

U.S. Oil Prices Outlook

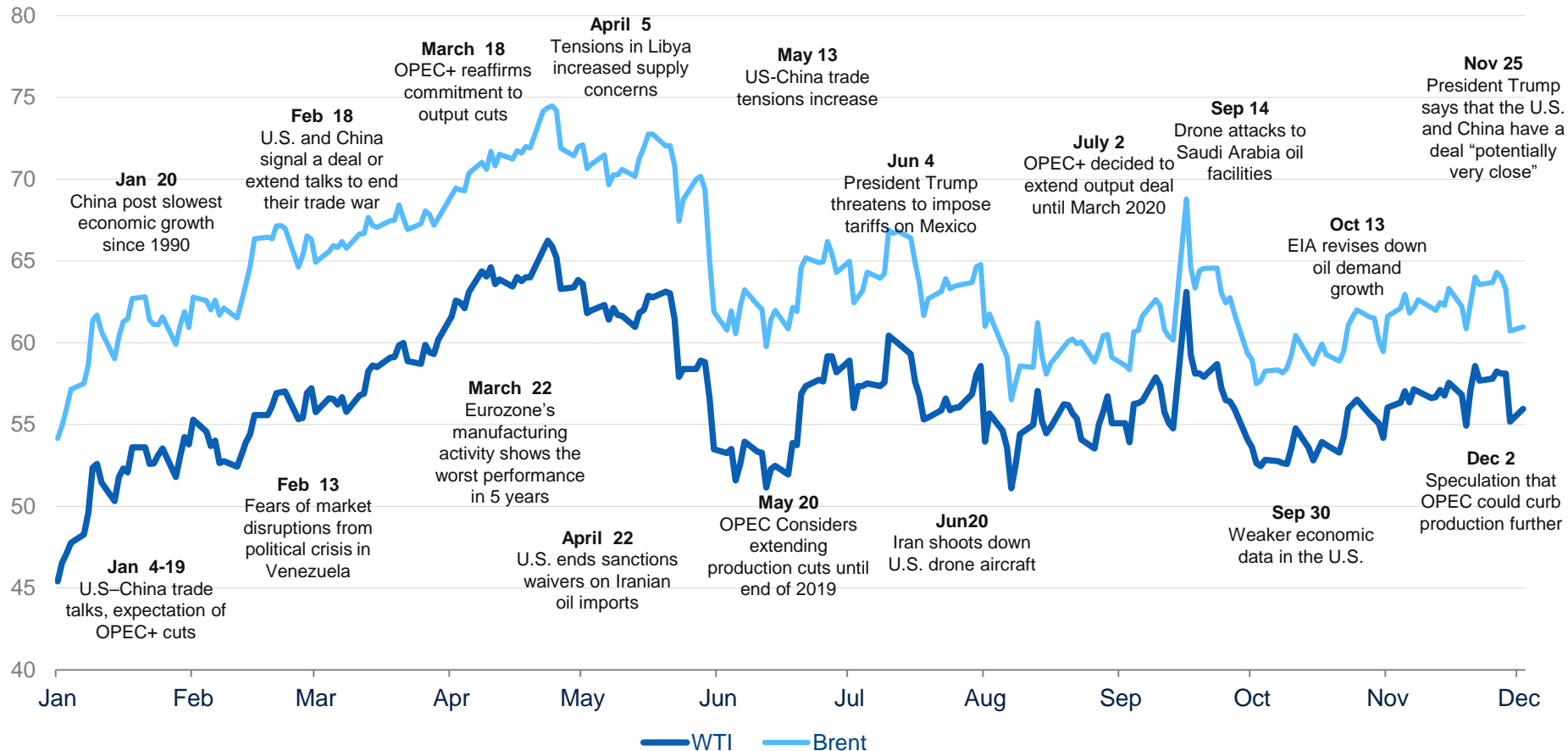
December 2019

Summary

- 2019 oil prices were in line with our baseline scenario
- OPEC is discussing whether to extend its production quota
- U.S oil production will expand further, albeit at a slower pace
- Our prospects for oil prices in 2020 assume weak demand growth in a well-supplied market
- Currently, tensions in the Middle East and protectionism are the main sources of uncertainty
- Long-term equilibrium prices around \$60/b
- Elevated uncertainty around long-term equilibrium: CAPEX, protectionism, transportation infrastructure, alternative energy sources, EM convergence, EVs, climate change, efficiency and technology

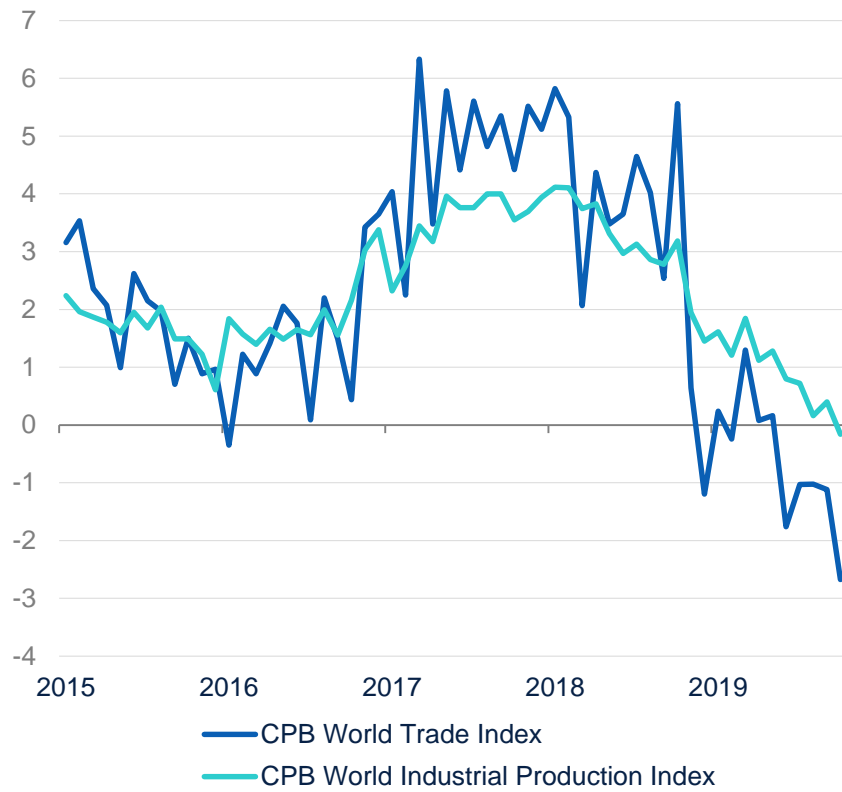
Brent prices are likely to close the year between \$60/b and \$65/b

CRUDE OIL PRICES 2019 (\$ PER BARREL)



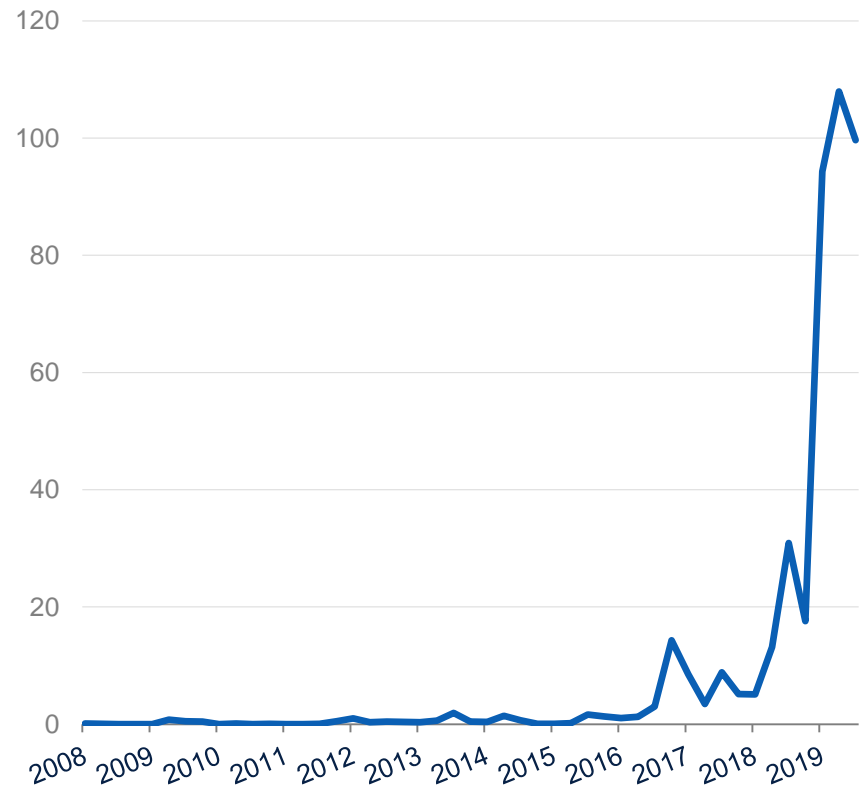
Trade uncertainty remains high, although it has receded slightly

WORLD TRADE AND INDUSTRIAL PRODUCTION (YOY % CHANGE)



Source BBVA Research and Bloomberg

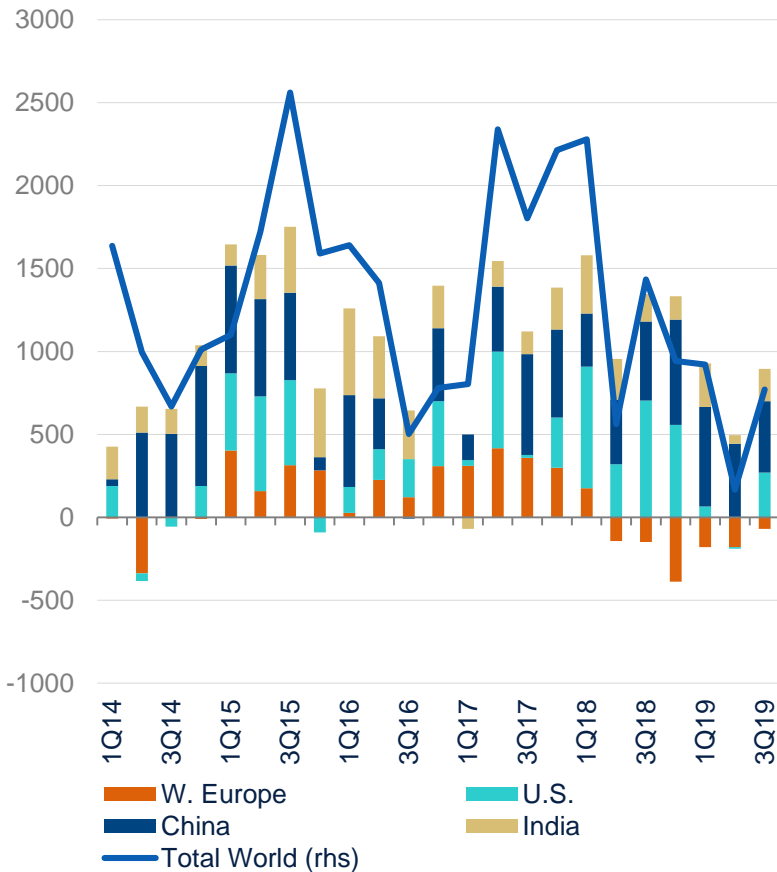
WORLD TRADE UNCERTAINTY (GDP WEIGHTED AVERAGE INDEX)



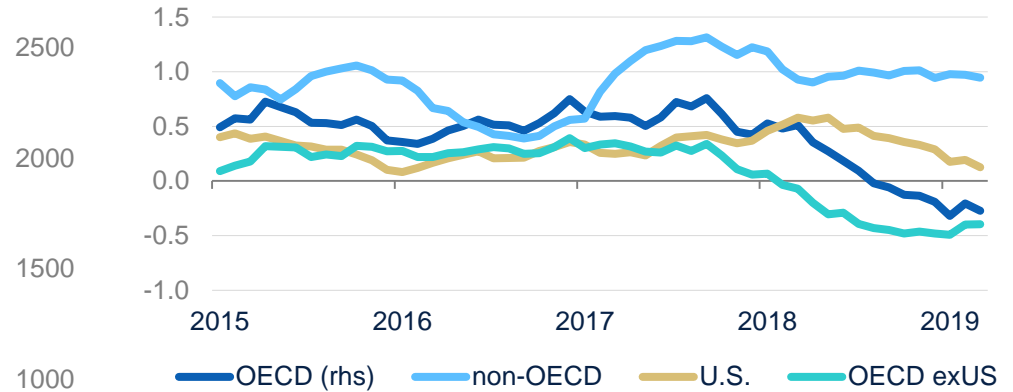
Source BBVA Research and Haver Analytics

Demand is the weakest in the OECD

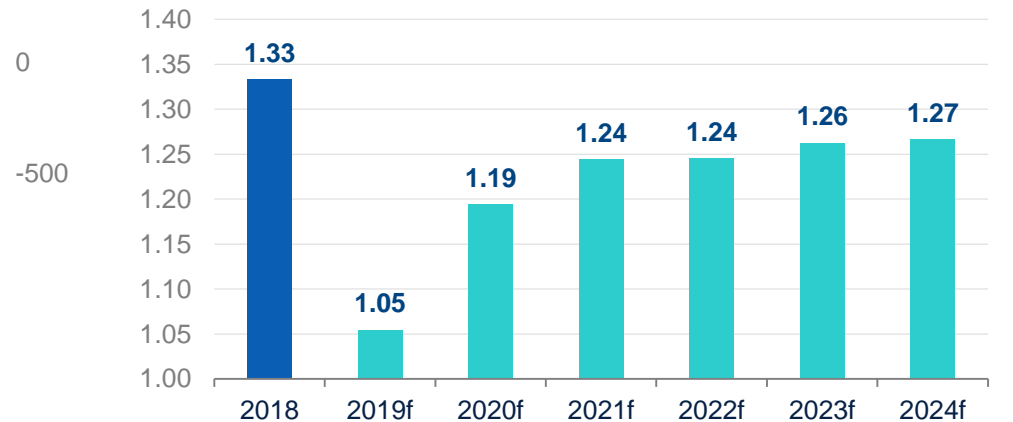
OIL PRODUCT DEMAND: TOTAL WORLD
(THOUSAND BARRELS PER DAY, YOY CHANGE)



OIL PRODUCT DEMAND
(MILLION BARRELS PER DAY, YOY CHANGE)



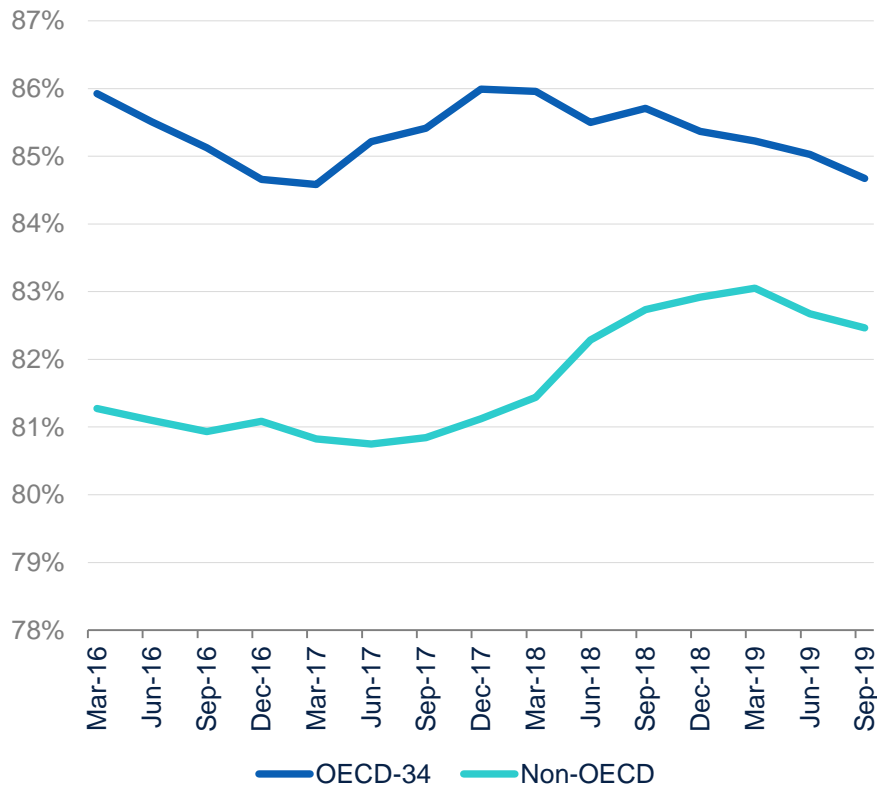
OIL PRODUCT DEMAND
(MILLION BARRELS PER DAY, YOY CHANGE)



Source BBVA Research with data from Haver Analytics, Bloomberg and WEO

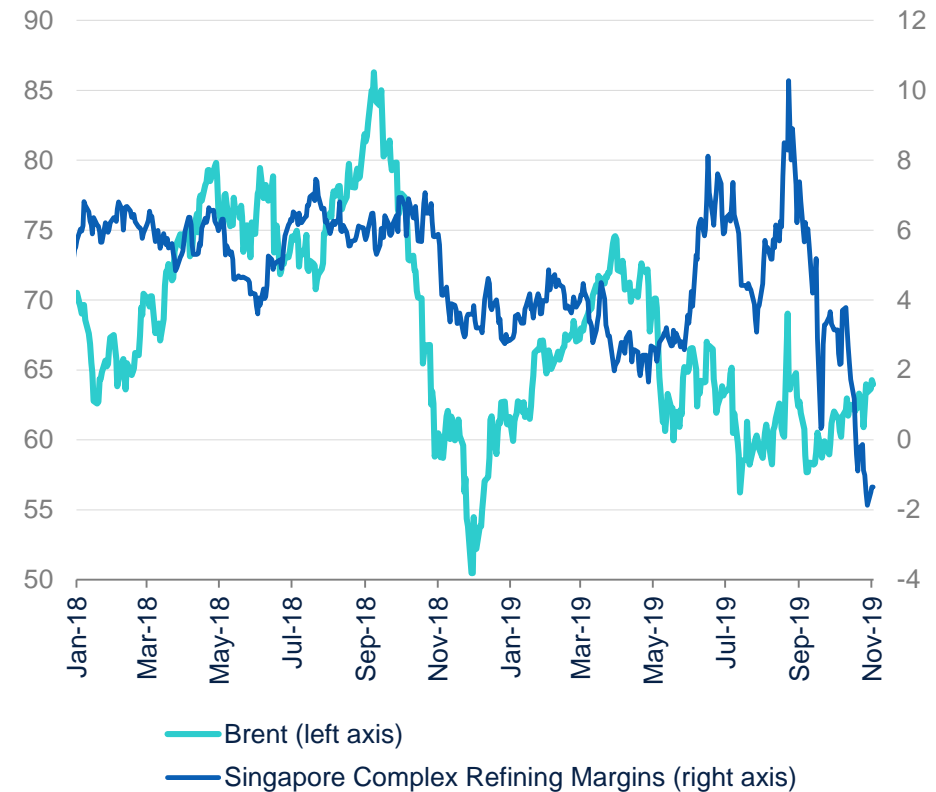
Slower refining activity and low margins put downward pressure on demand for crude oil

CRUDE OIL REFINERY RUNS (UTILIZATION RATES %, 4Q-MOVING AVERAGE)



Source: BBVA Research and Haver Analytics

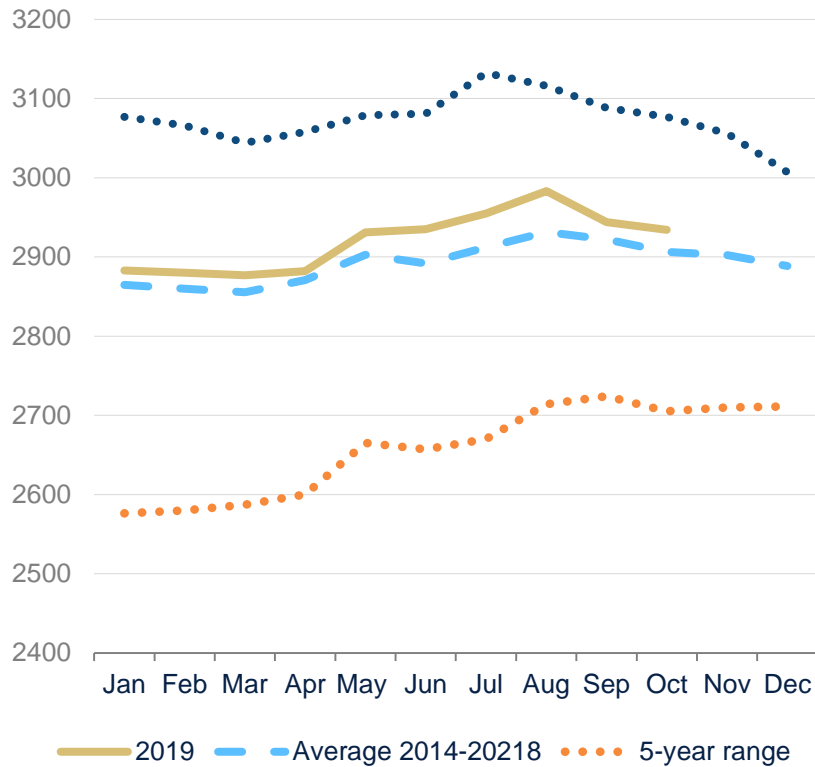
ASIA REFINING MARGINS & BRENT OIL PRICES (\$ PER BARREL)



Source: BBVA Research and Haver Analytics

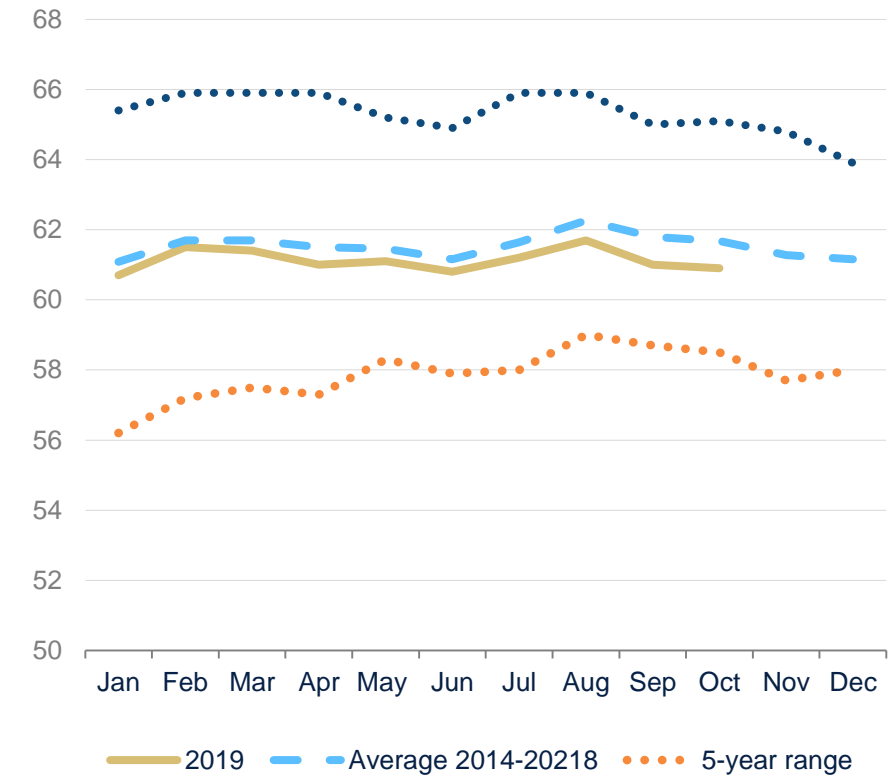
Inventories trending close to 5-year averages

OECD OIL INVENTORIES AT MONTH'S END (MILLION BARRELS)



Source: BBVA Research and Haver Analytics

OECD OIL INVENTORIES AT MONTH'S END (DAYS SUPPLY)

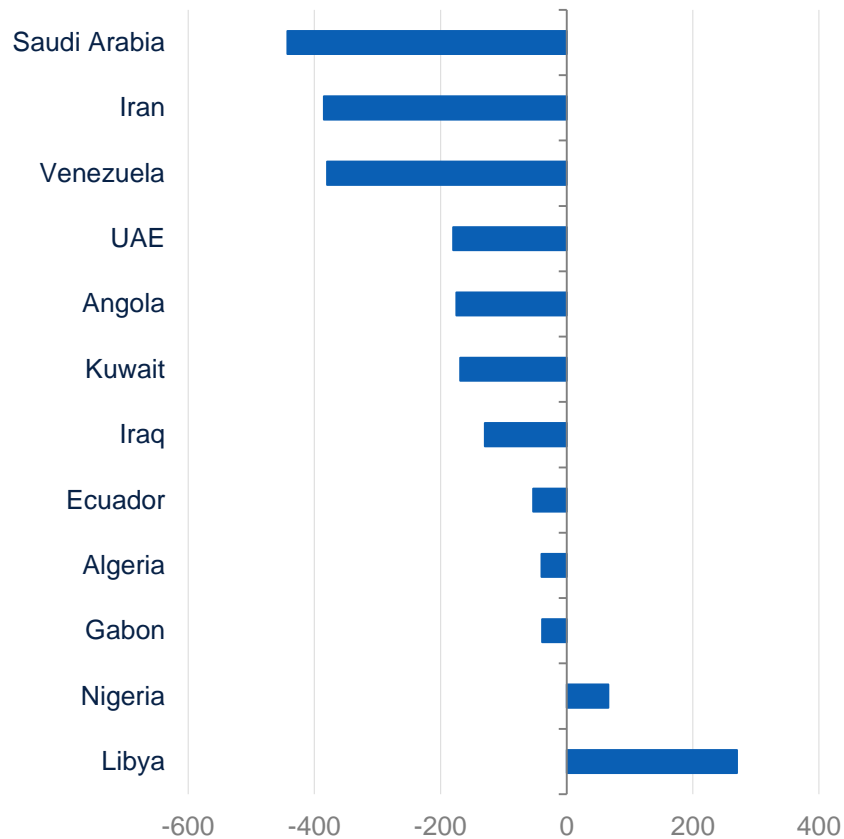


Source: BBVA Research and Haver Analytics

OPEC: compliance with output quotas and sanctions to Iran and Venezuela limit supply

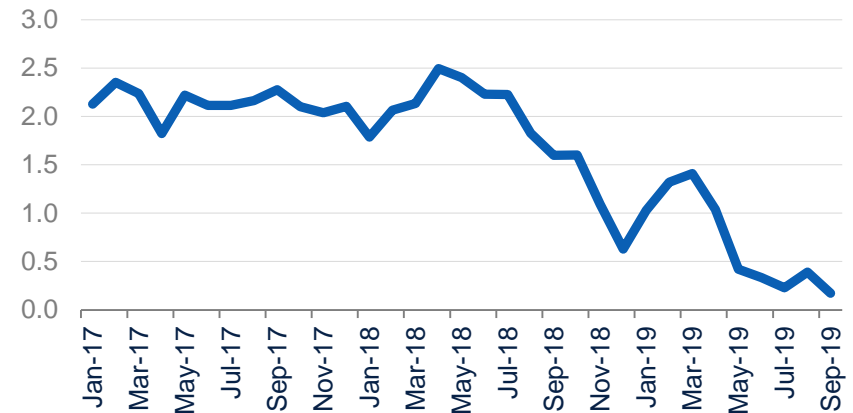
OPEC CRUDE OIL PRODUCTION

(CHANGE BETWEEN DEC-2018 AND OCTOBER -2019, THOUSAND BARRELS PER DAY)



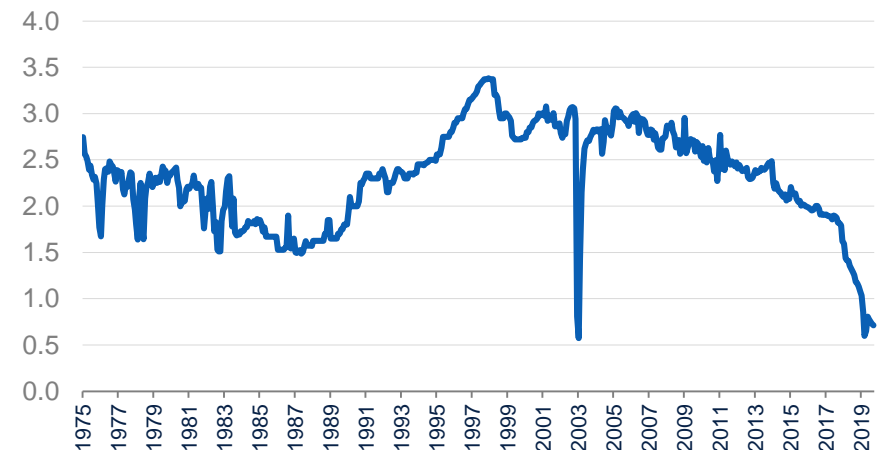
IRAN: EXPORTS OF CRUDE OIL

(MILLION BARRELS PER DAY)



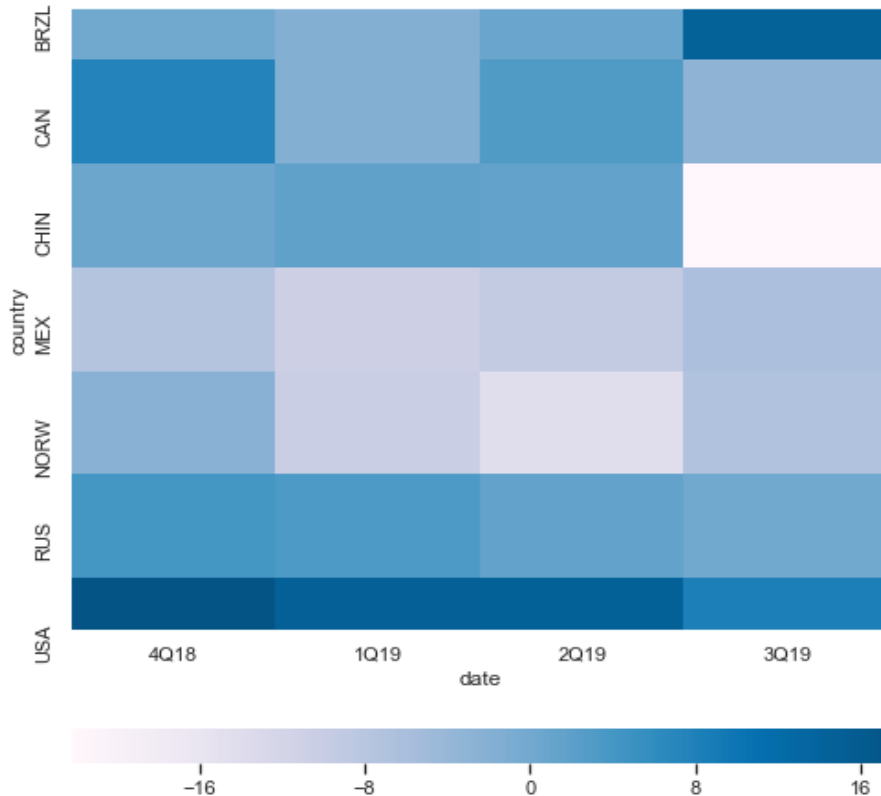
VENEZUELA: CRUDE OIL PRODUCTION

(MILLION BARRELS PER DAY)



Non-OPEC offshore production accelerated in Brazil, Mexico and Norway

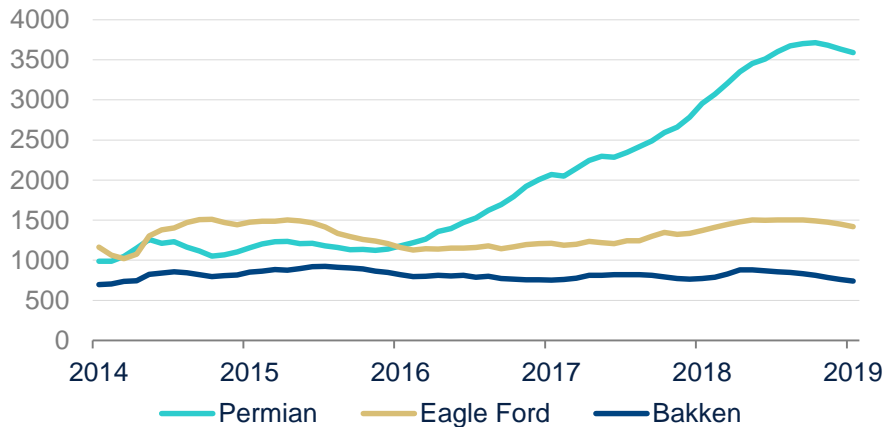
CRUDE OIL PRODUCTION (HEAT-MAP, YOY % CHANGE)



- **Mexico:** Higher drilling rates and prioritization of fields may help to stabilize and potentially reverse declining production
- **Brazil:** Output was significantly boosted by new production in the Santos Basin
- **Norway:** The commissioning of the Johan Sverdrup field should lead to positive year-over-year growth rates for the first time since 2017

U.S.: Incoming data suggests golden age of shale not over yet...

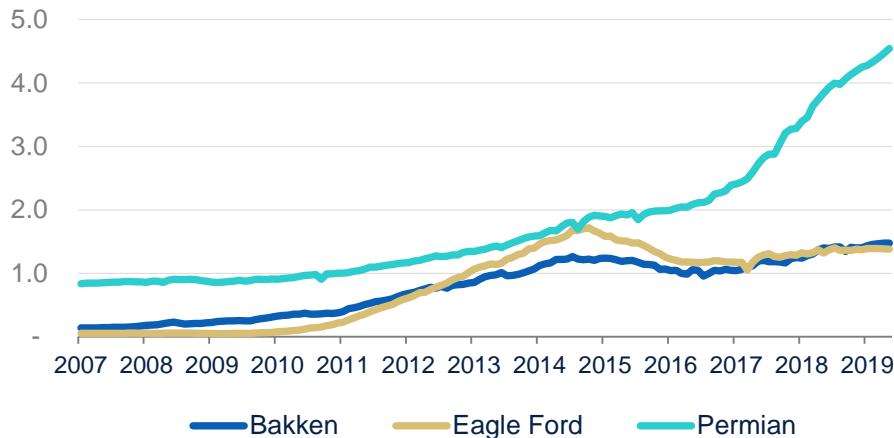
U.S. DRILLED BUT UNCOMPLETED WELLS (NUMBER)



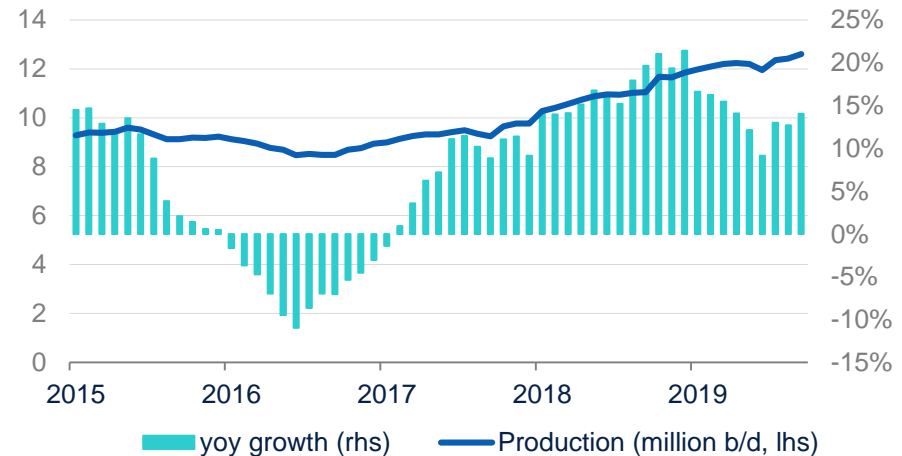
U.S. ACTIVE RIG COUNT (UNITS)



U.S. OIL PRODUCTION BY REGION (MILLION BARRELS PER DAY)



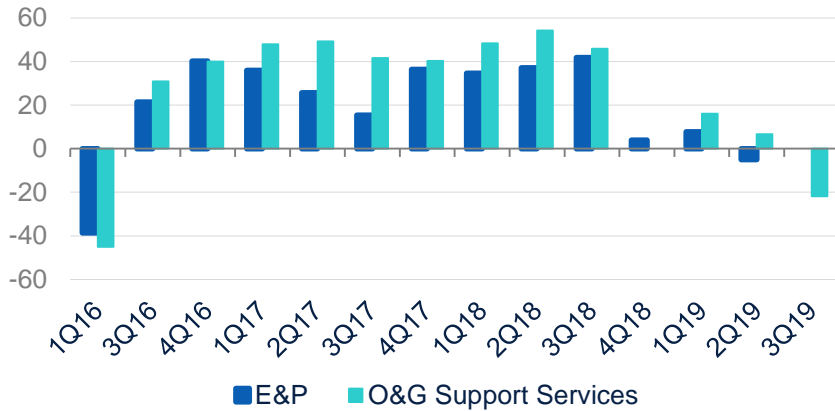
U.S. CRUDE OIL FIELD PRODUCTION



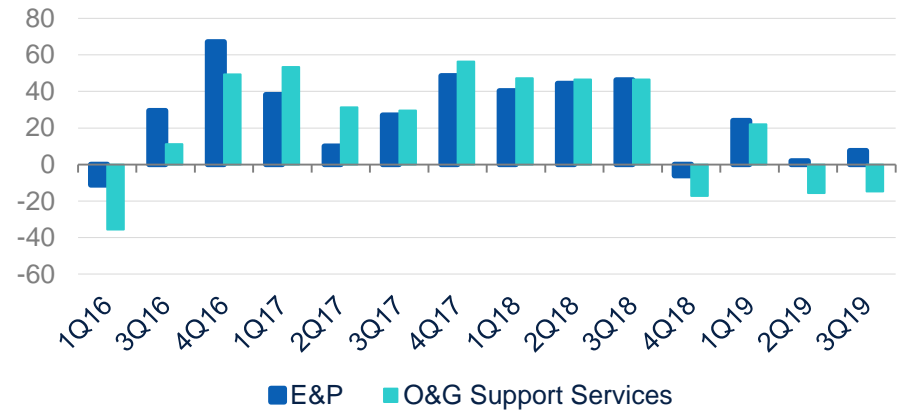
Source: BBVA Research and Haver Analytics

U.S.: Businesses activity seems to be cooling down

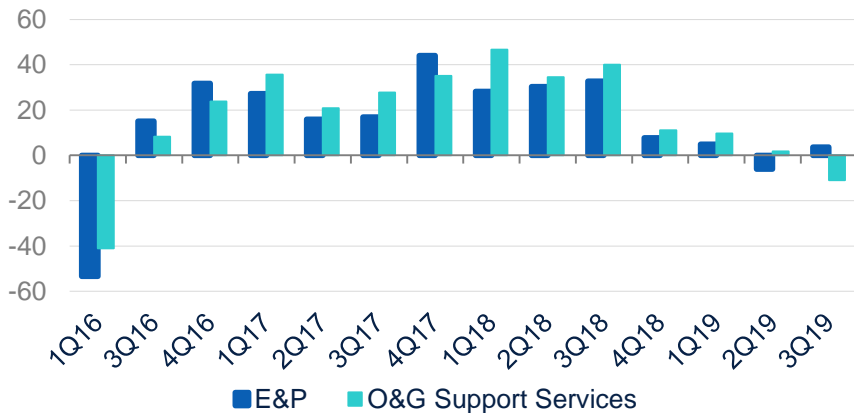
LEVEL OF BUSINESS ACTIVITY INDEX



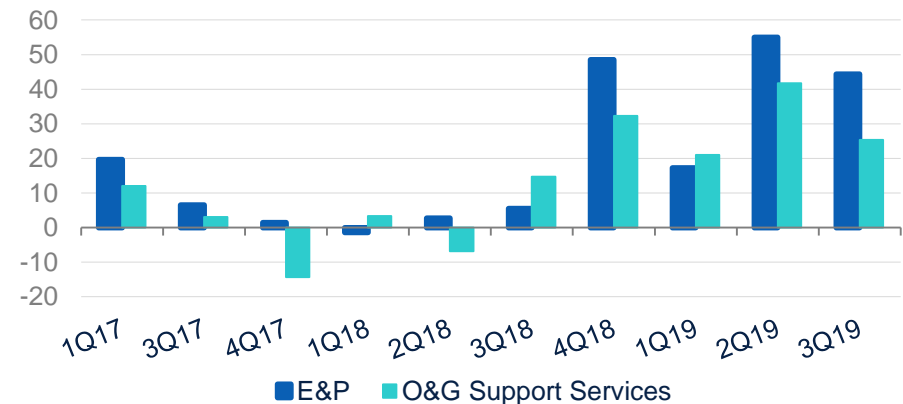
COMPANY OUTLOOK INDEX



CAPITAL EXPENDITURES INDEX



UNCERTAINTY INDEX

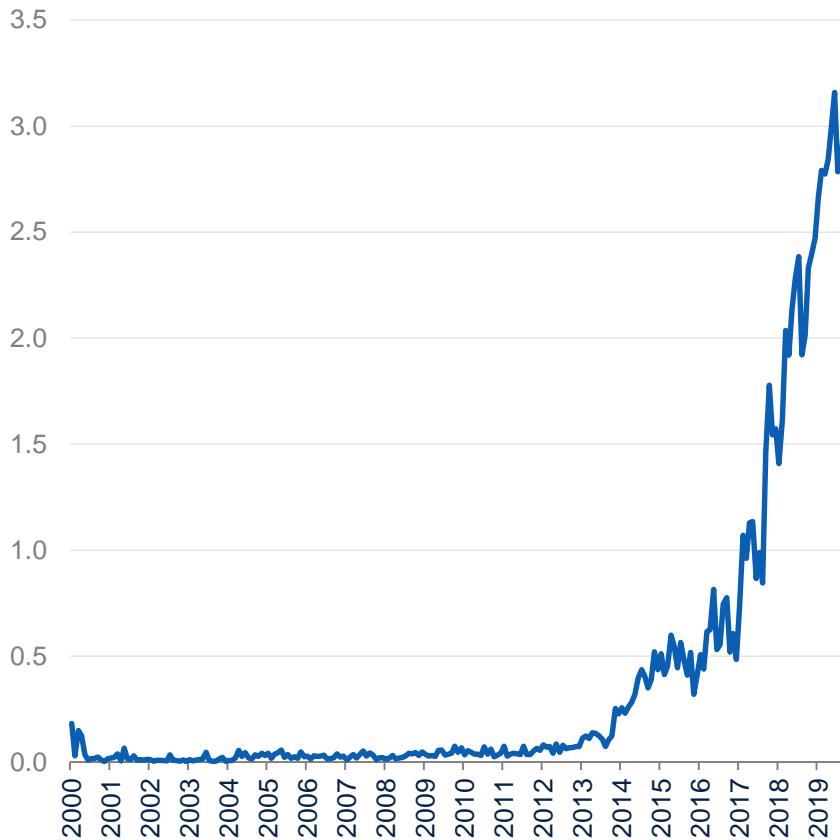


*Current Index = % Reporting Increase - % Reporting Decrease

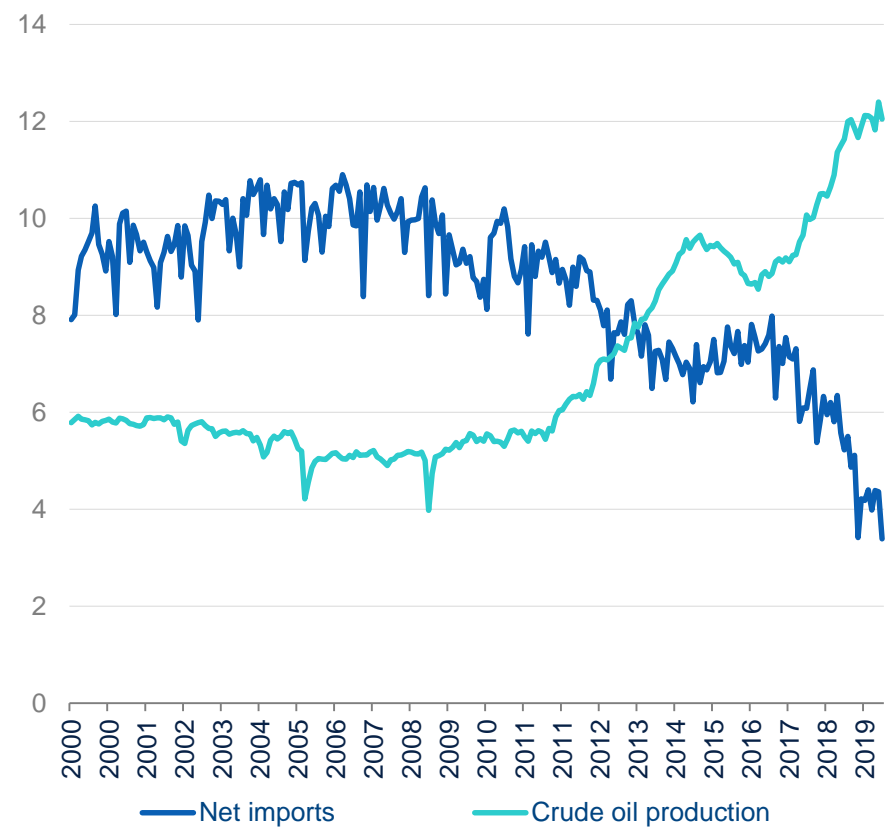
Source: Dallas Fed Energy Survey , 3Q19

U.S. import substitution continues

U.S. EXPORTS OF CRUDE OIL (MILLION BARRELS PER DAY)

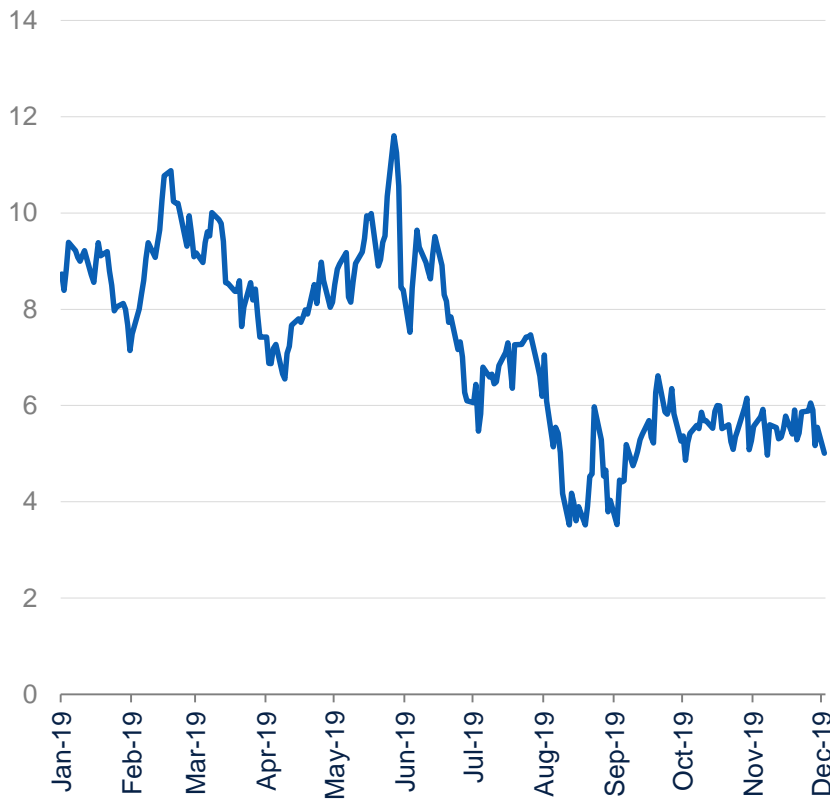


U.S. PRODUCTION AND NET IMPORTS OF CRUDE OIL (MILLION BARRELS PER DAY)



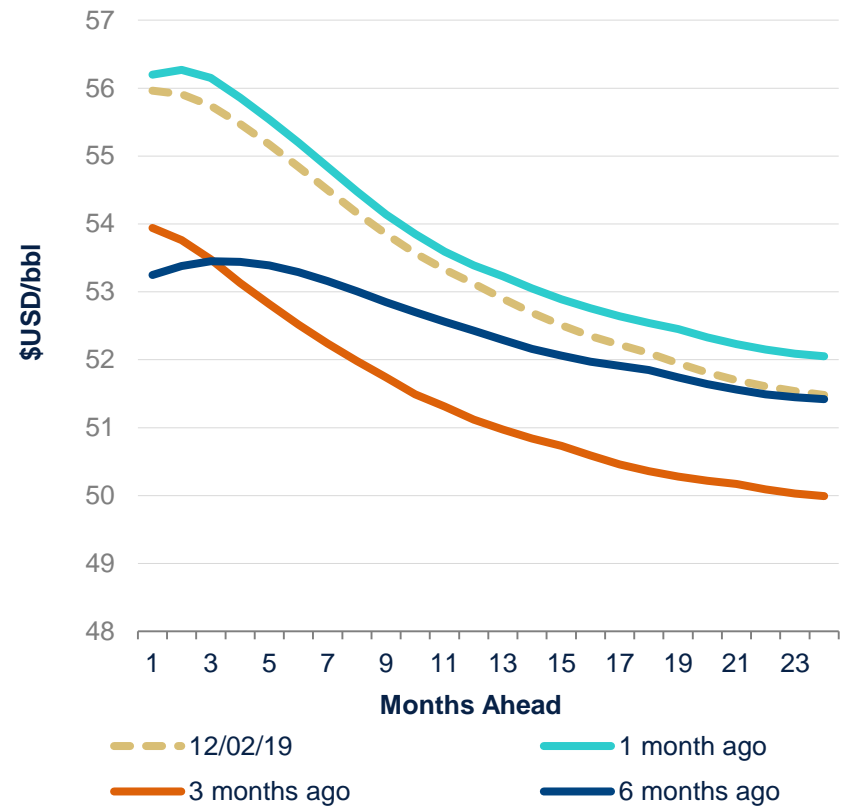
U.S.: New transportation infrastructure has narrowed the gap between Brent and WTI

BRENT-WTI DIFFERENTIAL
(\$ PER BARREL)



Source: BBVA Research and Bloomberg

WTI FUTURES
(\$ PER BARREL)



Source: BBVA Research and Bloomberg

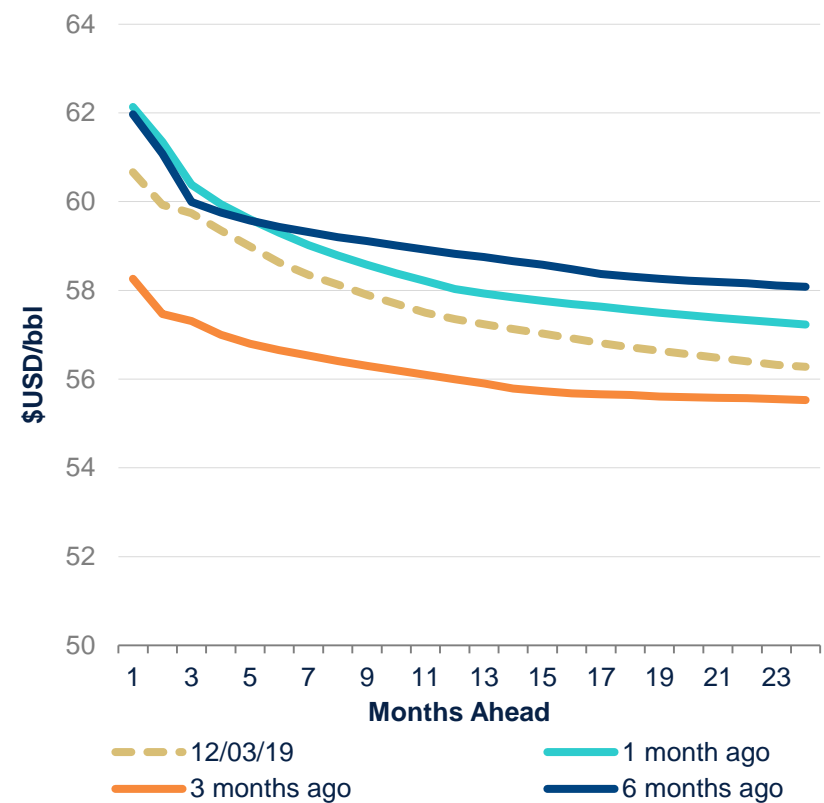
Net long positions recovered after better trade news

NET LONG POSITIONS (CONTRACTS AND \$ PER BARREL)



Source: BBVA Research and Bloomberg

BRENT FUTURES (\$ PER BARREL)

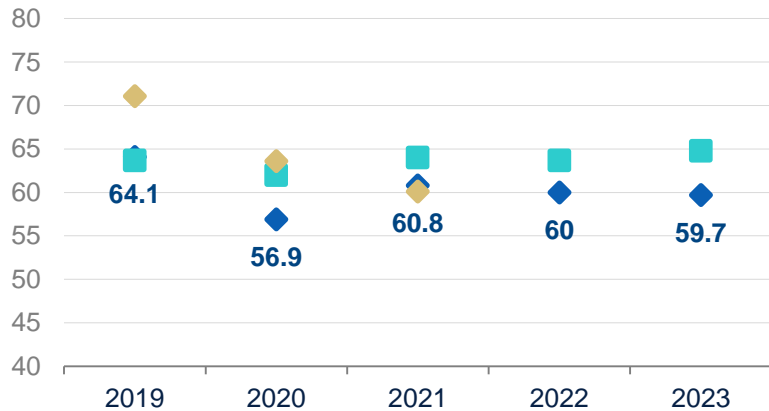


Source: BBVA Research and Bloomberg

Weak demand growth in a well supplied market remains the main driver of our baseline scenario

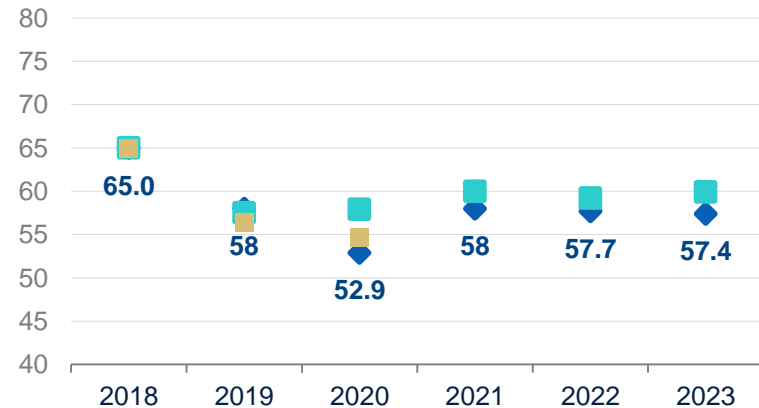
BRENT PRICES FORECAST (\$ PER BARREL)

	BBVA Research (baseline)	Bloomberg Survey (Nov 29)	EIA STEO (Nov 13)
2017	54.2	54.2	54.2
2018	71.1	71.1	71.1
2019	64.1	63.7	63.6
2020	56.9	62.0	60.1
2021	60.8	64.0	
2022	60.0	63.7	
2023	59.7	64.8	



WTI PRICES FORECAST (\$ PER BARREL)

	BBVA Research (baseline)	Bloomberg Survey (Nov 29)	EIA STEO (Nov 13)
2017	50.9	50.9	50.9
2018	65.0	65.0	65.0
2019	58.0	57.5	56.4
2020	52.9	57.9	54.6
2021	58.0	60.0	
2022	57.7	59.2	
2023	57.4	59.9	



◆ BBVA Research ■ Bloomberg Survey (Nov 29) ◆ EIA STEO (Nov 13)

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