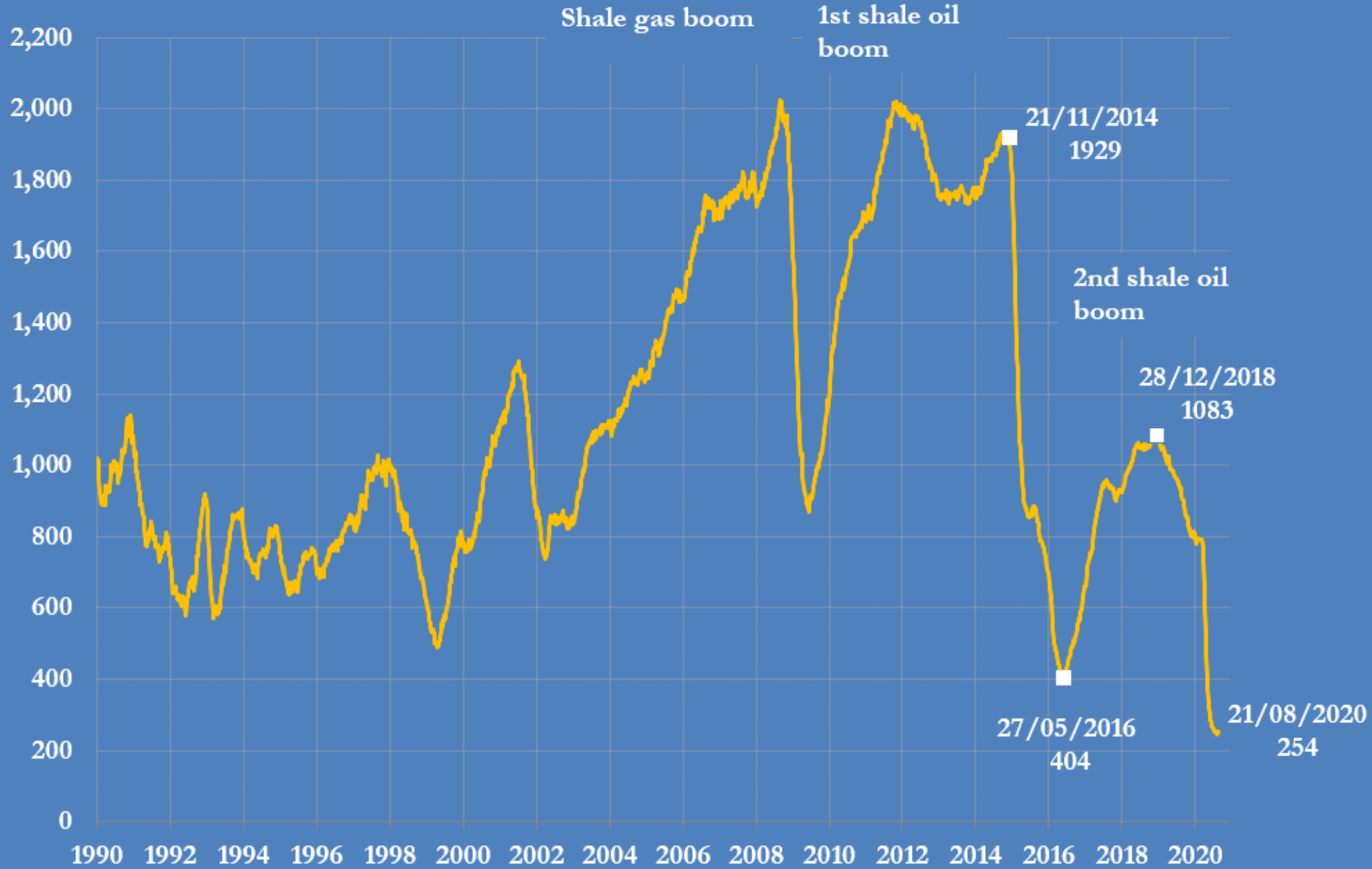


U.S. oil production outlook 2020/21

Selected indicators

JOHN KEMP
REUTERS
2 Sep 2020

Rigs drilling for oil and gas in the United States, 1990-2020

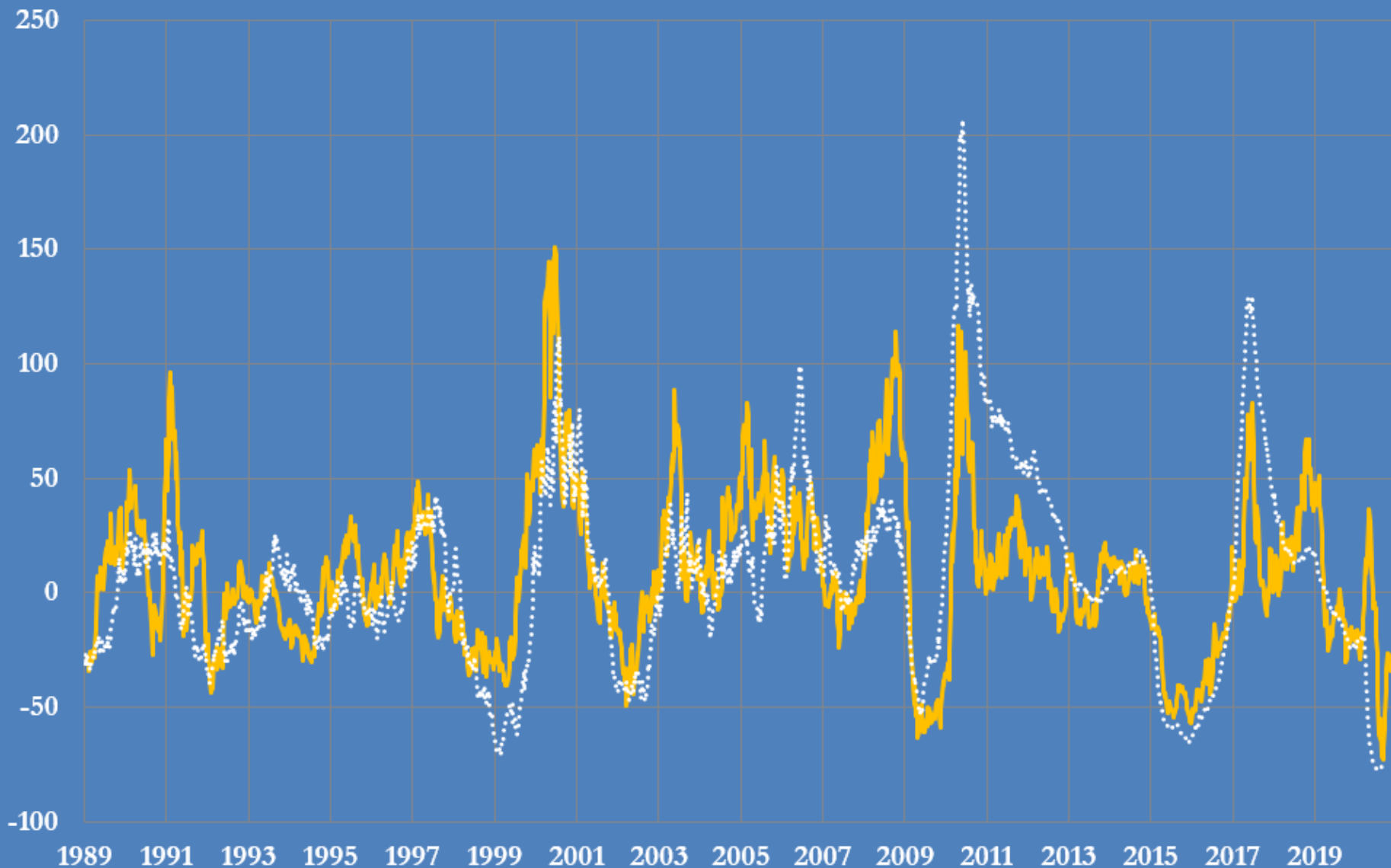


Source: Baker Hughes

@JKempEnergy

U.S. crude oil prices and drilling activity

12-month percent change (WTI prices leading by 19 weeks)

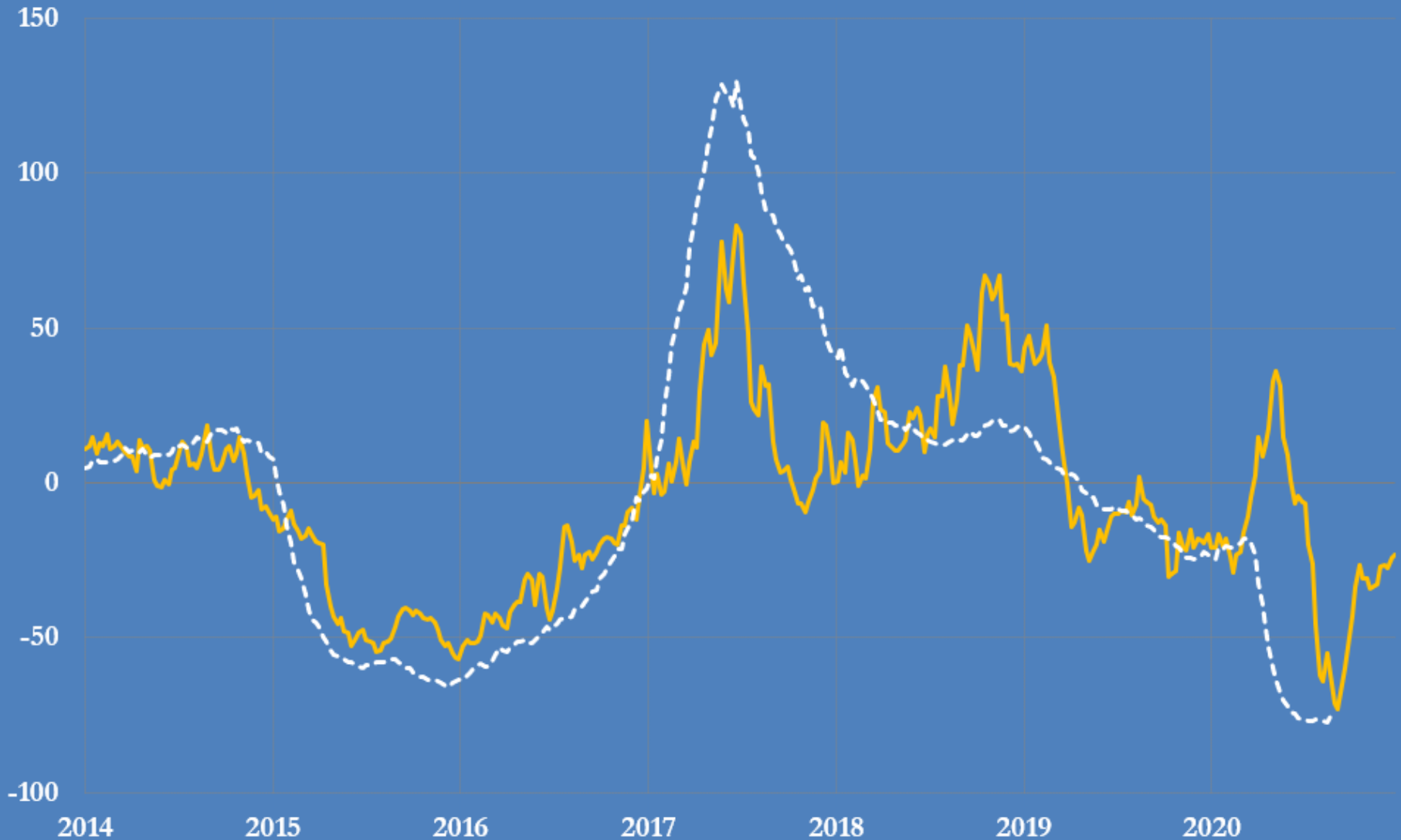


— WTI price (front-month futures contract)
..... U.S. oil rig count (Baker Hughes)

Sources: New York Mercantile Exchange, Baker Hughes; @JKempEnergy

U.S. crude oil prices and drilling activity

12-month percent change (WTI prices leading by 19 weeks)

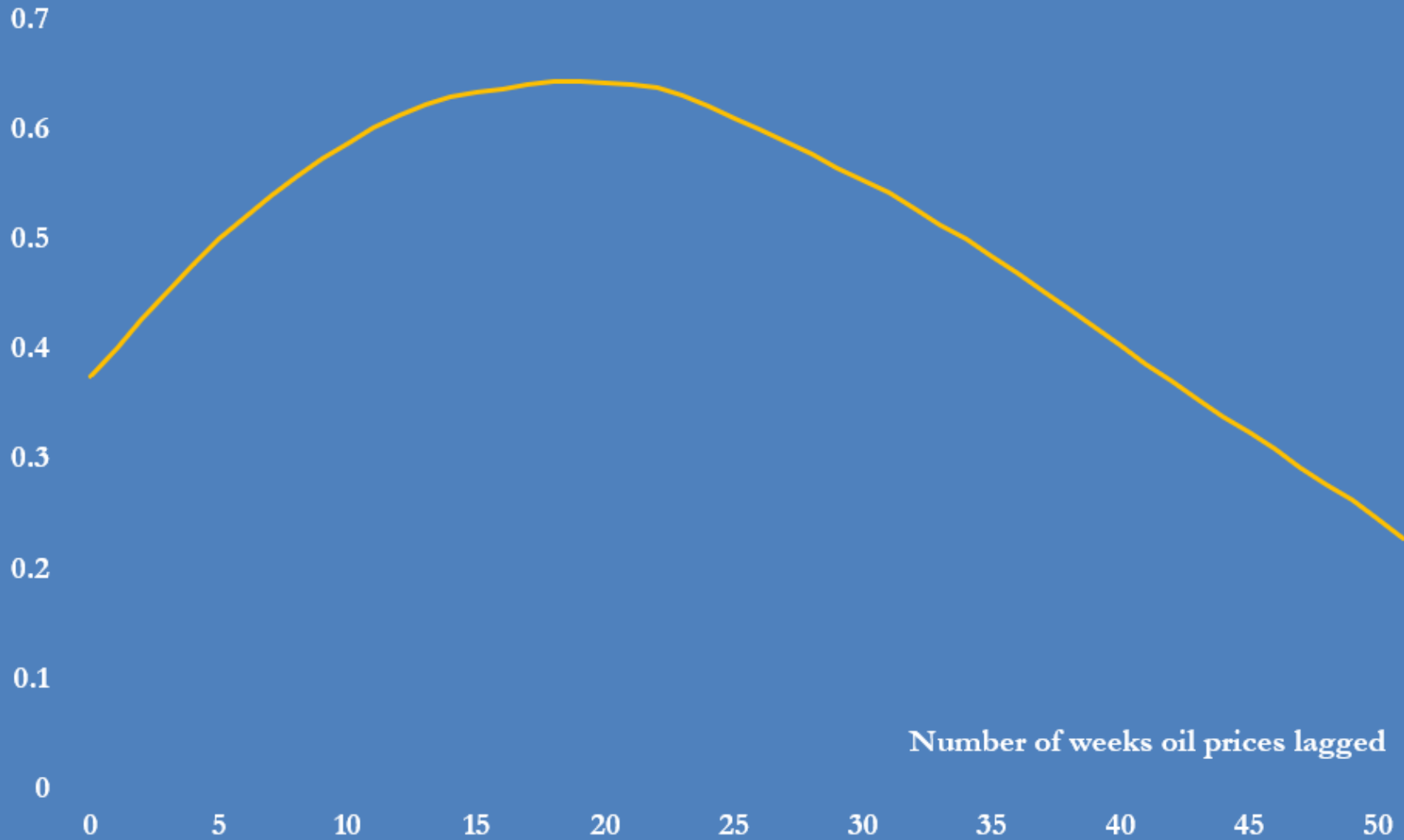


— WTI price (front-month futures contract)
- - - U.S. oil rig count (Baker Hughes)

Sources: New York Mercantile Exchange, Baker Hughes; @JKempEnergy

Correlation coefficient between U.S. drilling activity and oil prices

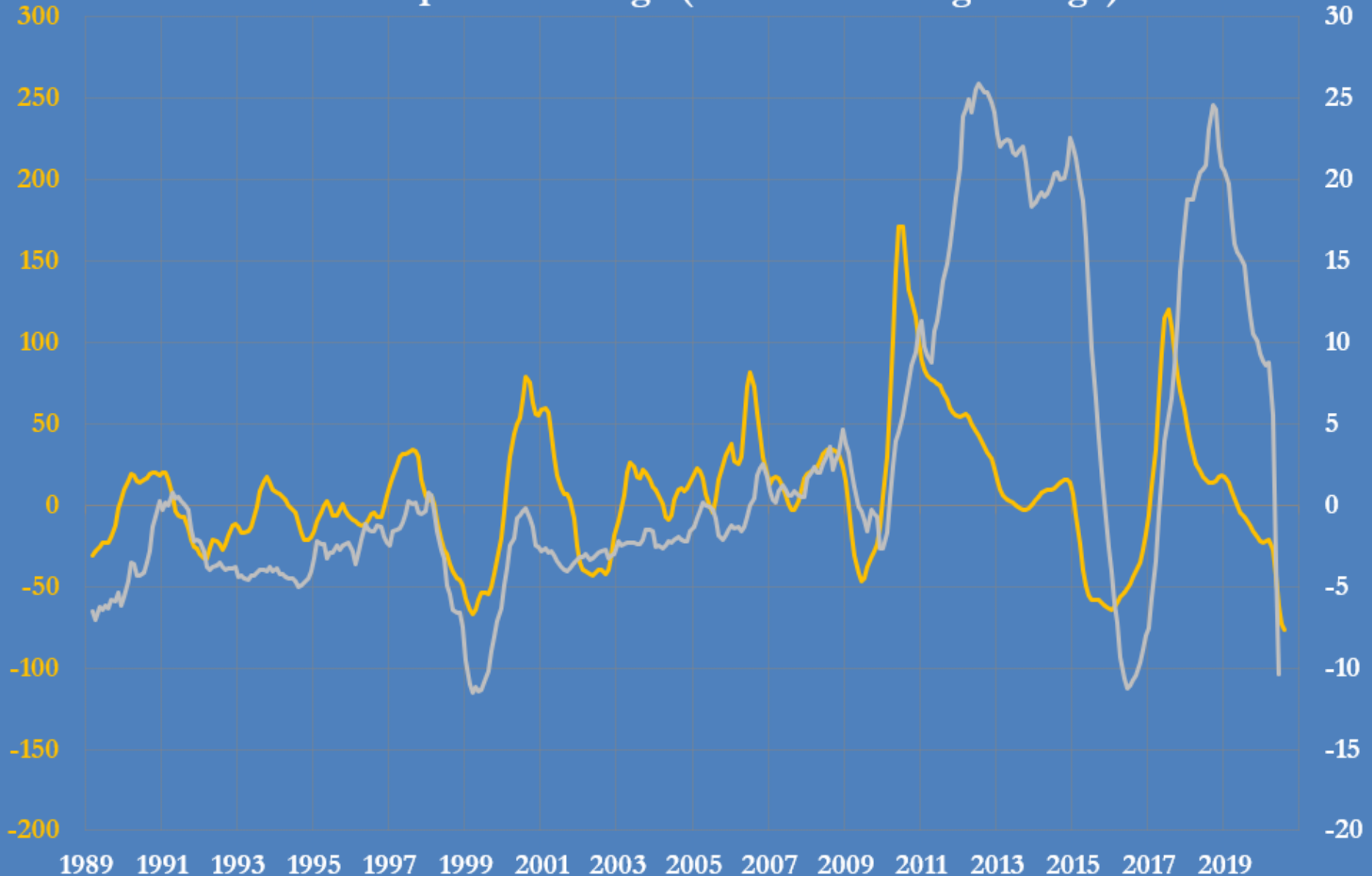
Baker Hughes U.S. oil rig count correlated with WTI prices lagged by number of weeks shown



Sources: New York Mercantile Exchange, Baker Hughes
@JKempEnergy

U.S. oil rig count and crude production

12-month percent change (3-month running average)



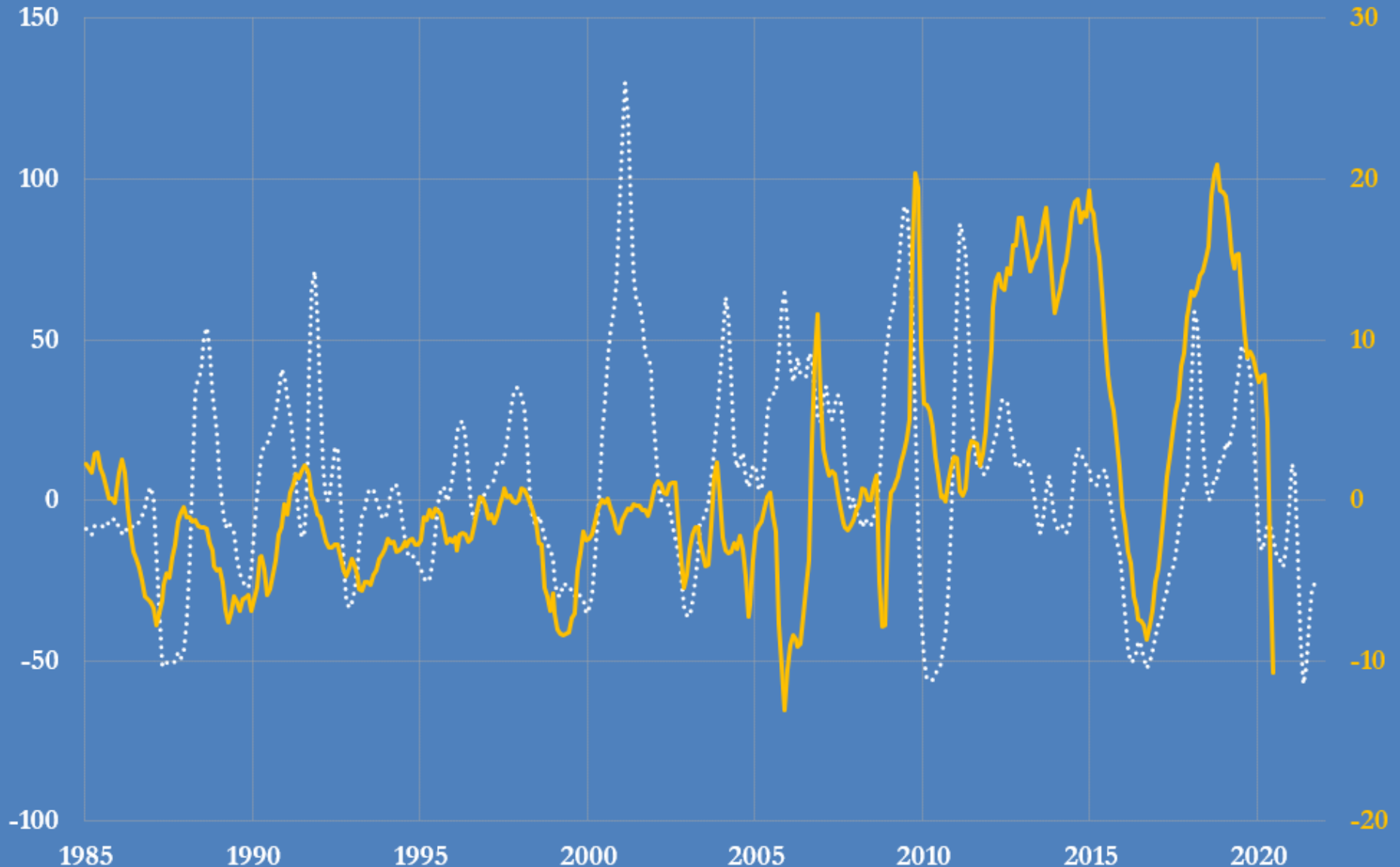
— Baker Hughes U.S. oil rig count (12mth percent change)(l-axis)

— L48 crude oil production (12mth percent change)(r-axis)

Sources: EIA, Baker Hughes
@JKempEnergy

U.S. oil futures prices and crude oil production, 1985-2021

Percent change compared with prior year, 3-month average



..... L-axis: WTI front-month futures (leading by 12-months)

—— R-axis: U.S. oil production

Source: U.S. Energy Information Administration, @JKempEnergy