BBVA Research

U.S. Economic Outlook

March 2019

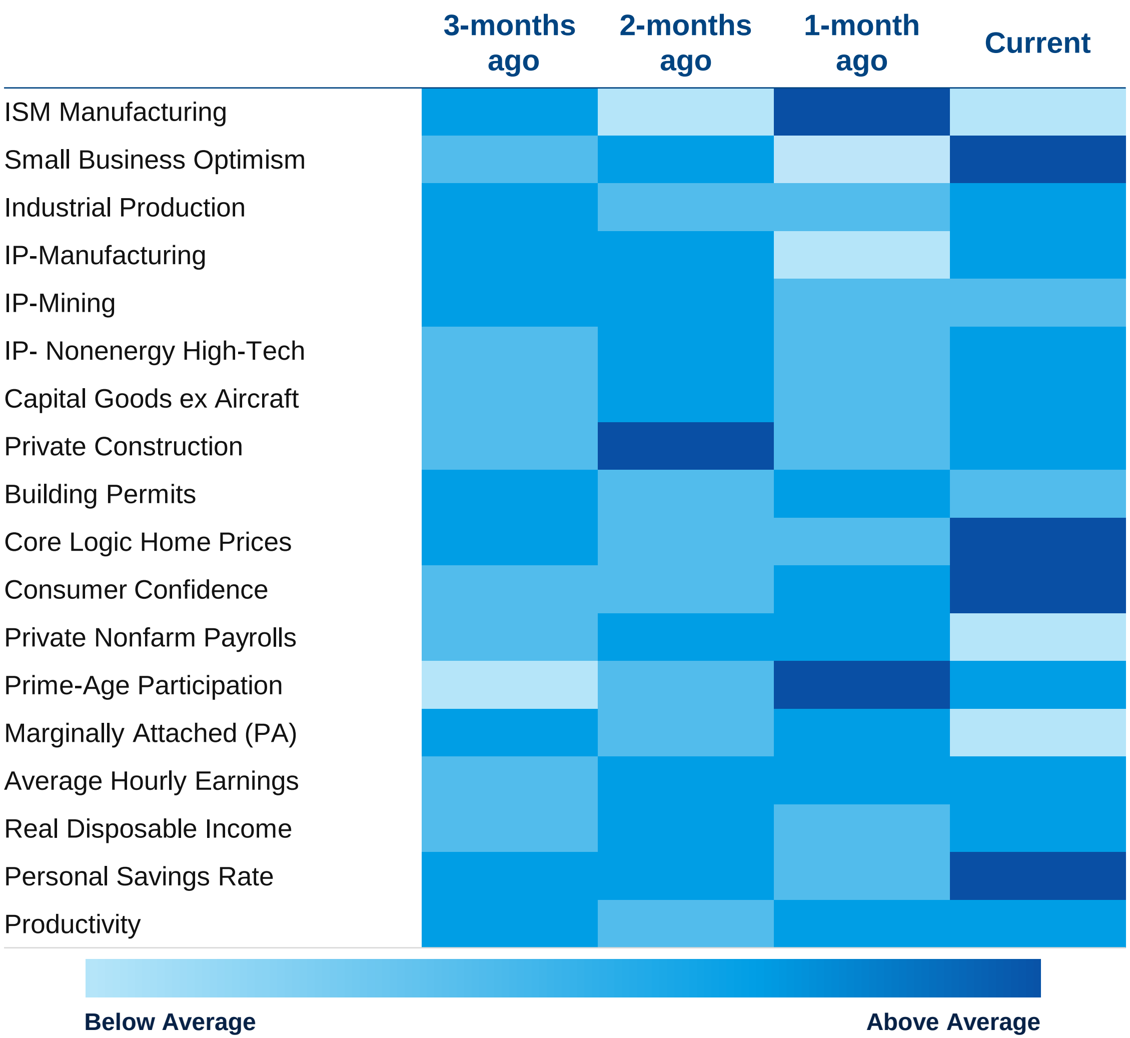
Creating Opportunities

Economic Outlook

- GDP growth to slow to 2.5% in 2019, and 2.0% in 2020
- Model based recession probability reaching troubling levels, growth outlook also tilted to the downside
- Probability of Fed rate hike in 2019 diminished; balance sheet normalization to end in September
- Labor market signals remain mixed after government shutdown
- Core inflation stable, headline below 2.0% in 2019
- Yield curve inverting, signal distorted by structural changes
- Oil prices converging with long-term equilibrium around $60/b

Economic activity

Real-Time Economic Momentum Heat Map

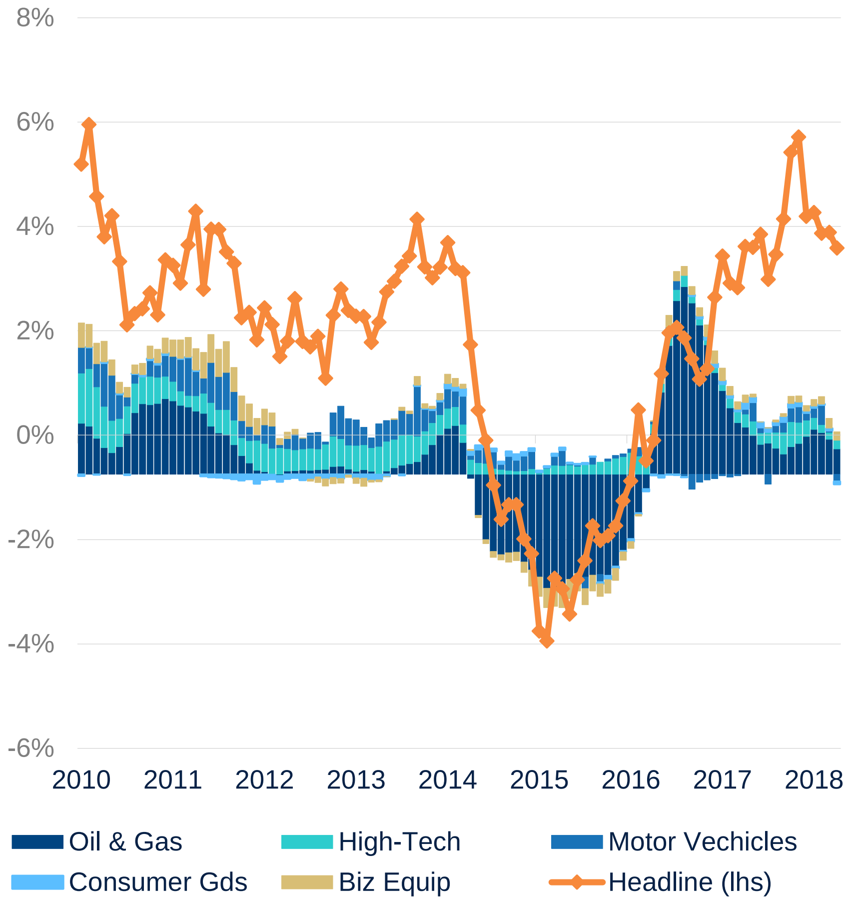


Source BBVA Research

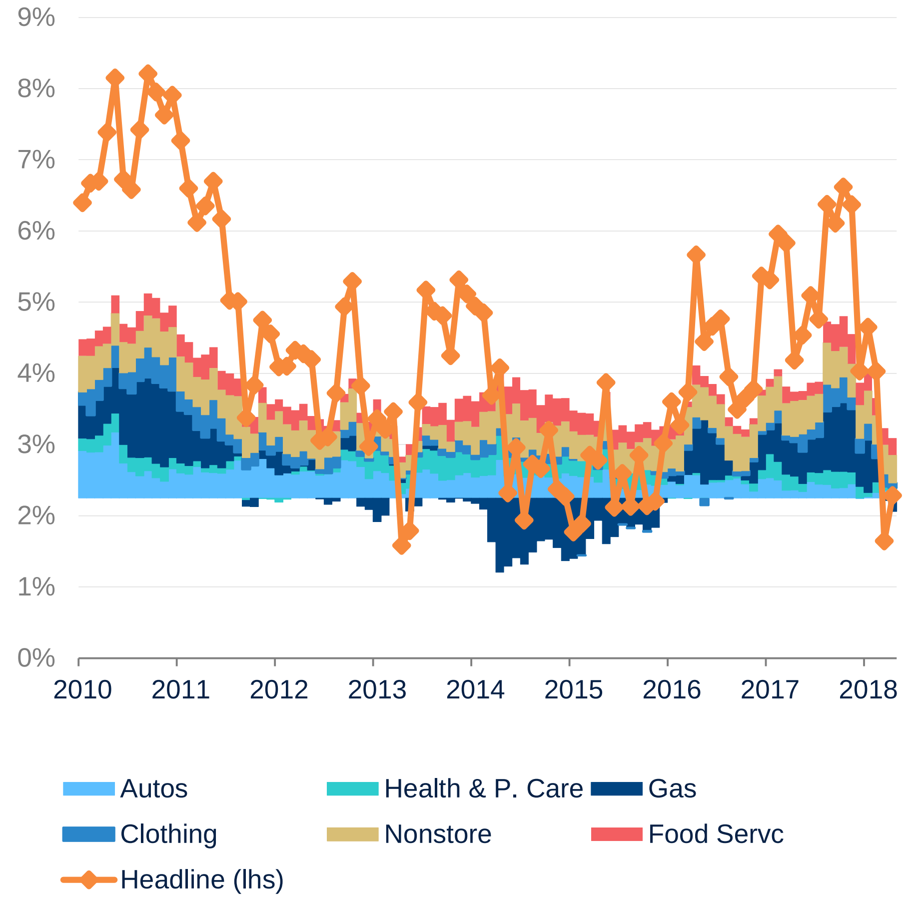
- ISM decelerating, but continues to signal expansion
- Small business concerns about rising cost of labor could presage turning point despite rebound in optimism
- Supply side conditions in housing sector recover after December slump
- Savings rebounds as year-end 2018 uncertainty encourages precautionary savings
- Labor productivity growth highest since 2015

Economic trends: Moderation continues in industrial activity, retail sales rebound from January slump

Industrial Production
(Year-over-year %)



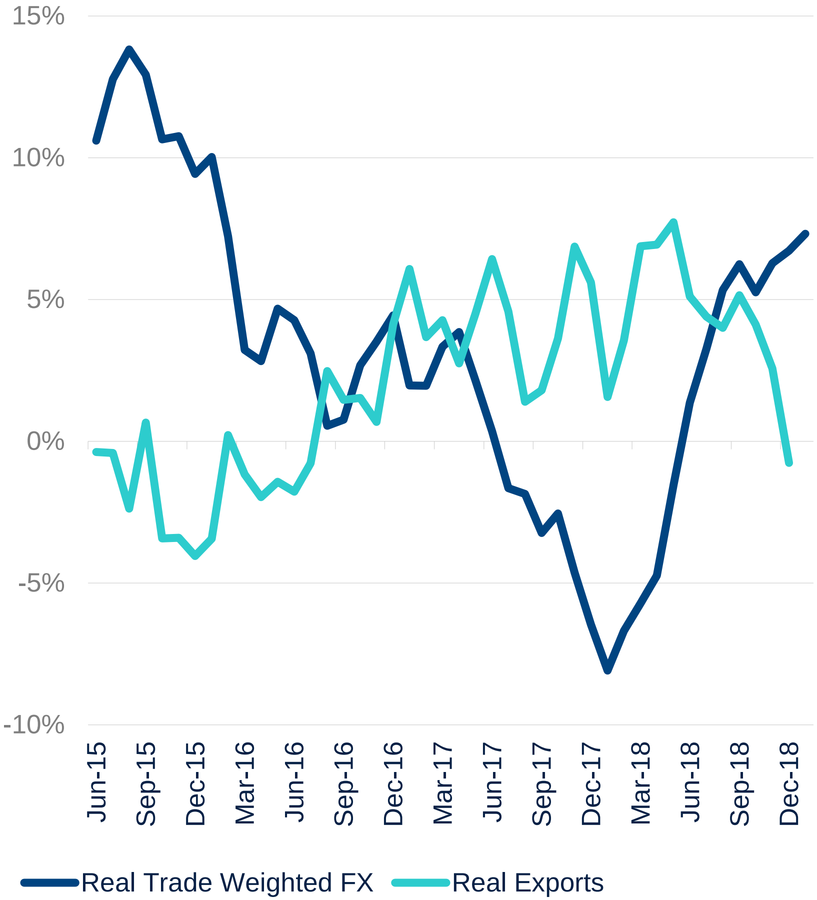
Retail Sales
(Year-over-year %)



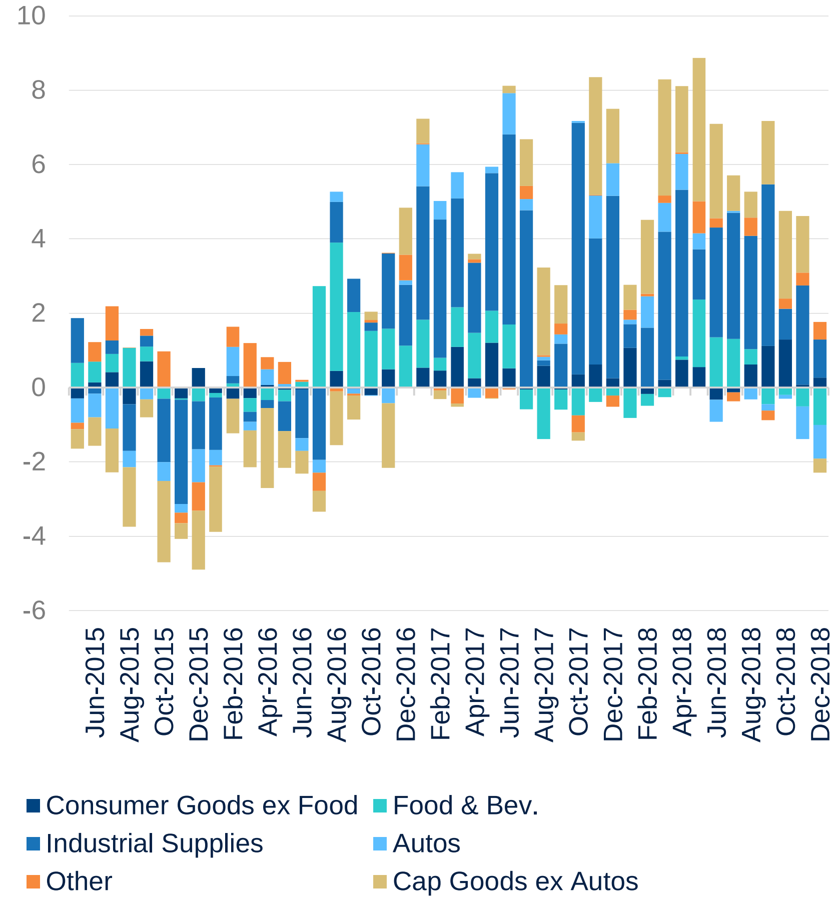
Source: BBVA Research, FRB & BEA

Economic trends: Exchange rate pressures and weakening global growth momentum drag down exports

Real Exchange Rate and Exports
(Year-over-year %)



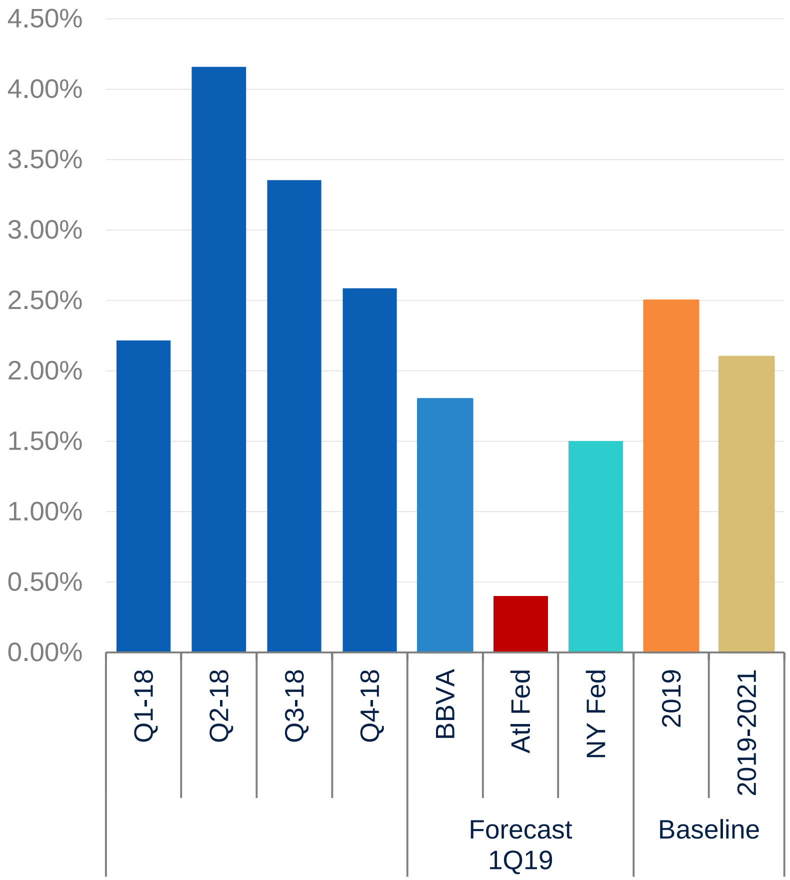
Real Exports
(Contribution to year-over-year %)



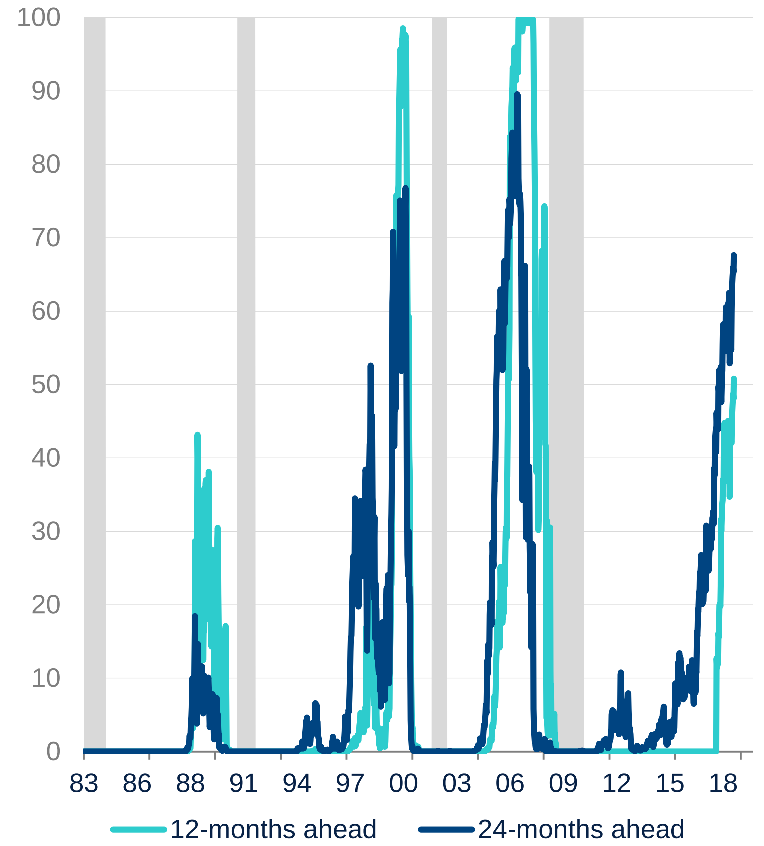
Source: BBVA Research, FRB & Census

Economic trends: Data revision implies much higher near-term recession risk: 50.7% in next 12-months

Real GDP
(QoQ SAAR, %)



Probability of Recession in 12 Months
(%)

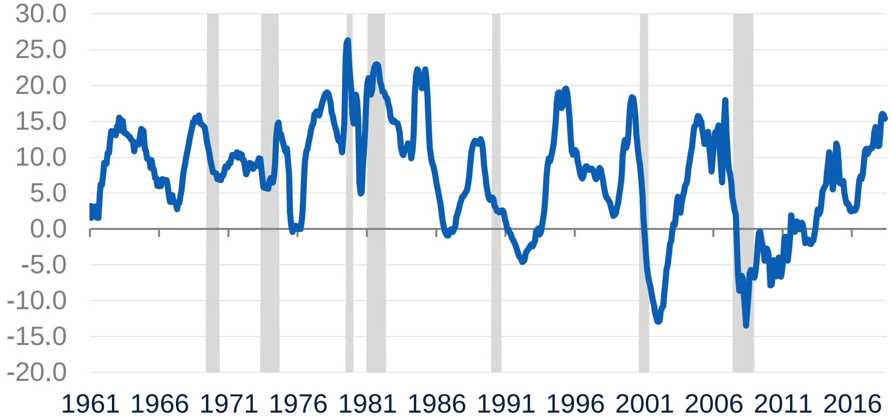


Source: BBVA Research, and ATL & NY Fed

Consumer credit cycle: Credit conditions ease despite higher levels of consumer leverage

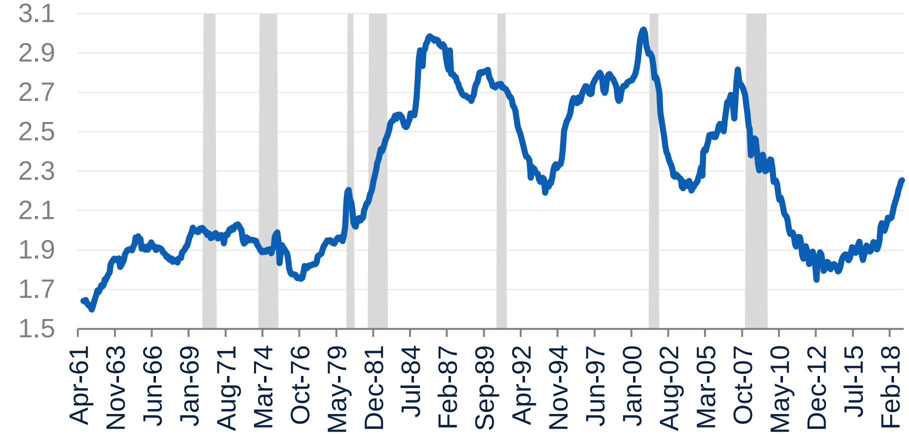
Personal Interest Expense

Year-over-year %



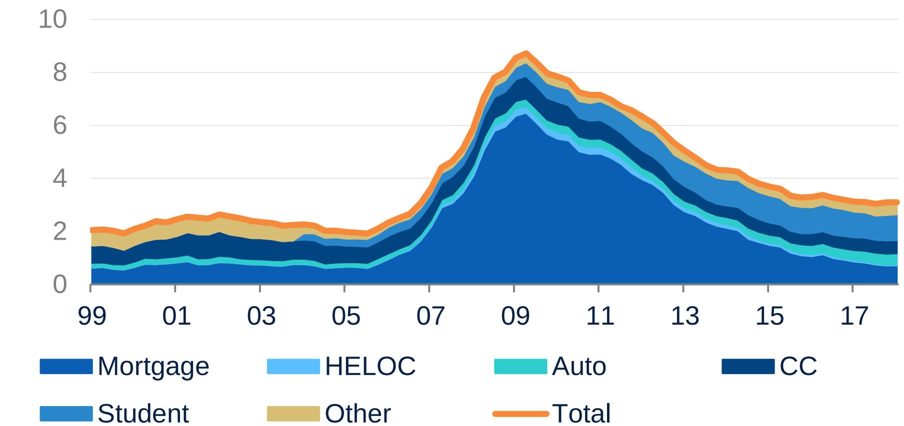
Personal Interest Expense to Disp. Income

Ratio, %



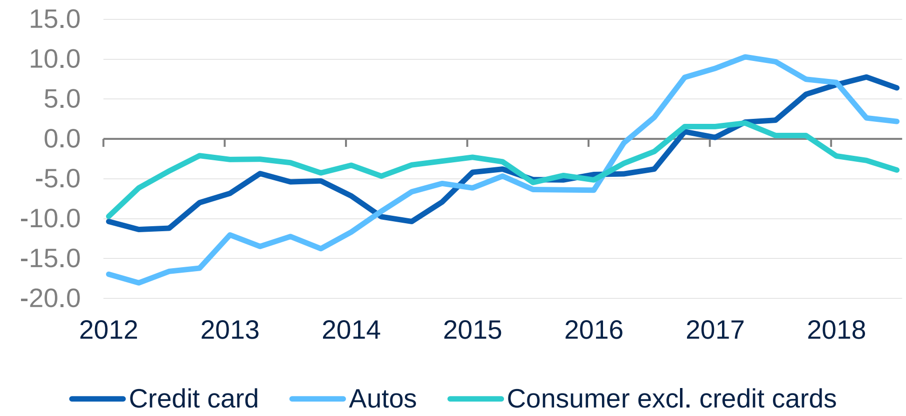
New 90+ Day Consumer Delinquencies Rates

%



Senior Loan Officers Lending Standards

+ tightening / - loosening



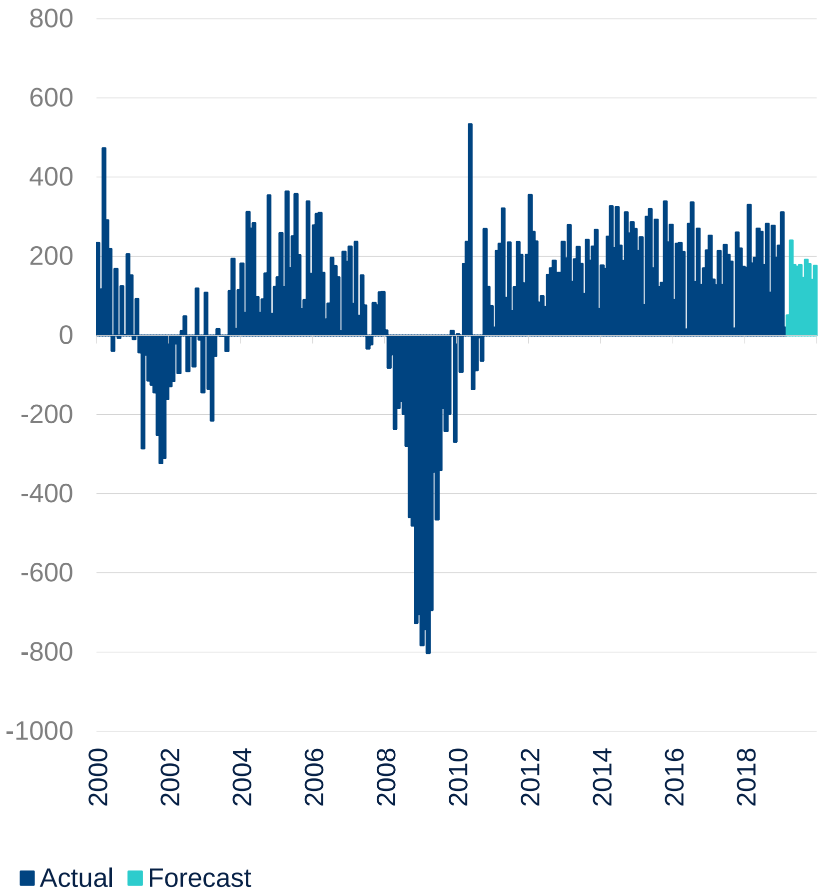
Source: BBVA Research, FRB, NY Fed & BEA

Labor Market

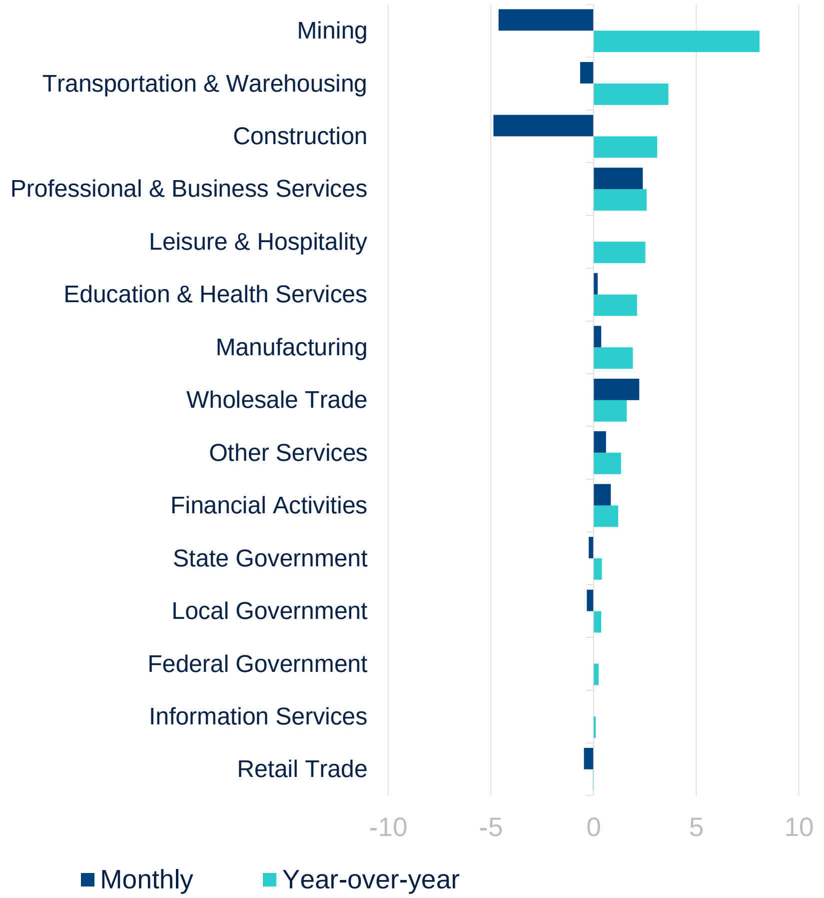
- In February, nonfarm payroll employment grew 20,000; down significantly from 311,000 in December
- Major industry weakness: construction (-31K), education (-18.7K), retail trade (-6.1K), transportation and warehousing (-3.0K), mining (-2.8K)
- The unemployment rate (UR) dropped to 3.8%, whipsawing as the impact from the government shutdown fades out of the data
- The labor force participation rate and employment-to-population remained unchanged at 63.2% and 60.7%, respectively
- We expect the UR to reach its low point in this business cycle soon (3.6%). Average monthly job growth to slow to 165K this year, from 223K in 2018

Labor market: Volatile 1Q19 reports consistent with past government shutdowns

Nonfarm Payrolls
(Monthly Change, K)



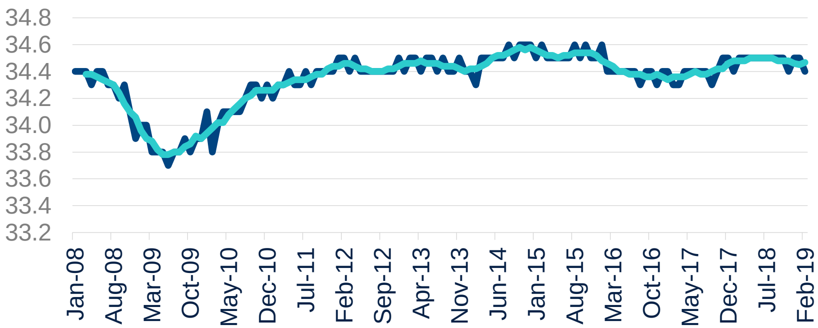
Industry Employment
(Annualized % change)



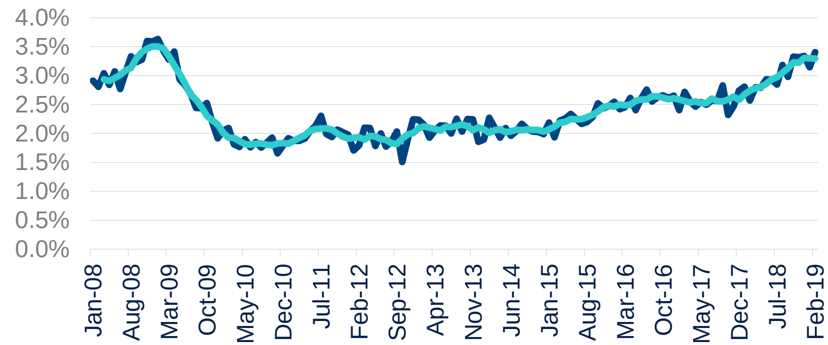
Source: BBVA Research & BLS

Labor market: Wage pressures continue to rise, as slack diminishes

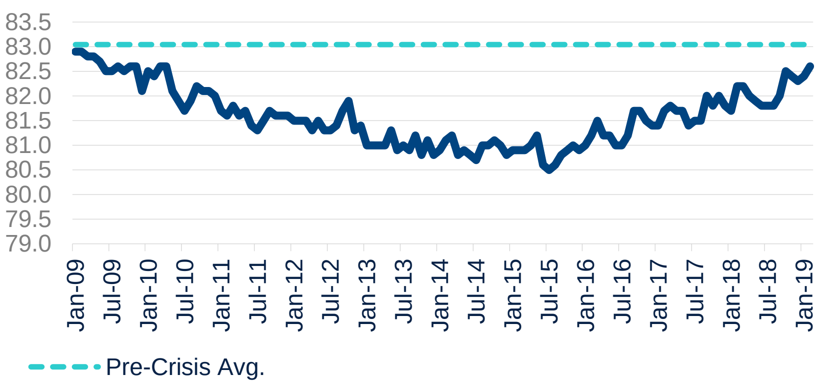
Average Weekly Hours
(number & 5mcma)



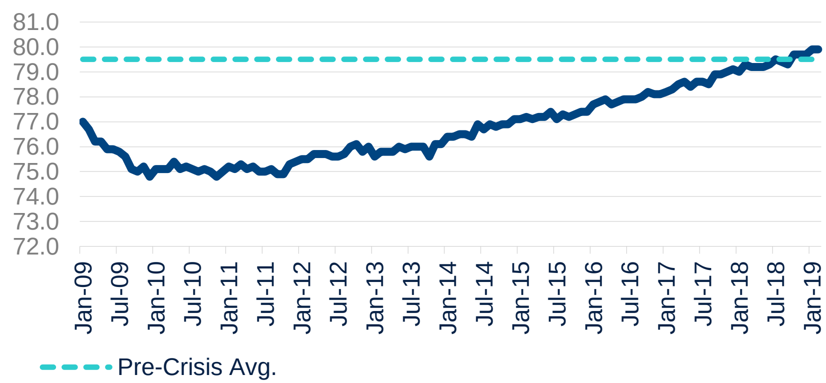
Average Hourly Earnings
(YoY% & 5mcma)



Prime Age Labor Force Participation
(%)



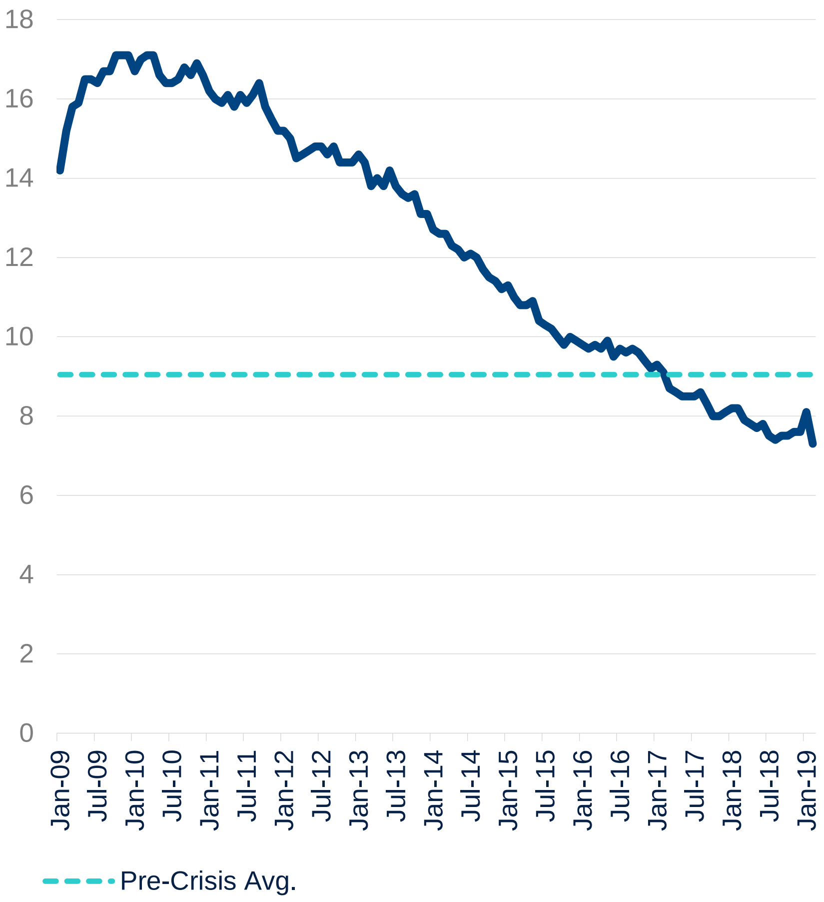
Prime Age Employment-to-Population
(%)



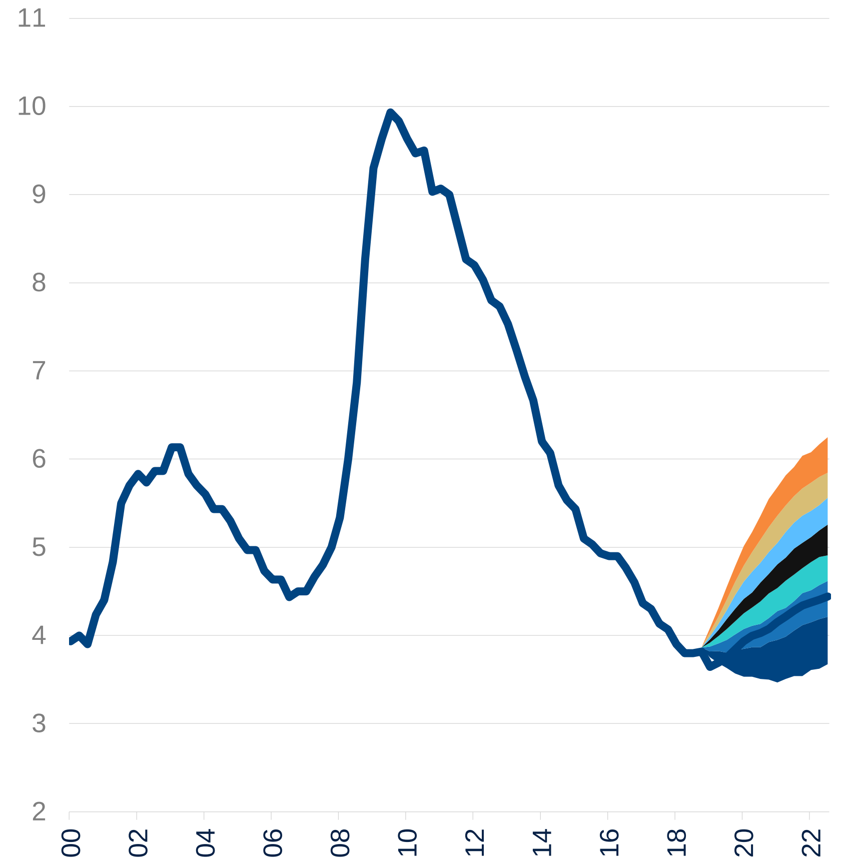
Source: BBVA Research & BLS

Labor market: Indicators signal unemployment rate close to nadir

U-6
(%)



Unemployment Rate
(%)



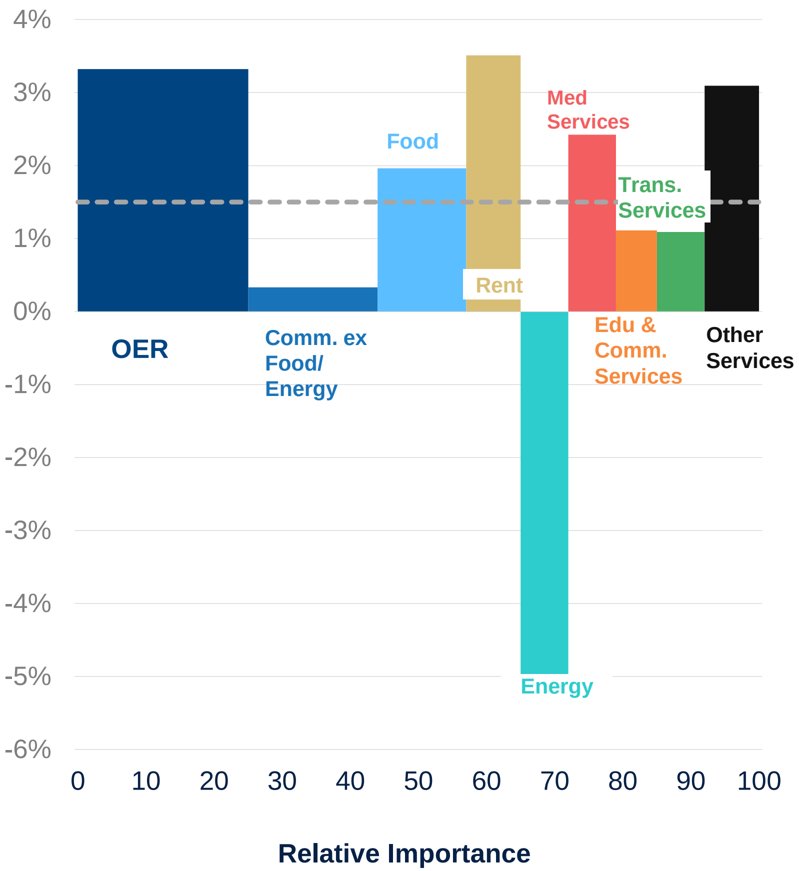
Source: BBVA Research & BLS

Inflation

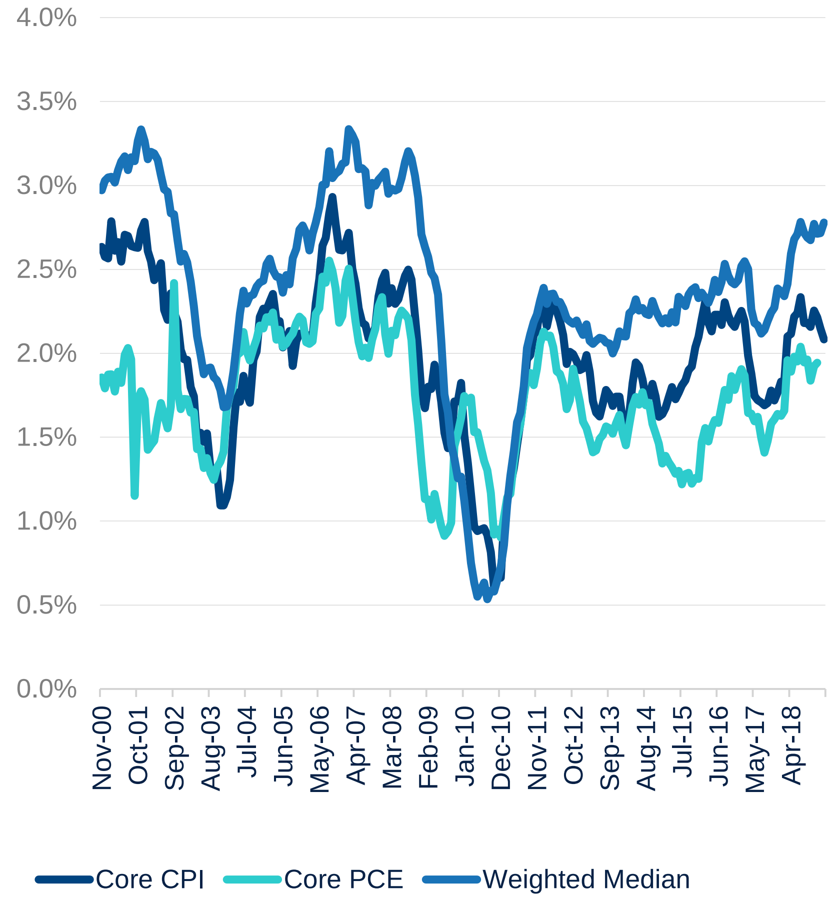
- Headline consumer price index (CPI) increased 0.2% MoM in February, as a rebound in owner equivalent rent (OER) offset declines in energy prices
- On a year-over-year basis, headline CPI decelerated to 1.5% while core remained stable at 2.1%
- The probability of entering high-inflation regime is nonexistent; deflation risks are also low
- Implied 5-year spot and forward inflation expectations have stabilized at or slightly below 2.0%
- Baseline assumes headline inflation to decelerate to 1.7% in 2019, before rebounding in 2020; core inflation to average 2.1% in 2019

Inflation: Drop in energy prices offset by rising OER and rental prices

Consumer Price Inflation
(12m change)



Core Inflation Measures
(12m change)

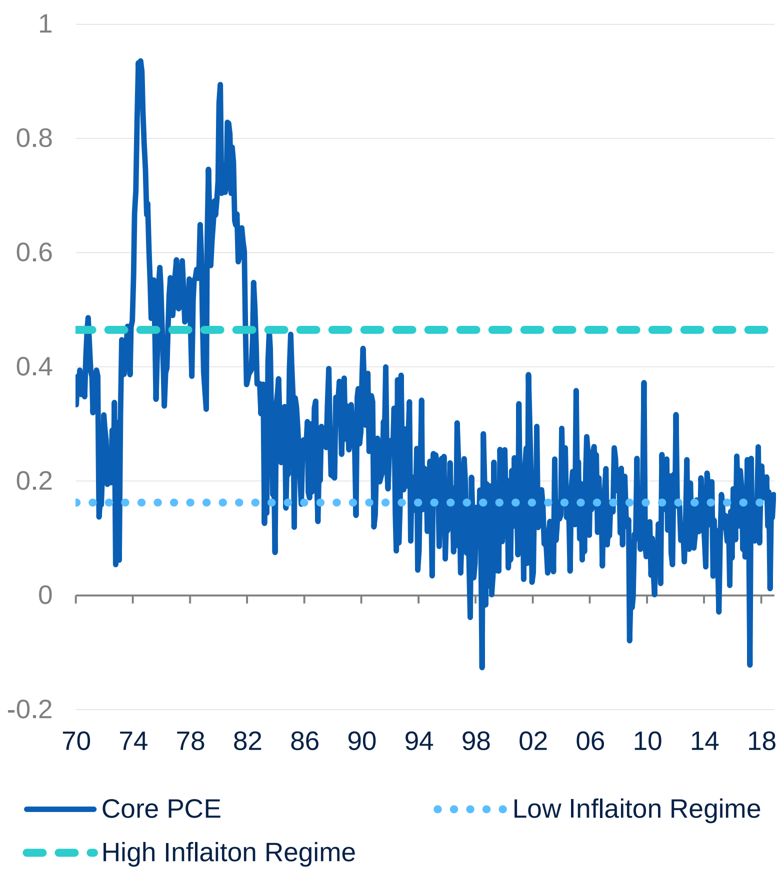


Source: BBVA Research, BLS & BEA

Inflation: Concerns shifting to lack of inflationary pressures, as inflation headwinds build in 1Q19

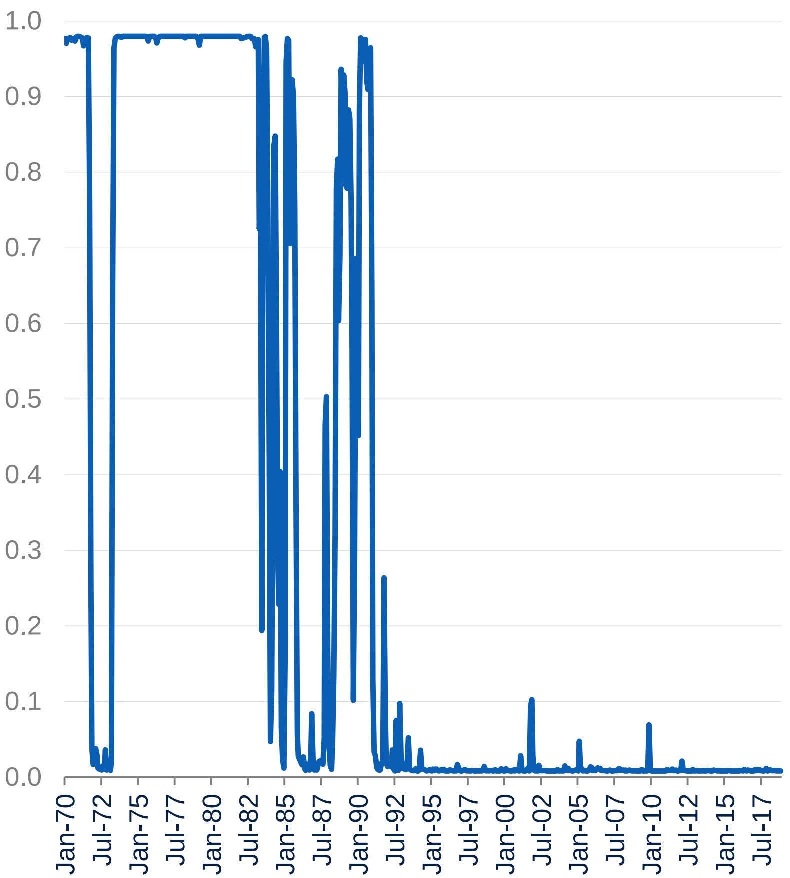
Core PCE Price Index & Inflation Regimes

Month-over-month %



Inflation Regime Change Probability

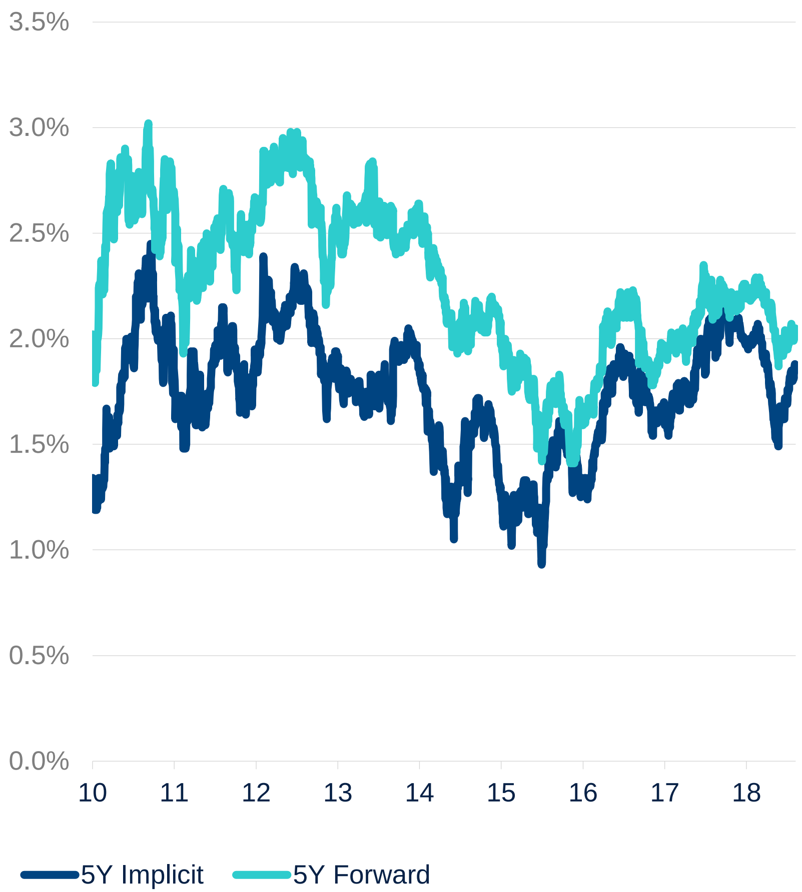
%



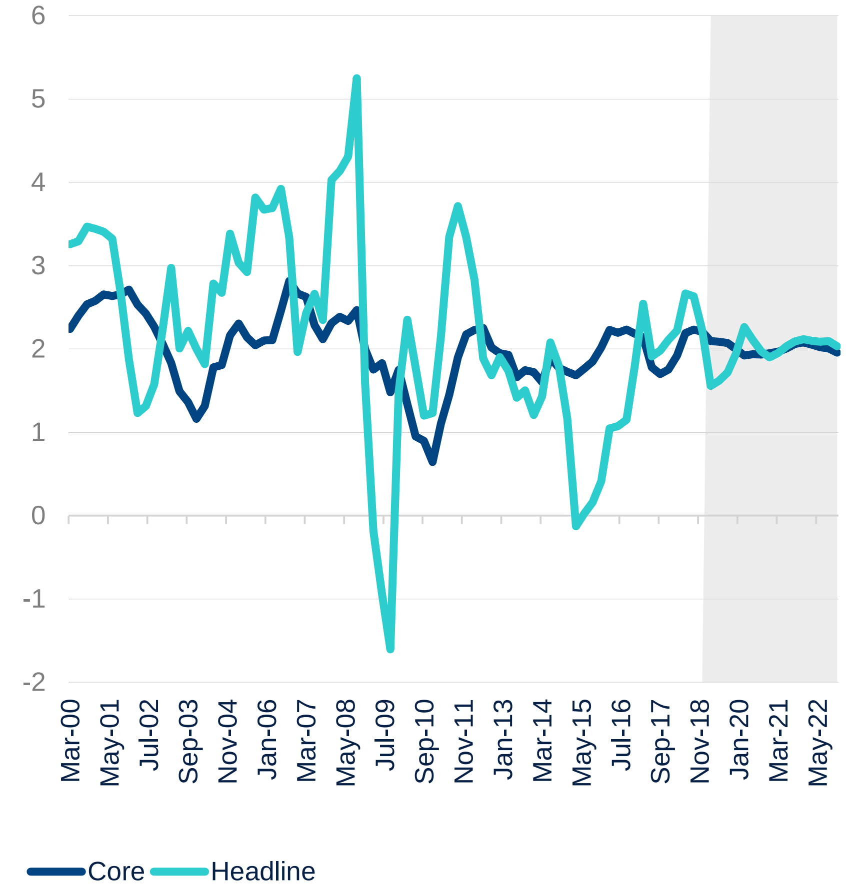
Source: BBVA Research & BLS

Inflation: Modest undershoot for headline in 2019, core to decelerate throughout the year

Inflation Expectations
(%)



Headline & Core CPI
(Year-over-year %)



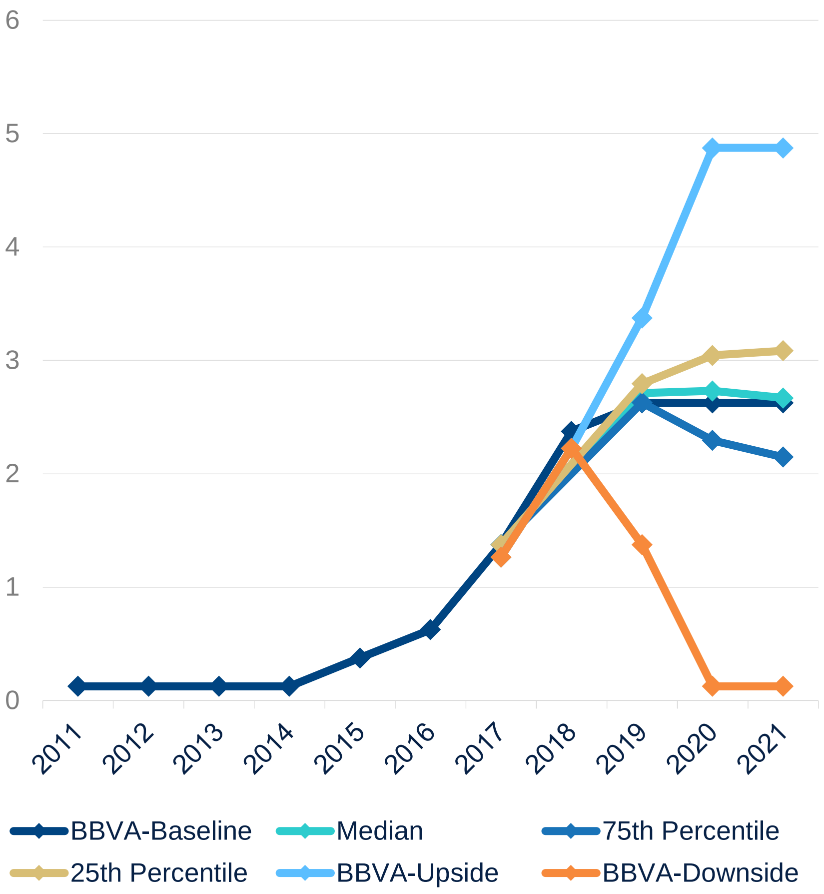
Source: BBVA Research & Haver Analytics

Monetary Policy: Federal Reserve

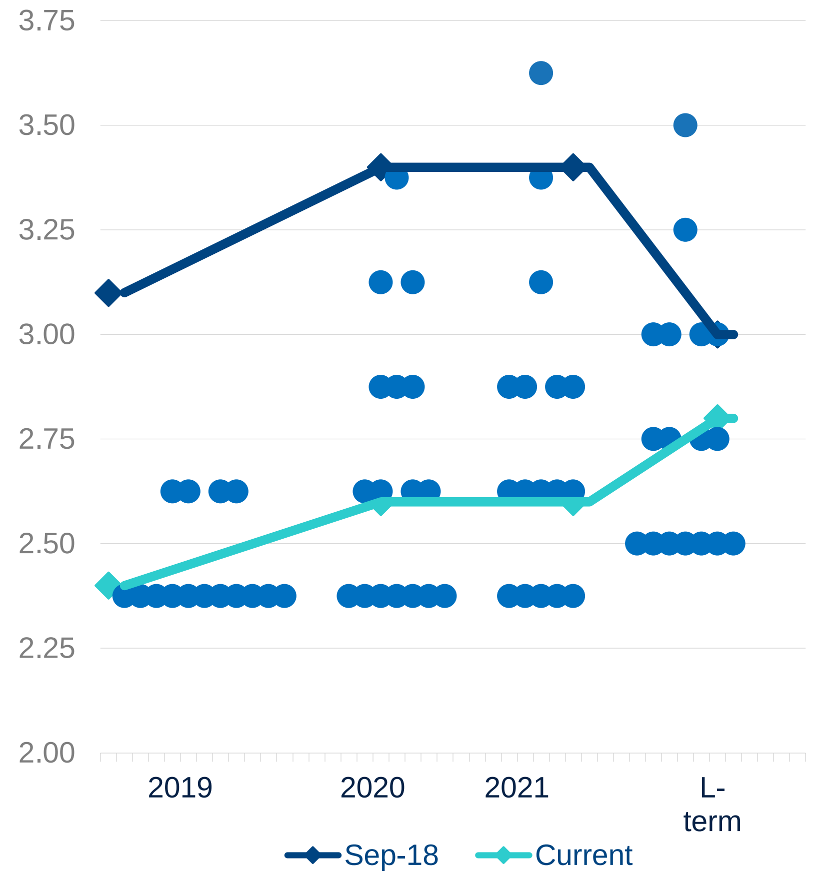
- At the March meeting, the Fed left rates unchanged, maintained their patient bias and strengthened their dovish signal with the dramatic downshift in path of Fed Funds rate
- End to Balance Sheet Normalization (BSN) in September and a slight adjustment to the caps on Treasury securities between May and September
- BSN: For a time, Fed plans to hold the size of the portfolio constant, allowing for a more gradual decline in reserves. At the end of normalization the portfolio would be around 17% of GDP, or $3.5 trillion to $3.8 trillion
- BSN: In the short term, the Fed will reinvest proceeds from its MBS portfolio into Treasuries that will roughly match the maturity distribution of outstanding Treasury debt; no commitment to a specific composition in the long run
- Possibility of rate increase in 2019 diminished after March meeting

Fed: Dramatic shift in Fed projections suggests possibility of no rate increases in 2019

BBVA & Dealers Projections of Fed Funds
(%, Effective)



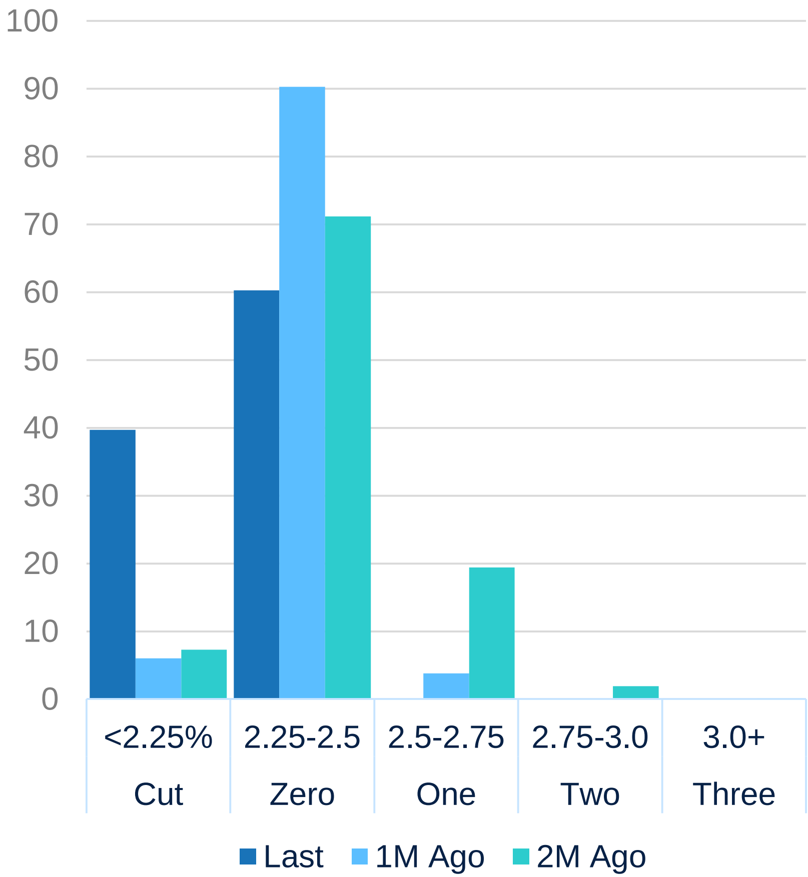
FOMC Projections of Fed Funds
(Year-over-year %, Mid-point)



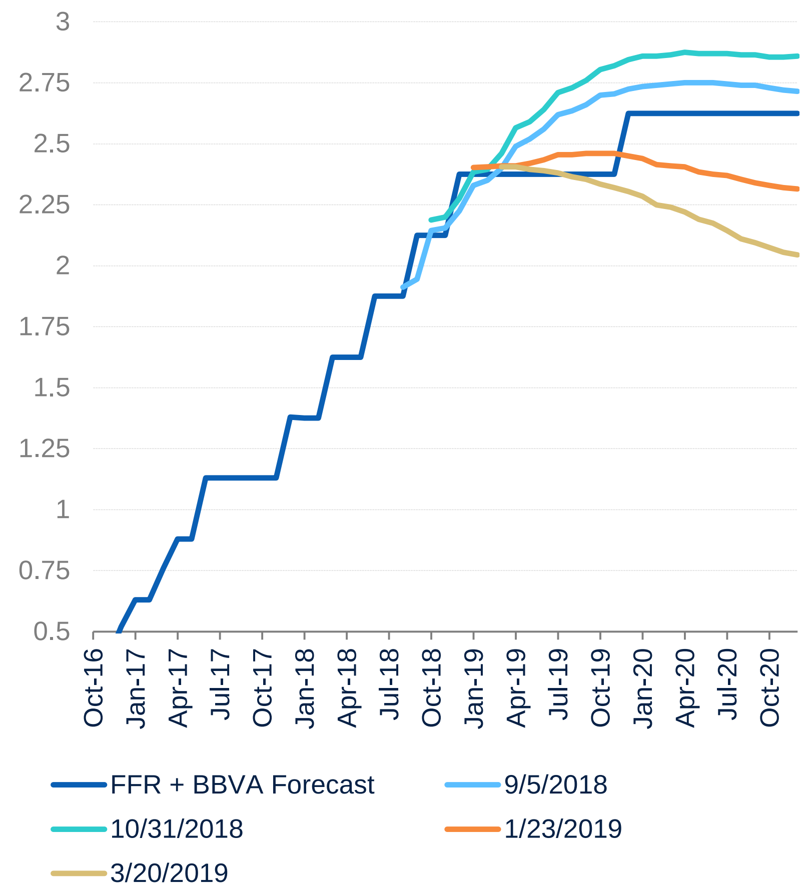
Source: BBVA Research & FRB

Monetary policy: Markets almost fully priced in rate cut in 2020

Fed Funds Implied Probability
(Number of rate increases through 2019, %)



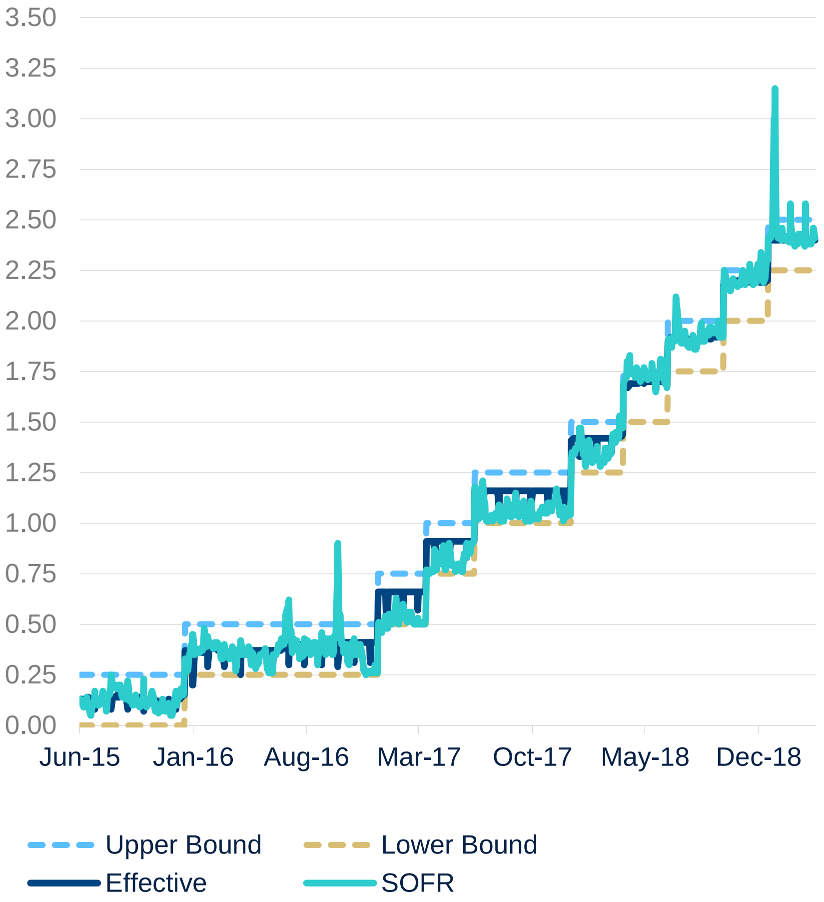
Fed Funds Futures & BBVA Baseline
(%)



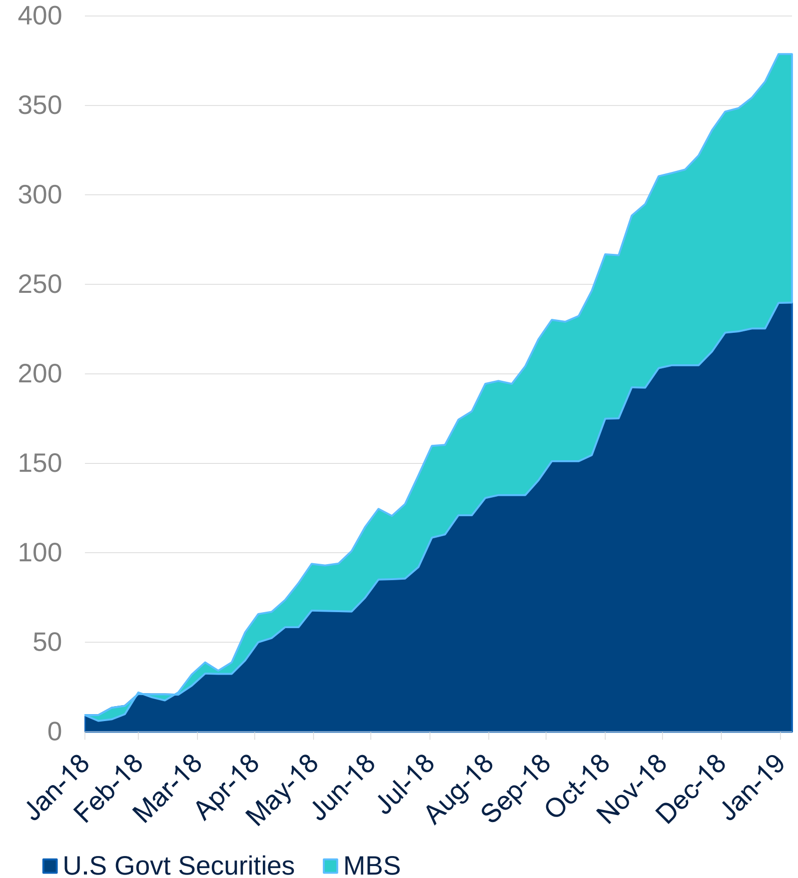
Source: BBVA Research & Bloomberg

Monetary Policy: Fed announces end of Balance Sheet normalization in September; terminal size of portfolio at $3.5 to $3.8 Trillion

Fed Funds & Repo Rates
(%)



Balance Sheet Attrition
(US$bn, Cumulative)



Source: BBVA Research & FRB

Interest Rates

- 10-yr Treasury at 2.46%, 80bp below 4Q18 peak,
  2-yr Treasury 65bp below peak at 2.33%

- Dramatic shift in Fed's balance sheet strategy and the U-turn on their guidance for policy rates suggests further compression in the term premium in medium-term, shift in the level and narrowing of slope

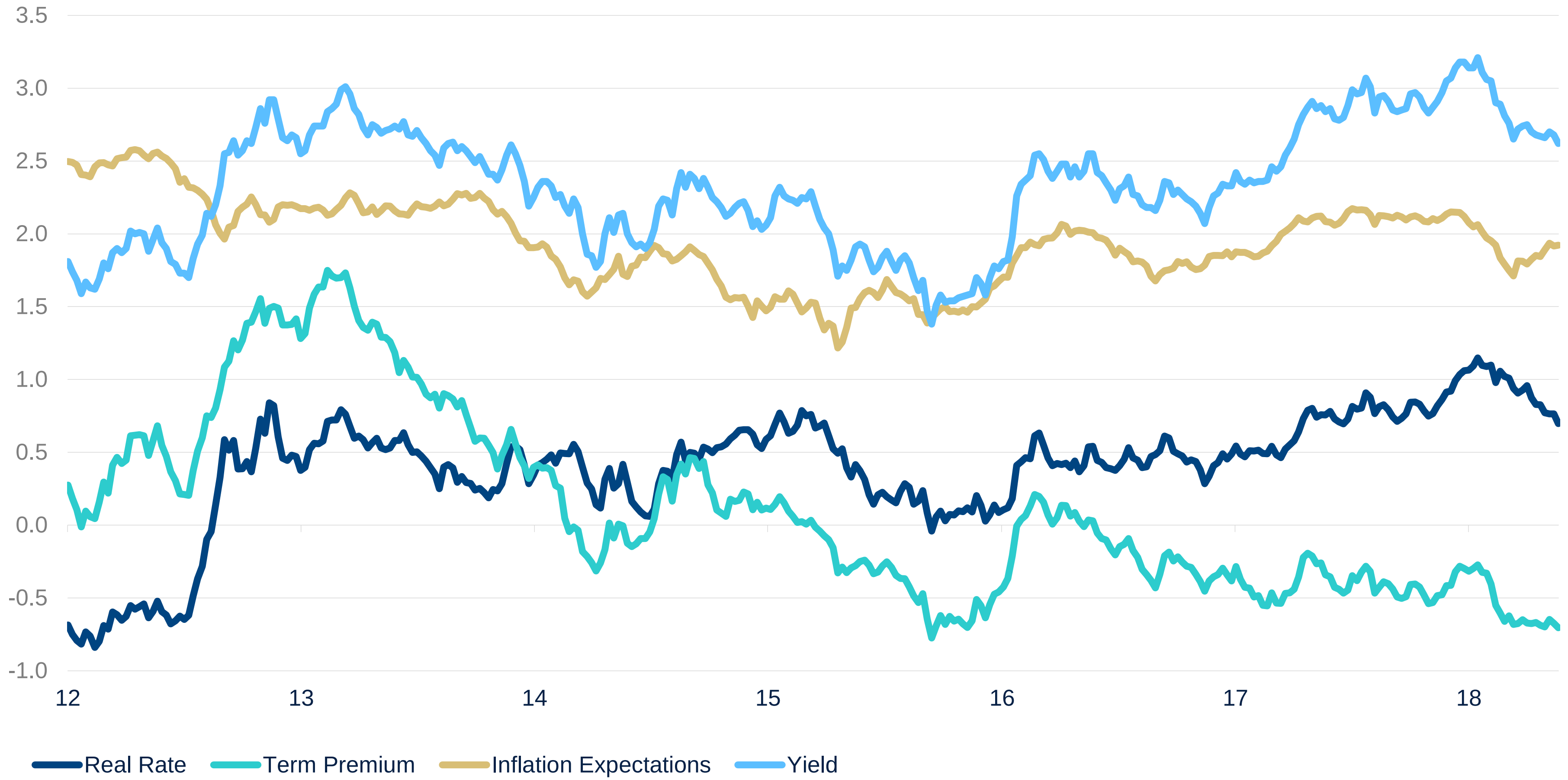
- Rising global uncertainty and dovish monetary policy abroad could add to the compression on the term premium, meaning a flatter-for-longer scenario for the yield curve and potential for full inversion

- Central bank balance sheet expansion and changes in savings preferences could distort interpretation of yield curve inversion

- 10-yr Treasury to reach 2.8% by end of 2019, downside risks growing

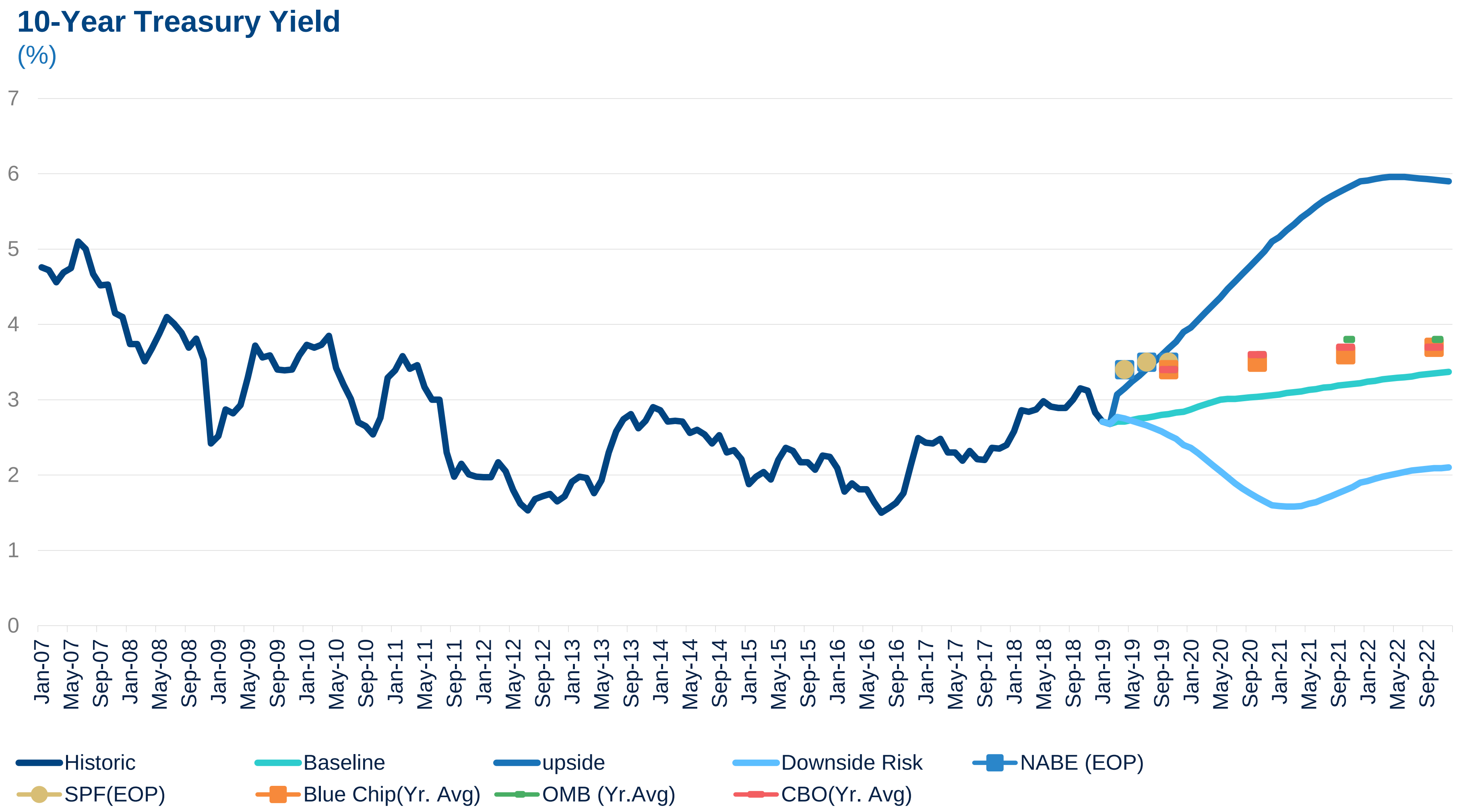
Interest rates: Risk aversion and savings preferences lowering term premium, decompression unlikely in short-term

10-Year Treasury Yield Decomposition
(%)



Source: BBVA Research, ACM & Haver Analytics

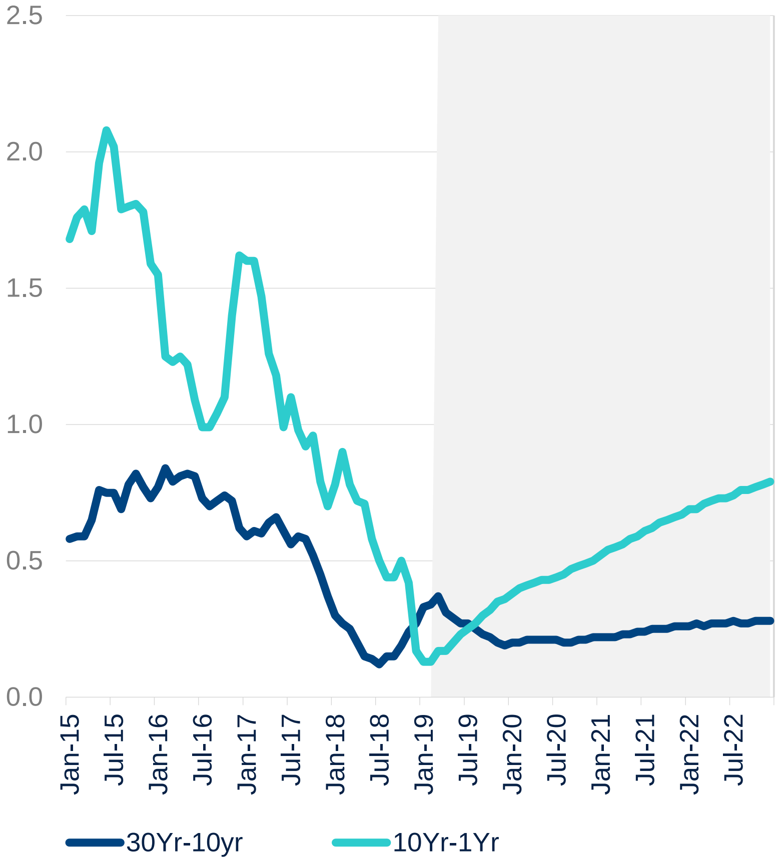
Interest rates: 10-year yields to remain lower for longer



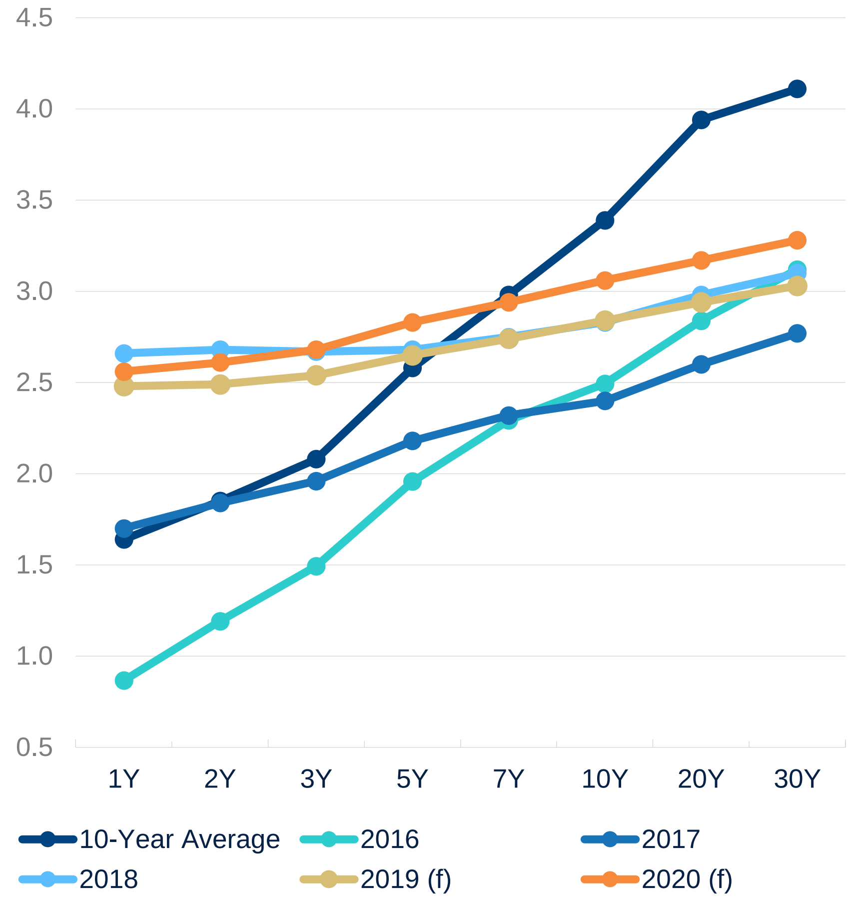
Source: BBVA Research, ACM & Haver Analytics

Interest rates: Yield curve slope edging closer to full inversion. Structural changes distort traditional inversion signal

Yield Curve Slope
(Bp)



Yield Curve
(%, eop)



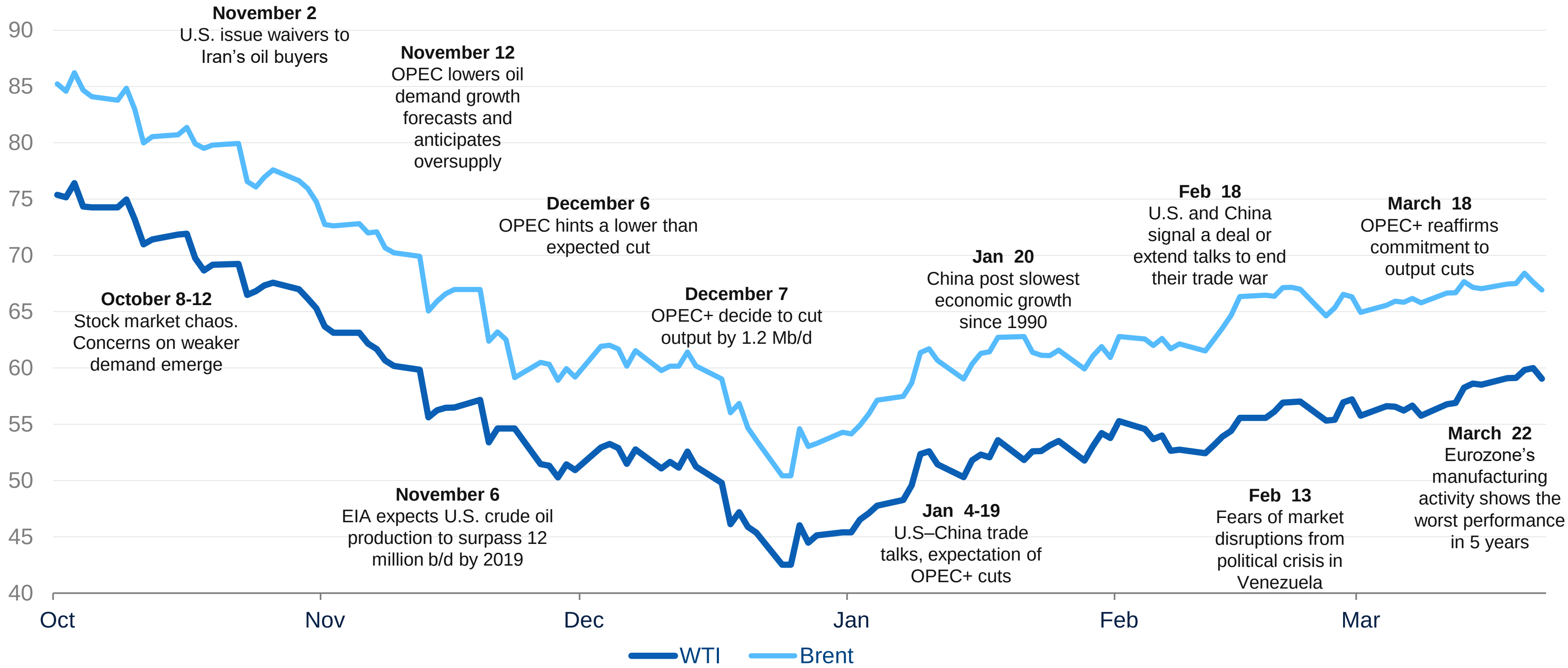
Source: BBVA Research

Oil Prices

- OPEC+ cuts are tightening the market and driving up prices. The deal could be extended throughout the entire year
- Sanctions to Venezuela and Iran could tighten supply further. However, OPEC has significant spare capacity to offset upward price pressures
- In 2019, U.S oil production will expand 1 million b/d while substantial transportation capacity will be added
- Our prospects for lower prices in 2H19 and 2020 assume slower global growth. Crude oil demand is contracting in Europe but remains supportive in U.S. & Asia
- We maintain our view of convergence to long-term equilibrium of around $60/b
- Elevated uncertainty around long-term equilibrium: CAPEX, protectionism, transportation infrastructure, alternative energy sources, EM convergence, EVs, climate change, efficiency and technology

Oil Prices: Concerns on global economic outlook keep prices contained despite OPEC+ output cuts

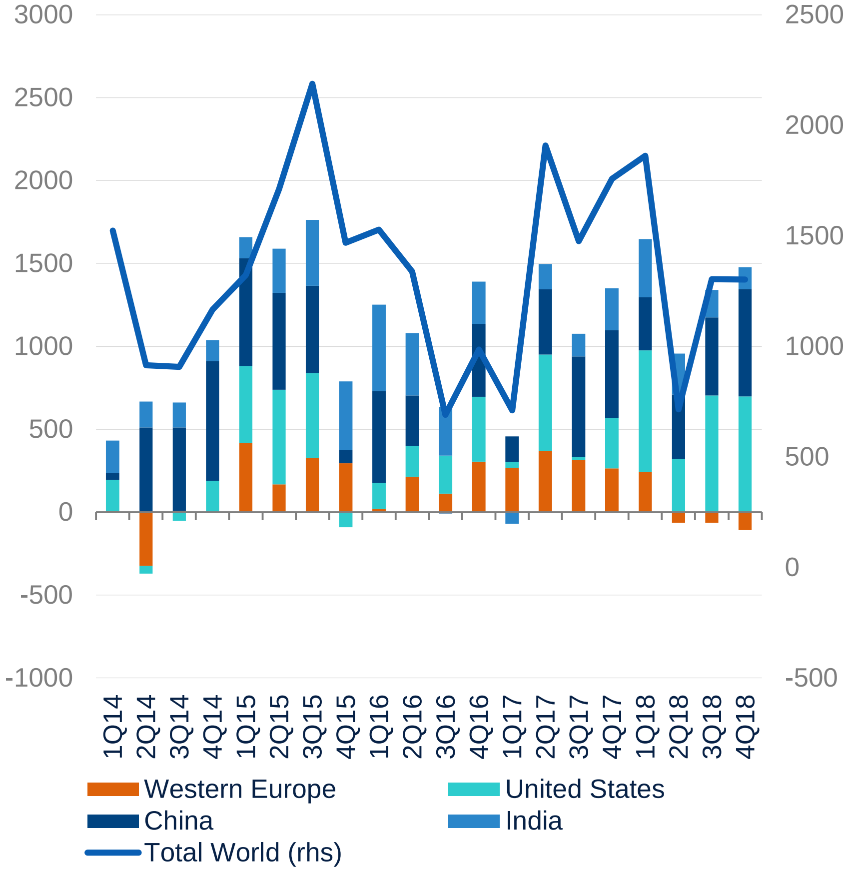
Crude oil prices October 2018 to March 2019
($ per barrel)



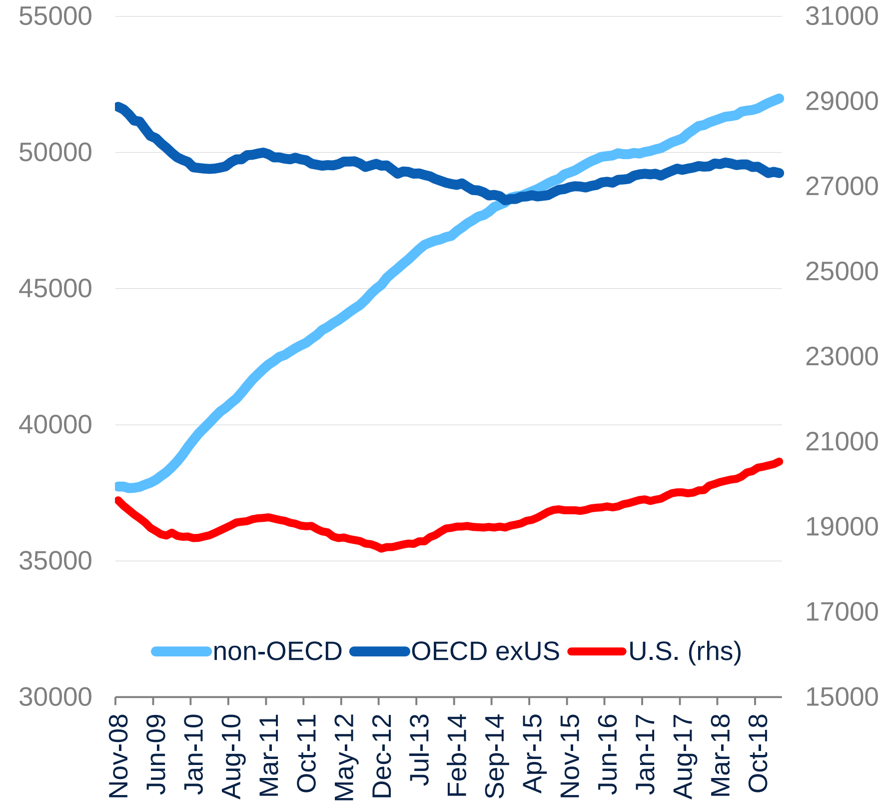
Source: BBVA Research and Haver Analytics

Consumption: Demand has declined in Europe, but remains supportive in China, India and the U.S.

Oil product demand: total world
(Thousand barrels per day, yoy change)



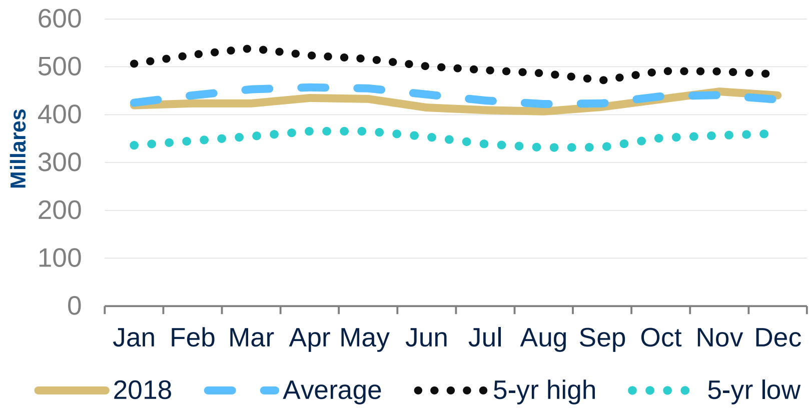
Oil product demand
(Million barrels per day)



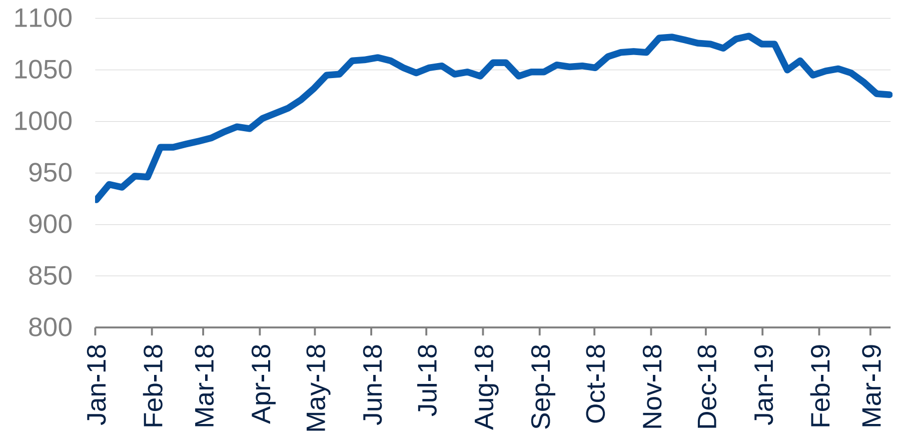
Source: BBVA Research and Haver Analytics

U.S. production: output remain solid despite decline in rig count

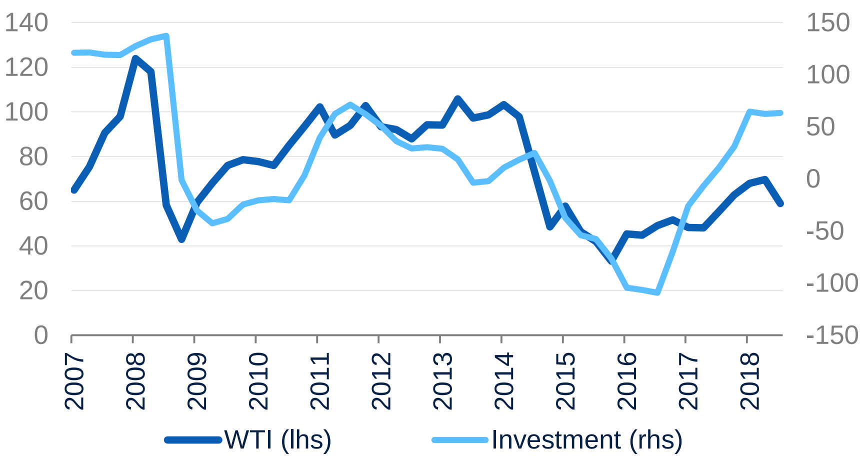
U.S. Crude oil inventories
(Excluding SPR, million barrels)



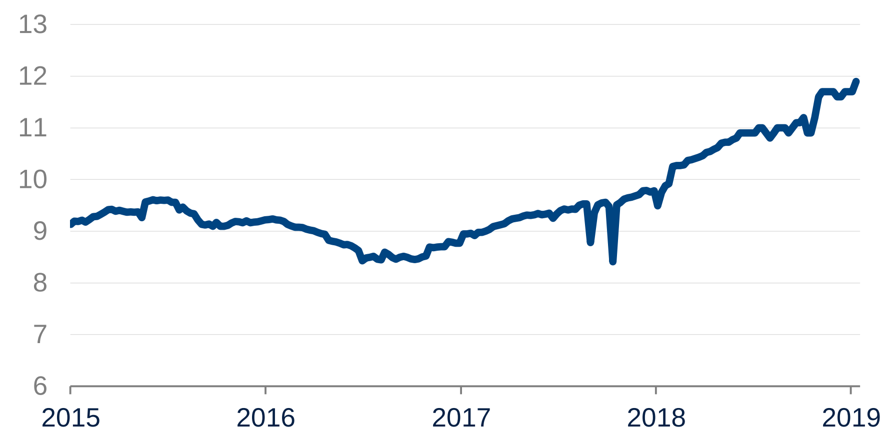
U.S. Active Rig Count
(units)



U.S. Real private investment in E&P
(yoy $billion)



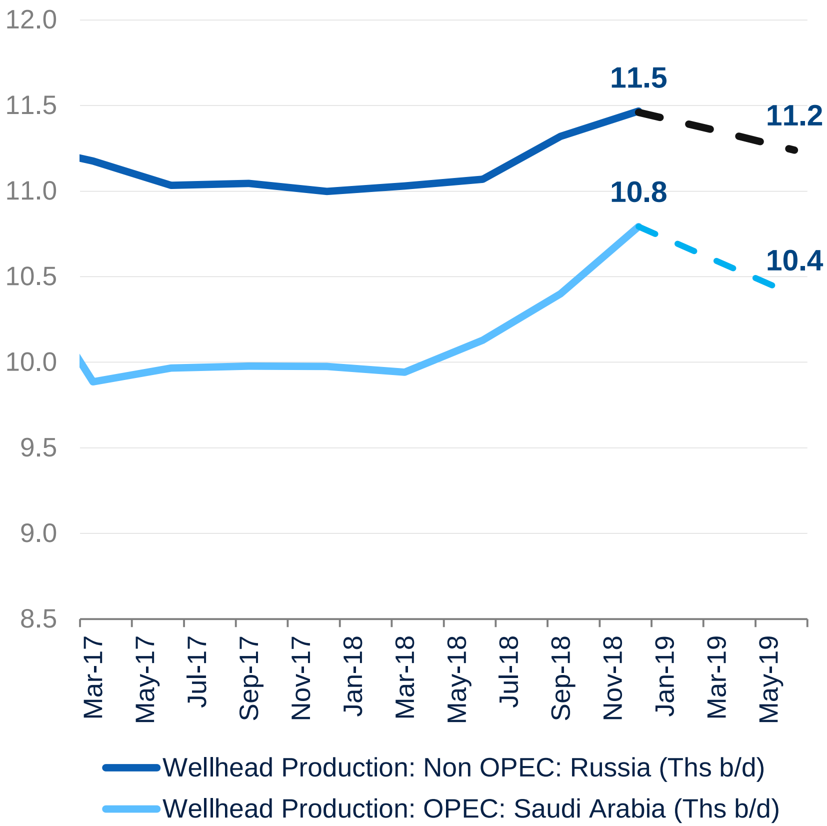
U.S. Estimated crude oil production
(Thousand barrels/day)



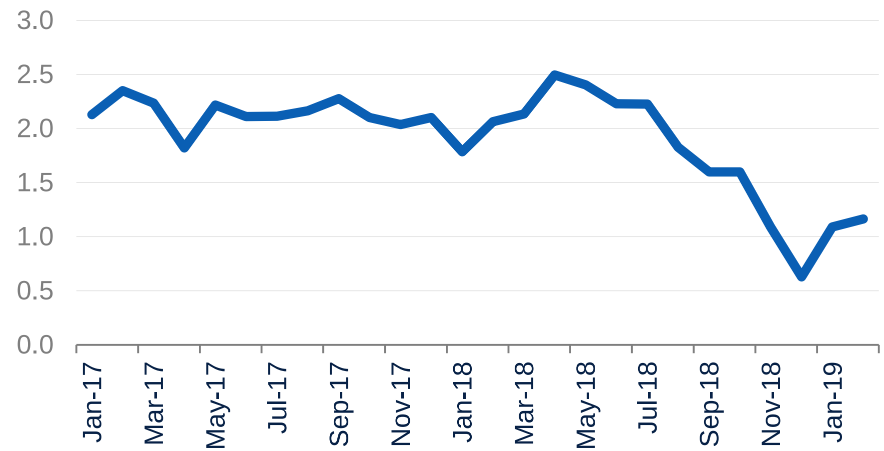
Source: BBVA Research and Haver Analytics

OPEC+ supply: Adjustments and U.S. sanctions to Iran and Venezuela will tighten supply throughout 1H19

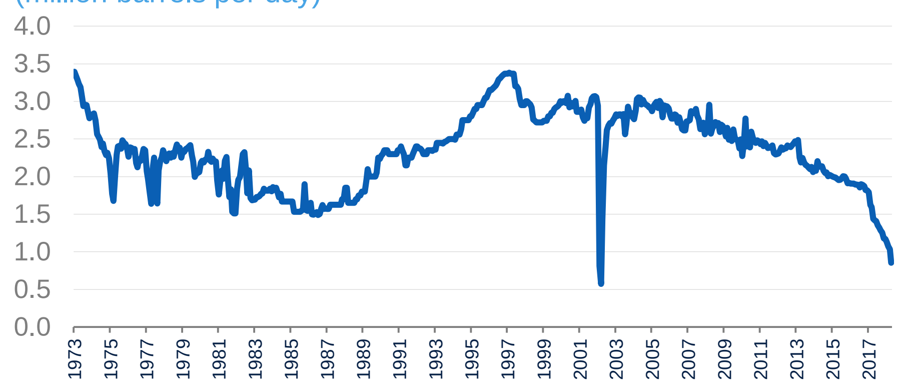
Crude oil production
(Million barrels per day)



Iran: exports of crude oil
(million barrels per day)



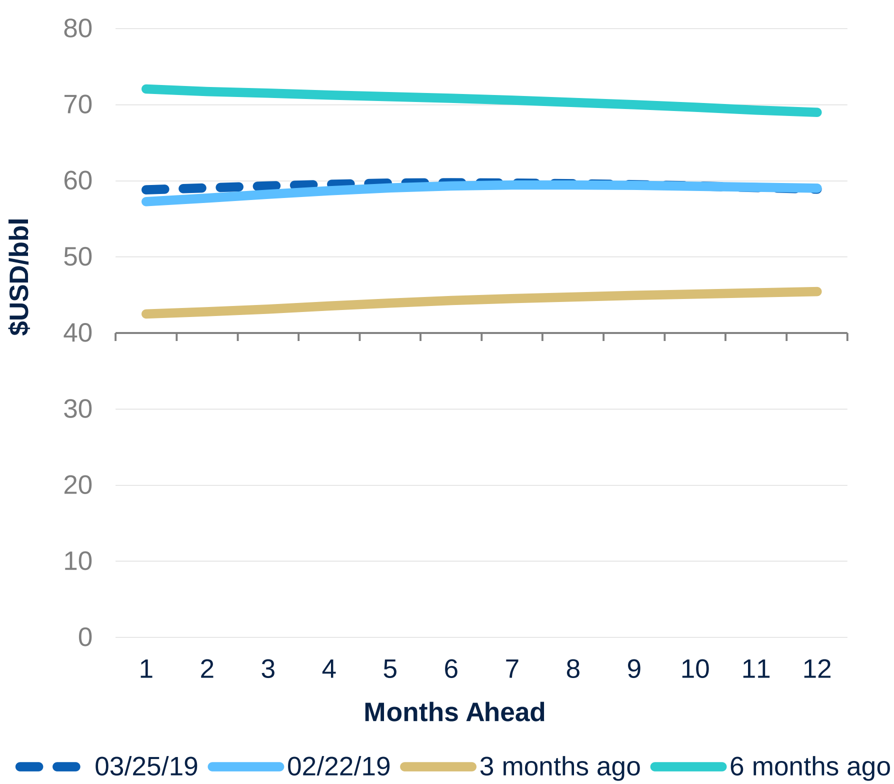
Venezuela: crude oil production
(million barrels per day)



Source: BBVA Research, Haver Analytics, and Bloomberg

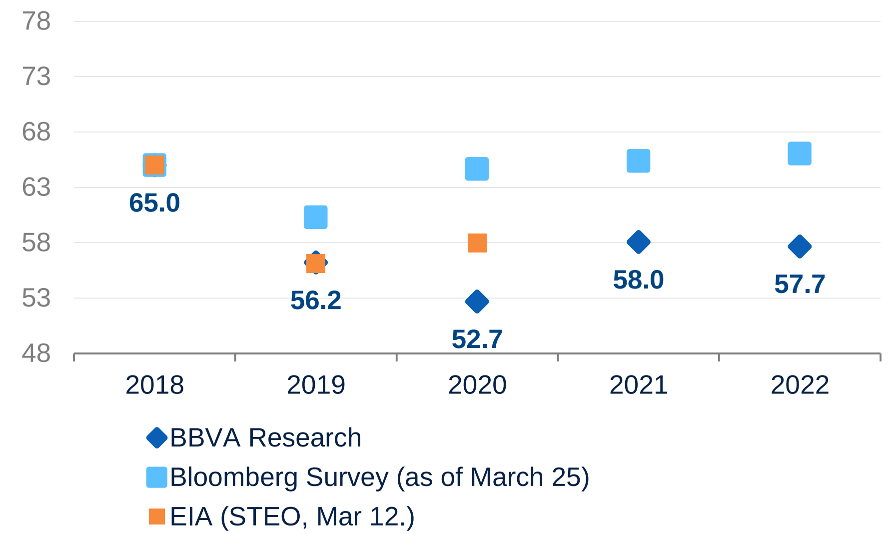
Forecasts: WTI prices could linger between upper $50s and lower $60s in 2019, but will decelerate in 2020; convergence to long-term equilibrium around $60/b

WTI Futures
($ per barrel)



WTI prices forecast
($ per barrel)

	BBVA Research	Bloomberg Survey (as of March 25)	EIA (STEO, Mar 12.)
2017	50.8	50.9	50.9
2018	65.0	65.0	65.0
2019	**56.2**	**60.3**	**56.1**
2020	**52.7**	**64.6**	**58.0**
2021	**58.0**	**65.4**	
2022	**57.7**	**66.1**	



Source: BBVA Research and Bloomberg

Uncertainty: Short-term risks tilted to the downside

>= $55/b*

- OPEC+ expands output deal to 2H19
- Oil waivers to importers of Iranian oil expire and are not renewed
- Additional negative supply shocks (e.g. Venezuela, Libya, Nigeria)
- Consistent signs of progress in trade negotiations between the U.S. and China
- Milder-than-expected deceleration of global demand
- Takeaway issues preventing U.S. crude to reach global markets

< $55/b*

- Weaker global economic outlook
- Persistent deadlock in trade talks between U.S. and China
- Dollar appreciation
- President Trump's pressure on OPEC
- Limited enforcement of Iranian sanctions
- Higher-than-expected crude oil production in the U.S.

*WTI crude prices. Source: BBVA Research

Macroeconomic Outlook

	2011	2012	2013	2014	2015	2016	2017	2018	2019 (f)	2020 (f)	2021 (f)	2022 (f)
Real GDP (% SAAR)	1.6	2.2	1.8	2.5	2.9	1.6	2.2	2.9	2.5	2.0	1.9	1.8
Real GDP (Contribution, pp)												
PCE	1.3	1.0	1.0	2.0	2.5	1.9	1.8	1.8	2.0	1.5	1.3	1.2
Gross Investment	0.9	1.6	1.1	0.9	0.8	-0.2	0.8	1.1	0.9	0.8	0.9	0.9
Non Residential	1.0	1.2	0.5	0.9	0.3	0.1	0.7	1.0	0.8	0.7	0.8	0.7
Residential	0.0	0.3	0.3	0.1	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0
Exports	0.9	0.5	0.5	0.6	0.1	0.0	0.4	0.5	0.4	0.6	0.7	0.7
Imports	-0.9	-0.5	-0.3	-0.9	-1.0	-0.3	-0.8	-0.8	-0.9	-0.9	-0.9	-1.0
Government	-0.7	-0.4	-0.5	-0.2	0.3	0.3	0.0	0.3	0.3	0.1	0.0	0.0
Unemployment Rate (%, average)	8.9	8.1	7.4	6.2	5.3	4.9	4.4	3.9	3.7	4.0	4.2	4.4
Avg. Monthly Nonfarm Payroll (K)	173	181	192	251	227	193	179	223	165	160	135	113
CPI (YoY %)	3.1	2.1	1.5	1.6	0.1	1.3	2.1	2.4	1.7	2.1	2.0	2.1
Core CPI (YoY %)	1.7	2.1	1.8	1.8	1.8	2.2	1.8	2.1	2.1	1.9	2.0	2.0
Fiscal Balance (% GDP, FY)	-8.4	-6.8	-4.1	-2.8	-2.4	-3.2	-3.5	-4.0	-4.2	-4.2	-4.2	-4.7
Current Account (bop, % GDP)	-2.9	-2.6	-2.1	-2.1	-2.2	-2.3	-2.3	-2.4	-2.8	-2.9	-3.0	-3.1
Fed Target Rate (%, eop)	0.25	0.25	0.25	0.25	0.50	0.75	1.50	2.50	2.75	2.75	2.75	2.75
Core Logic National HPI (YoY %)	-2.9	4.0	9.7	6.8	5.3	5.5	5.9	5.8	4.9	4.2	3.9	3.6
10-Yr Treasury (% Yield, eop)	1.98	1.72	2.90	2.21	2.24	2.49	2.40	2.83	2.84	3.06	3.22	3.37
WTI Oil Prices (dpb, average)	94.9	94.1	97.9	93.3	48.7	43.2	50.9	65.0	56.3	52.7	58.0	57.7

Source: BBVA Research
*Forecasts subject to change

Economic Scenarios

Probability (%)	Current	Previous
Upside	**2**	5
Baseline	**55**	55
Downside	**43**	40

Macro Scenarios	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
GDP	2.5	2.9	1.6	2.2	2.5	**2.5**	**2.0**	**1.9**	**1.8**	**1.8**
Upside						3.0	3.2	3.1	2.7	2.7
Downside						0.7	-0.9	1.9	2.1	2.3
UR	6.2	5.3	4.9	4.4	3.8	**3.7**	**4.0**	**4.2**	**4.4**	**4.5**
Upside						3.5	2.9	2.9	3.0	3.0
Downside						4.5	6.2	6.6	5.7	5.0
CPI	1.6	0.1	1.3	2.1	1.7	**1.7**	**2.1**	**2.1**	**2.1**	**2.1**
Upside						2.0	3.3	3.6	3.8	3.9
Downside						0.9	0.8	1.1	1.3	1.4
Fed [eop]	0.25	0.50	0.75	1.50	2.75	**2.75**	**2.75**	**2.75**	**2.75**	**2.75**
Upside						3.50	5.00	5.00	5.00	5.00
Downside						1.50	0.25	0.25	0.25	0.25
10-Yr [eop]	2.21	2.24	2.49	2.4	2.87	**2.84**	**3.06**	**3.22**	**3.37**	**3.48**
Upside						3.90	5.10	5.90	5.90	5.90
Downside						2.40	1.60	1.90	2.10	2.10

Subject to revision without notice

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U.S. Economic Outlook

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Creating Opportunities