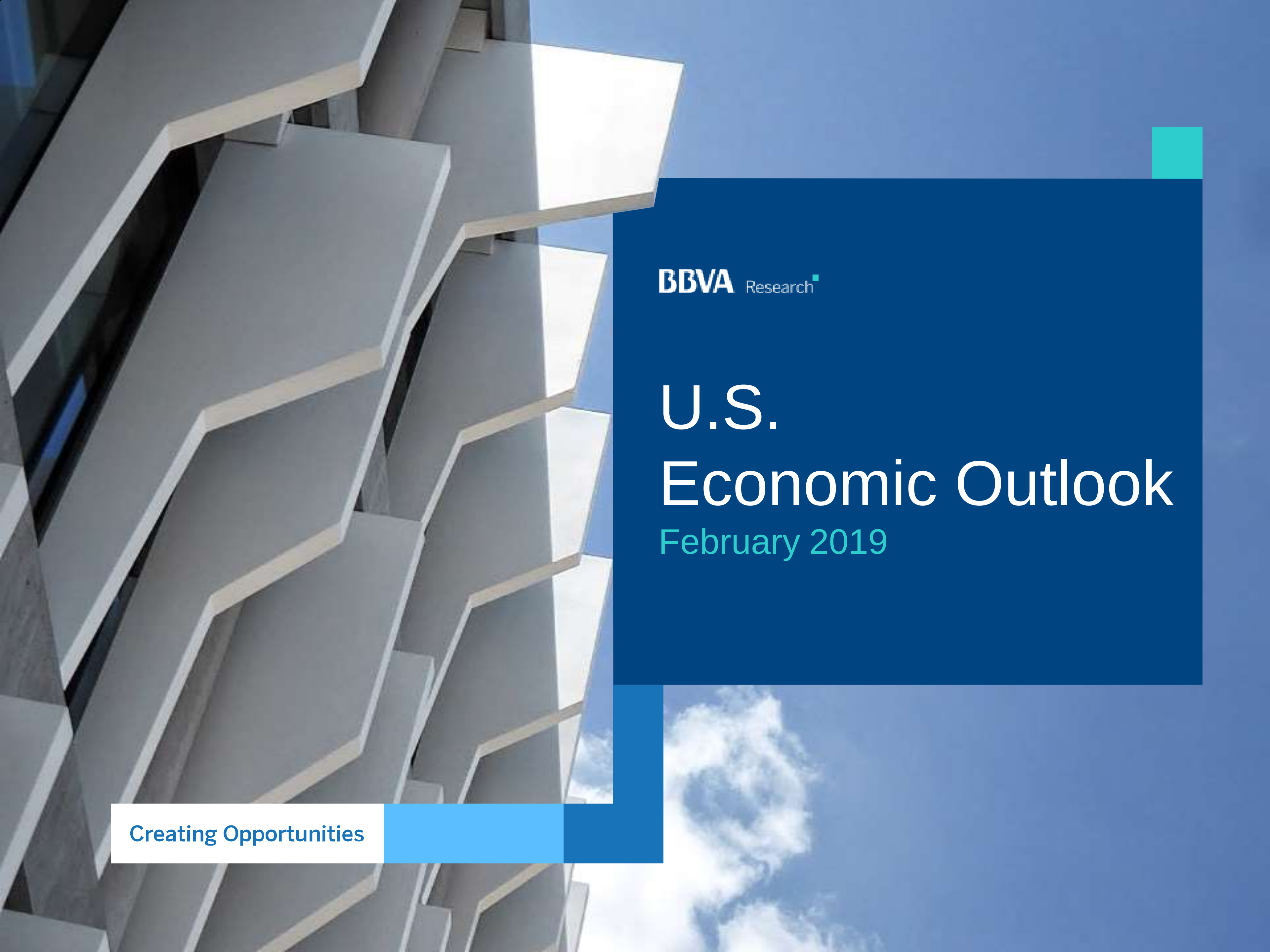


BBVA Research

U.S. Economic Outlook

February 2019

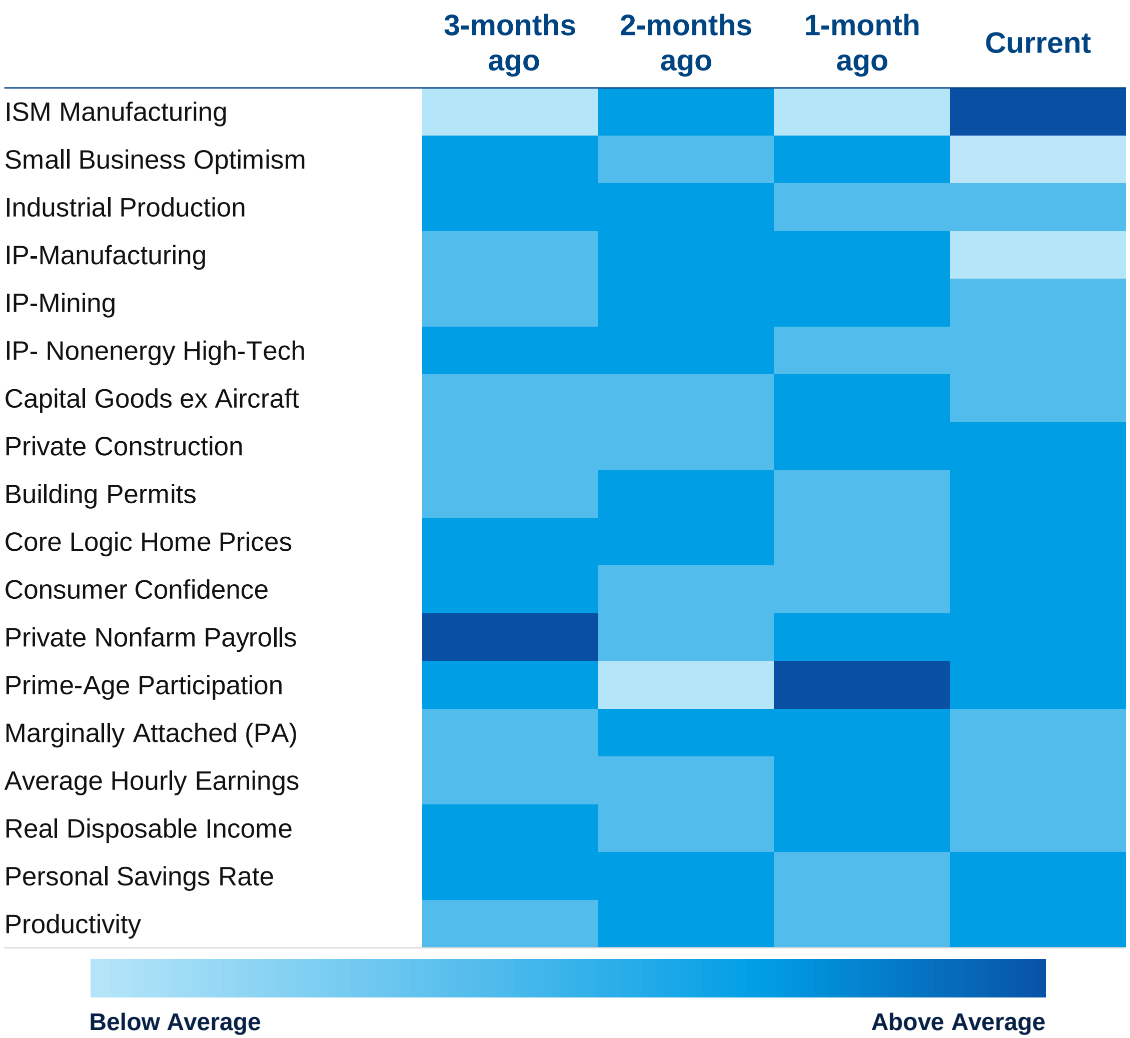
Creating Opportunities

Economic Outlook

- GDP growth to slow to 2.5% in 2019, and 2.0% in 2020
- Risk of recession remains elevated
- Fed to delay raising rates until 4Q19; operational framework and balance sheet strategy adjusted
- Labor market conditions remain auspicious
- Core inflation to remain stable, modest rebound in energy prices to lift headline
- 10-year Treasury to follow shallower path
- Oil prices converging with long-term equilibrium around $60/b

Economic activity

Real-Time Economic Momentum Heat Map



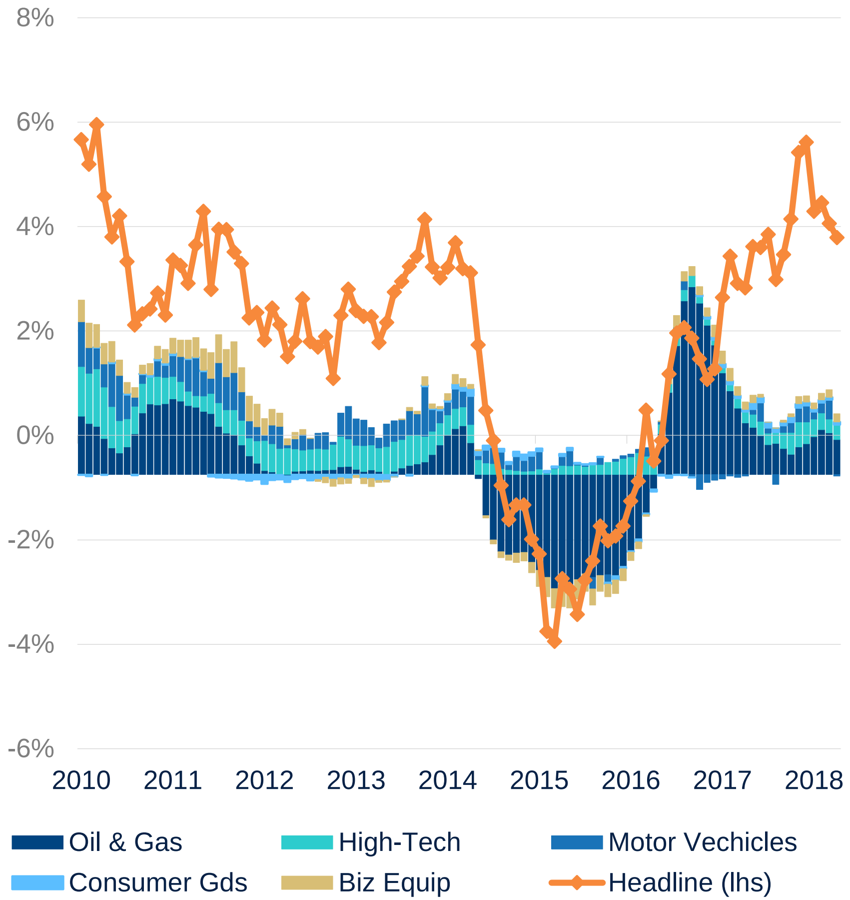
Source BBVA Research

- Improving manufacturing sentiment on less negative views on domestic demand and thawing trade tensions
- Small business optimism continues declining on concerns about future economic growth
- Home prices appreciation strong despite weaker demand side conditions
- Consumer confidence is lowest since 2017
- Steady productivity growth amidst strong labor force inflows and modest wage increases

Economic trends: Industrial production moderates while retail sales plummet in December

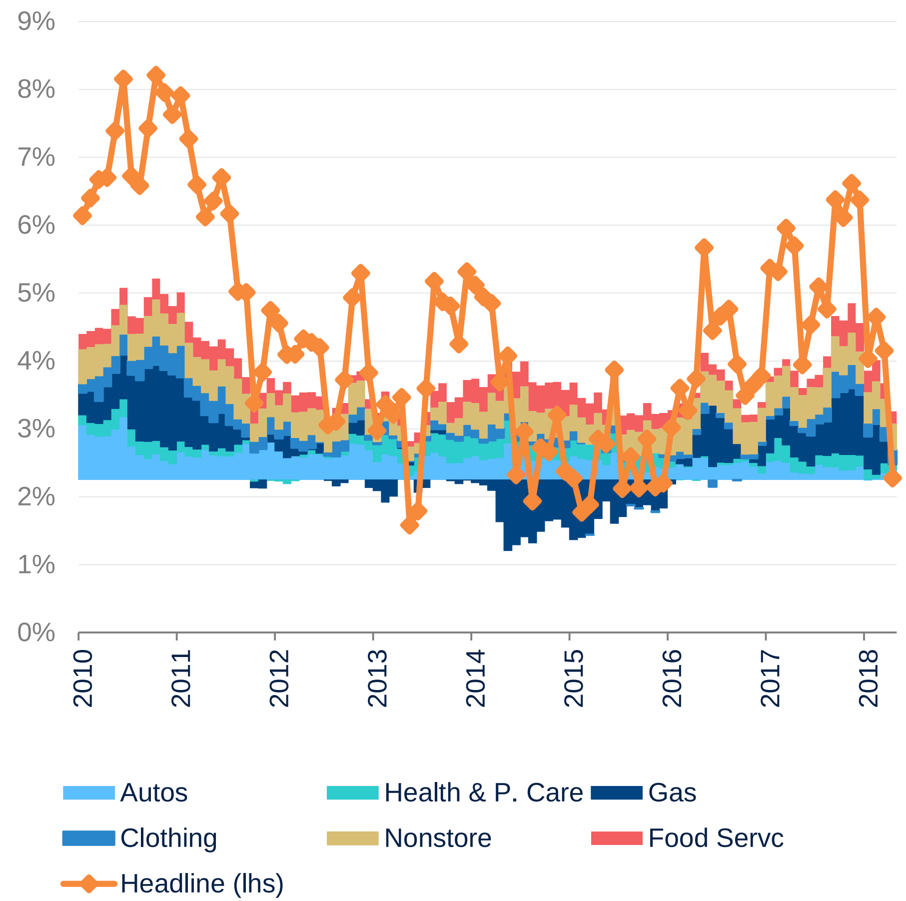
Industrial Production

(Year-over-year %)



Retail Sales

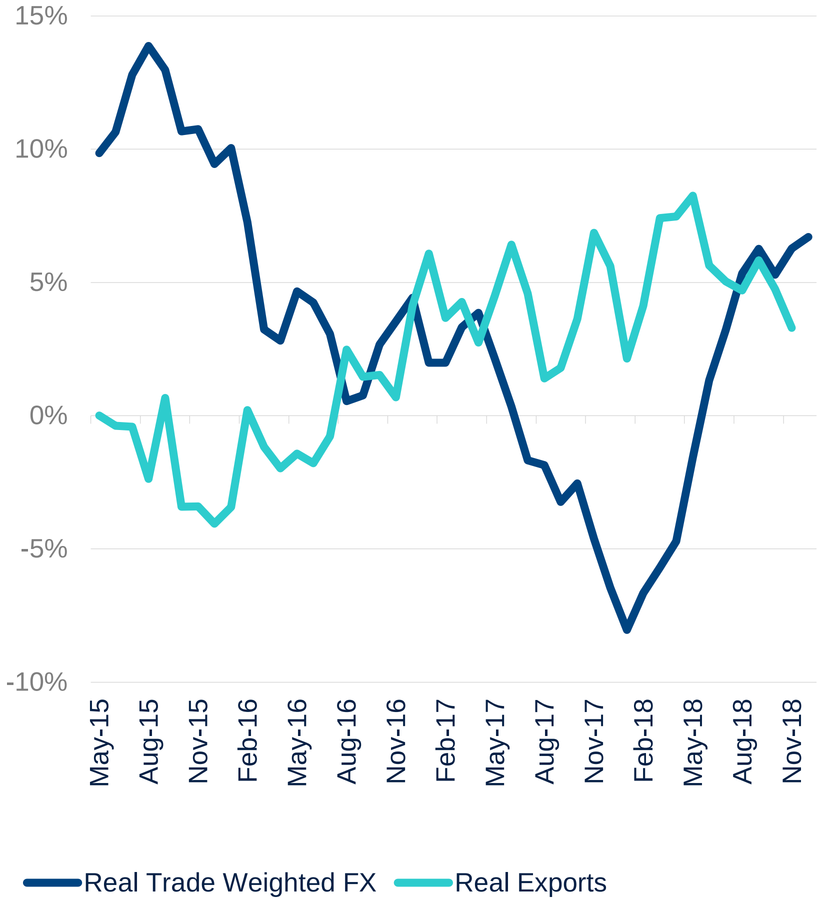
(Year-over-year %)



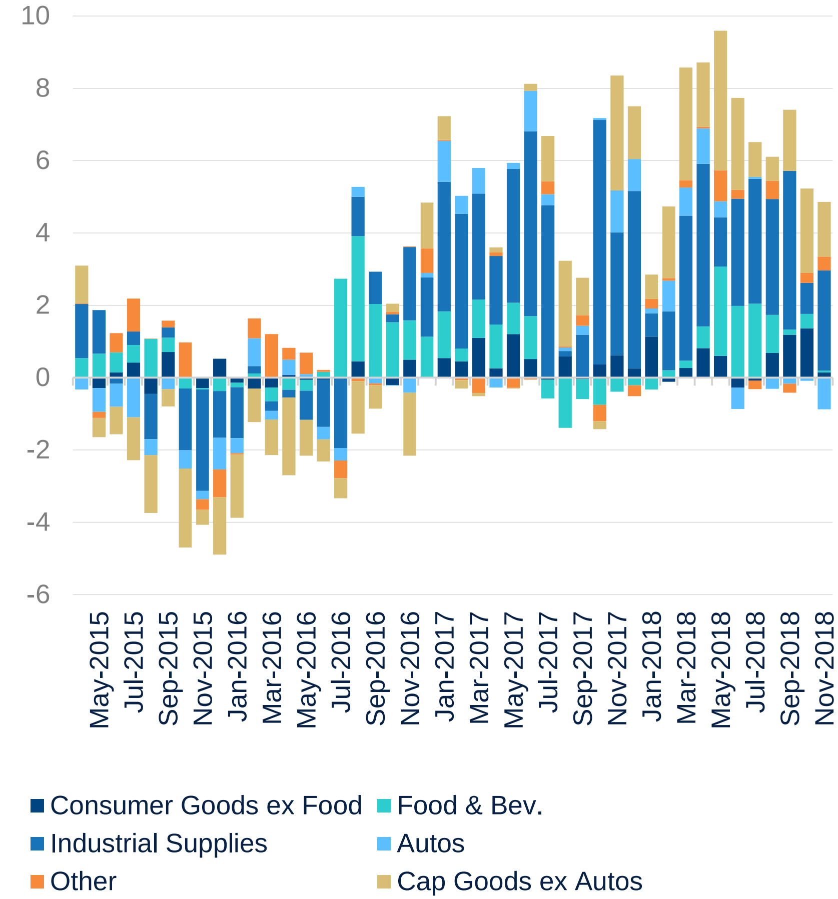
Source: BBVA Research, FRB & BEA

Economic trends: FX and slower global growth weigh on exports

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



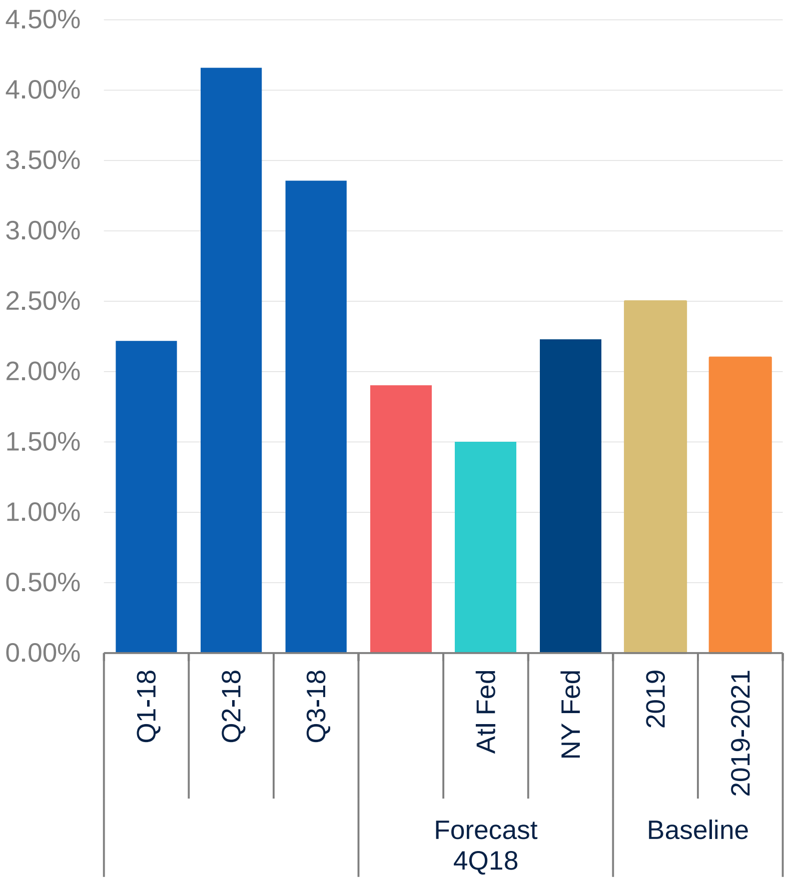
Real Exports
(Contribution to year-over-year %)



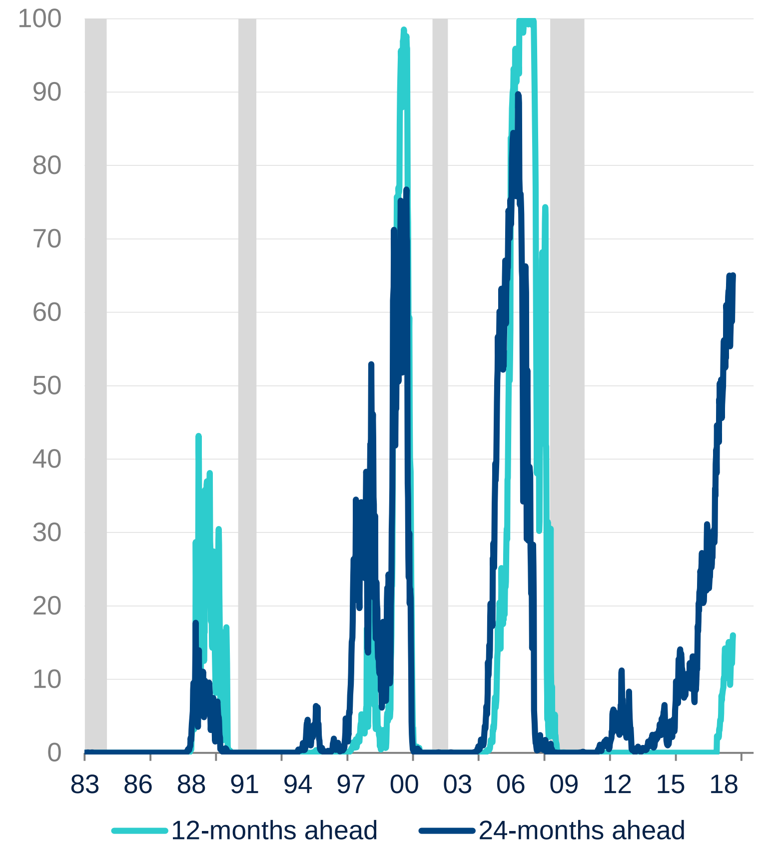
Source: BBVA Research, FRB & Census

Economic trends: Modest impact from government shutdown in 1Q19. Recession probability 16% in next 12-months, 65% in 24 months

Real GDP
(QoQ SAAR, %)



Probability of Recession in 12 Months
(%)

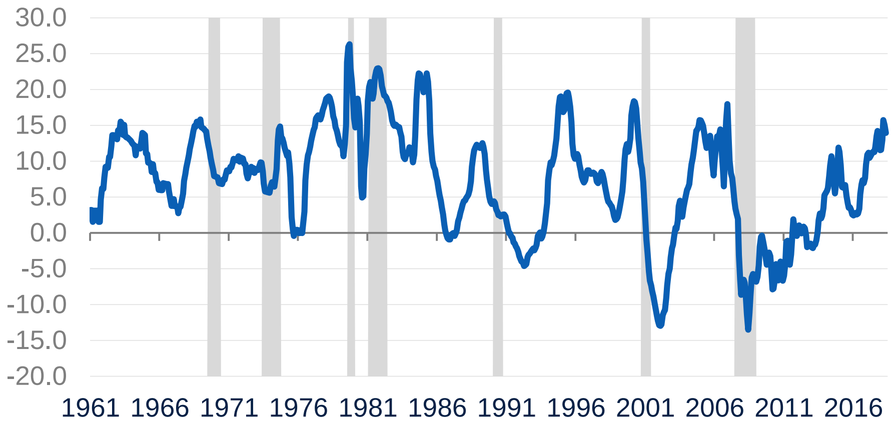


Source: BBVA Research, and ATL & NY Fed

Consumer credit cycle: Consumer fundamentals remain strong, but leverage increasing in rising rate environment

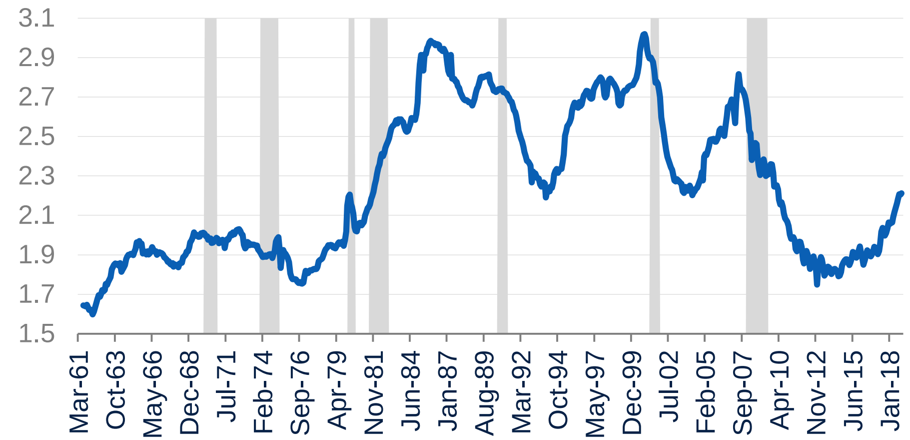
Personal Interest Expense

Year-over-year %



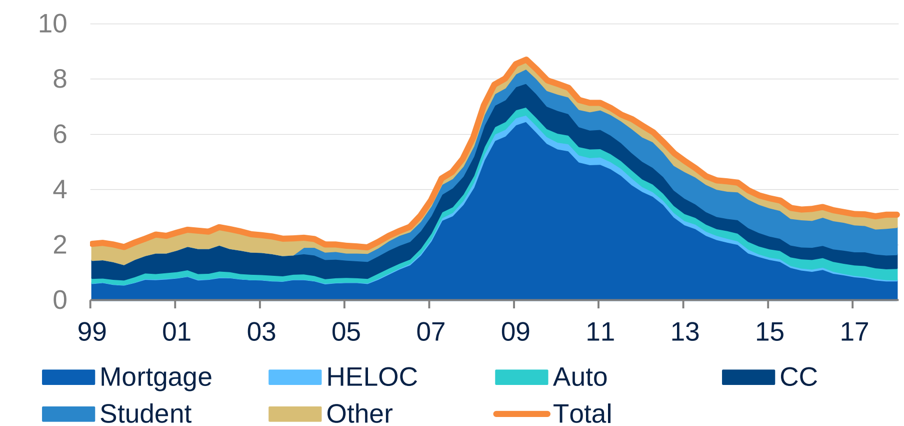
Personal Interest Expense to Disp. Income

Ratio, %



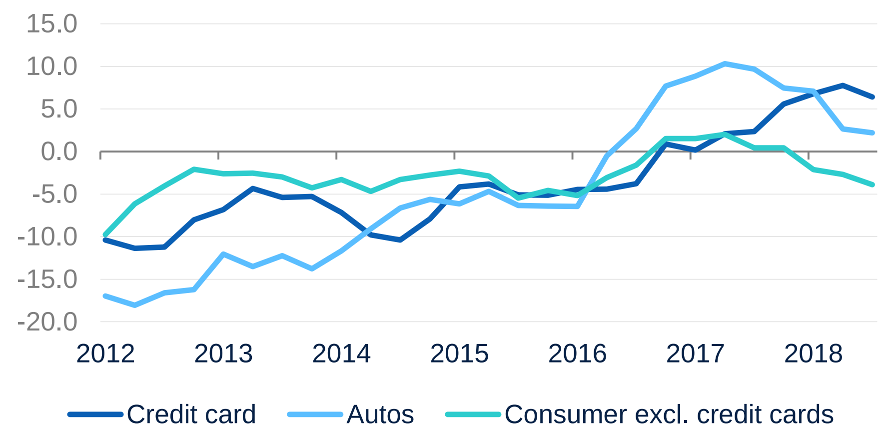
New 90+ Day Consumer Delinquencies Rates

%



Senior Loan Officers Lending Standards

+ tightening / - loosening



Source: BBVA Research, FRB, NY Fed & BEA

Labor Market

- In January, nonfarm payroll employment grew 304,000 up from 222,000 in December

- The unemployment rate (UR) increased to 4.0%, as the government shutdown pushed a large number of workers out of the labor force or caused them to be reported as unemployed

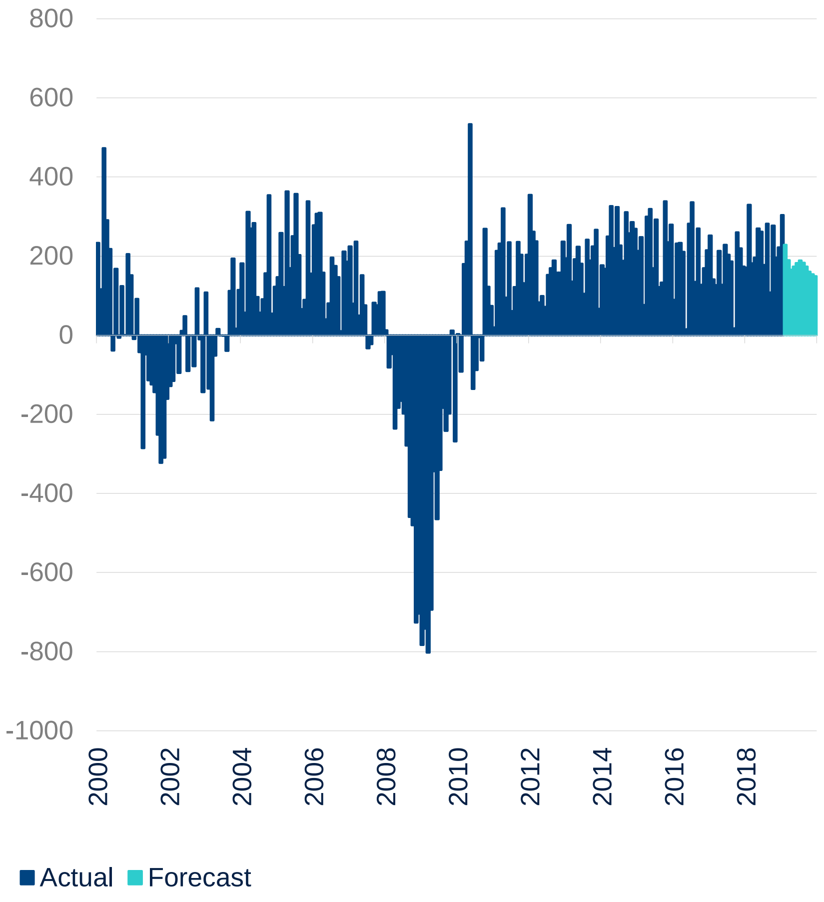
- Major industry gains: leisure and hospitality (74K), construction (52K), health care (42K), and transportation and warehousing (27K)

- The labor force participation rate and employment-to-population increased 10bp to 63.2% and 60.7%, respectively

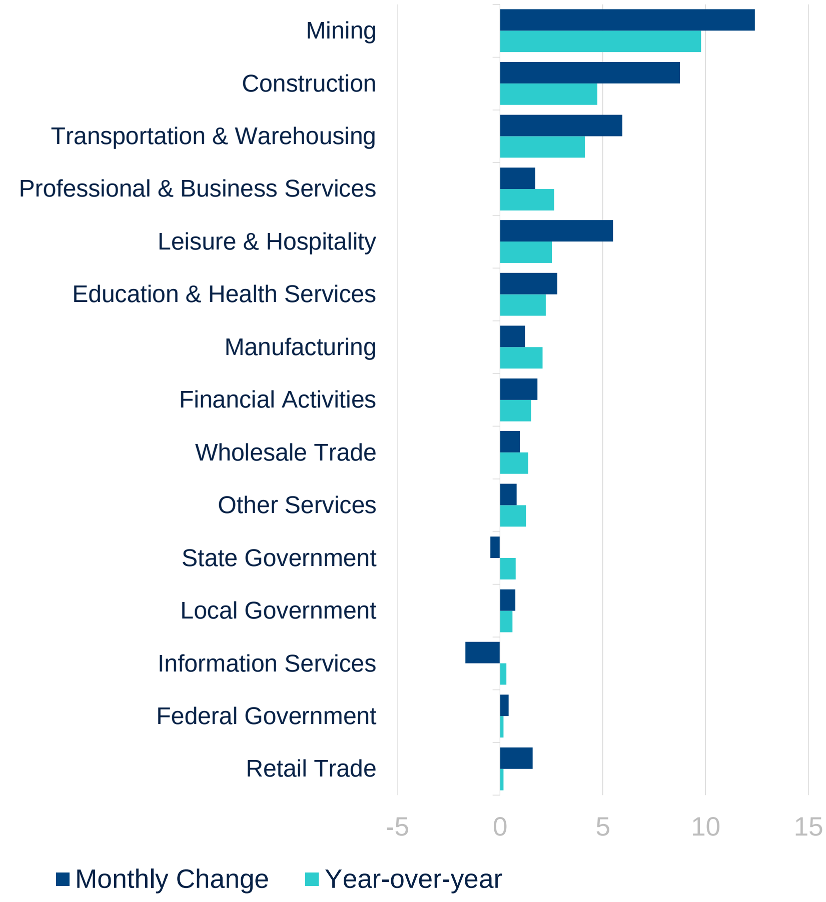
- We expect the UR to reach its low point in this business cycle in 3Q19 (3.6%), and job growth to continue to decelerate

Labor market: Strong job growth to start 2019

Nonfarm Payrolls
(Monthly Change, K)



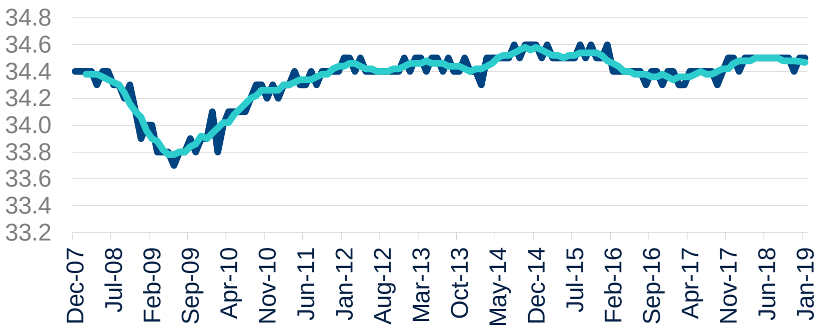
Industry Employment
(Annualized % change)



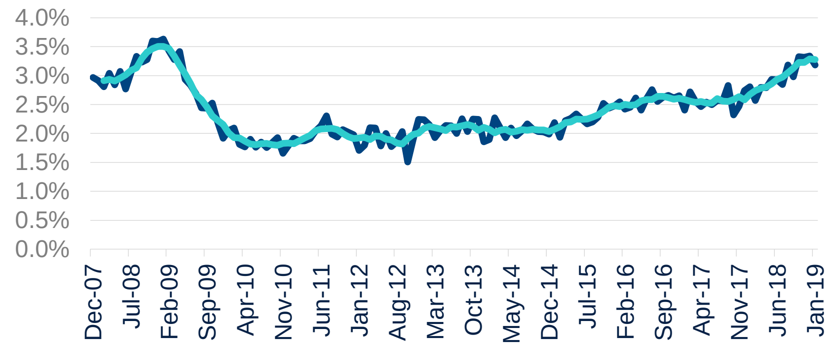
Source: BBVA Research & BLS

Labor market: Wage pressures rising while hours worked holds steady

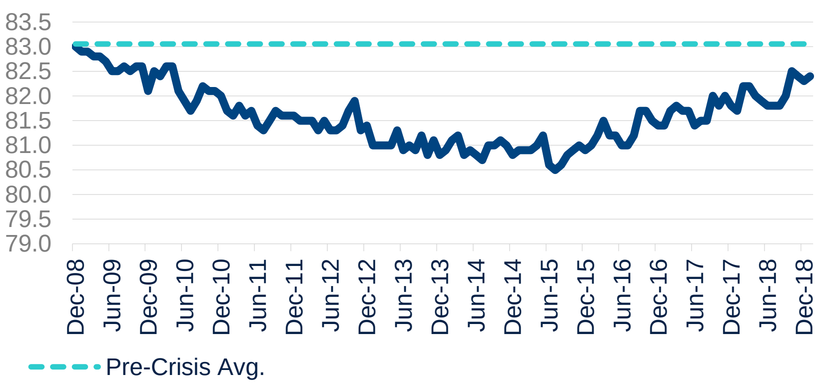
Average Weekly Hours
(number & 5mcma)



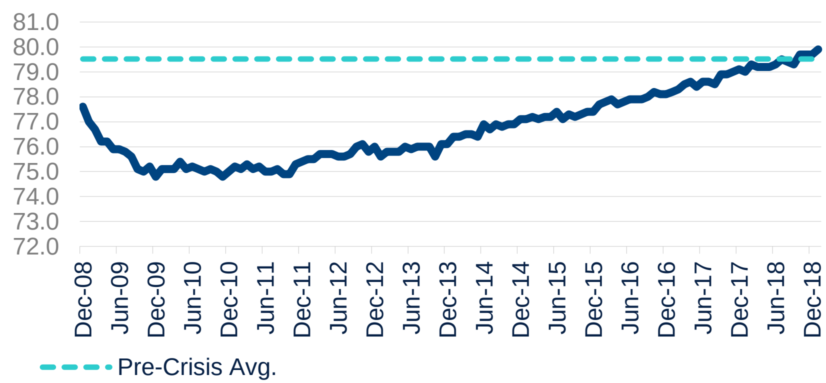
Average Hourly Earnings
(YoY% & 5mcma)



Prime Age Labor Force Participation
(%)



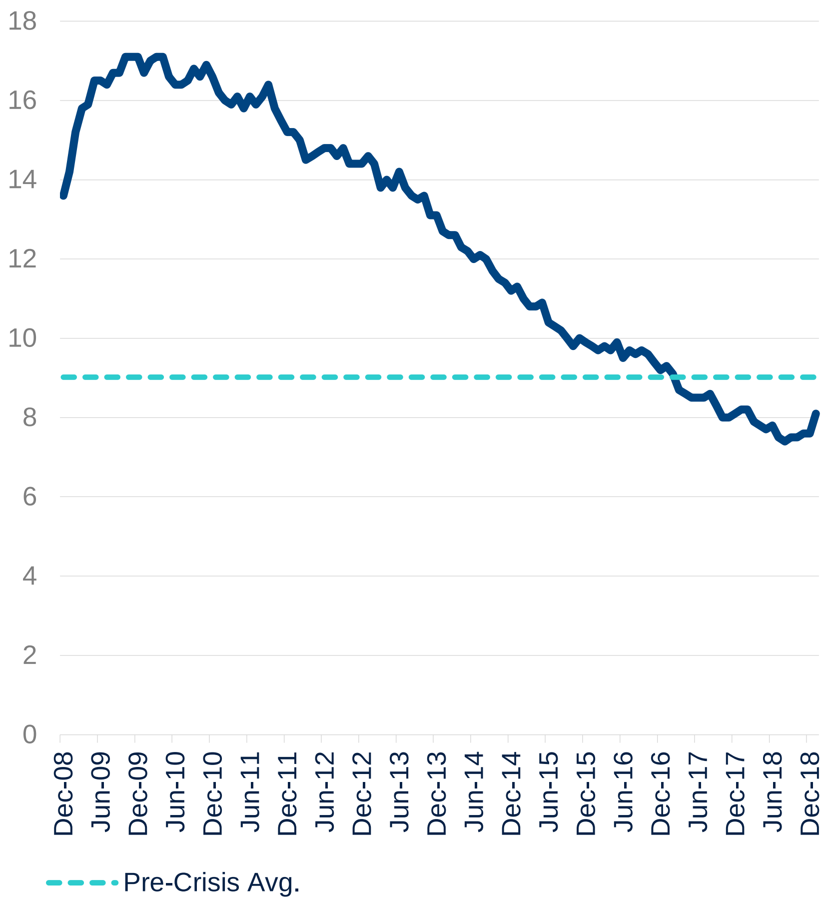
Prime Age Employment-to-Population
(%)



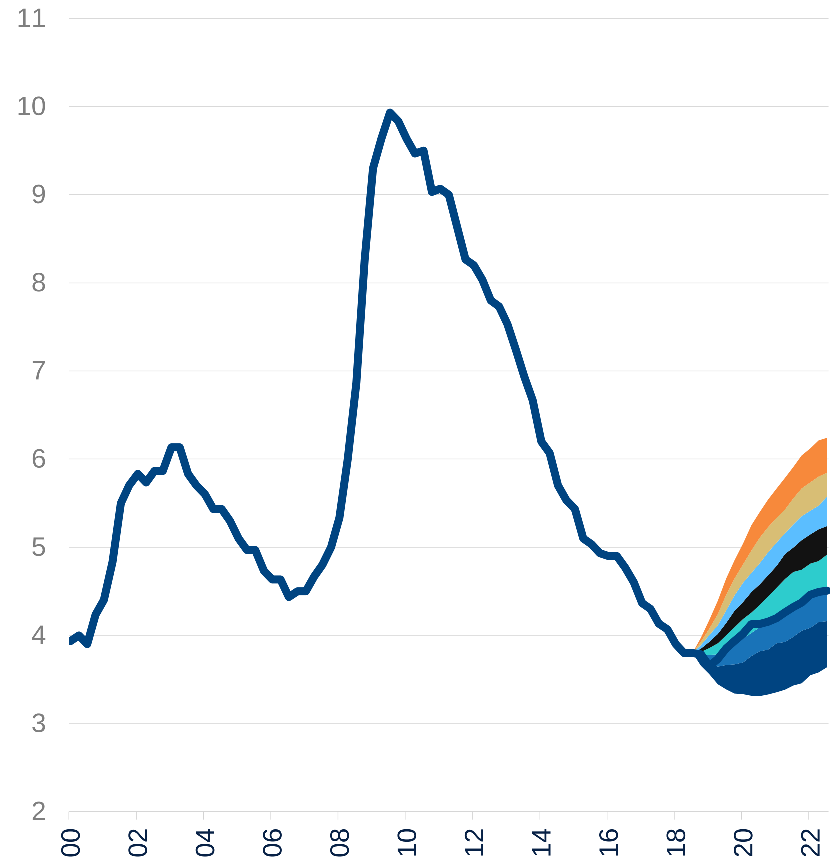
Source: BBVA Research & BLS

Labor market: Modest declines in the unemployment rate while labor market utilization declines

U-6
(%)



Unemployment Rate
(%)



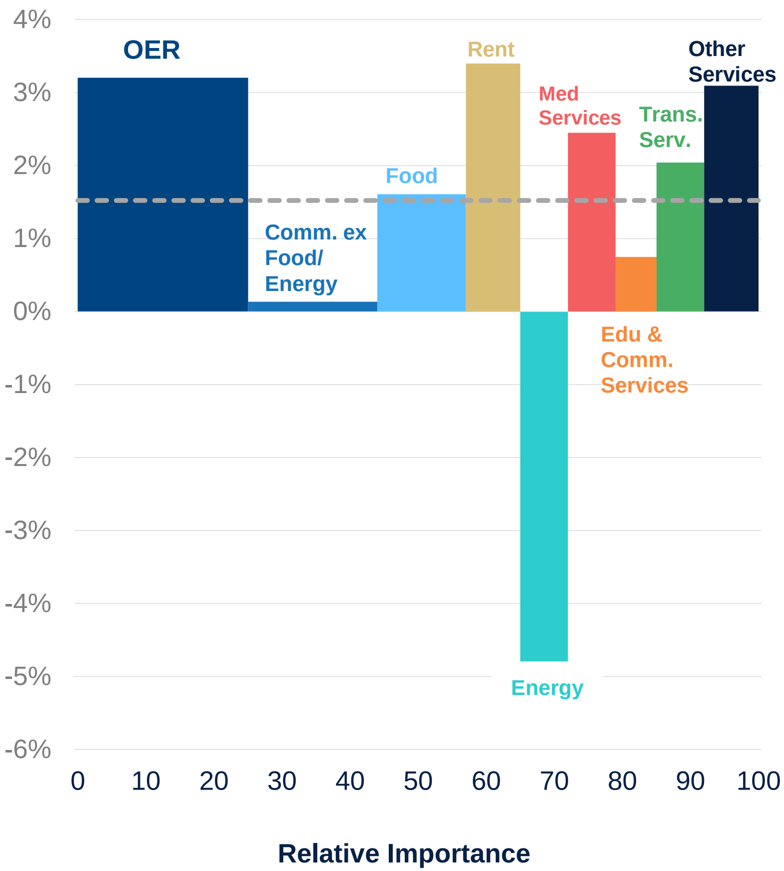
Source: BBVA Research & BLS

Inflation

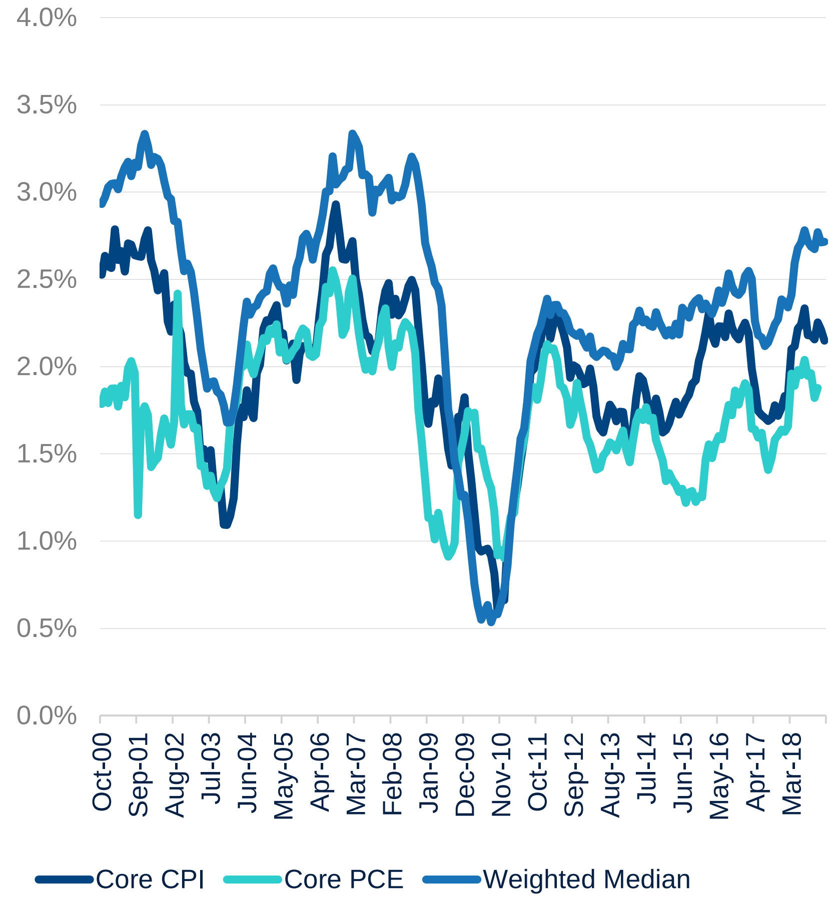
- Headline consumer price index (CPI) was unchanged in January, as declines in energy prices offset increases in food prices and core inflation
- On a year-over-year basis, headline CPI decelerated to 1.5% while core remained stable at 2.1%
- Recovery in oil prices should limit pass-through to energy prices going forward
- The probability of entering high-inflation regime is nonexistent; deflation risks are also low
- Implied 5-year and 10-year inflation expectations have edged up with energy prices rising and demand-side fears fading
- Pass-through from low energy prices to bring headline CPI below 2% for year; core CPI to remain close 2.2%

Inflation: Although core prices remains stable, headline dropping due to declines in energy prices

Consumer Price Inflation
(12m change)



Core Inflation Measures
(12m change)

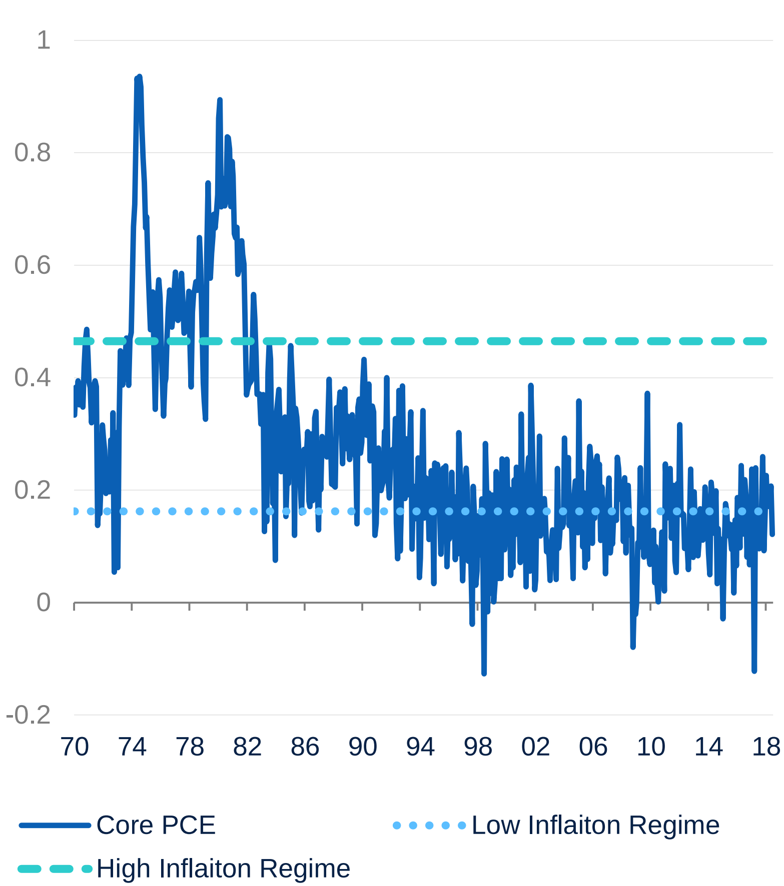


Source: BBVA Research, BLS & BEA

Inflation: Probability of high inflation regime extremely low

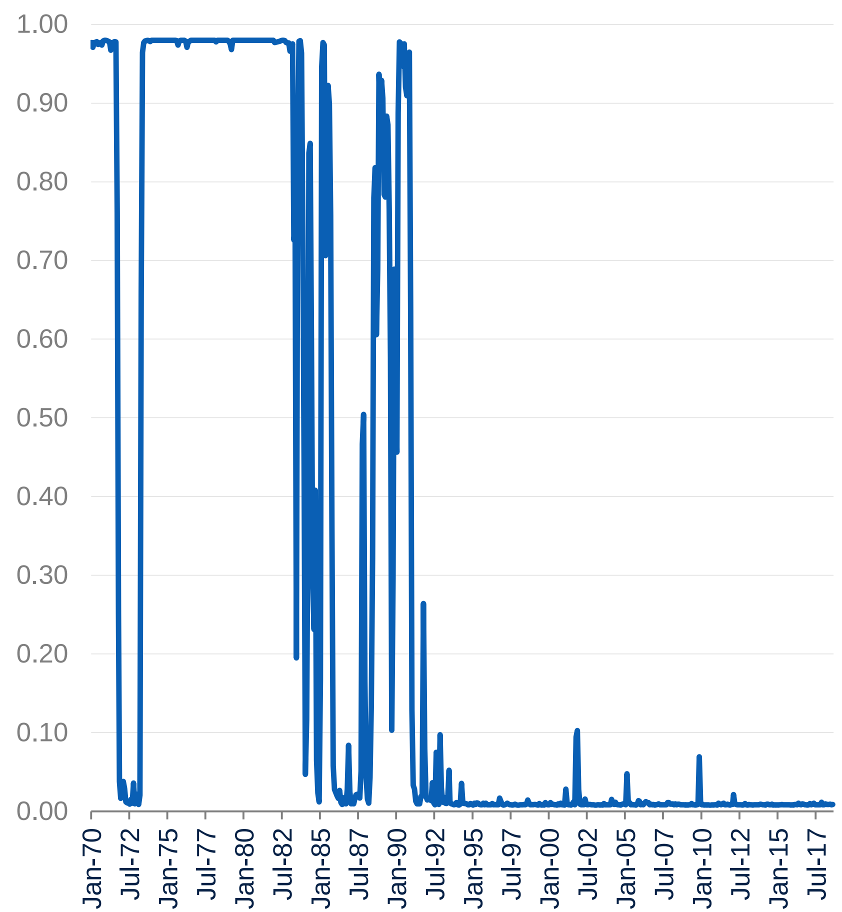
Core PCE Price Index & Inflation Regimes

Month-over-month %



Inflation Regime Change Probability

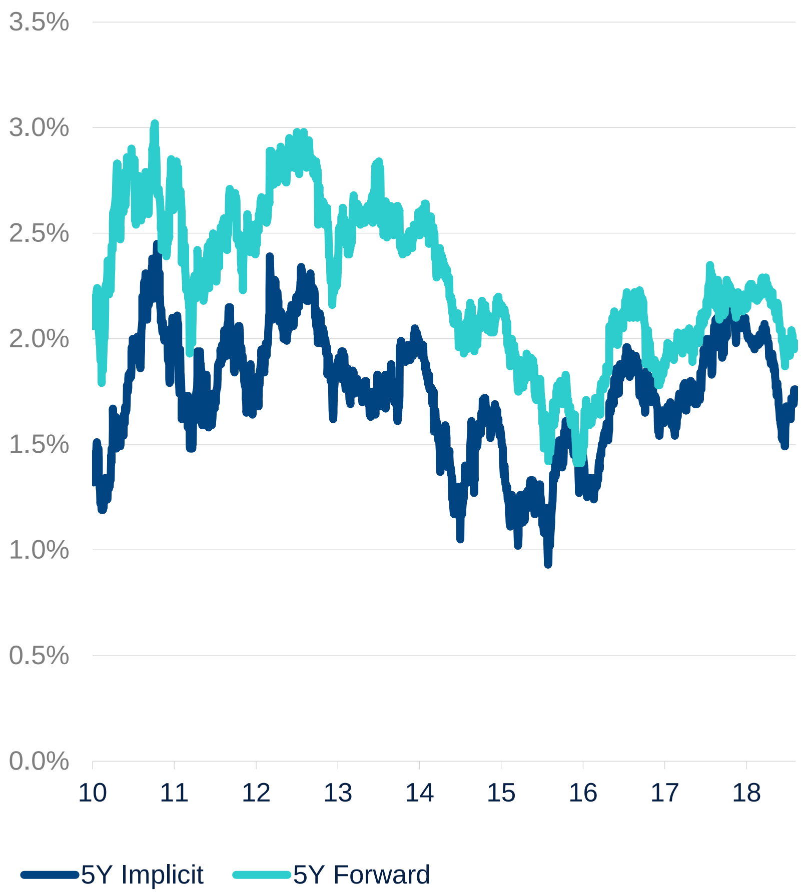
%



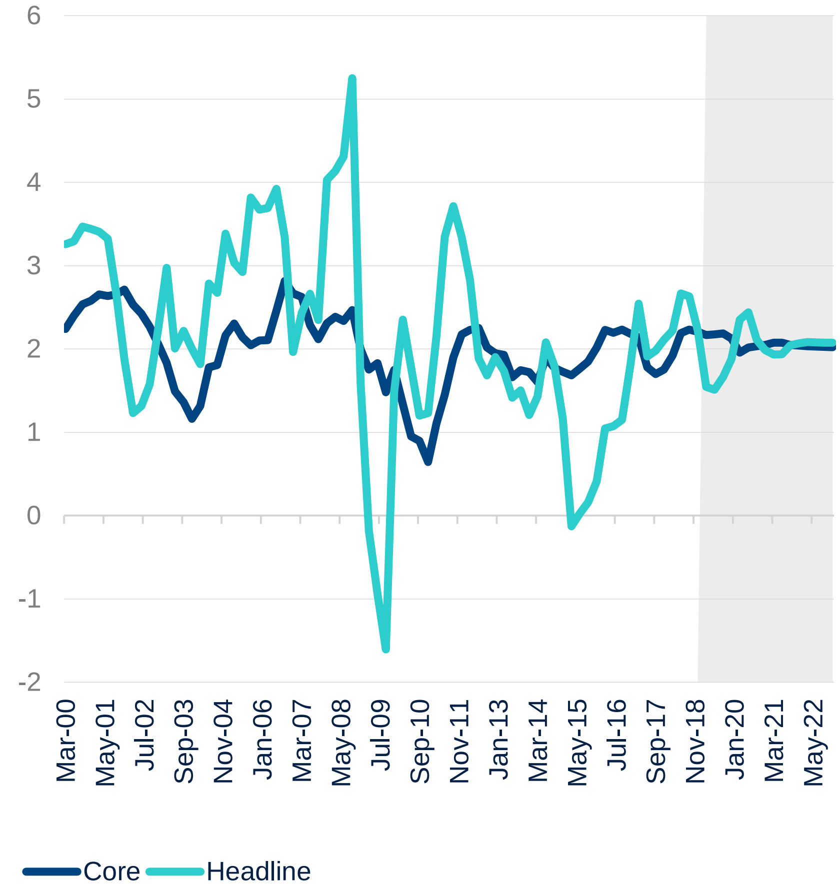
Source: BBVA Research & BLS

Inflation: Baseline for modest undershoot in 2019

Inflation Expectations
(%)



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



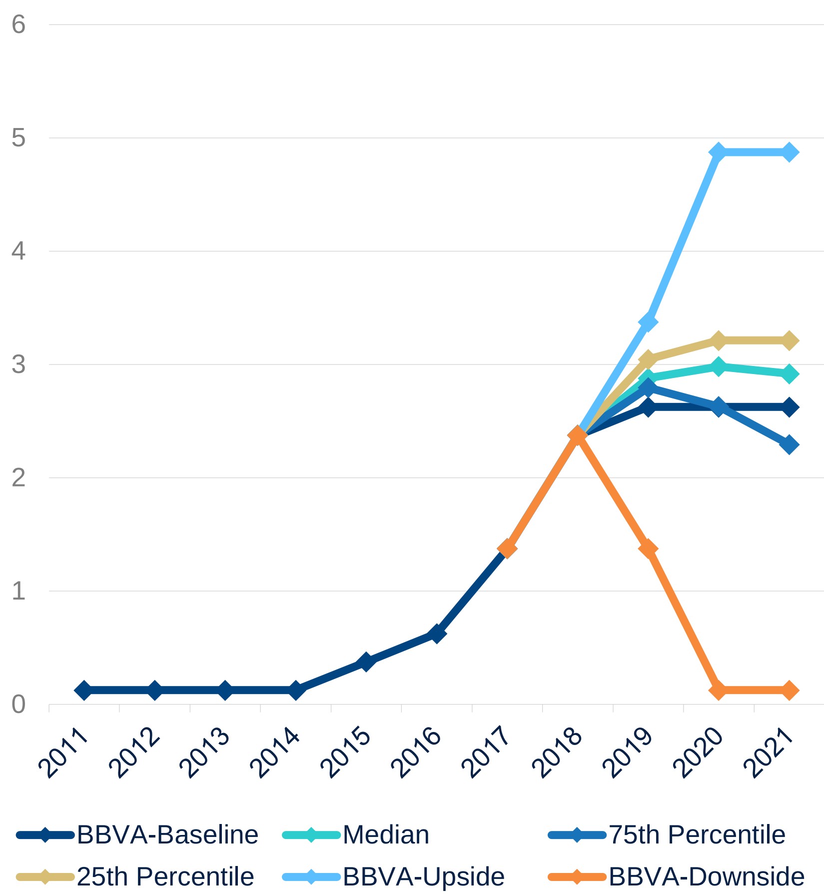
Source: BBVA Research & Haver Analytics

Monetary Policy: Federal Reserve

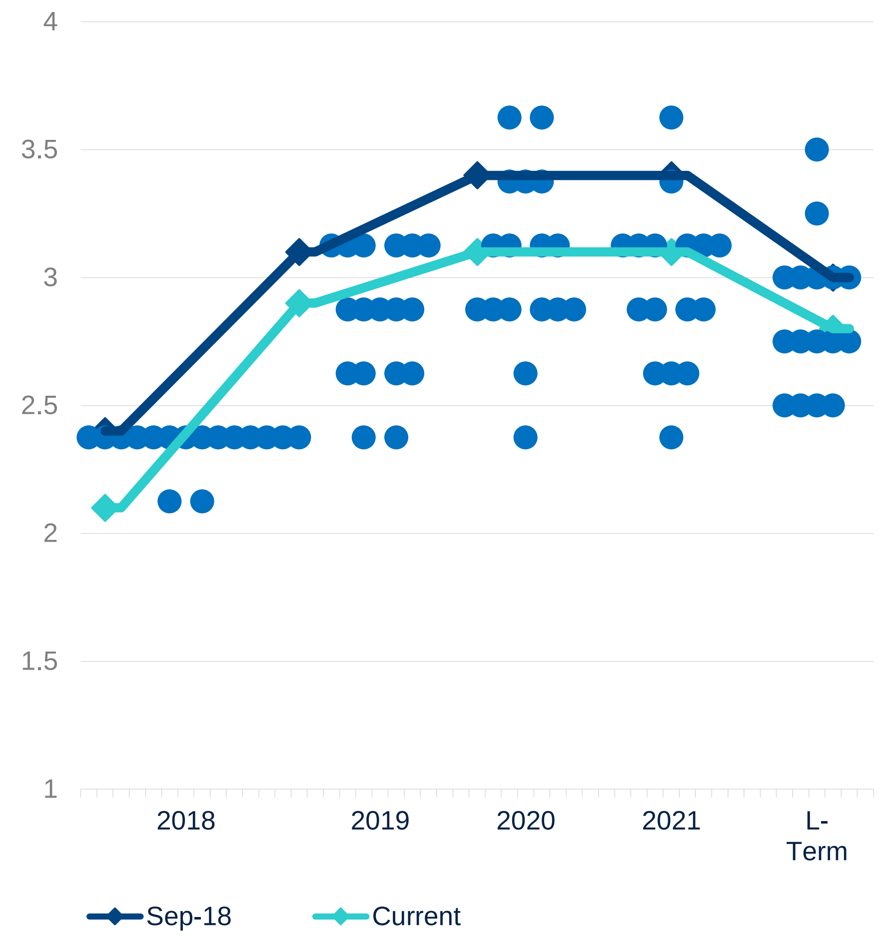
- The FOMC left the target range of the Fed Funds rate unchanged at their January 29-30th meeting
- FOMC shifting tone saying, "[i]n light of global economic and financial developments and muted inflation pressures, the Committee will be ***patient***"
- The FOMC has not reached a consensus on what conditions would be needed to continuing raising rates, but several members felt higher inflation or a more benign risk outlook would be sufficient for the Fed to raise later this year
- Terminal level of the balance sheet will be significantly higher (1-1.5Tr) than previously estimated and the normalization cycle will end sooner (EOY)
- With conditions similar to 2016—elevated uncertainty, financial tensions and weaker growth fundamentals— and with actual and expected inflation likely to undershoot the Fed's target in the 1H19, we believe that this means the Fed will wait until the 4Q19 before raising rates again.

Fed: Patience is name of the game; rate increases on hold until 4Q19

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



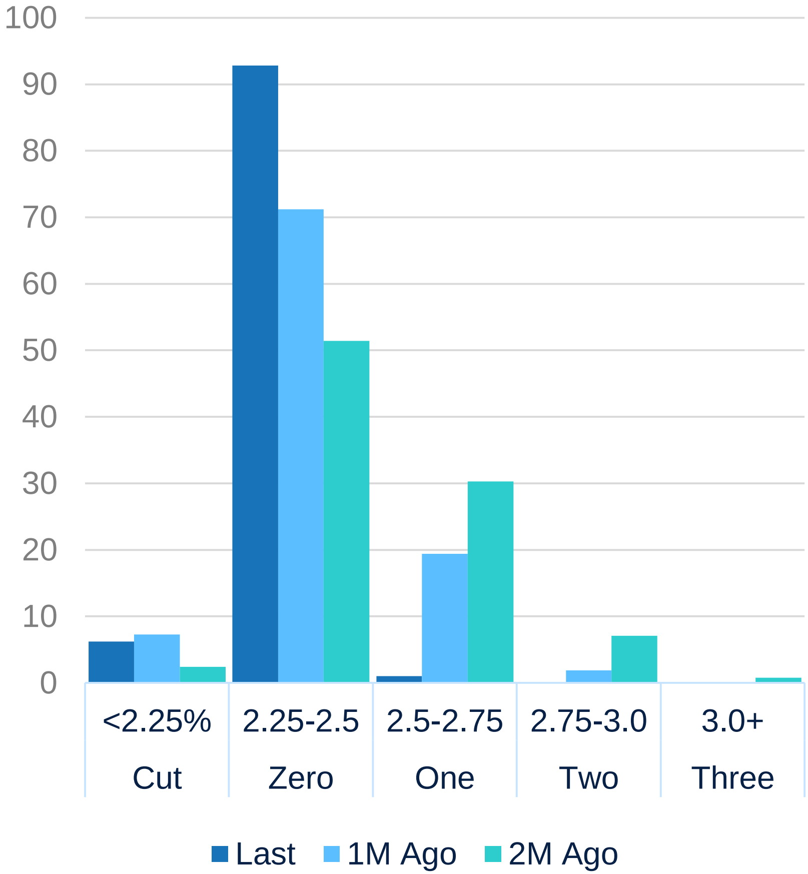
FOMC Projections of Fed Funds
(Year-over-year %, Mid-point)



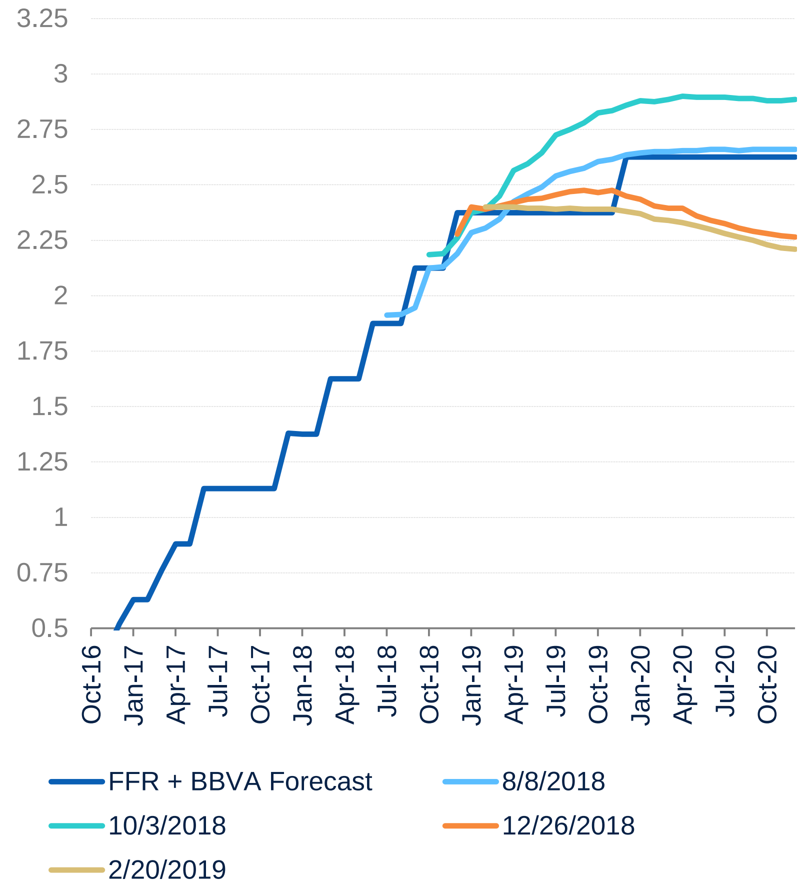
Source: BBVA Research & FRB

Monetary policy: Markets discounting prolonged pause, possible rate cut in 2020

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



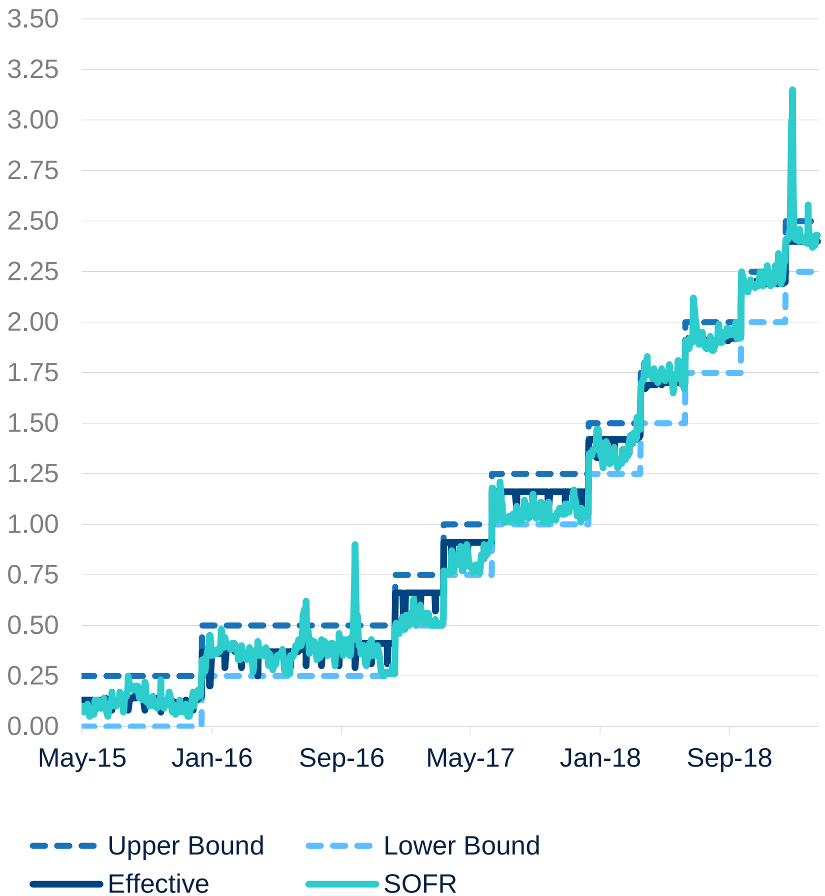
Fed Funds Futures & BBVA Baseline
(%)



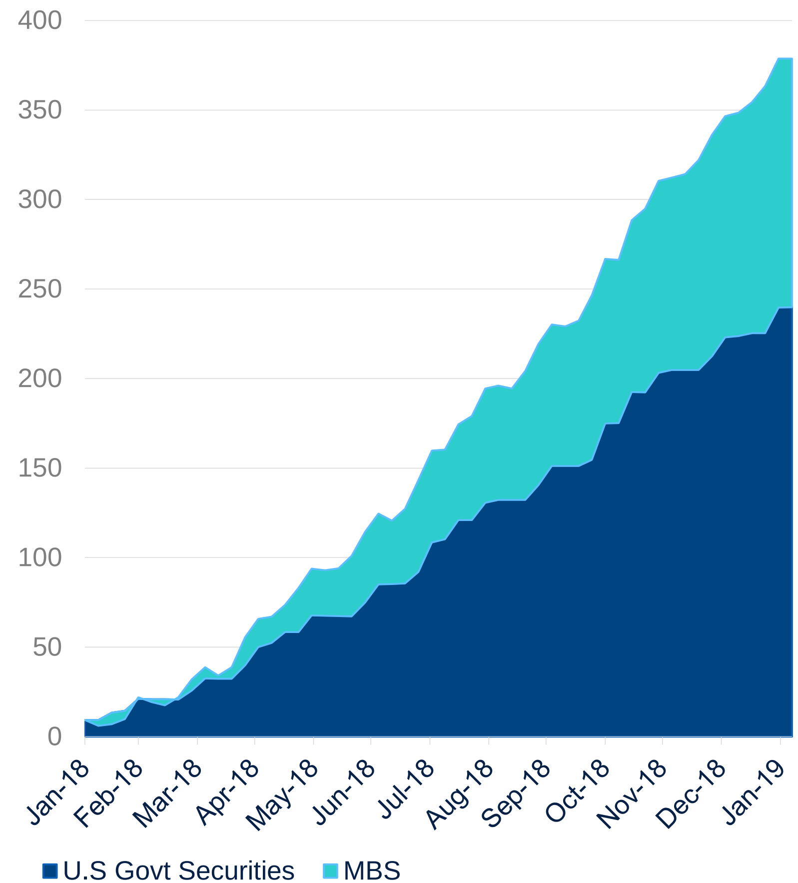
Source: BBVA Research & Bloomberg

Monetary Policy: New balance sheet strategy to be unveiled shortly, larger terminal level and shorter wind down

Fed Funds & Repo Rates
(%)



Balance Sheet Attrition
(US$bn, Cumulative)



Source: BBVA Research & FRB

Interest Rates

- 10-yr Treasury at 2.69%, 70bp below 4Q18 peak,
  2-yr Treasury 50bp below peak at 2.53%

- 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 and shift in the level

- 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

- Ample domestic demand for U.S. government debt from domestic sectors contain upside pressures on yields

- 10-yr Treasury to reach 2.9% by end of 2019 and 3.1% by year end 2020

Interest rates: Drop in inflation expectations and negative term premium push 10-year Treasury below 2.7%

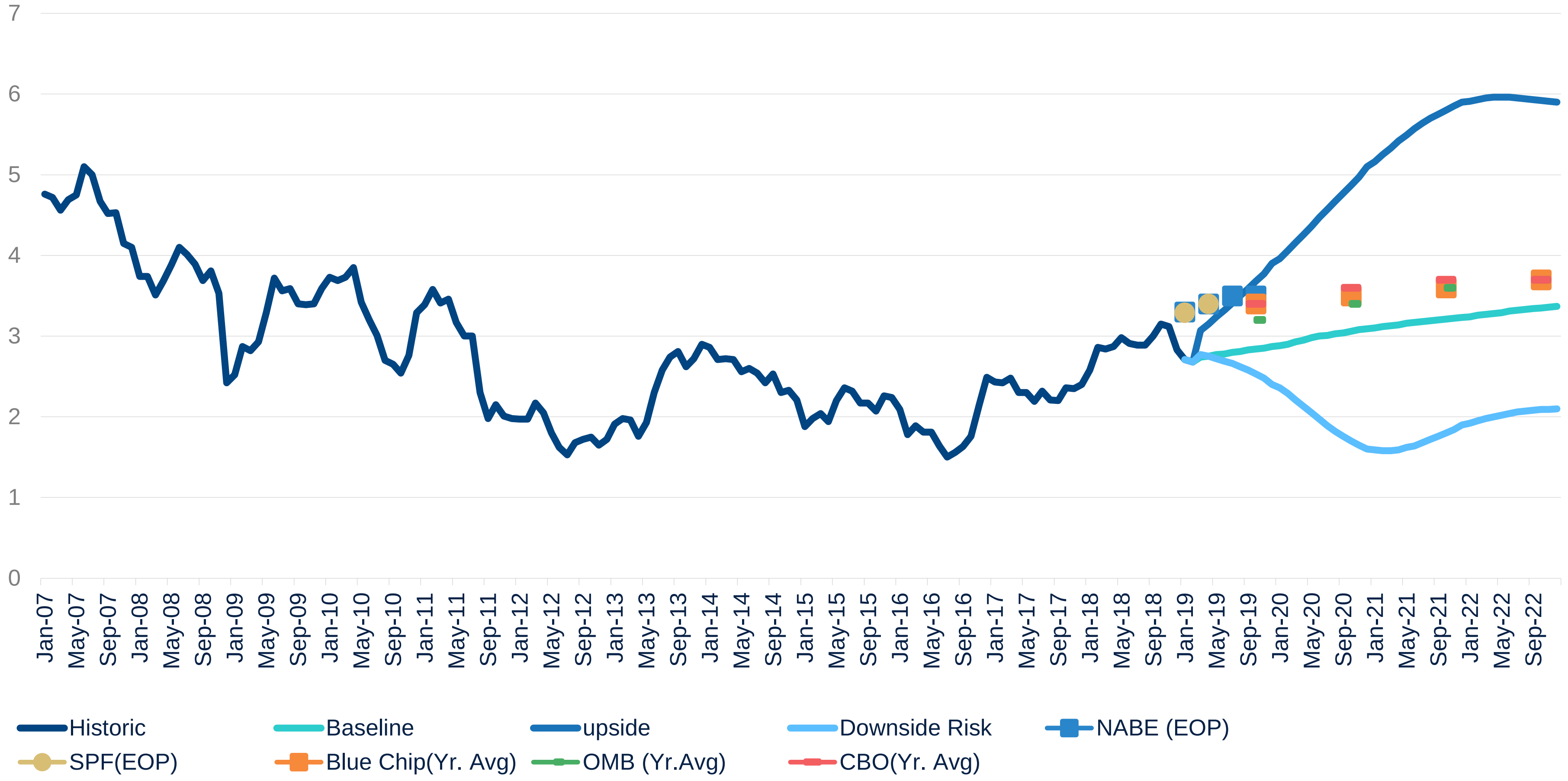
10-Year Treasury Yield Decomposition
(%)

Source: BBVA Research, ACM & Haver Analytics

Interest rates: Nontrivial downward revisions to 10-year, risks now more balanced

10-Year Treasury Yield

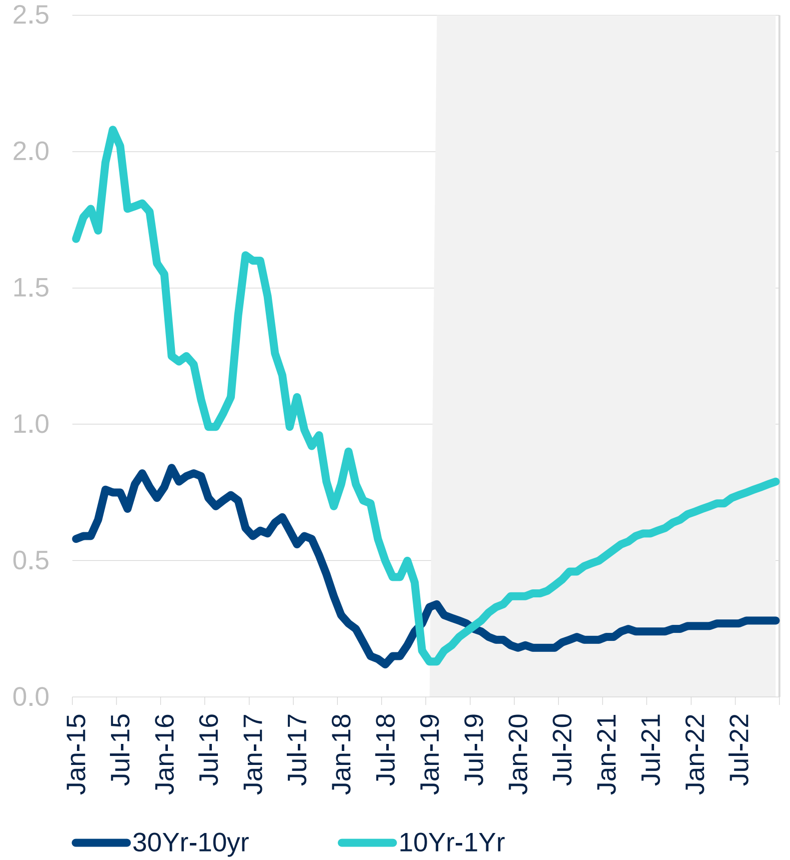
(%)



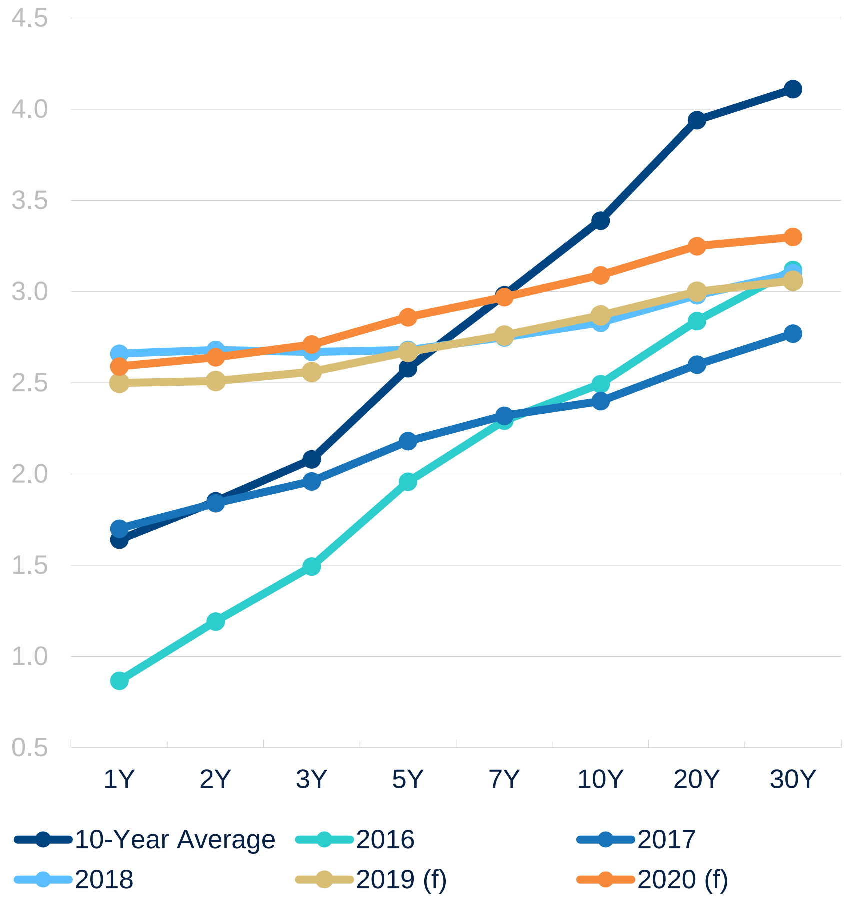
Source: BBVA Research, ACM & Haver Analytics

Interest rates: Yield curve slope to remain low, but positive

Yield Curve Slope
(Bp)



Yield Curve
(%, eop)



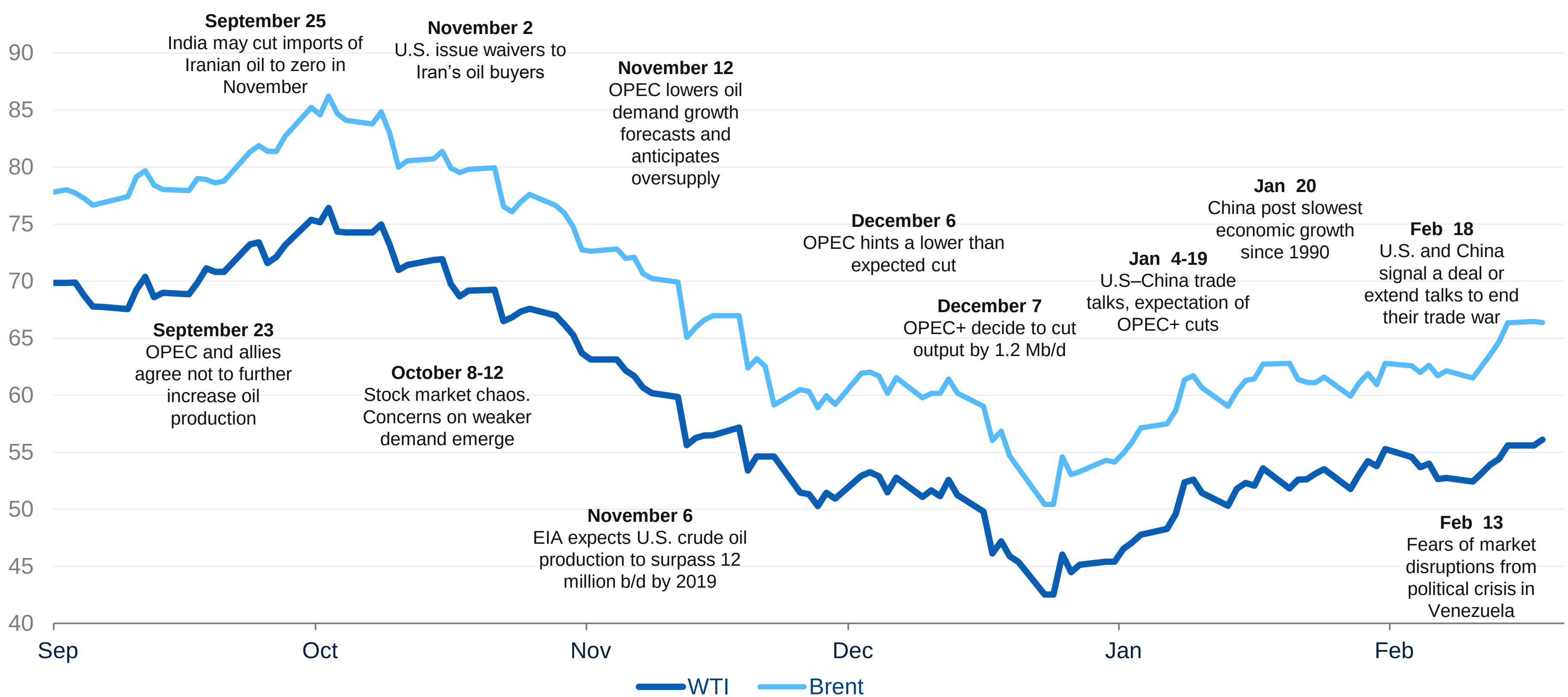
Source: BBVA Research

Oil Prices

- OPEC+ cuts, a pause in U.S. interest rate increases, and signals of a trade deal between U.S. and China resulted in higher prices
- Going forward, the expiration of import waivers of Iranian oil could add an extra boost
- U.S. production is expected to remain robust through the year, more transportation infrastructure will facilitate exports
- Demand is projected to slow down as global economic growth weakens
- We maintain our forecasts of convergence to long-term equilibrium around $60/b
- Elevated uncertainty around long-term equilibrium: CAPEX, protectionism, transportation infrastructure, alternative energy sources, EM convergence, EVs, climate change, efficiency and technology

Improving sentiment on the global economy, plus OPEC+ commitment to adjust supply led to higher prices

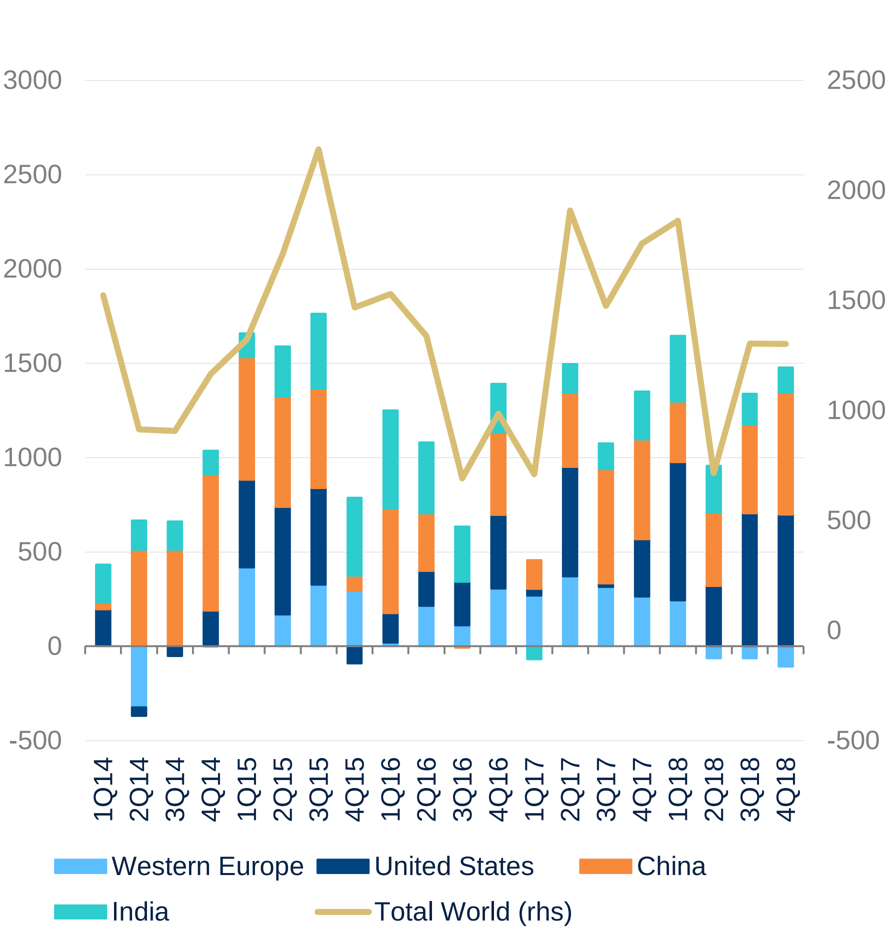
Crude oil prices August 2018 to February 2019
($ per barrel)



Source: BBVA Research and Haver Analytics

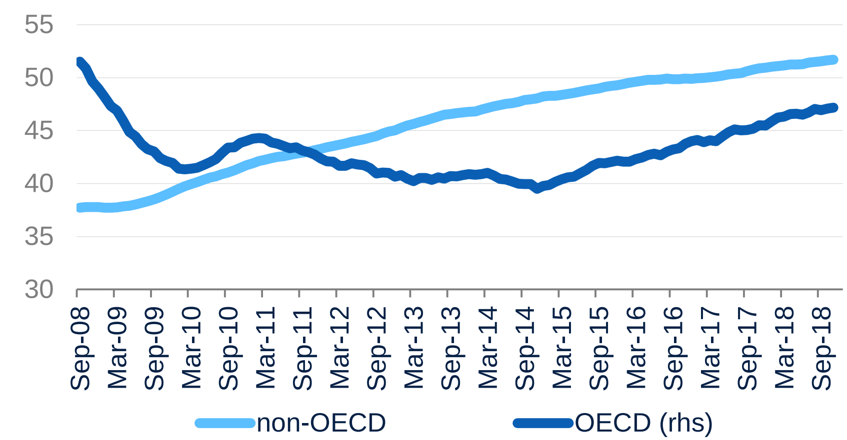
Demand supported by China, India and the U.S.

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

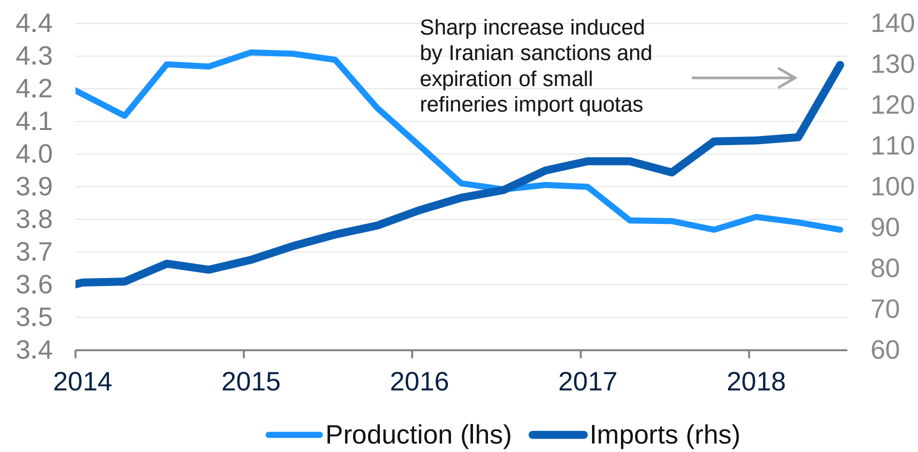


Source: BBVA Research and Haver Analytics

Oil product demand
(Million barrels per day)

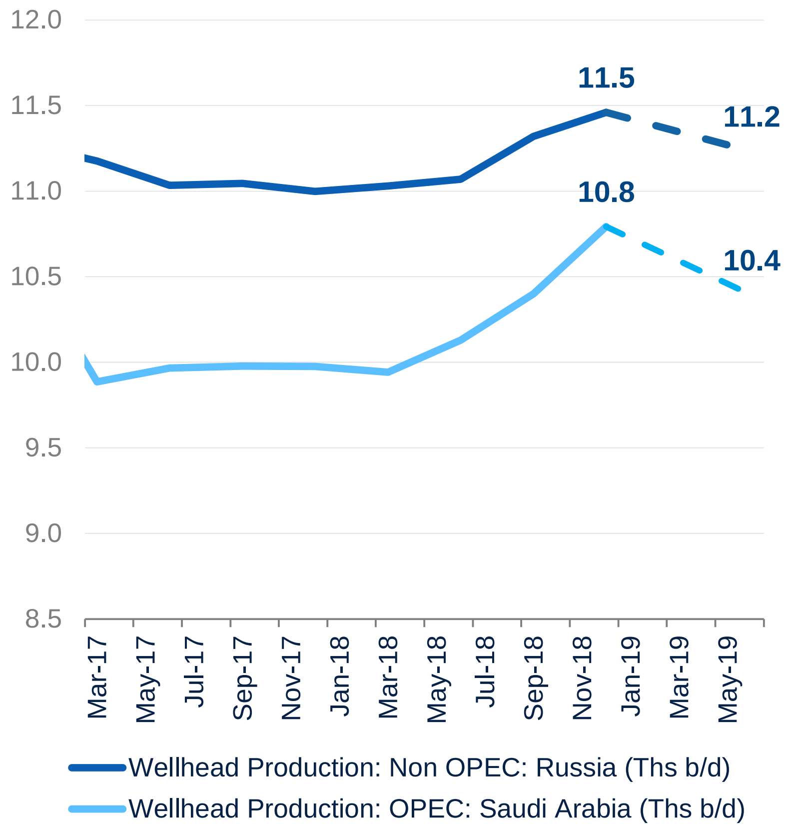


China: imports and production of crude oil
(Million metric tons SA, and million b/d)

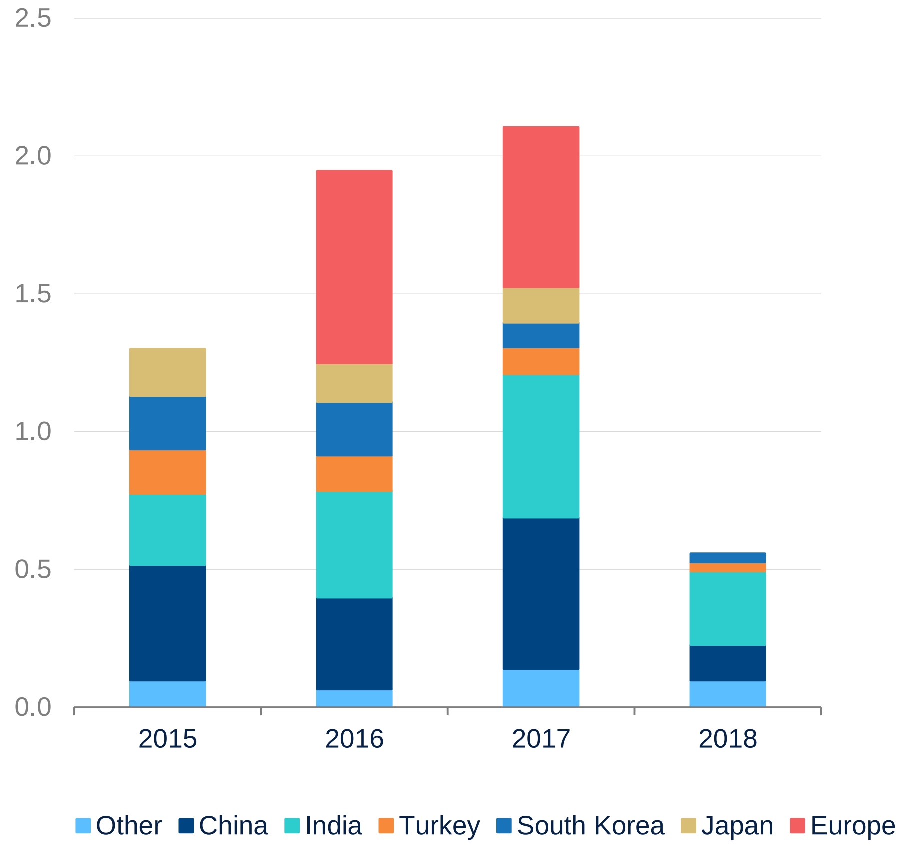


OPEC+ supply adjustments and the expiration of waivers to importers of Iranian oil will tight supply thought 1H19

Crude oil production
(Million barrels per day)



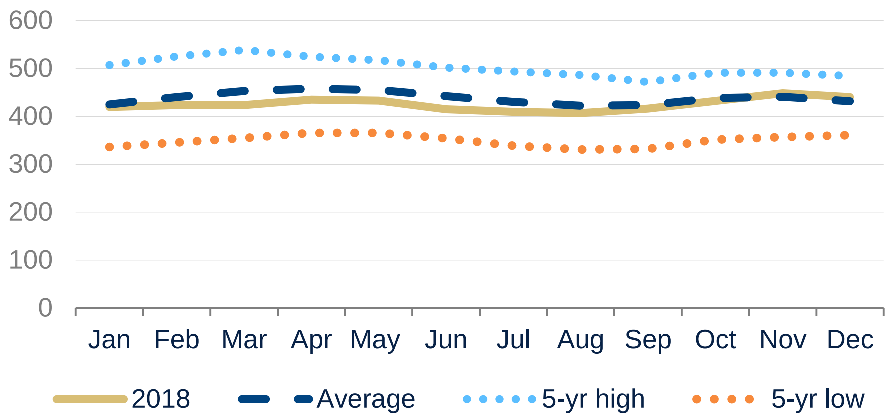
Iran: exports of crude oil
(million barrels per day)



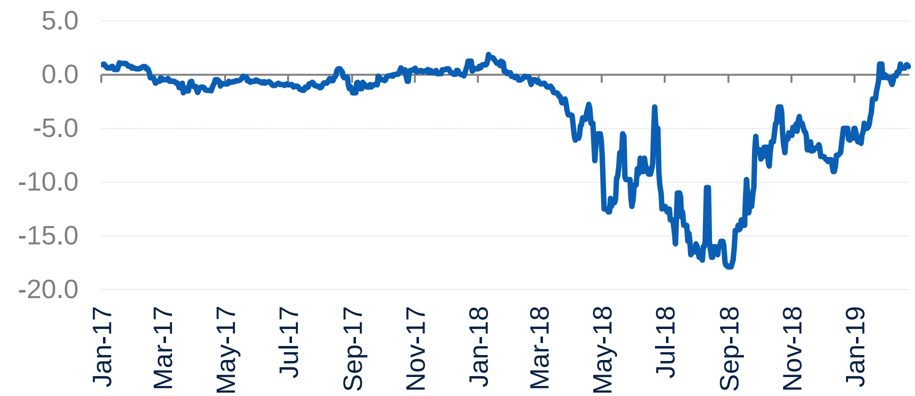
Source: BBVA Research, Haver Analytics, and Bloomberg

U.S. production to remain solid. No signs of domestic oversupply

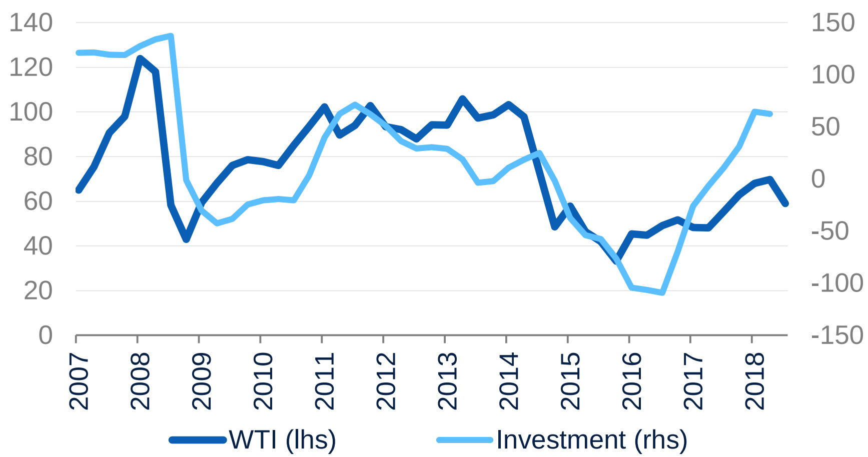
U.S. Crude oil inventories
(Excluding SPR, million barrels)



WTI Midland-Cushing differential
($/b)



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



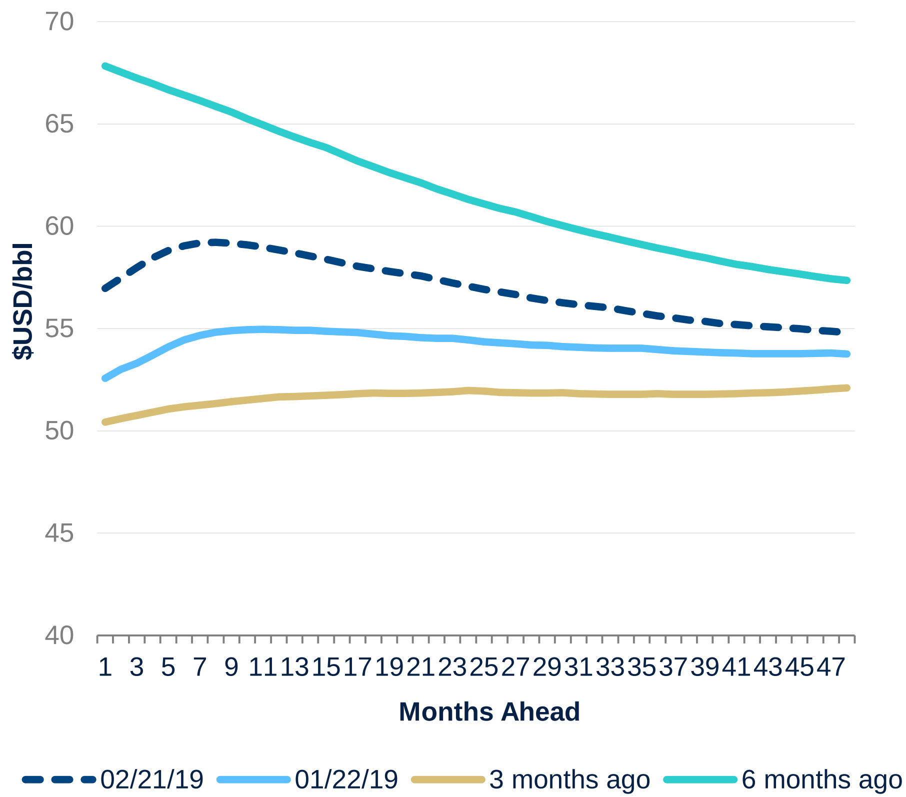
U.S. Estimated crude oil production
(Thousand barrels/day)

Source: BBVA Research and Haver Analytics

WTI prices could move between higher $50s and lower $60s in 2019, but may decelerate further in 2020. We maintain our forecasts of convergence to long-term equilibrium around $60/b

WTI Futures

($ per barrel)

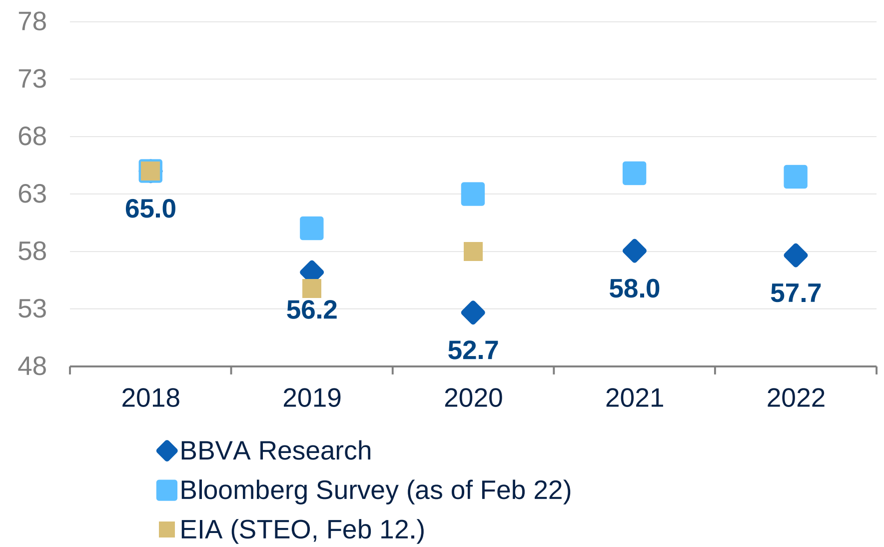


Source: BBVA Research and Bloomberg

WTI prices forecast

($ per barrel)

	BBVA Research	Bloomberg Survey (as of Feb 22)	EIA (STEO, Feb 12.)
2017	50.8	50.9	50.9
2018	65.0	65.0	65.0
2019	**56.2**	**60.0**	**54.8**
2020	**52.7**	**63.0**	**58.0**
2021	**58.0**	**64.8**	
2022	**57.7**	**64.5**	



Macroeconomic Outlook

	2011	2012	2013	2014	2015	2016	2017	2018 (e)	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	1.9	1.9	1.3	1.3	1.3
Gross Investment	0.9	1.6	1.1	0.9	0.8	-0.2	0.8	1.0	1.0	0.9	0.8	0.8
Non Residential	1.0	1.2	0.5	0.9	0.3	0.1	0.7	1.0	0.8	0.8	0.7	0.8
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	0.6	0.5	0.6	0.7	0.7
Imports	-0.9	-0.5	-0.3	-0.9	-1.0	-0.3	-0.8	-0.9	-1.0	-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	3.8	4.1	4.2	4.5
Avg. Monthly Nonfarm Payroll (K)	173	181	192	251	227	193	179	223	188	159	135	121
CPI (YoY %)	3.1	2.1	1.5	1.6	0.1	1.3	2.1	2.4	1.7	2.2	2.0	2.1
Core CPI (YoY %)	1.7	2.1	1.8	1.8	1.8	2.2	1.8	2.1	2.2	2.0	2.1	2.0
Fiscal Balance (% GDP, FY)	-8.4	-6.8	-4.1	-2.8	-2.4	-3.2	-3.5	-3.9	-4.2	-4.1	-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	2.87	3.09	3.23	3.37
West Texas Intermediate 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	**5**	5
Baseline	**55**	55
Downside	**40**	40

Macro Scenarios										
	2014	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
GDP	2.5	2.9	1.6	2.2	2.9	2.5	2.0	1.9	1.8	1.8
Upside					3.0	3.0	3.2	3.1	2.7	2.7
Downside					2.8	0.7	-0.9	1.9	2.1	2.3
UR	6.2	5.3	4.9	4.4	3.9	3.8	4.1	4.2	4.5	4.5
Upside						3.1	2.9	2.9	3.0	3.0
Downside						4.3	6.2	6.6	5.7	5.0
CPI	1.6	0.1	1.3	2.1	2.4	1.7	2.2	2.0	2.1	2.0
Upside						1.6	3.8	3.5	3.8	3.8
Downside						0.7	1.1	1.1	1.3	1.4
Fed [eop]	0.25	0.50	0.75	1.50	2.50	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	2.83	2.87	3.09	3.23	3.37	3.46
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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BBVA Research

U.S. Economic Outlook

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Creating Opportunities