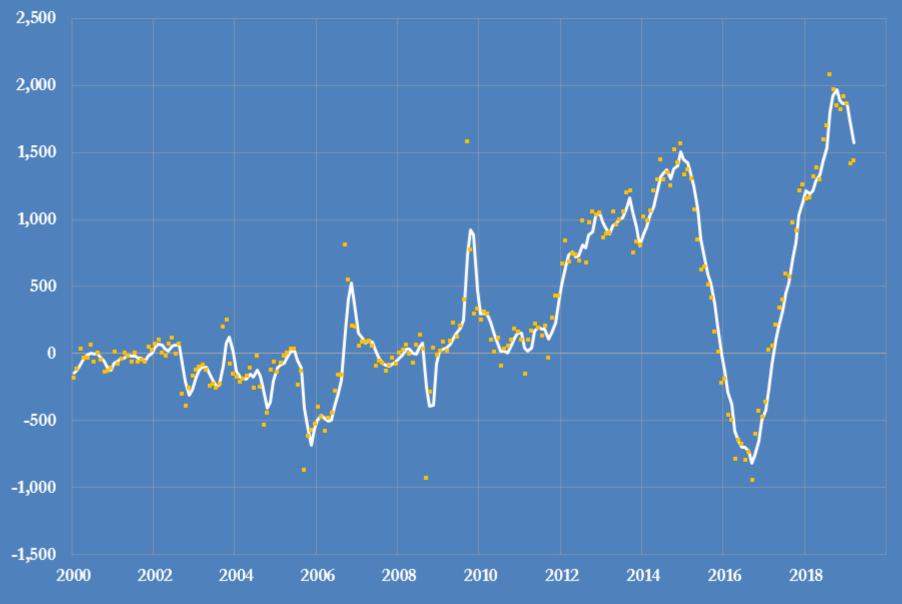
Oil prices, production and consumption Selected indicators

JOHN KEMP REUTERS 4 June 2019 U.S. crude oil production, 1920-2019 000 b/d



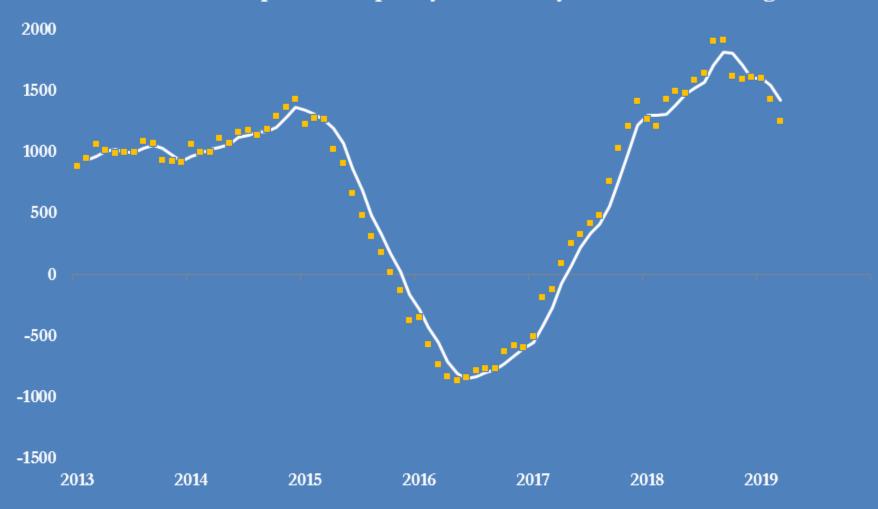
U.S. crude oil production, 2000-2019 Increase compared with prior year, monthly and 3-month average, 000 b/d



Source: U.S. Energy Information Administration

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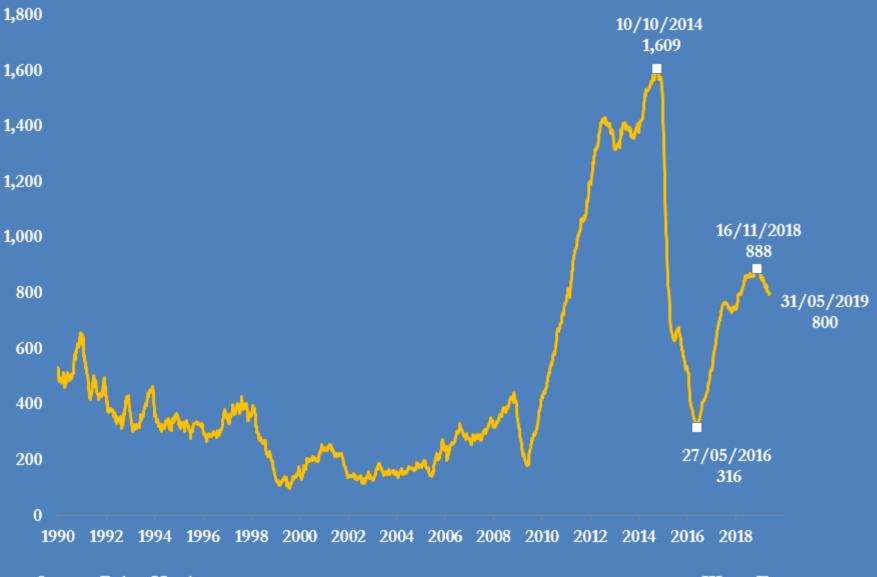
U.S. crude oil production, 2013-2019 Lower 48 states excluding federal Gulf of Mexico, 000 b/d Increase compared with prior year, monthly and 3-month average



Source: U.S. Energy Information Administration

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Number of rigs drilling for oil in the United States



Source: Baker Hughes

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Cyclical indicators in the oil market, 2007-2019 Brent crude: front-month futures prices and calendar spreads 200 12 150 9 100 6 50 3 -50 -3 -6 -150 -9 -200 -12 2007 2009 2011 2013 2015 2017 2019

-L-axis: Brent front-month futures prices (percent change year-on-year)

----R-axis: Brent calendar spread (1st month - 7th month future price, U.S.\$ per bbl)

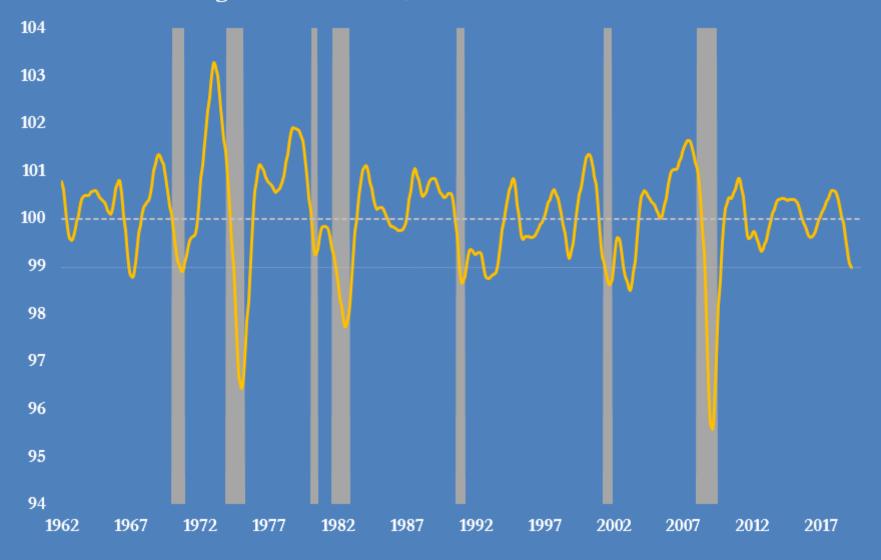
Both series are averaged over 30 trading days to smooth short-term volatility @JKempEnergy

Shape of the futures price curve in Brent crude Contango (-) or backwardation (+) from months 1 to 7 (US\$/bbl)



Price difference Brent month 1 and month 7 (U.S.\$/bbl) Source: ICE Futures, @JKempEnergy Contango (-) or backwardation (+)

OECD Composite Leading Indicator, 1962-2018 Long-term trend = 100, NBER U.S. recessions shown



Source: OECD

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Volume of World Trade, 1993-2019 Percent change from prior year, monthly and three-month average



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