

The logo for BBVA Research, featuring the text "BBVA" in a bold, white, sans-serif font, followed by "Research" in a smaller, lighter weight sans-serif font. A small teal square is positioned to the right of the word "Research".

BBVA Research

U.S. Economic Outlook

November 2018

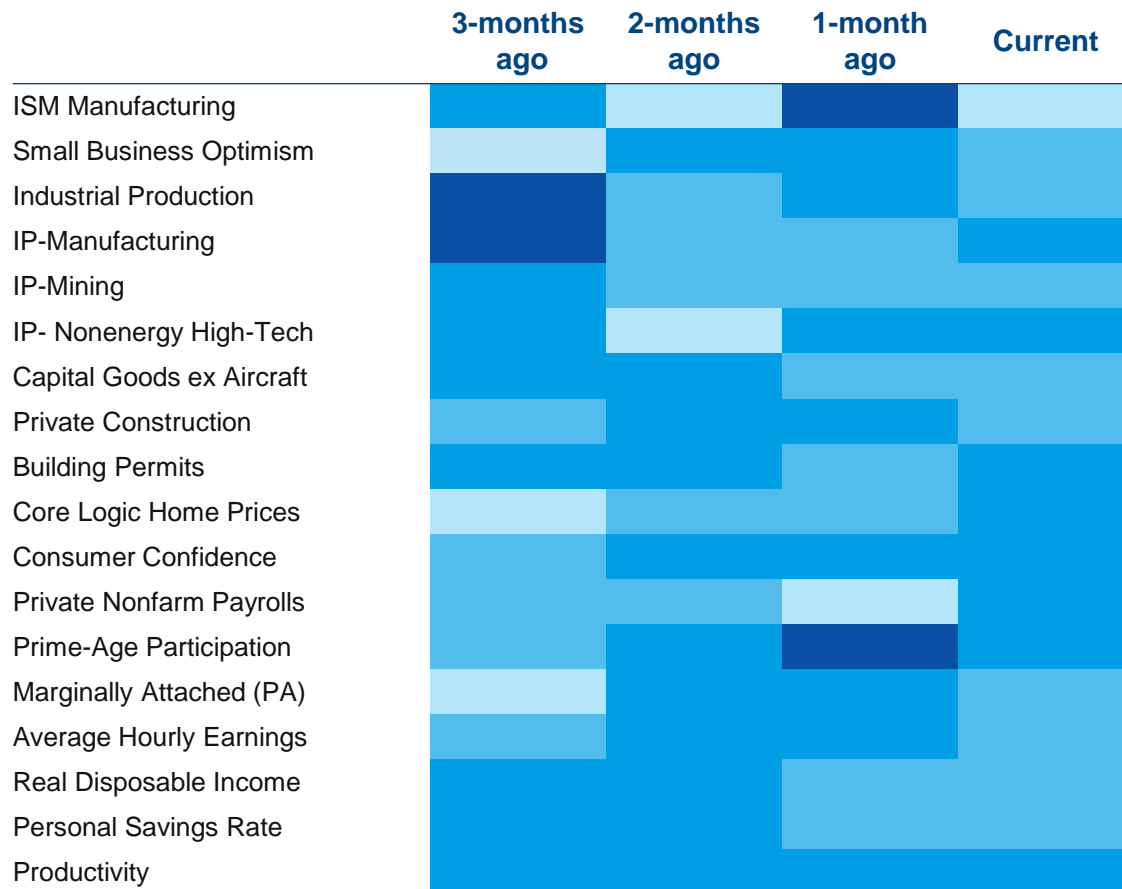
Creating Opportunities

Economic Outlook

- Modest upside risk to growth in 2018, baseline for 2019 unchanged but risks tilted to the downside
- Although models suggest low risk of recession, qualitative analysis indicates downside risks are increasing
- FOMC remains poised to raise rates in December. Baseline assumes three additional increases in 2019
- Labor market slack minimal, as unemployment rate nears 50 year lows
- Inflation pressures ease in 3Q18, but tariffs and rising nonlabor price pressures will continue to buoy inflation expectations. Our scenario continues to anticipate a slight overshooting of 2% target
- 10-year Treasury continues upward trend in line with our baseline
- Analysts and future markets have lowered their expectations for oil prices

Economic activity

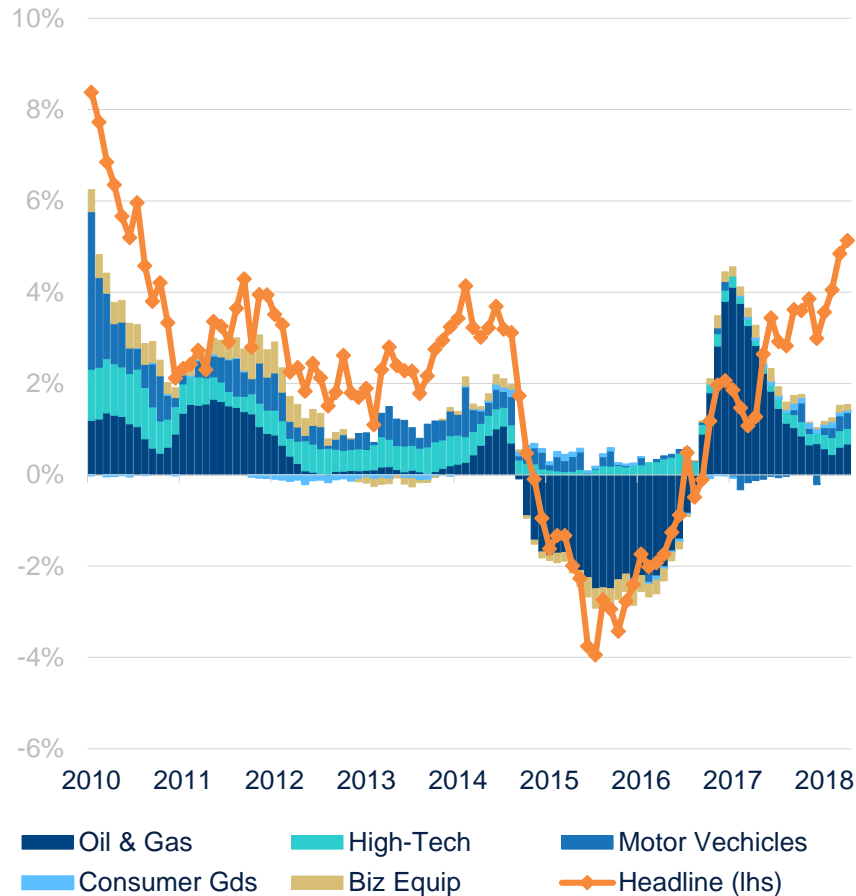
Real-Time Economic Momentum Heat Map



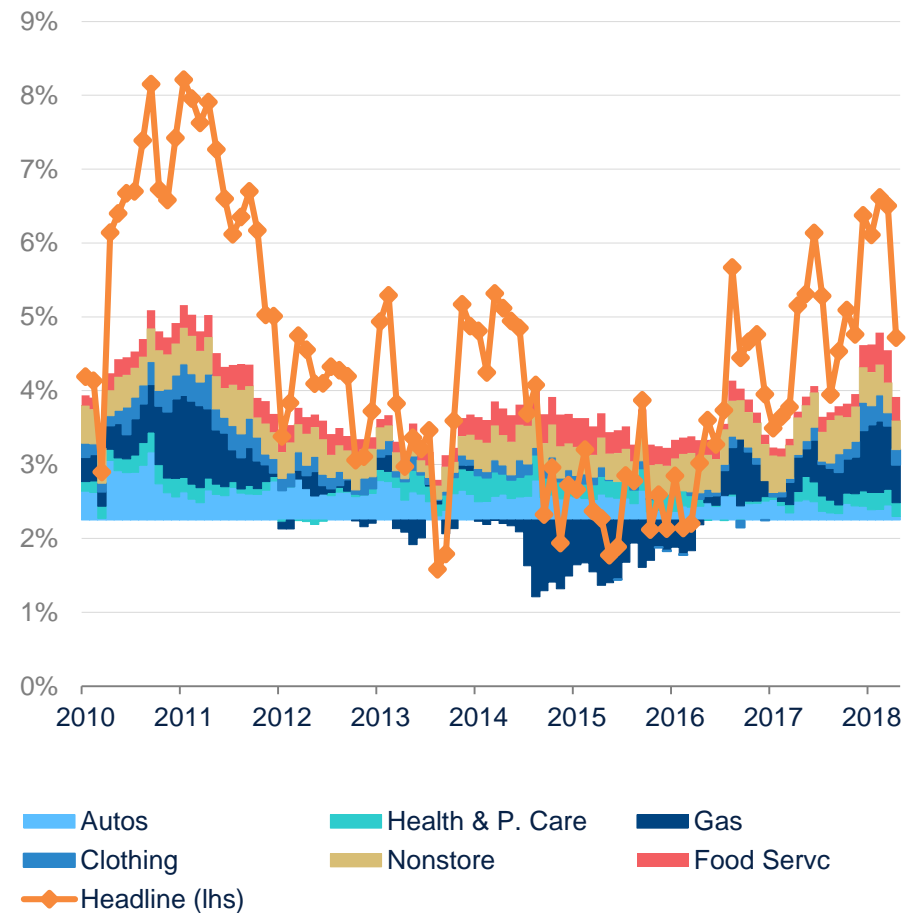
- While confidence indicators remain elevated, momentum continues to slow
- Home price momentum slowing as rising rates weigh on the demand side
- Durable goods orders drop in September after strong momentum in 1H18
- Labor force inflows continue to add to the tightness of the labor market
- Moderate income growth requiring consumers to dip into savings

Economic trends: Headwinds building on the consumer side, industrial indicators remain positive

Industrial Production (Year-over-year %)



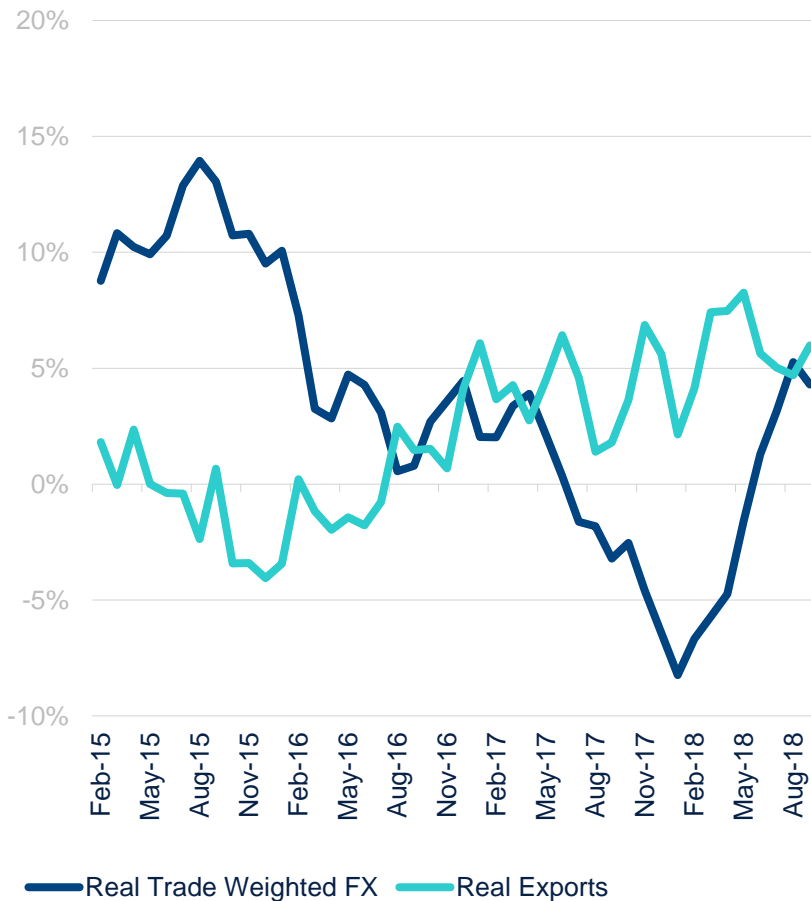
Retail Sales (Year-over-year %)



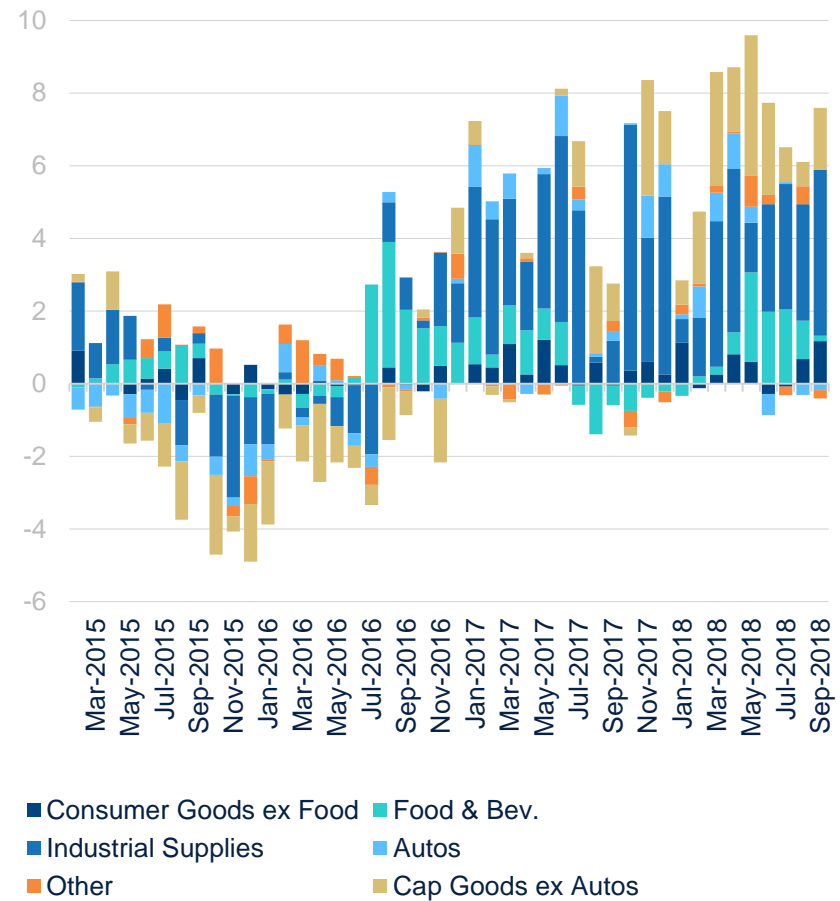
Source: BBVA Research, FRB & BEA

Economic trends: Tariffs and geopolitical tensions have little effect on U.S. exports

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



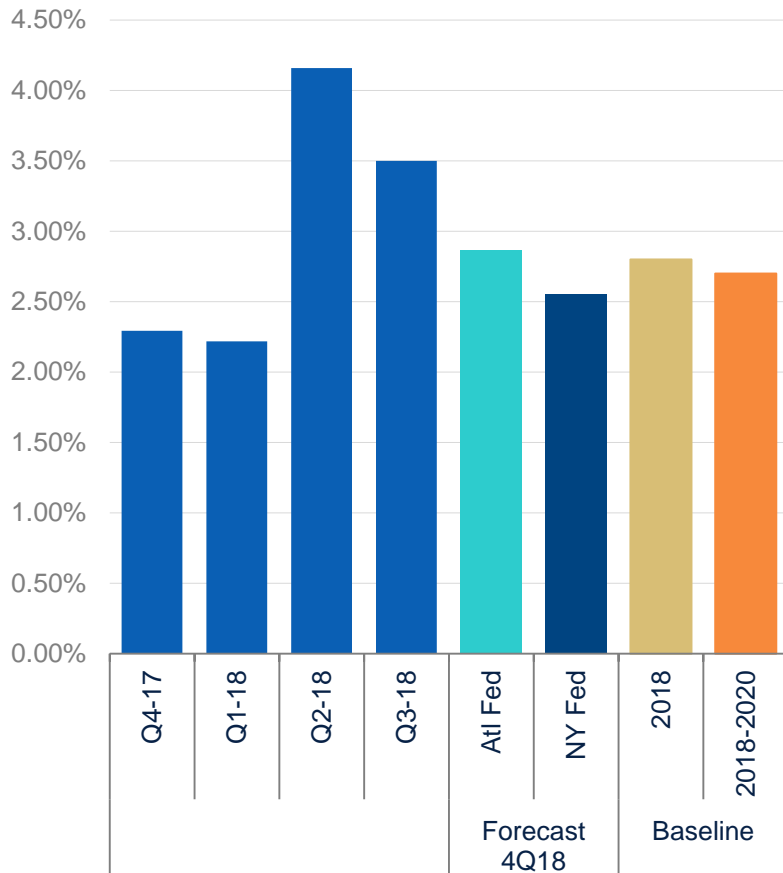
Real Exports (Contribution to year-over-year %)



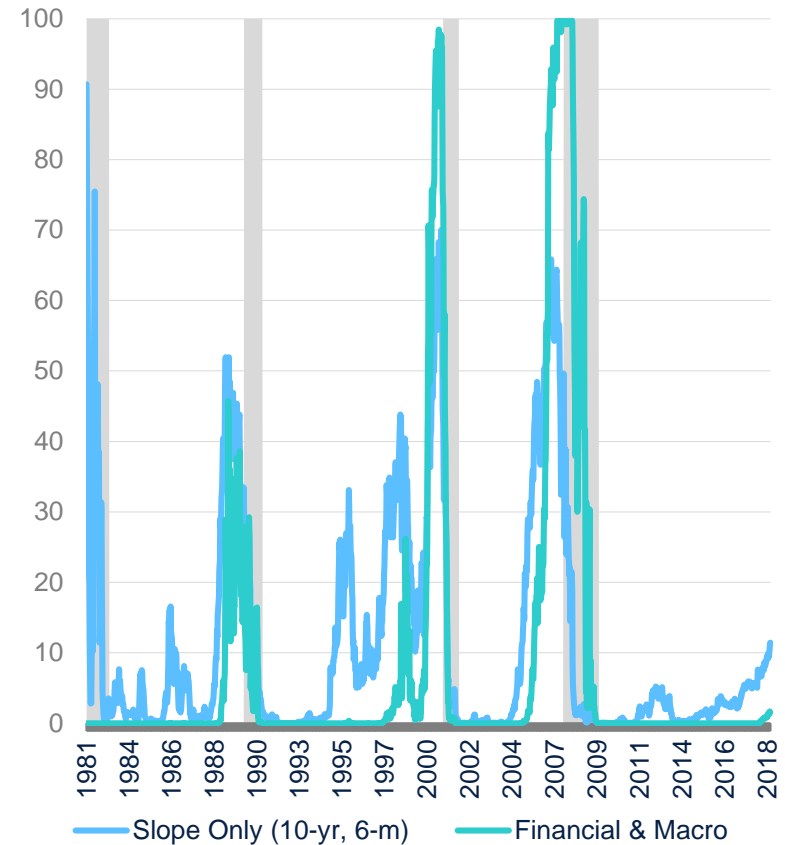
Source: BBVA Research, FRB & Census

Economic trends: Growth in 4Q18 to show further deceleration, recession probability 2.0%

Real GDP
(QoQ SAAR, %)



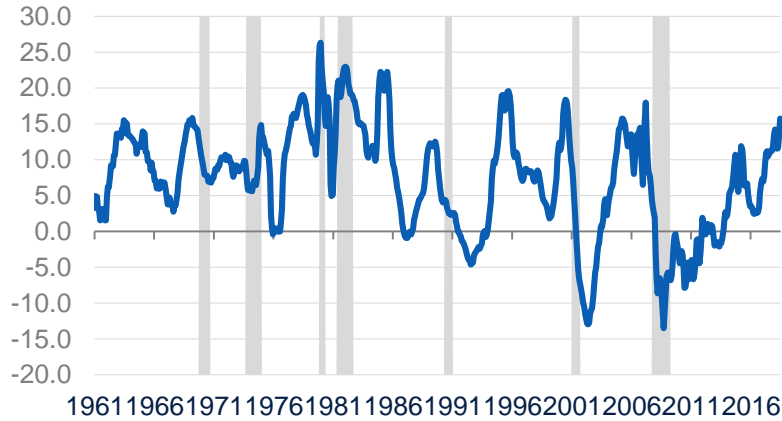
Probability of Recession in 12 Months
(%)



Consumer credit cycle: Personal Interest expense continues rising as a share of disposable income

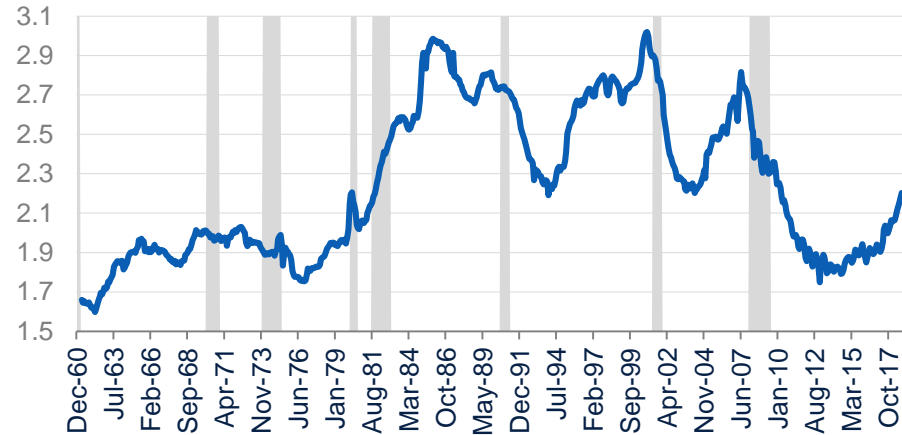
Personal Interest Expense

Year-over-year %



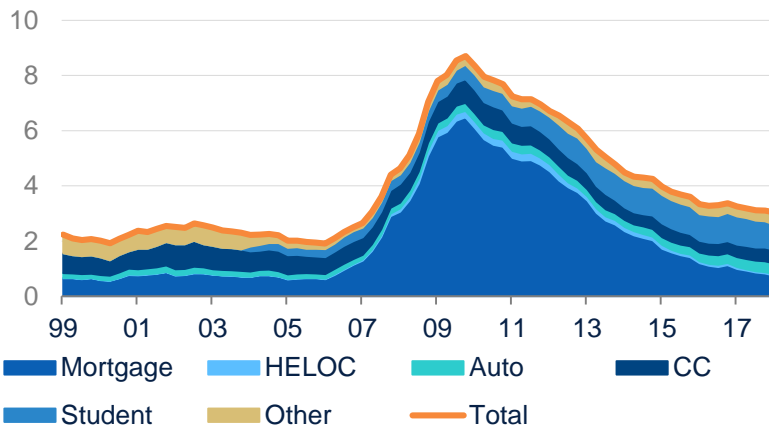
Personal Interest Expense to Disp. Income

Ratio, %



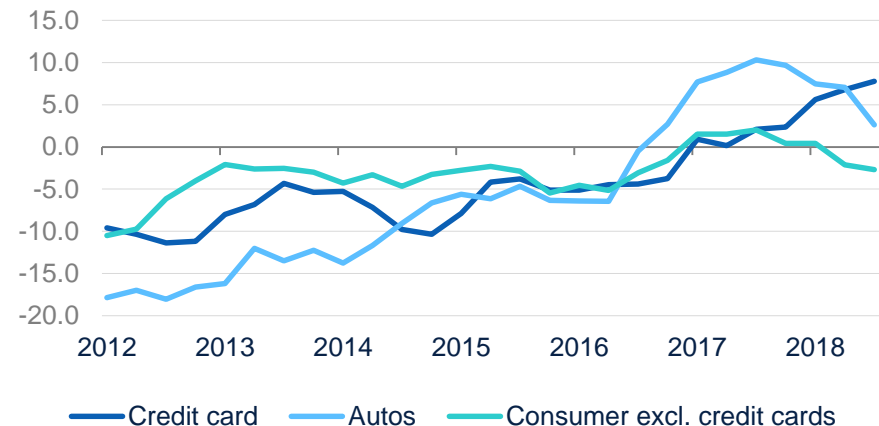
New 30+ Day Consumer Delinquencies Rates

%



Senior Loan Officers Lending Standards

+ tightening / - loosening



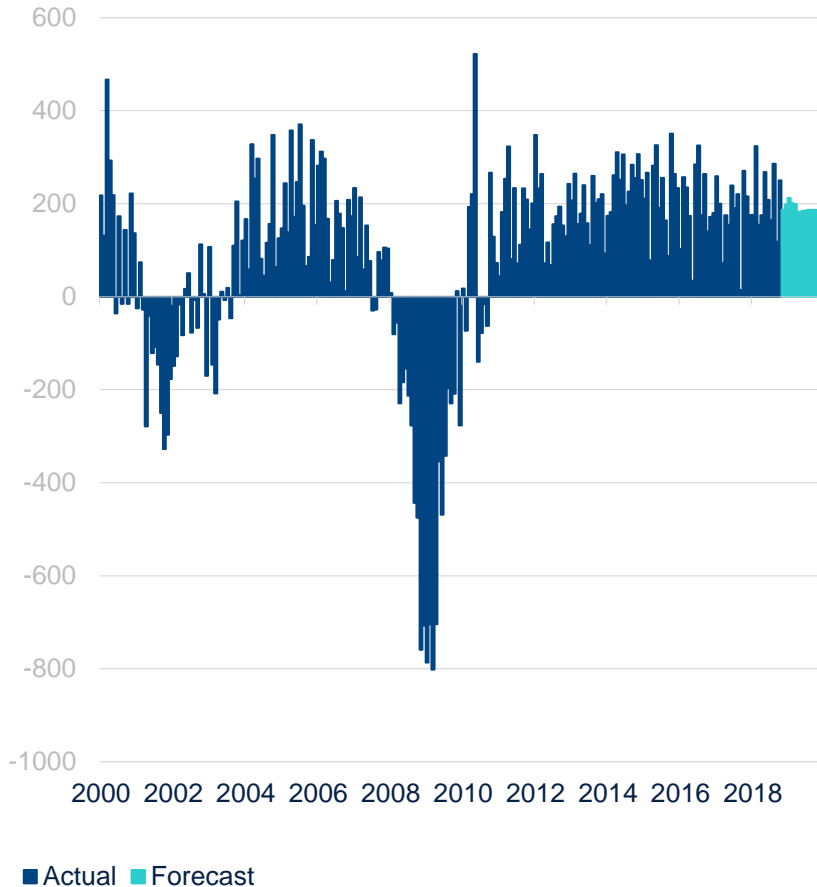
Source: BBVA Research, FRB, NY Fed & BEA

Labor Market

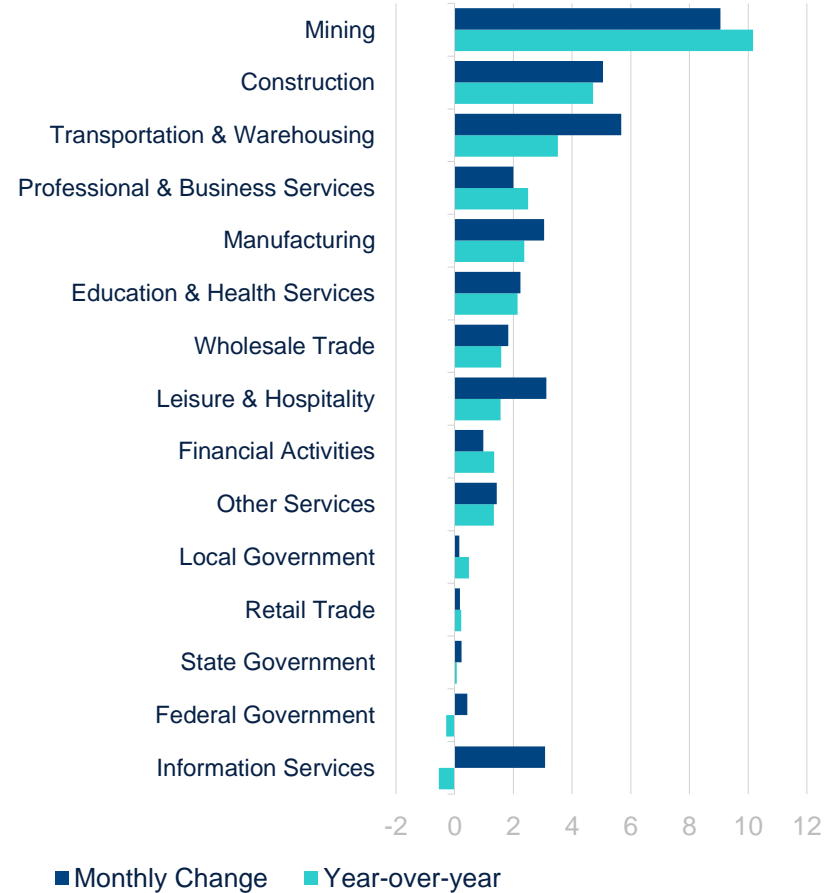
- In October, nonfarm payrolls increased at an above average pace (250K), as the weather effects faded from the data
- In terms of industry trends, the report showed solid gains in health care (36K), manufacturing (32K), construction (30K) and transportation and warehousing (25K)
- No material change in the jobs figures in August and September
- At 3.7%, the unemployment rate remained at its lowest point since December 1969
- The labor force participation rate and employment-population ratio increased to 62.9% and 60.6%
- We expect the UR to remain close to its current rate of 3.7%, as employment growth eases in the 1H19

Labor market: Job growth recovers, as impacts from hurricanes fades

Nonfarm Payrolls (Monthly Change, K)

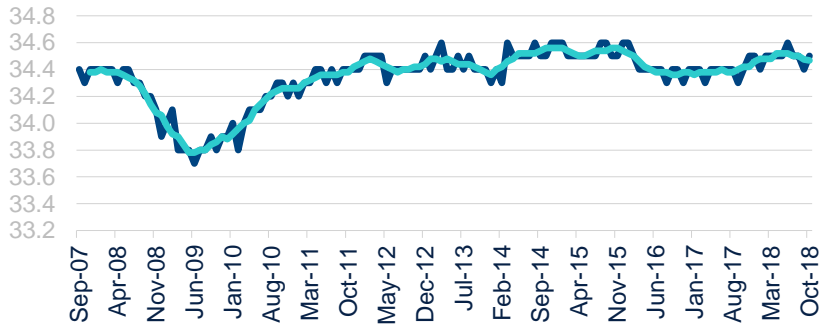


Industry Employment (Annualized % change)

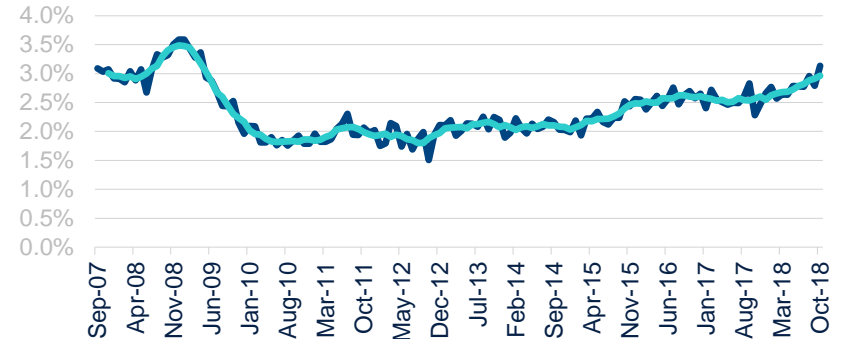


Labor market: Prime age employment-to-population ratio surpasses pre-crisis average

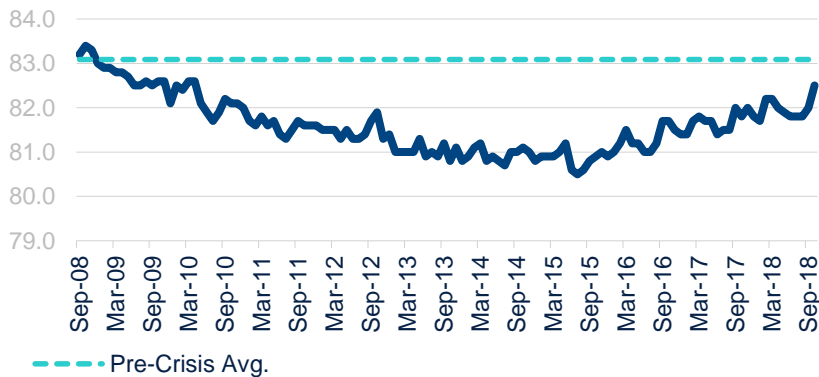
Average Weekly Hours (number & 5mcm)



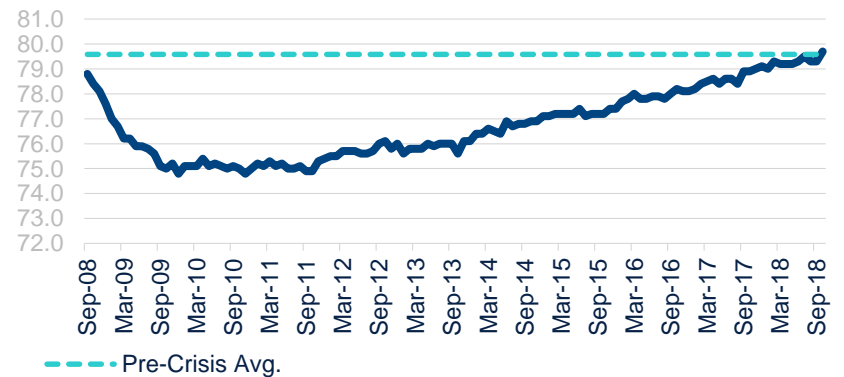
Average Hourly Earnings (YoY% & 5mcm)



Prime Age Labor Force Participation (%)

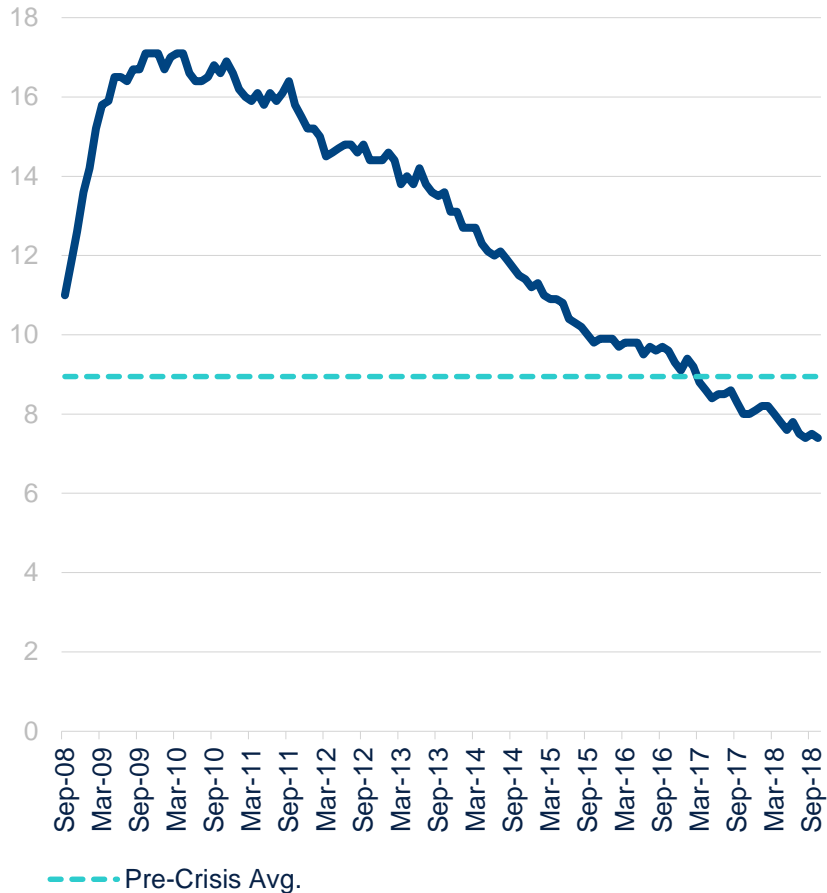


Prime Age Employment-to-Population (%)

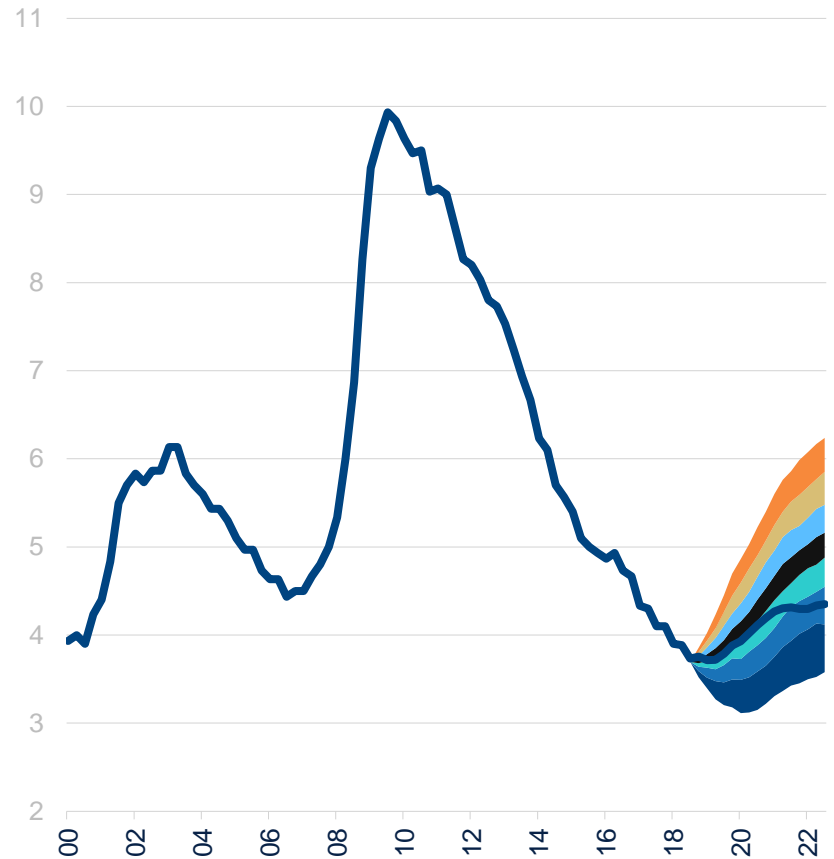


Labor market: UR trending at lowest level since December 1969

U-6
(%)



Unemployment Rate
(%)

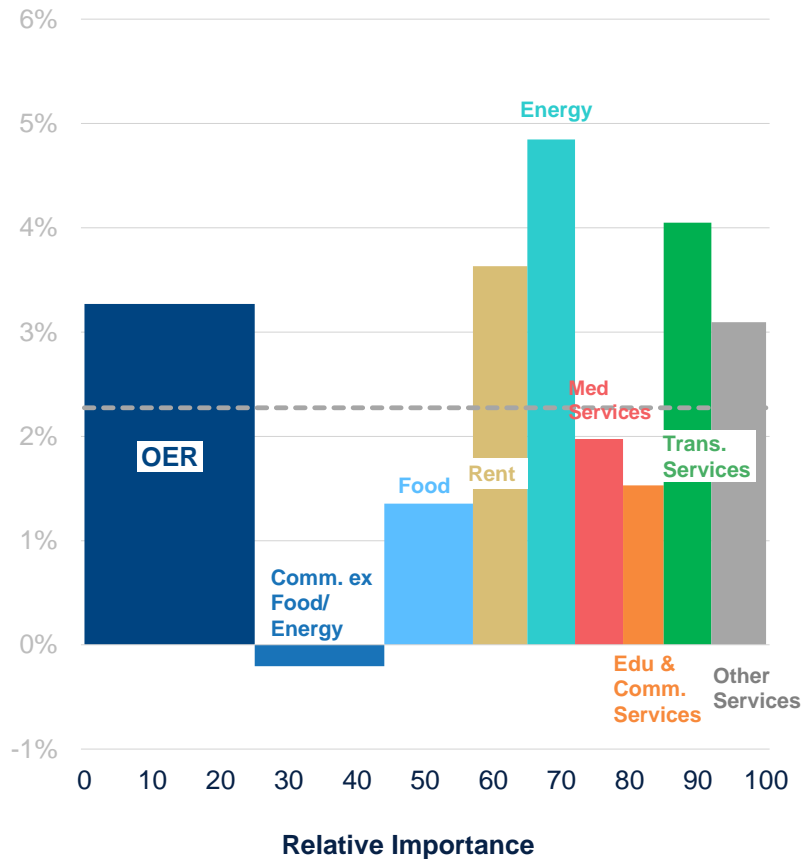


Inflation

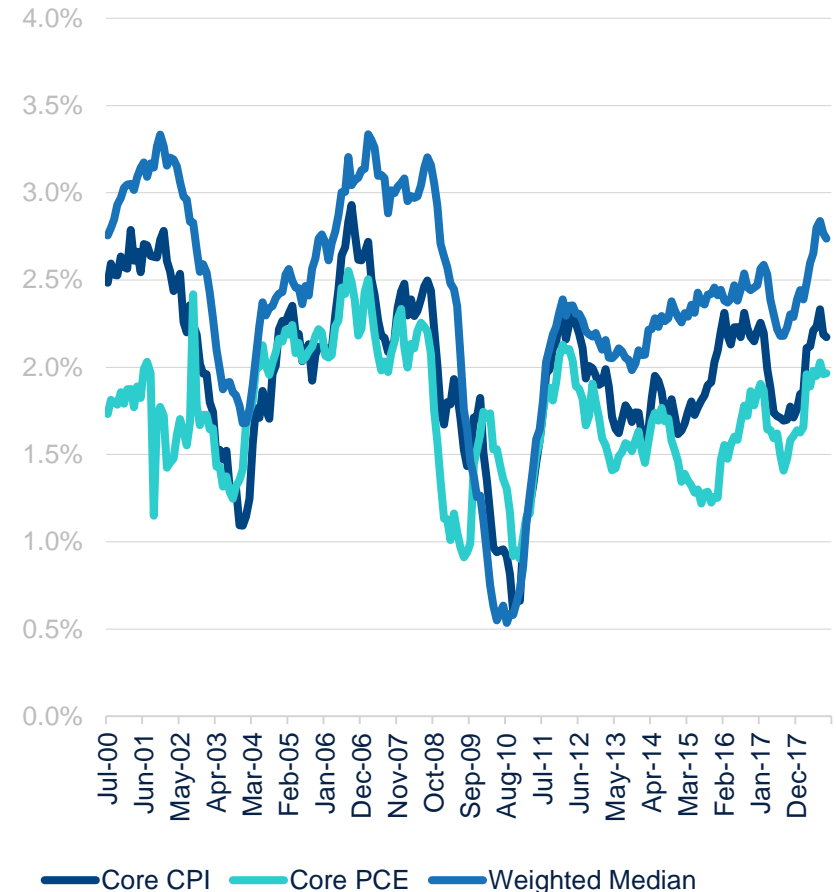
- Headline CPI decelerated to 2.3% while core CPI held steady at 2.2%
- Core PCE growth consistent with the Fed objectives
- In September, probability of entering high-inflation regime was less than 0.8%
- Inflation expectations easing, as softer incoming data assuages fears of persistent rise in inflation
- Transportation services and shelter remain largest contributor to overall inflation, as food, energy and medical price pressures ease
- With additional tailwinds from an expansionary fiscal policy and tit-for-tat tariffs, we continue to expect core PCE will rise to 2.1% by 2019

Inflation: Core prices pressures easing, as home price momentum slows

Consumer Price Inflation (12m change)



Core Inflation Measures (12m change)

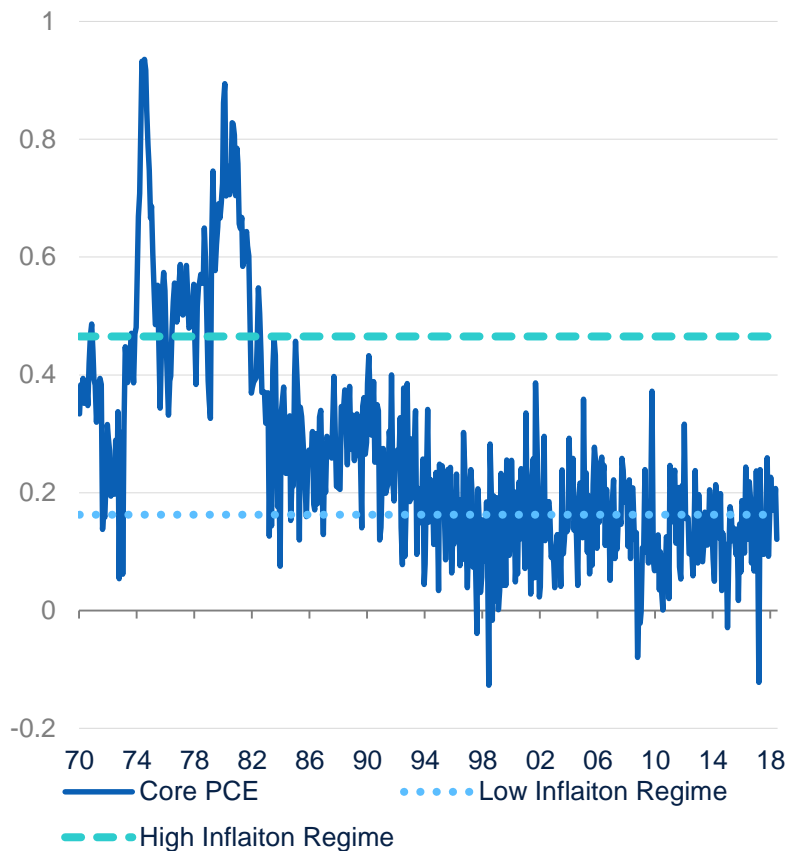


Source: BBVA Research, BLS & BEA

Inflation: Probability of inflation regime change edges down

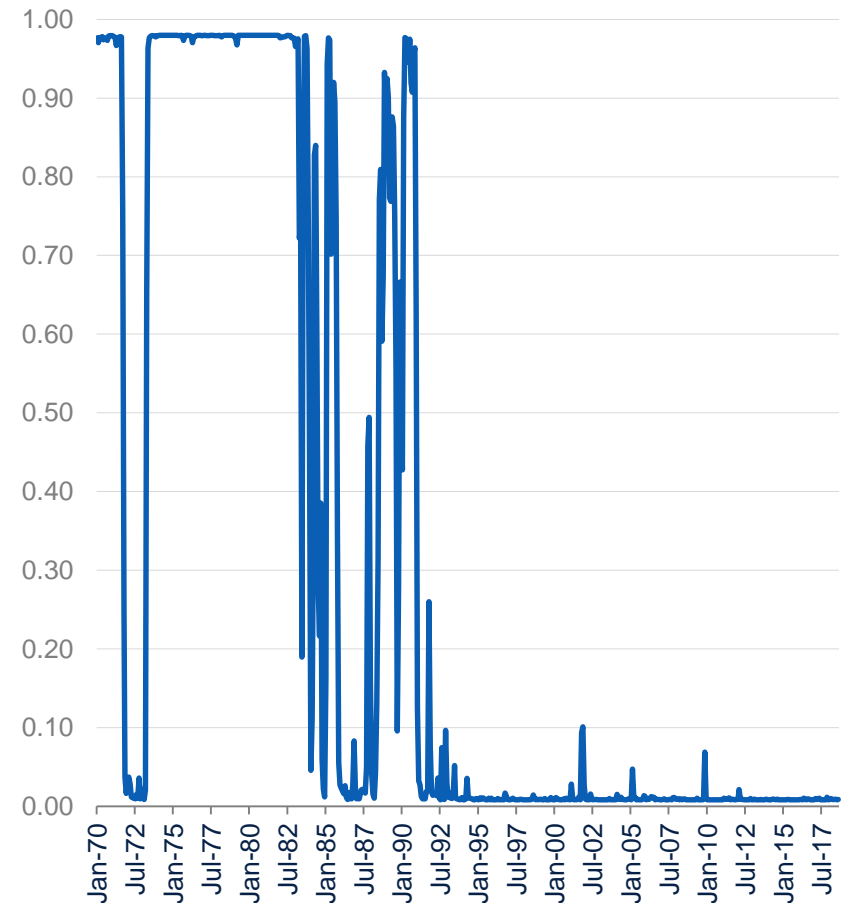
Core PCE Price Index & Inflation Regimes

Month-over-month %



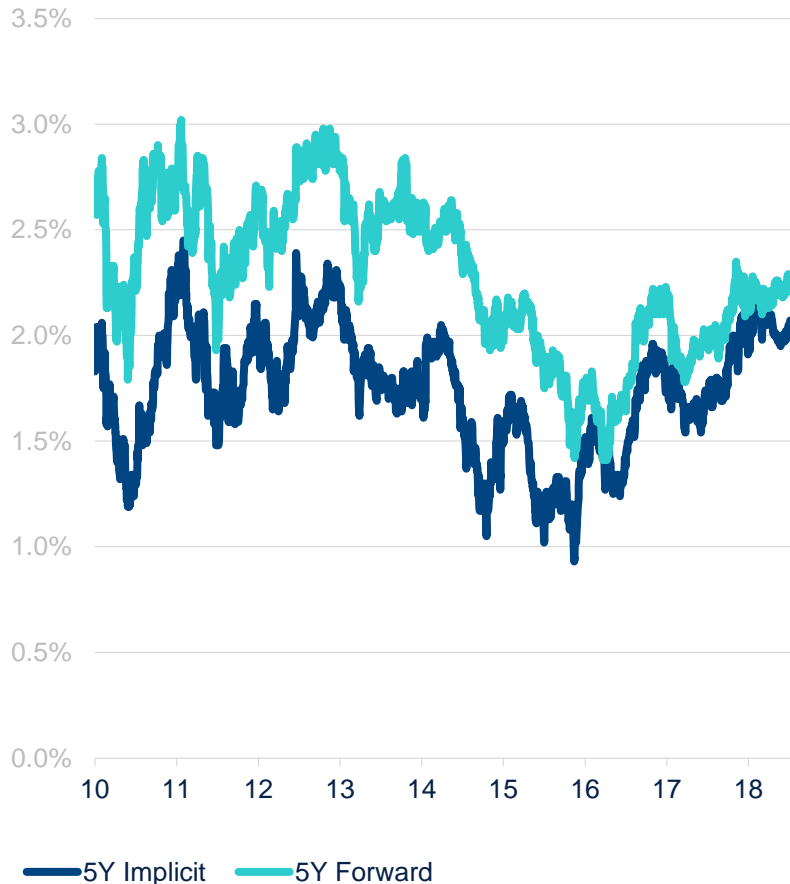
Inflation Regime Change Probability

%

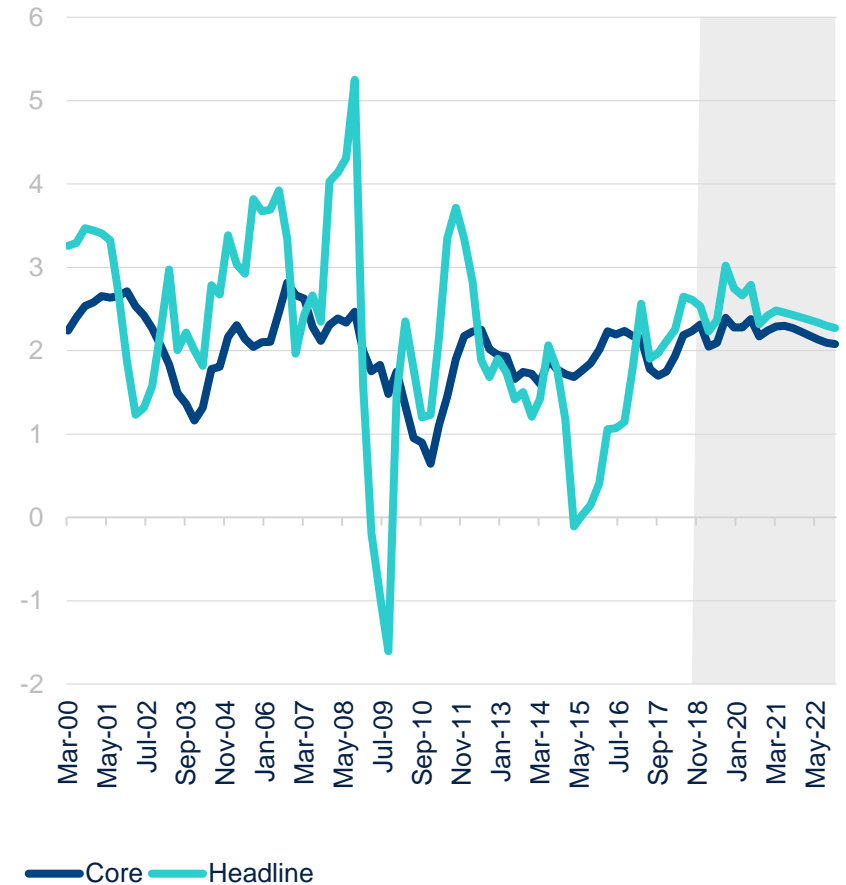


Inflation: Slight downside bias to inflation forecast in 2018, baseline remains for modest overshooting in 2019

Inflation Expectations (%)



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

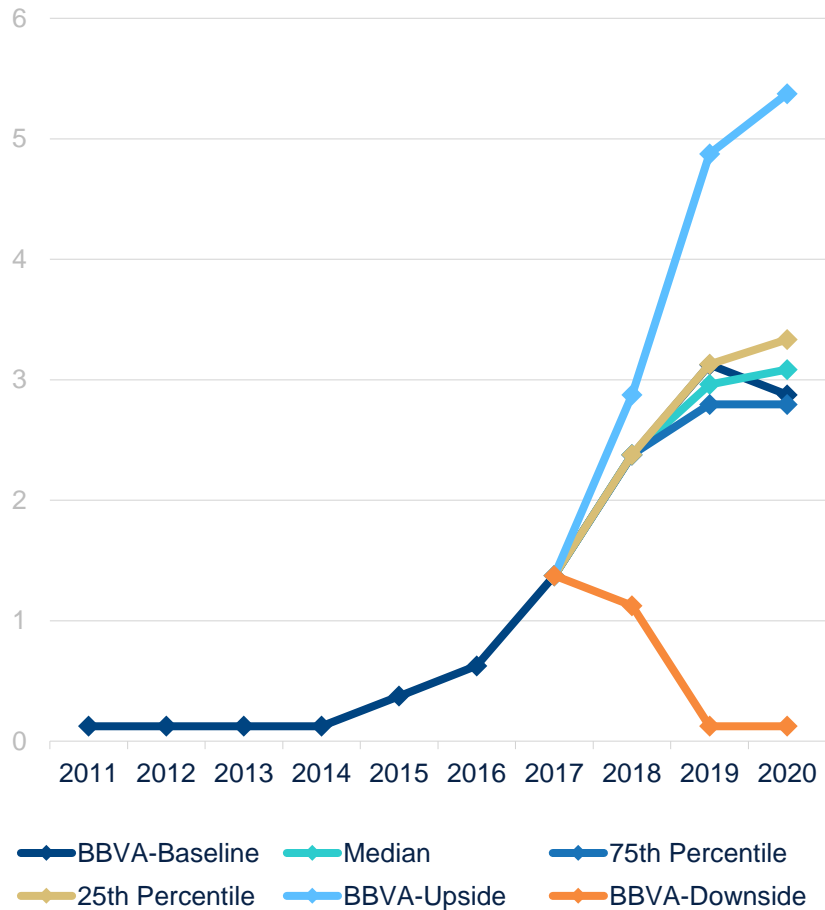


Monetary Policy: Federal Reserve

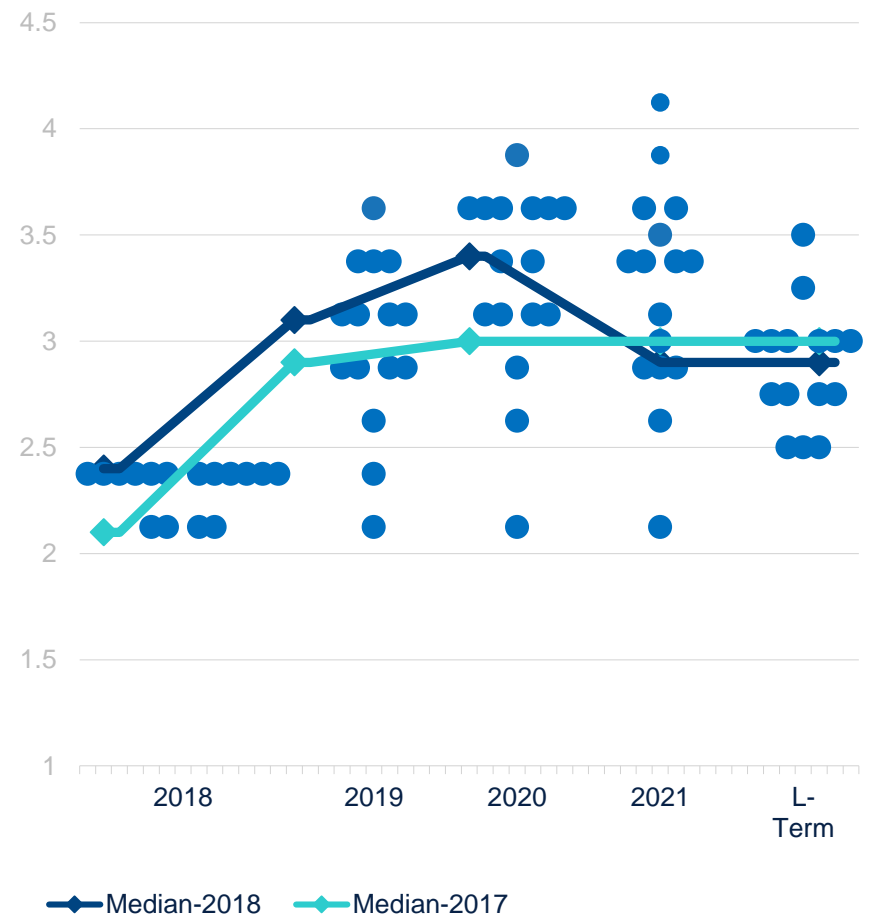
- The FOMC maintained the target range of the federal funds at 2.0%-2.25% at their November meeting
- The only significant revision to the statement was on business fixed investment, which has continued to moderate in spite of the incentives created by the tax reform
- Markets fully aligned with December rate hike while the probability of 3+ rate hikes in 2019 has increased after falling throughout the month of October (~47%)
- No change to Fed's outlook, which is in line with our baseline; biases to the downside likely growing
- We maintain Fed will raise rates one more time in December and three more times in 2019

Fed: No change to outlook, two rate increases this year and 3 rate increases next

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



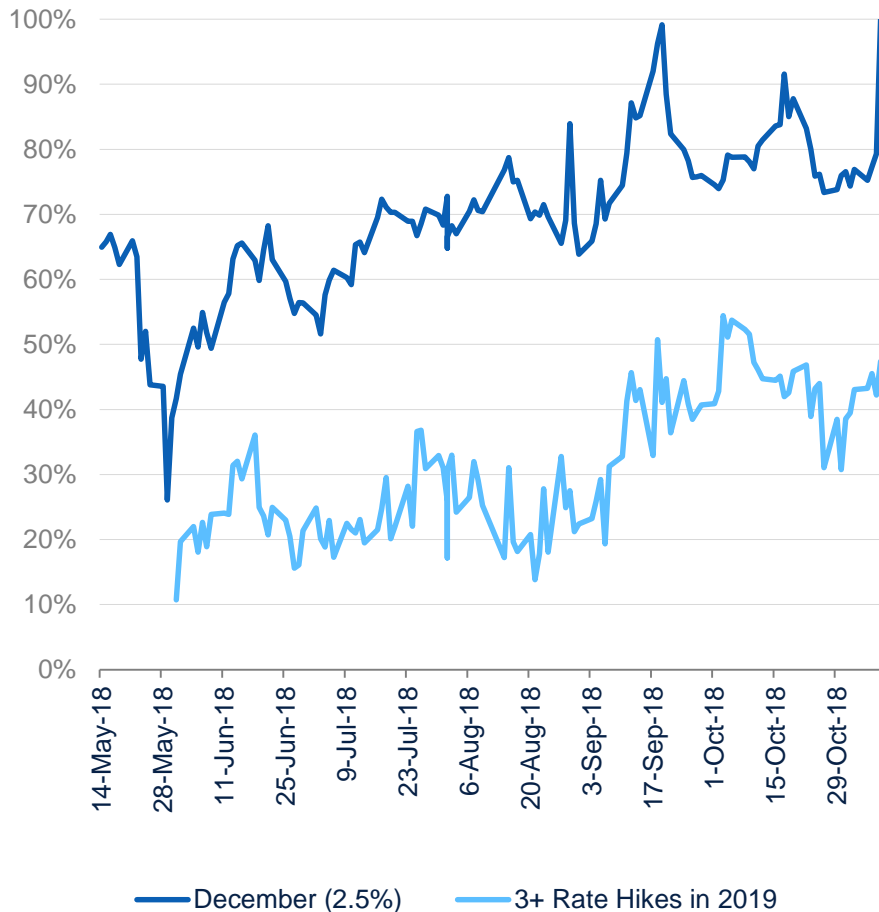
FOMC Projections of Fed Funds (Year-over-year %, Mid-point)



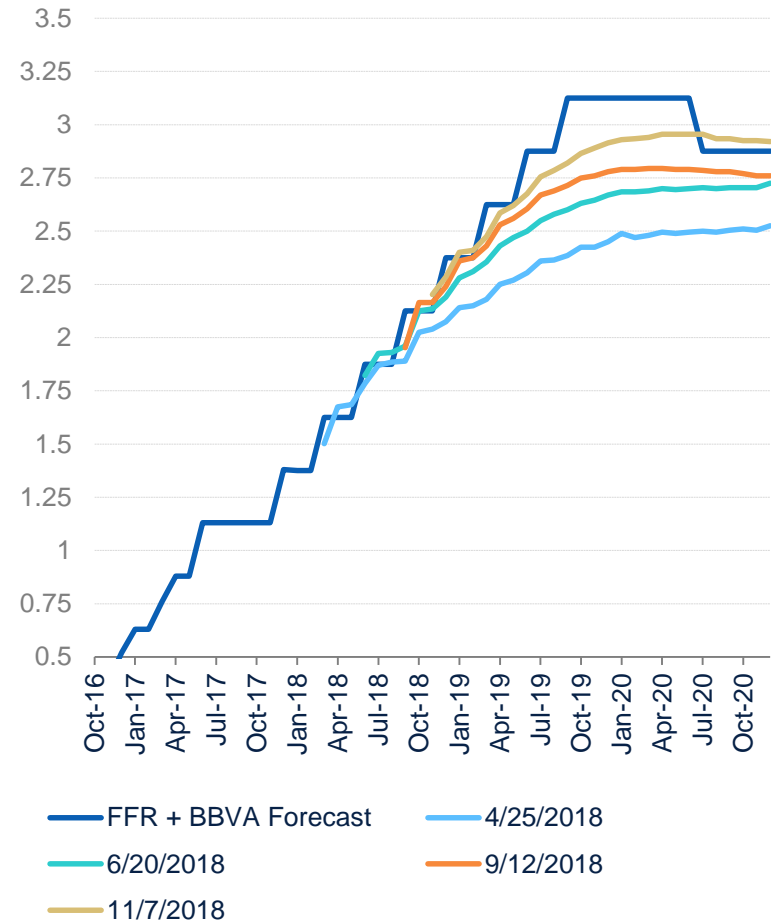
Source: BBVA Research & FRB

Monetary policy: Market probability of additional increase in Dec at 100%, 3+ hikes in 2019 at 47%

Fed Funds Implied Probability (%)

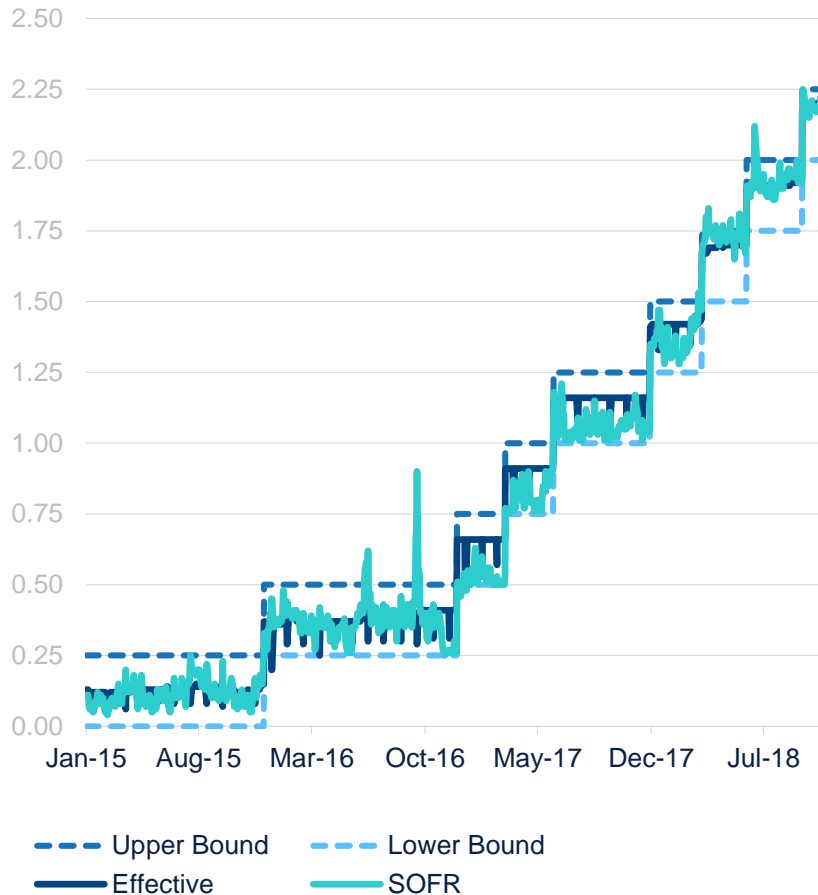


Fed Funds Futures & BBVA Baseline (%)

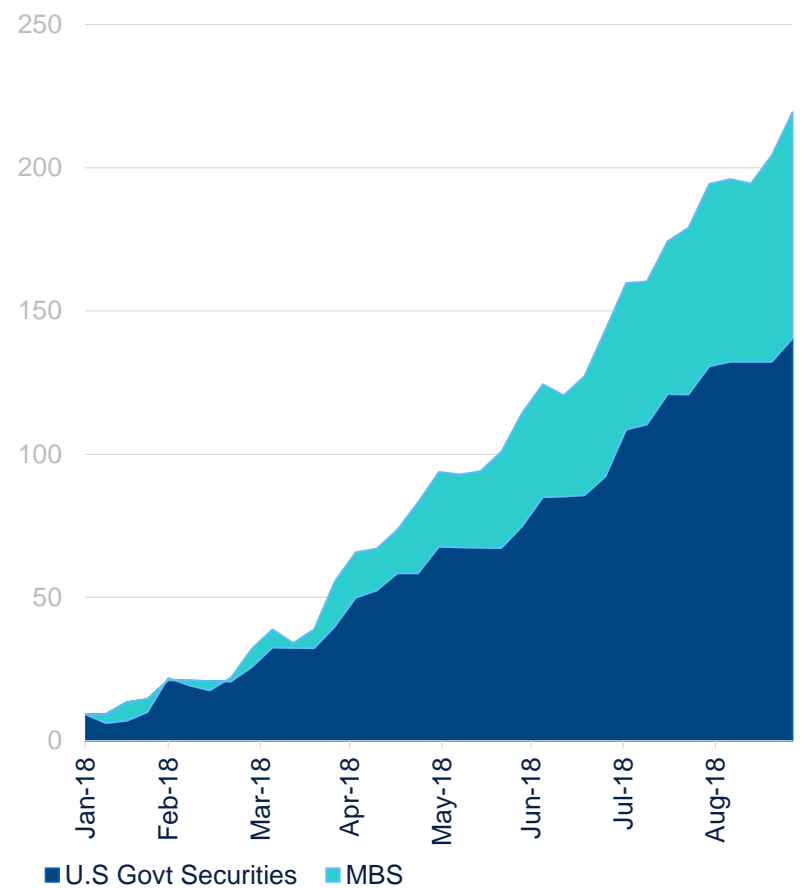


Monetary Policy: Balance sheet attrition gaining momentum with over \$246B in run-off to date

Fed Funds & Repo Rates (%)



Balance Sheet Attrition (US\$bn, Cumulative)

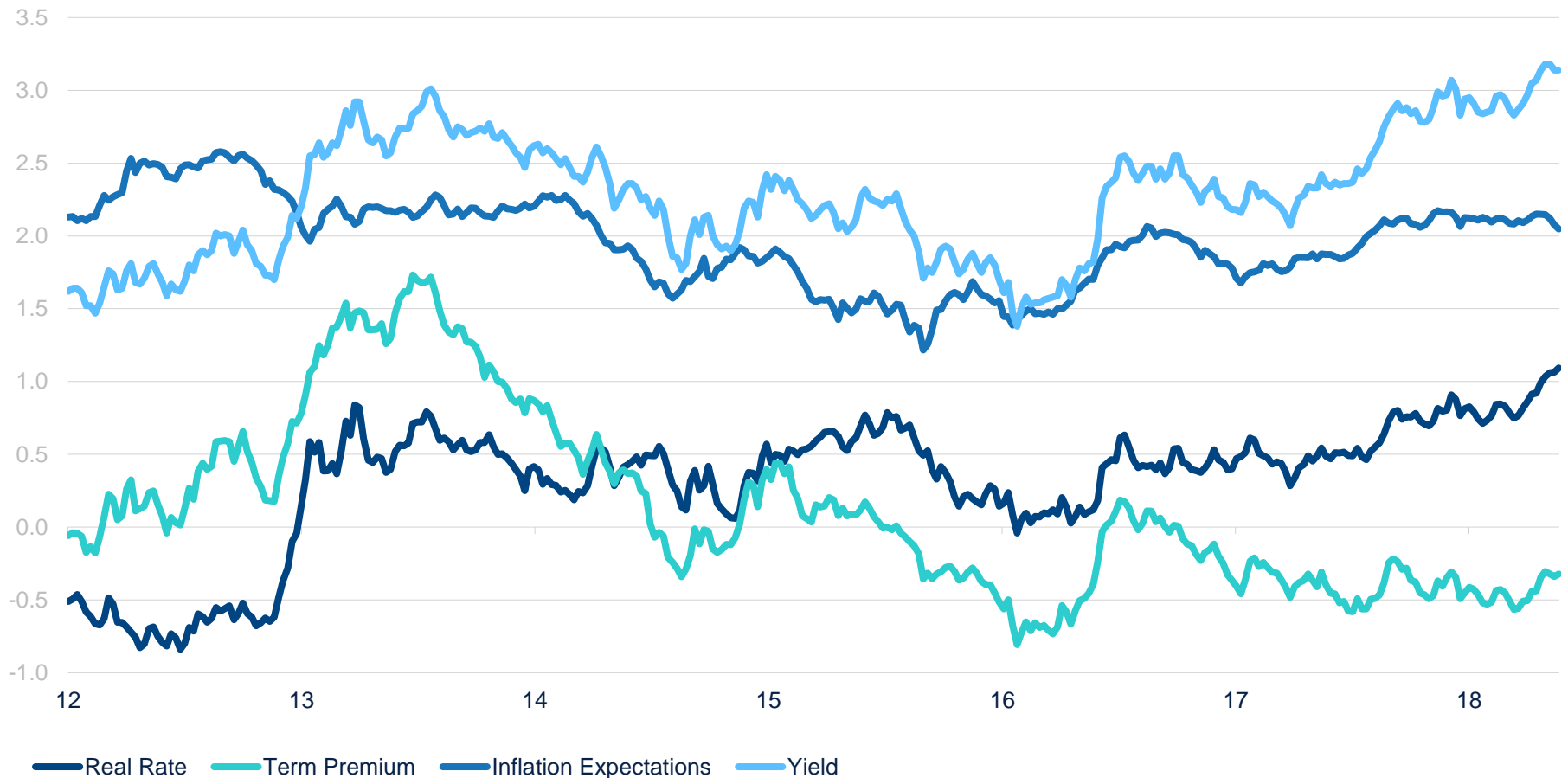


Interest Rates

- Continued upward momentum in short end of the yield curve, as markets expecting more rather than less monetary policy tightening
- 10-yr Treasury yields surpassed 3.2% for the first time since 2011
- Greater clarity on domestic policy making, and less accommodative monetary policy abroad should encourage further decompression of the term-premium
- Baseline assumes 10-year Treasury yield at 3.1% by year-end 2018 and 3.6% by year-end 2019
- Bias tilting slightly to the upside
- Term premium decompression has slowed the yield curve flattening

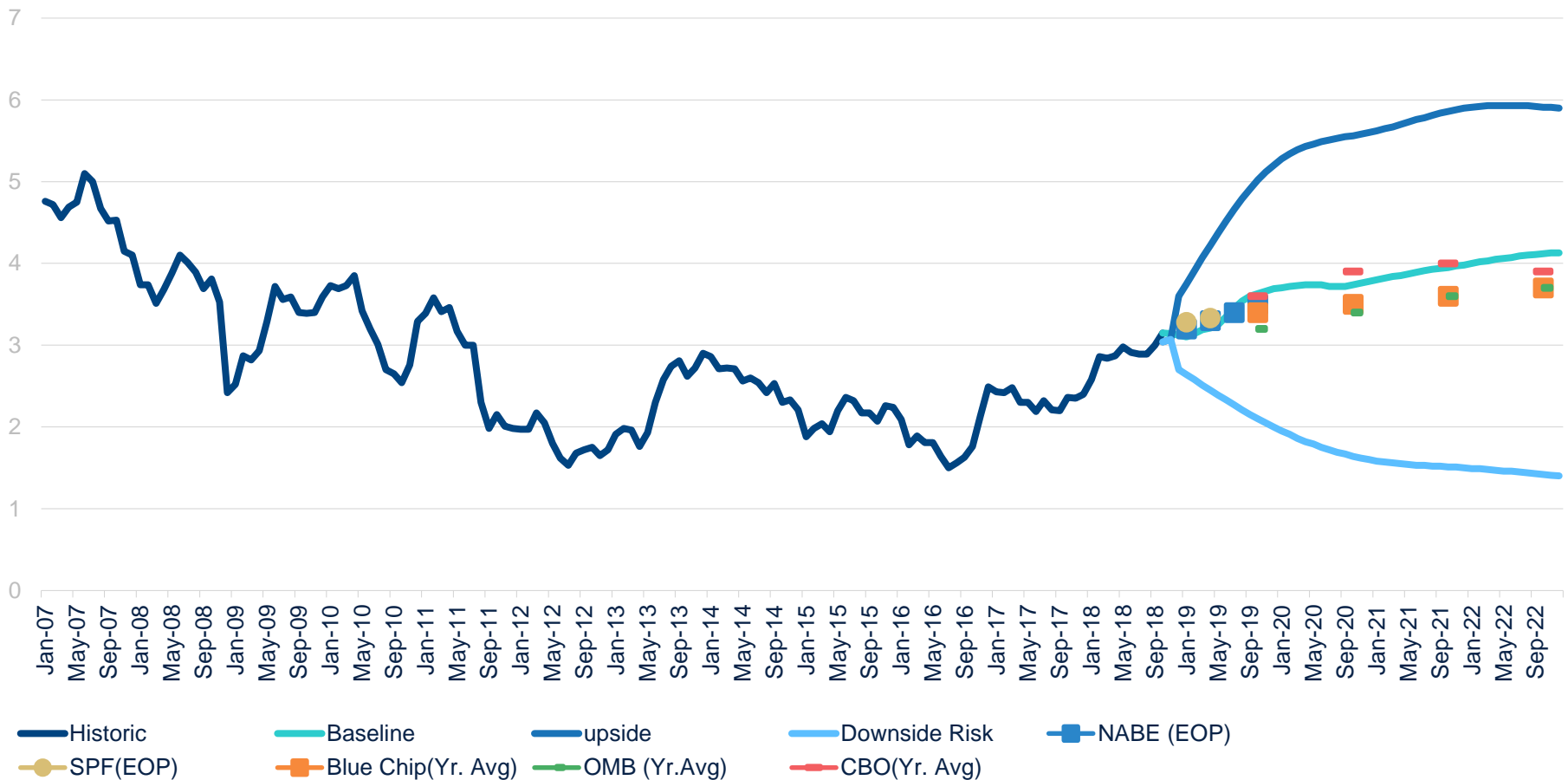
Interest rates: Term premium decomposition and inflation expectations pushing 10-year Treasury above 3.2%

10-Year Treasury Yield Decomposition (%)



Interest rates: Greater clarity on domestic policy making and monetary policy support modest upside

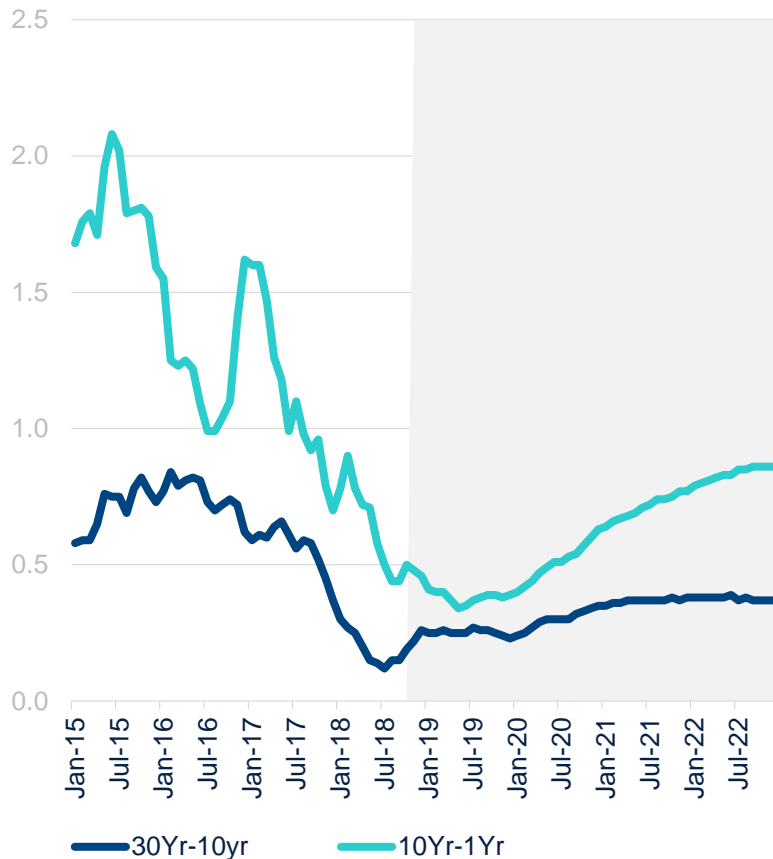
10-Year Treasury Yield (%)



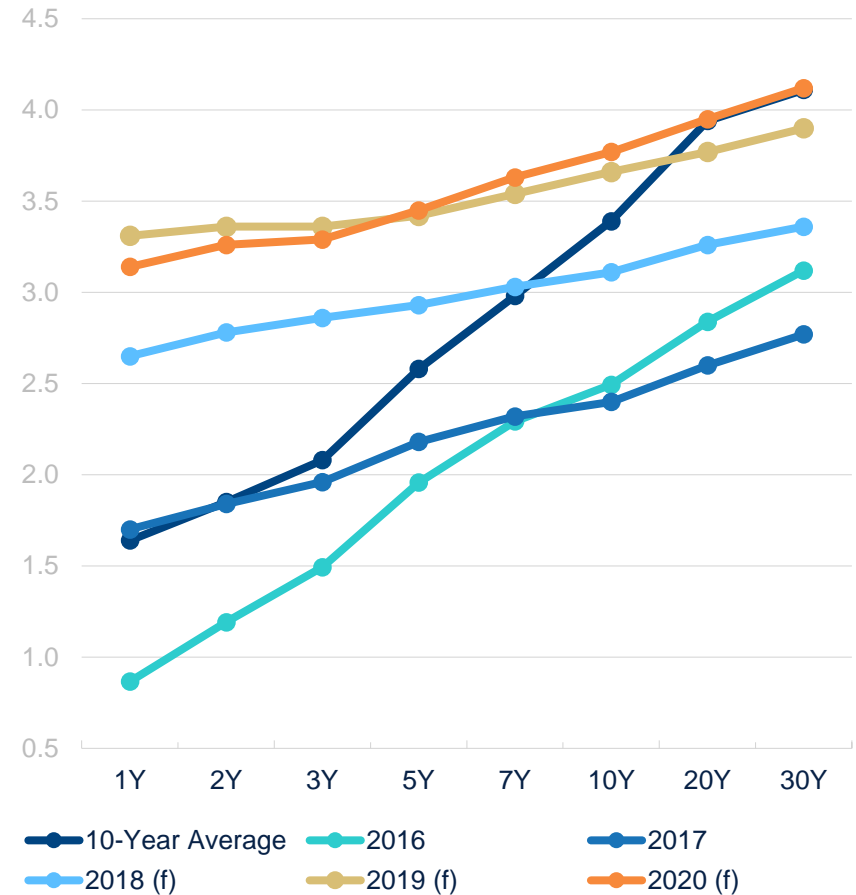
Source: BBVA Research, ACM & Haver Analytics

Interest rates: Threat of yield curve inversion moderates, as slope edges up with rise in long-term rates

Yield Curve Slope (Bp)



Yield Curve (% eop)



Energy Prices

- Growing global supply and U.S. waivers to buyers of Iranian crude have caused prices to go down
- U.S. production remains strong and is expected to reach a record 12 million b/d threshold next year
- Demand supported by China, India and the U.S.; however, risks are tilted to the downside
- We maintain our forecasts of convergence to long-term equilibrium around \$60/b
- Elevated uncertainty around long-term equilibrium: lagged effect of subpar global CAPEX, protectionism, alternative energy sources, EM convergence, EVs, climate change, efficiency and technology

Oil prices quickly fell into bear market...

WTI Crude oil prices July to November 2018

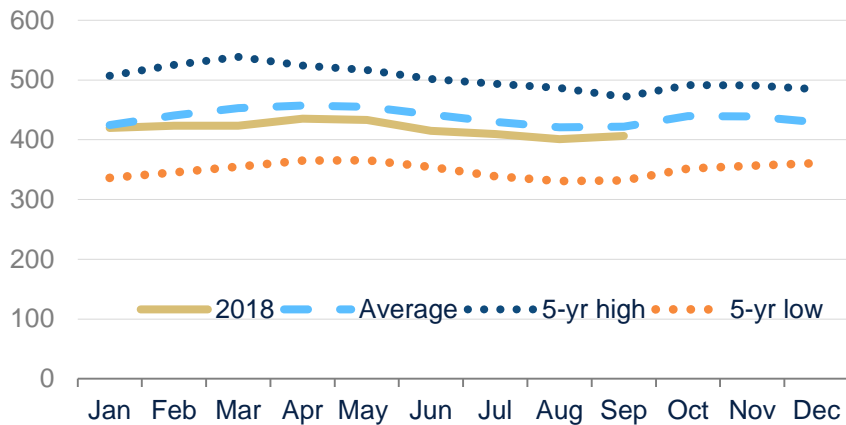
(\$ per barrel, 2018)



U.S. production continues to reach record heights

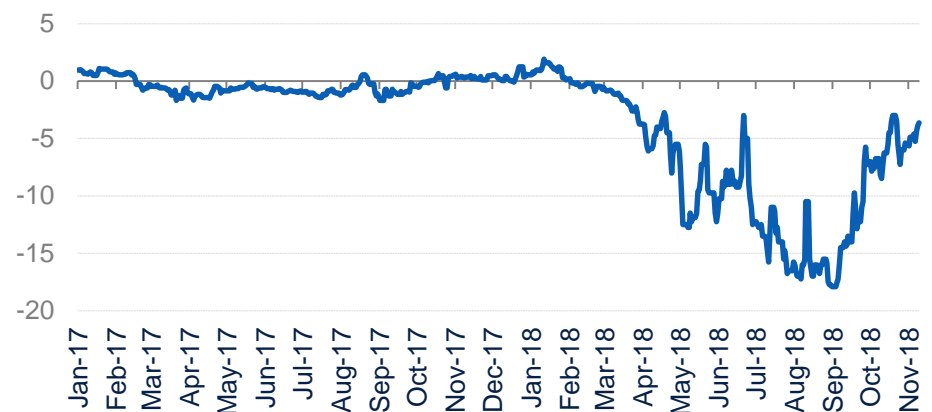
U.S. Crude oil inventories

(Excluding SPR, million barrels)



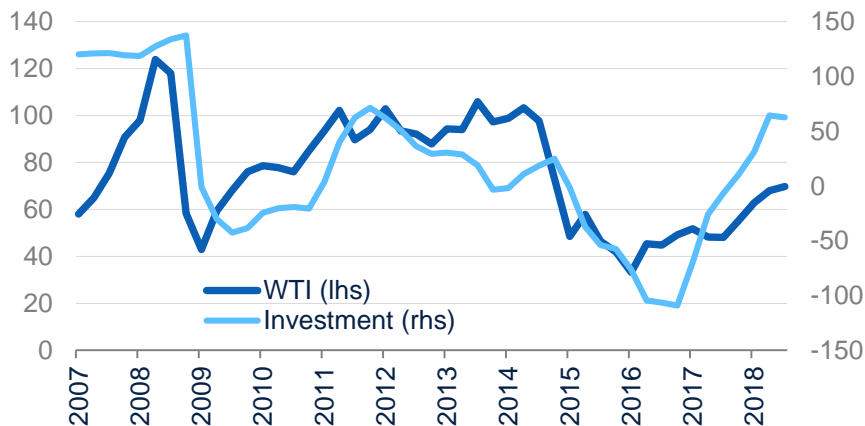
WTI Midland-Cushing differential

(\$/b)



U.S. Real private investment in E&P

(yoy \$billion)



U.S. Estimated crude oil production

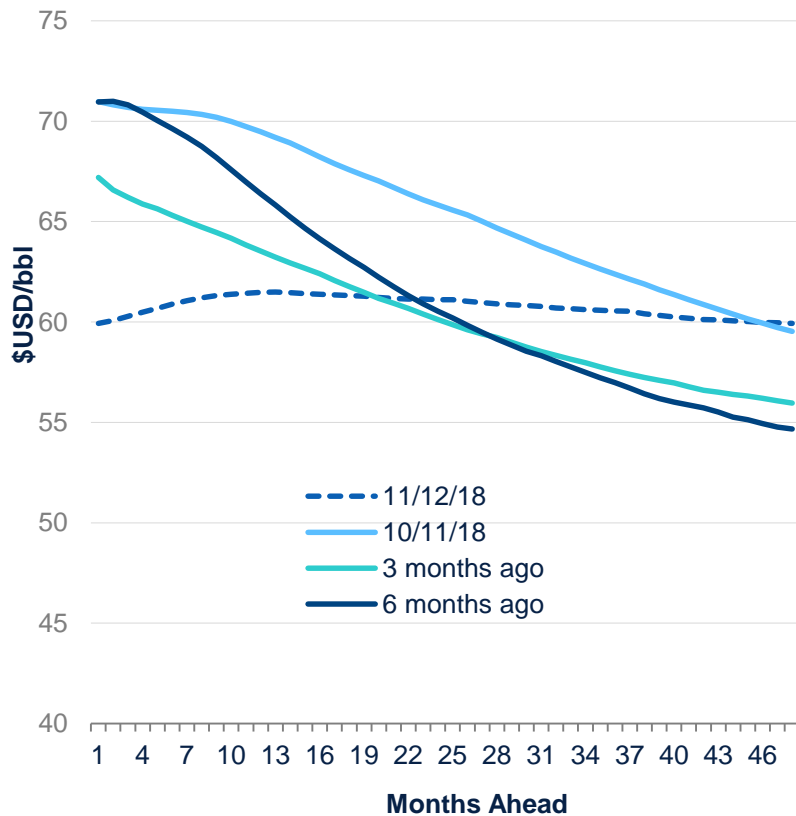
(Thousand barrels/day)



Analysts and future markets have lowered their expectations

WTI Futures

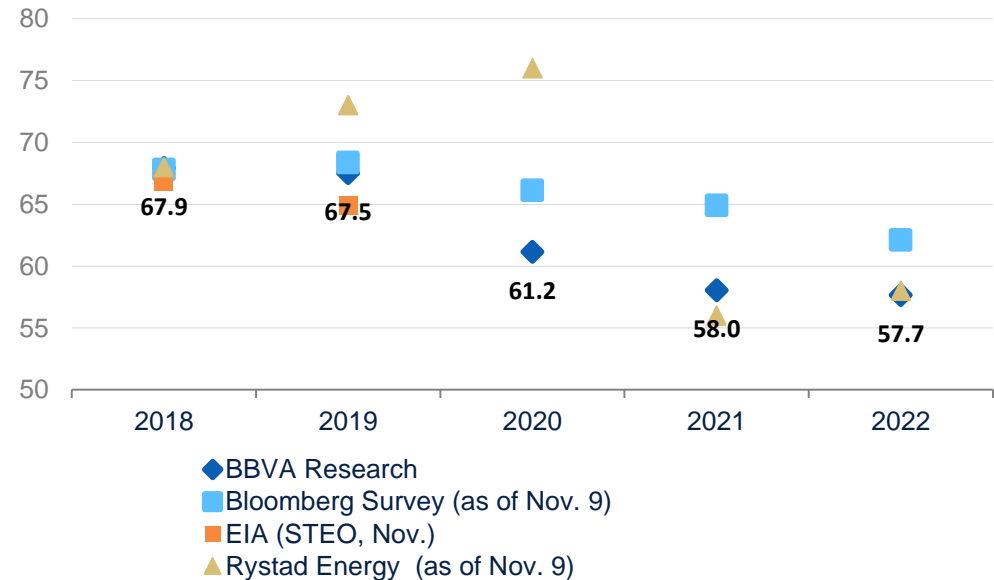
(\$ per barrel)



WTI prices forecast

(\$ per barrel)

	BBVA Research	BBVA Research (2Q18)	Bloomberg Survey (as of Nov. 9)	EIA (STEO, Nov.)	Rystad Energy (as of Nov. 9)
2017	50.9	50.9	50.9	50.9	50.9
2018	67.9	65.9	67.8	66.8	68.0
2019	67.5	65.1	68.4	64.9	73.0
2020	61.2	61.2	66.1		76.0
2021	58.0	58.1	64.9		56.0
2022	57.7	57.7	62.1		58.0



Source: BBVA Research and Bloomberg

Macroeconomic Outlook

	2011	2012	2013	2014	2015	2016	2017	2018 (f)	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	2.8	2.8	2.5	2.3	2.1
Real GDP (Contribution, pp)												
PCE	1.3	1.0	1.0	2.0	2.5	1.9	1.8	1.9	2.1	1.6	1.5	1.4
Gross Investment	0.9	1.6	1.1	0.9	0.8	-0.2	0.8	0.9	0.9	0.9	0.8	0.7
Non Residential	1.0	1.2	0.5	0.9	0.3	0.1	0.7	0.9	0.9	0.8	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	0.6	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	-0.9
Government	-0.7	-0.4	-0.5	-0.2	0.3	0.3	0.0	0.3	0.4	0.3	0.1	0.1
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	4.3
Avg. Monthly Nonfarm Payroll (K)	174	179	192	250	226	195	182	209	188	157	126	105
CPI (YoY %)	3.1	2.1	1.5	1.6	0.1	1.3	2.1	2.5	2.6	2.5	2.4	2.3
Core CPI (YoY %)	1.7	2.1	1.8	1.7	1.8	2.2	1.8	2.2	2.2	2.3	2.3	2.1
Fiscal Balance (% GDP, FY)	-8.4	-6.8	-4.1	-2.8	-2.4	-3.2	-3.5	-4.2	-4.6	-4.5	-4.8	-5.2
Current Account (bop, % GDP)	-2.9	-2.6	-2.1	-2.1	-2.2	-2.3	-2.3	-2.3	-2.4	-2.5	-2.5	-2.5
Fed Target Rate (% eop)	0.25	0.25	0.25	0.25	0.50	0.75	1.50	2.50	3.25	3.00	3.00	3.00
Core Logic National HPI (YoY %)	-2.9	4.0	9.7	6.8	5.3	5.5	5.9	6.0	5.3	5.4	5.6	5.7
10-Yr Treasury (% Yield, eop)	1.98	1.72	2.90	2.21	2.24	2.49	2.40	3.12	3.69	3.78	3.98	4.13
Brent Oil Prices (dpb, average)	111.3	111.7	108.7	99.0	52.4	43.6	54.3	73.9	72.7	64.9	60.9	60.0

Economic Scenarios

	Probability (%)	Current	Previous
Upside		10	10
Baseline		60	75
Downside		30	15

Macro Scenarios

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
GDP	1.8	2.5	2.9	1.6	2.2	2.8	2.8	2.5	2.3	2.1
Upside	1.8	2.5	2.9	1.6	2.2	3.0	3.7	3.3	3.1	2.7
Downside	1.8	2.5	2.9	1.6	2.2	2.8	1.2	-0.7	1.8	2.1
UR	7.4	6.2	5.3	4.9	4.4	3.9	3.8	4.1	4.2	4.3
Upside	7.4	6.2	5.3	4.9	4.4	3.9	3.2	2.9	3.0	3.0
Downside	7.4	6.2	5.3	4.9	4.4	3.9	4.6	6.2	6.6	5.8
CPI	1.5	1.6	0.1	1.3	2.1	2.5	2.6	2.5	2.4	2.3
Upside	1.5	1.6	0.1	1.3	2.1	2.5	3.2	3.5	3.6	3.8
Downside	1.5	1.6	0.1	1.3	2.1	2.4	1.4	1.1	1.1	1.3
Fed [eop]	0.25	0.25	0.50	0.75	1.50	2.50	3.25	3.00	3.00	3.00
Upside	0.25	0.25	0.5	0.75	1.5	3	5	5.5	5.5	5.5
Downside	0.25	0.25	0.5	0.75	1.5	1.25	0.25	0.25	0.25	0.25
10-Yr [eop]	2.9	2.21	2.24	2.49	2.4	3.12	3.69	3.78	3.98	4.13
Upside	2.9	2.21	2.24	2.49	2.4	3.6	5.2	5.6	5.9	5.9
Downside	2.9	2.21	2.24	2.49	2.4	2.7	2	1.6	1.9	2.1

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