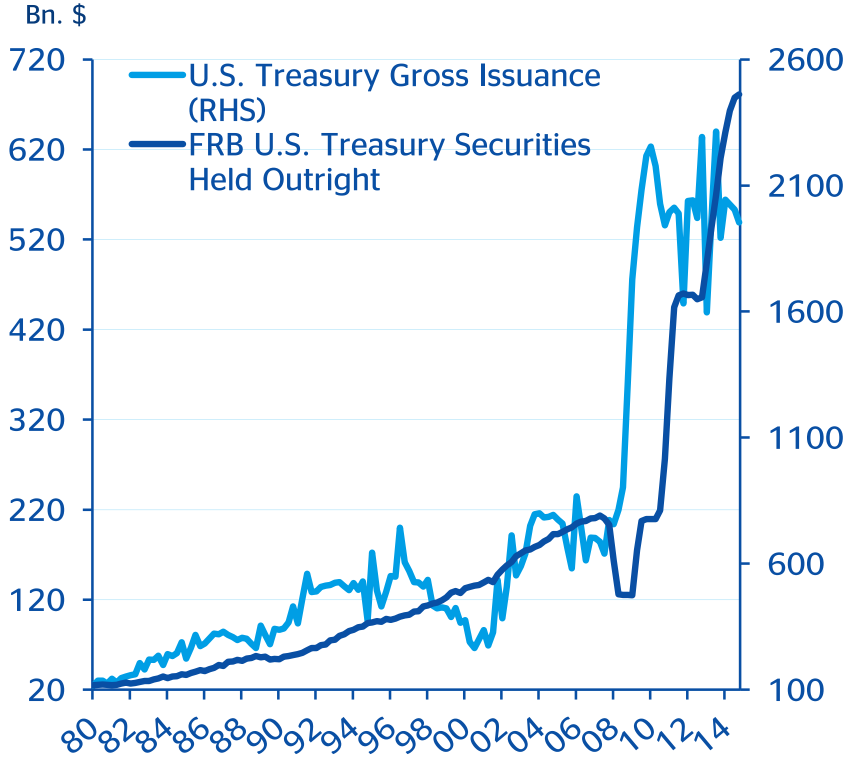
Channel

- Resulting in a decline of duration risk

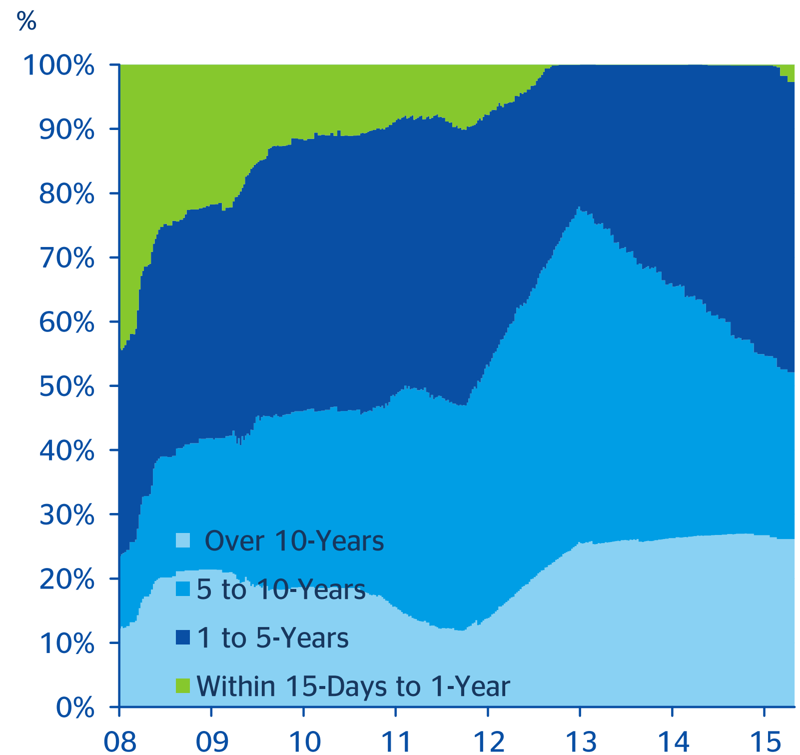
Supply-Demand Imbalance: Demand Side Pressures

The Fed maintains the reinvestment policy - not depleting its $2.46Tn holdings of securities (19.6% of total outstanding Treasuries and 15.1% of GDP)

Issuance and Fed Holdings of Treasury Securities



Fed Holdings of Treasury Maturity Distribution



Source: Bureau of Public Debt, FRB, Haver Analytics & BBVA Research

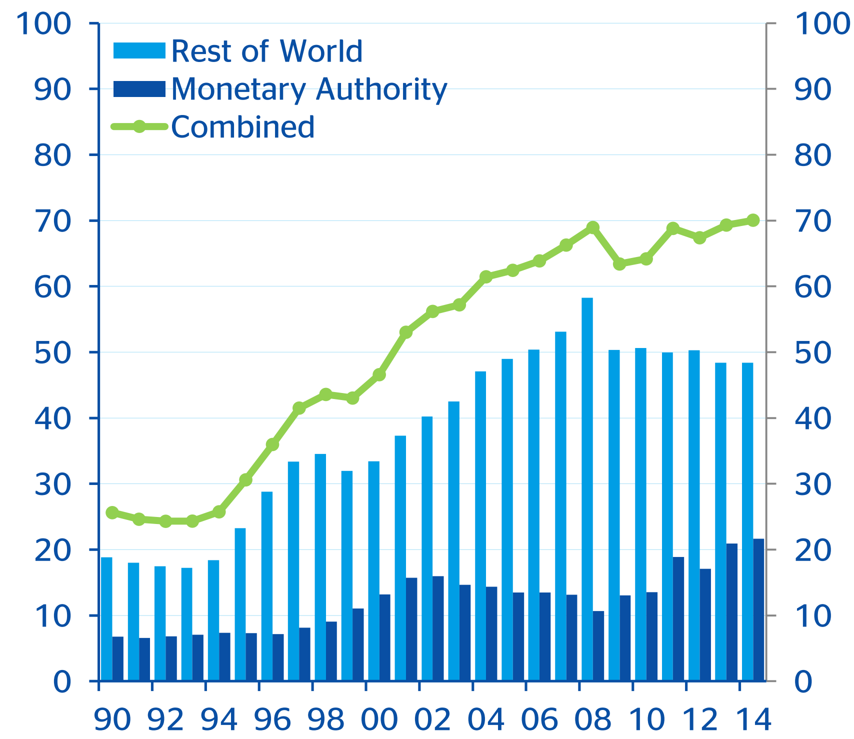
Supply-Demand Imbalance: Demand Side Pressures

U.S. debt has not lost its appeal to foreign investors

- More attractive in comparison to its counterparts, offering lower deflationary risk and greater promise for economic growth
- 2014 holdings by the rest of the world accounted for 48% of U.S. debt issuance ($5.5 tn.)
- 2014 combined holdings of the Fed and the rest of the world was at 70% of U.S. debt issuance

Fed and Foreign Holdings as a Share of Government Liabilities of Treasury Securities

%

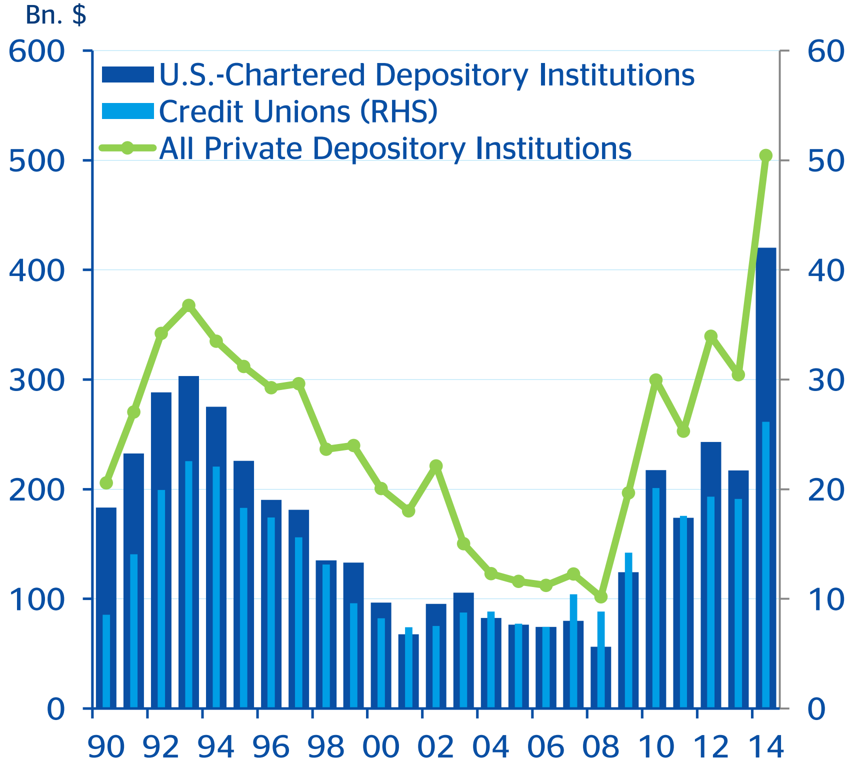


Source: FRB & BBVA Research

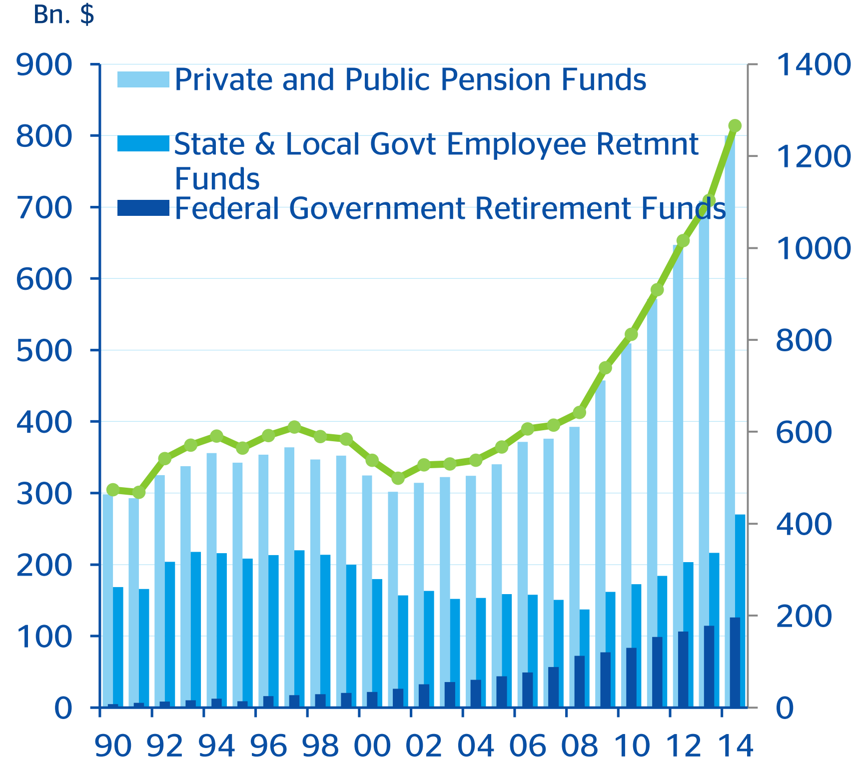
Supply-Demand Imbalance: Demand Side Pressures

New financial regulations on liquidity rules increased domestic pressure on the demand by banks and pension funds

Treasury Securities Holdings



Treasury Securities Holdings



Source: FRB & BBVA Research

Downward Pressure will Remain

Low term-premium environment to stay

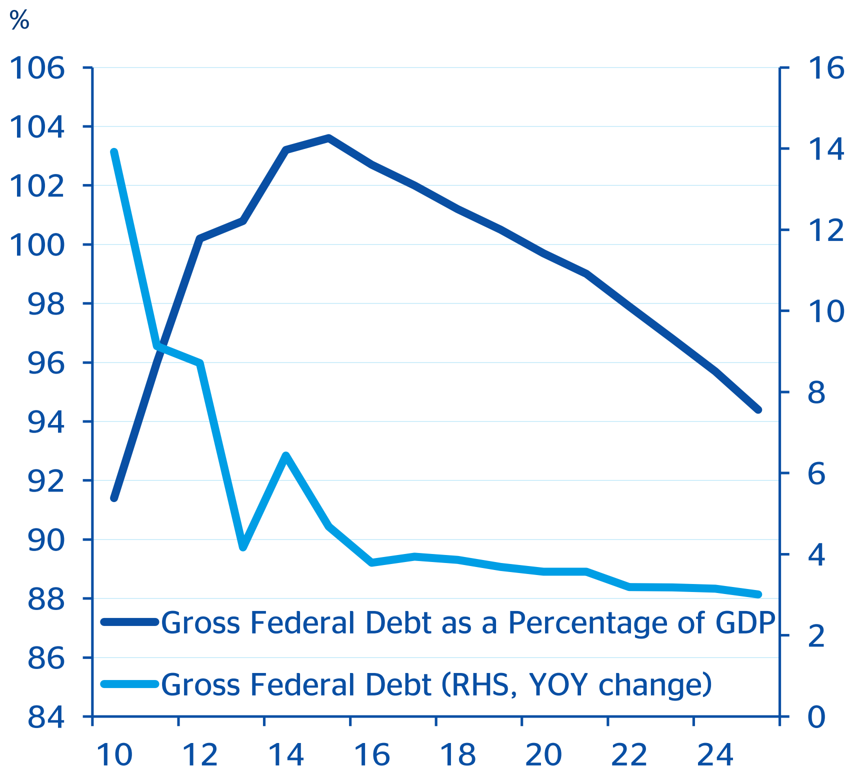
- Inflation risks are not expected to pick up due to long-term structural shifts in inflation composition
- Reduced policy uncertainty environment will continue through the course of the Fed Exit as the Fed will maintain policy transparency and clear communication
- Duration risk will maintain downward pressure due to the supply-demand imbalance
  - **Supply** – debt issuance will stabilize around a year-over-year growth rate of 3.5%
  - **Demand** – domestic regulations and foreign demand will keep upward pressure (the flight to safety and flight to quality are expected to continue)

    Additionally, the decoupling between the policies of the Fed and the ECB will likely result in an additional flow of funds into U.S. markets.

Downward Pressure will Remain

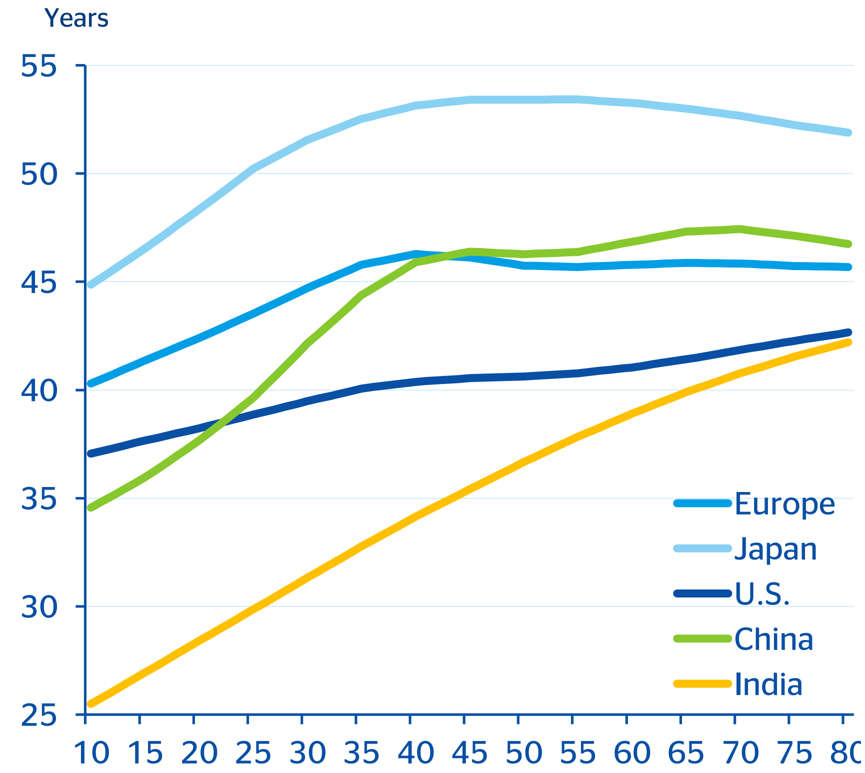
As aging populations become one of the pivotal structural obstacles to potential growth in the developed world - the share of foreign holders of U.S. debt will continue to grow far into the future

Gross Federal Debt



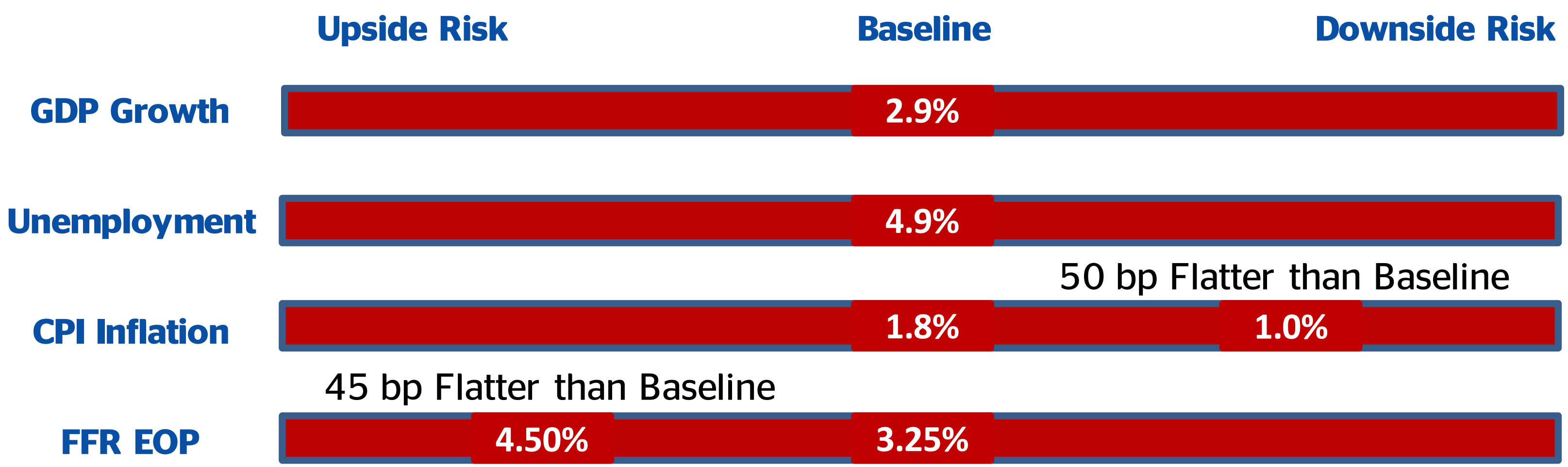
Source: OMB & BBVA Research

Median Age



Source: UN & BBVA Research

Yield Curve Forecasts



Macroeconomic Fundamentals and the Yield Curve Forecasts in 3 scenarios:

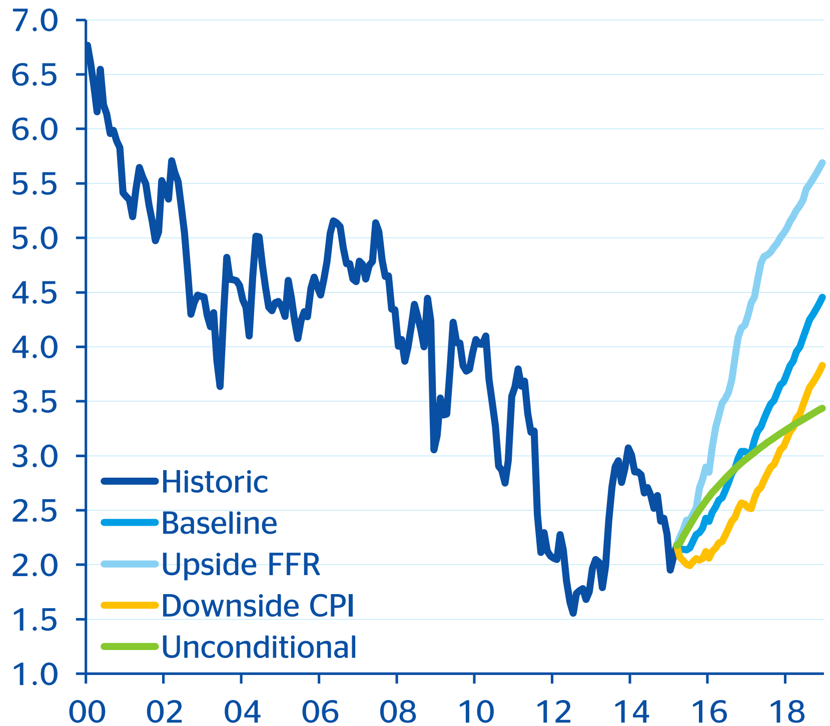
1) the BBVA Research baseline scenario of 4-year average real GDP growth of 2.9%, CPI inflation of 1.8%, and federal funds rate tightening by 300bp by the end of 2018
2) a steeper path of policy rate tightening (4-year increase in federal funds rate of 425bp)
3) low inflation with a 4-year average inflation rate of 1.0%

Yield Curve Forecasts

- 125bp higher policy rate results in almost an equivalent increase in 10-Year yields and 45bp flatter yield curve
- lower inflation results in a 63bp decline in yield and flattens the curve by 50bp

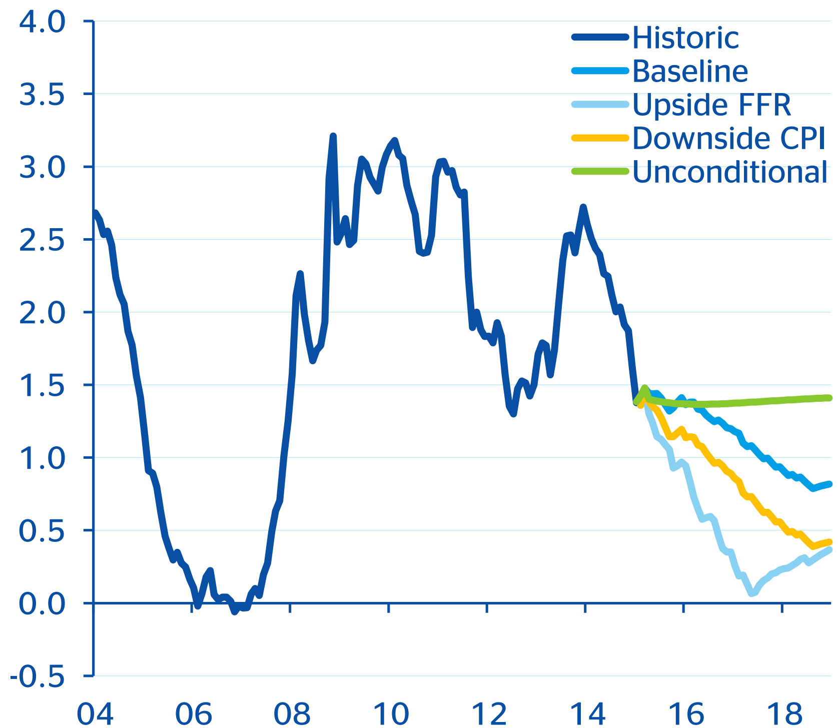
Zero-Coupon 10-Year U.S. Treasury Yield

%



Zero-Coupon Yield Curve Slope

10Y-2Y, %



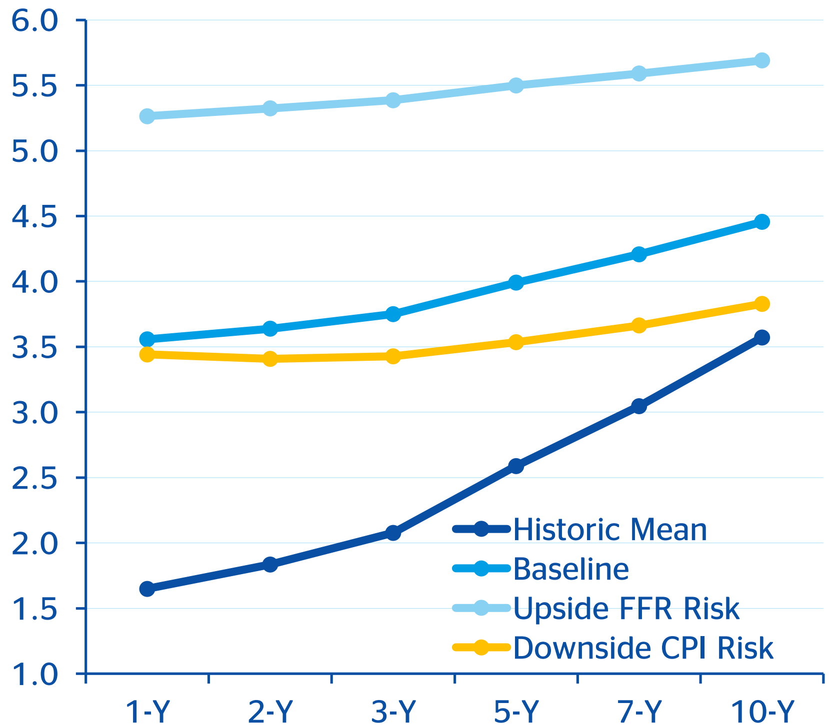
Source: BBVA Research

Yield Curve Forecasts

We find that both inflation and the FFR are far more relevant than economic growth for the future path of long-term yields

2018 Zero-Coupon Yield Curve

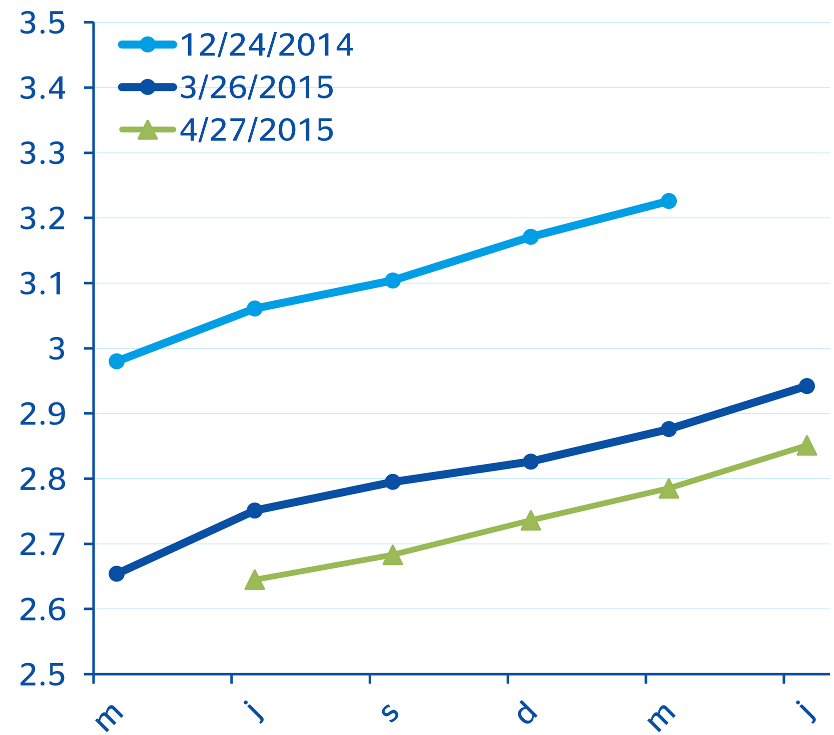
EOP, %



Source: FRB & BBVA Research

10-Year U.S. Treasury Yield Futures

%



Source: Bloomberg & BBVA Research

Milder Increase and Flatter Yield Curve

- The structural and cyclical factors that explain recent historical low levels of long-term rates are unlikely to dissipate quickly
- Improved fiscal conditions, new financial regulations, demographic changes and elevated global uncertainty will offset the absence of additional Fed asset purchases

Outcome

Milder long-term rate increases and flatter yield curve forecasts, even when accounting for macroeconomic factors and short-term rate liftoff

Small Likelihood of Upside Pressure

Small likelihood of upside pressure on long-term yields can arise from an increase in the aggregate amount of bonds available to private investors

- Domestic loosening of supply - if the Fed speeds the balance sheet normalization process, selling longer-term treasuries
- The effect could be augmented if foreign central banks fall under financial distress and need to sell-off their U.S. Treasury holdings

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