

Global oil market and OPEC⁺ output increase

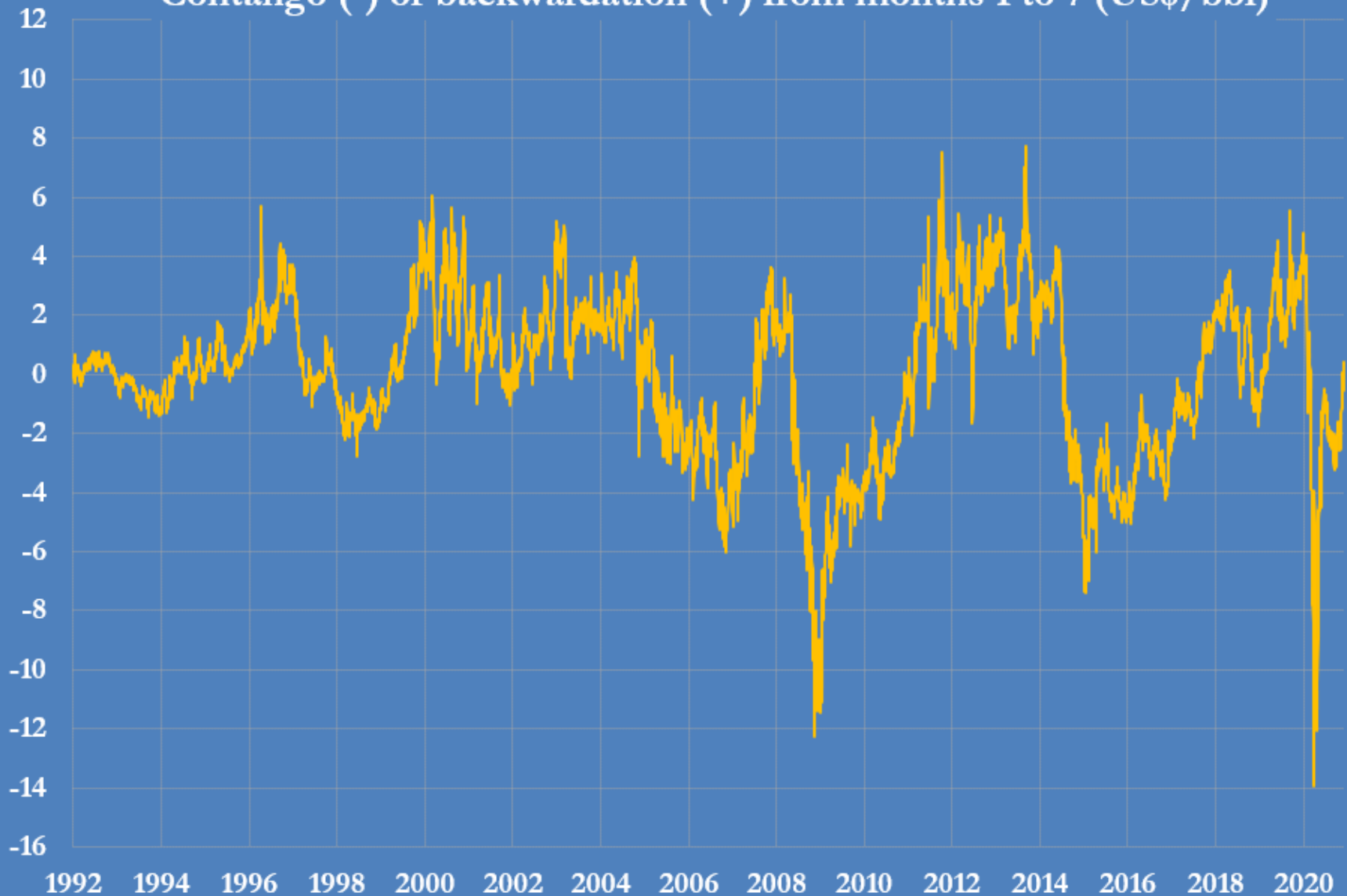
Selected indicators

JOHN KEMP
REUTERS

4 Dec 2020

Shape of the futures price curve in Brent crude

Contango (-) or backwardation (+) from months 1 to 7 (US\$/bbl)

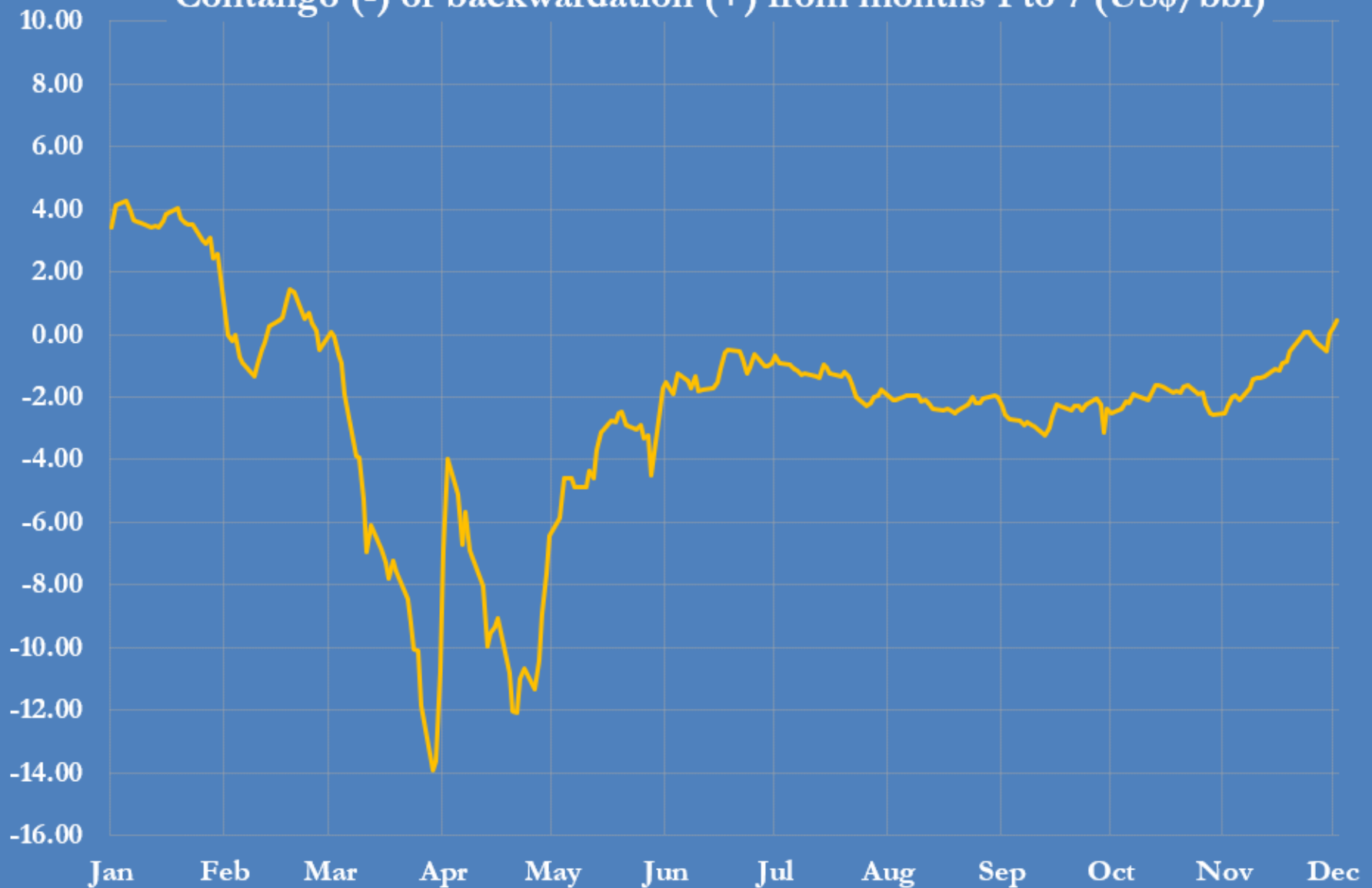


Price difference Brent month 1 and month 7 (U.S.\$/bbl)
Contango (-) or backwardation (+)

Source: ICE Futures, @JKempEnergy

Shape of the futures price curve in Brent crude

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Price difference Brent month 1 and month 7 (U.S.\$/bbl)
Contango (-) or backwardation (+)

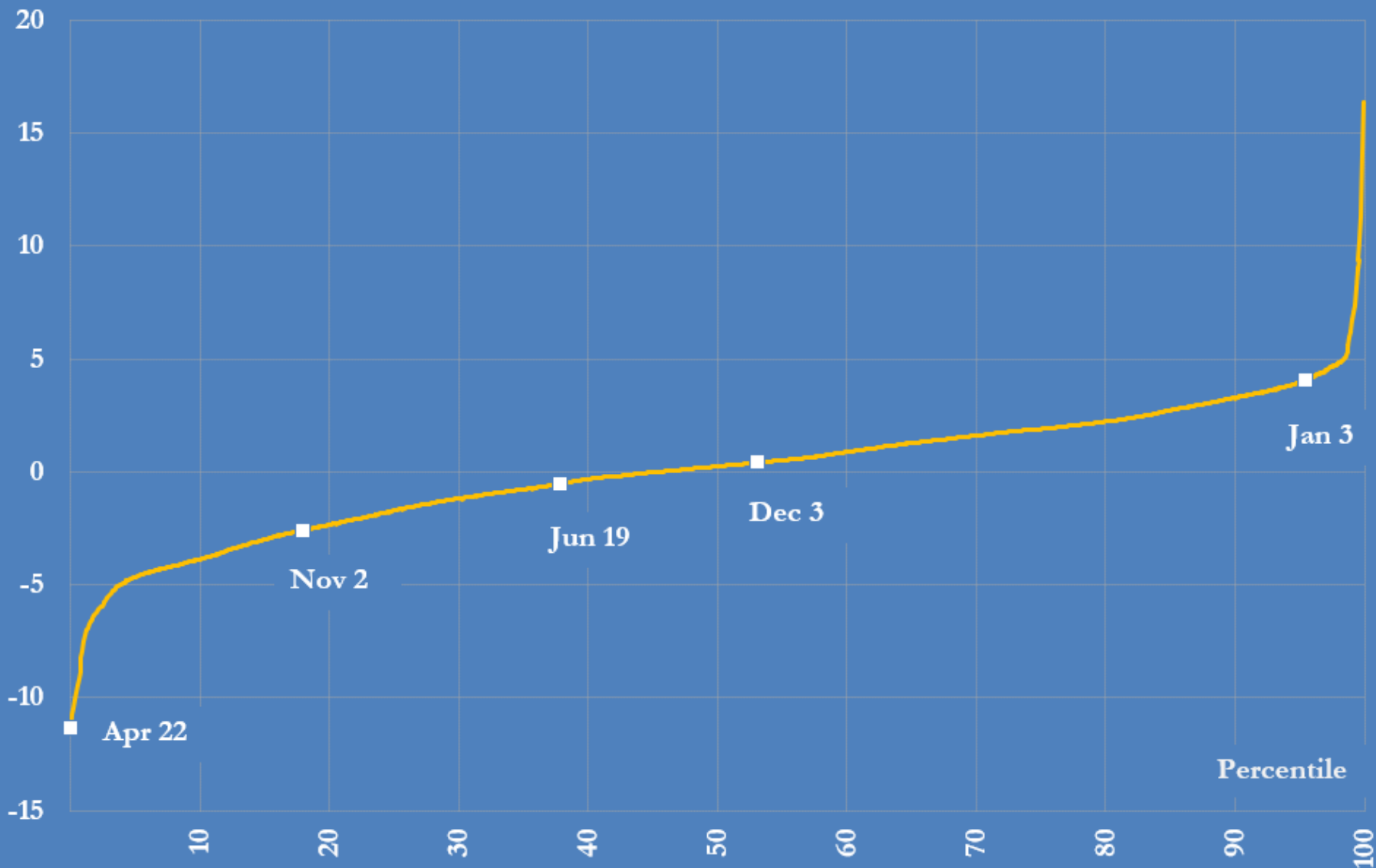
Source: ICE Futures, @JKempEnergy

Brent calendar spread from month 1 to month 7

Percentiles 1990-2020, US\$ per barrel

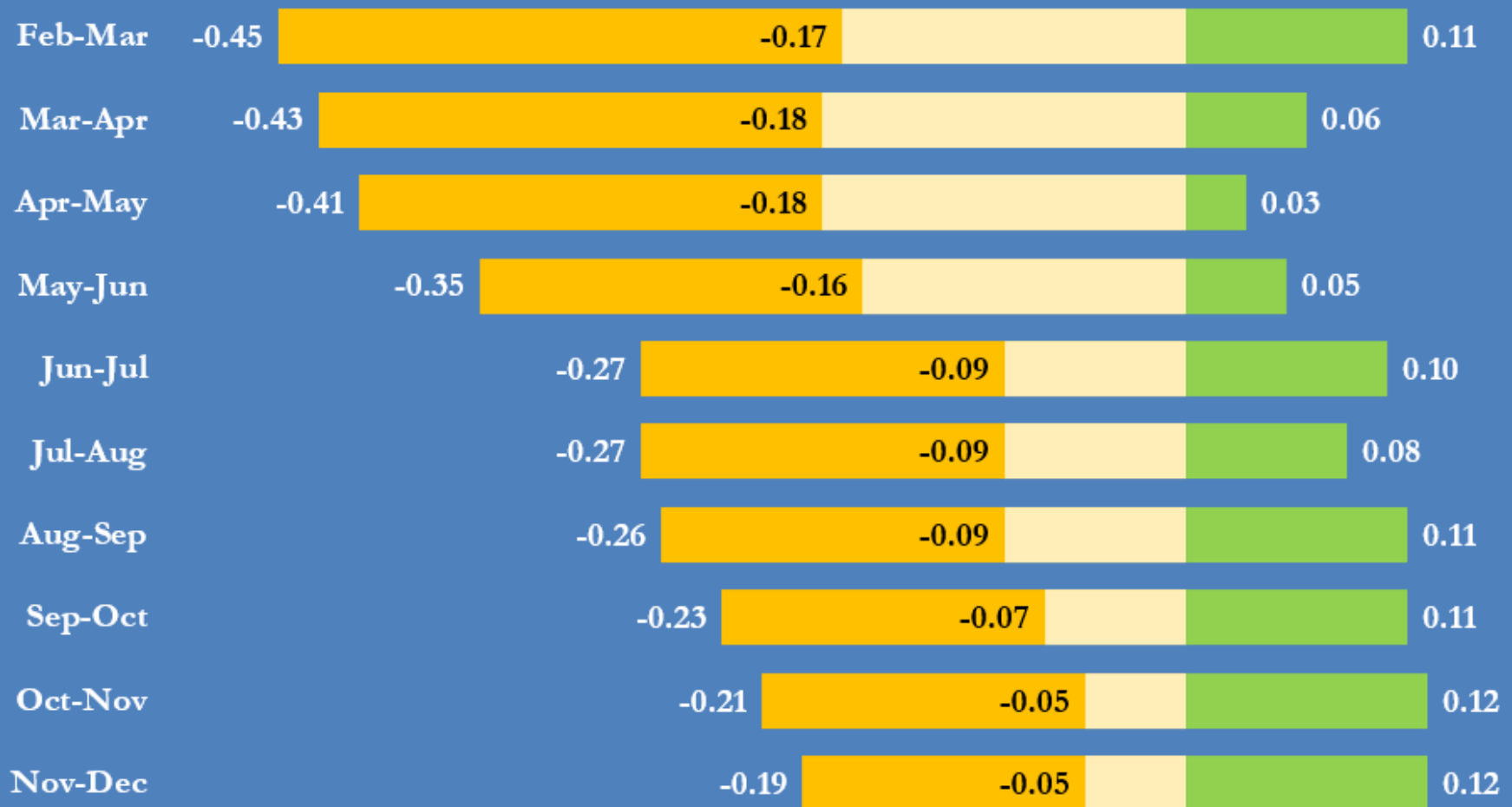
Contango (-) or backwardation (+)

U.S.\$/bbl



Brent inter-month calendar spreads for 2021

U.S.\$ per barrel, contango (-) or backwardation (+)



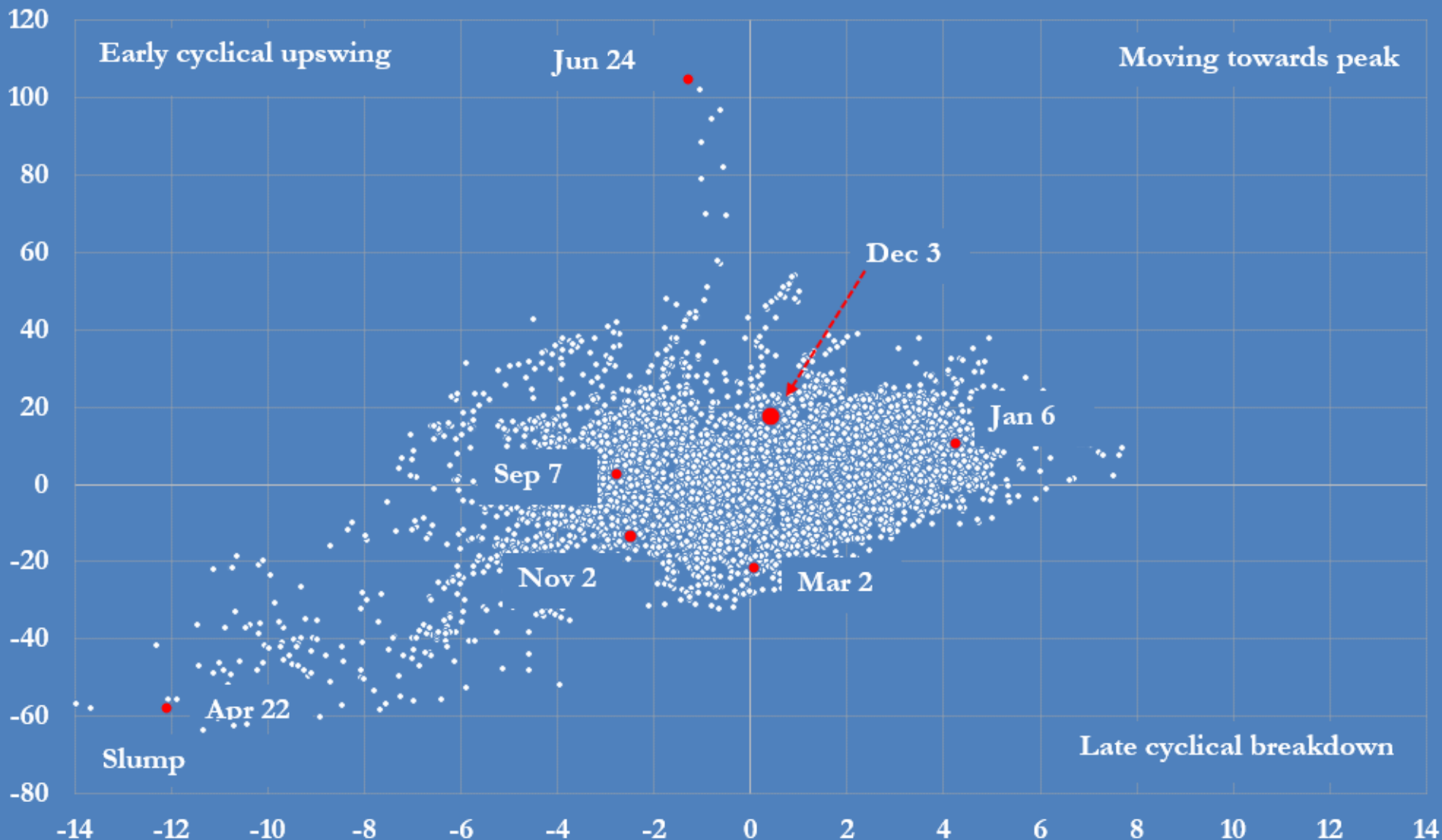
- Brent calendar spreads on Oct 30
- Brent calendar spreads on Nov 18
- Brent calendar spreads on Dec 3

Source: ICE Futures Europe
@JKempEnergy

Brent spot prices and calendar spread, 1993-2020

X-axis: six-month calendar spread (M1-M7) (U.S\$ per barrel)

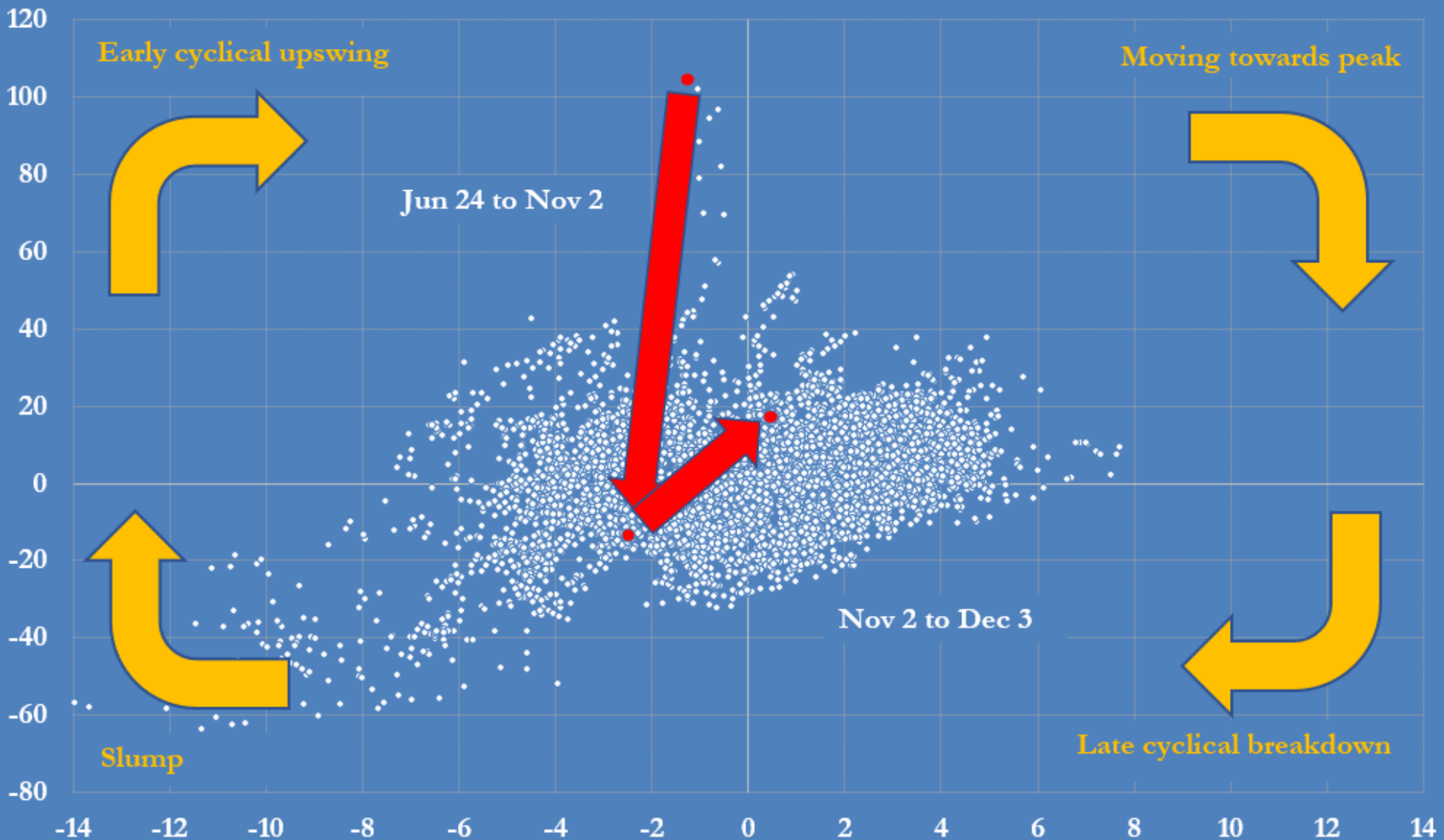
Y-axis: percent change in spot price over previous two months (five-day avg)



Brent spot prices and calendar spread, 1993-2020

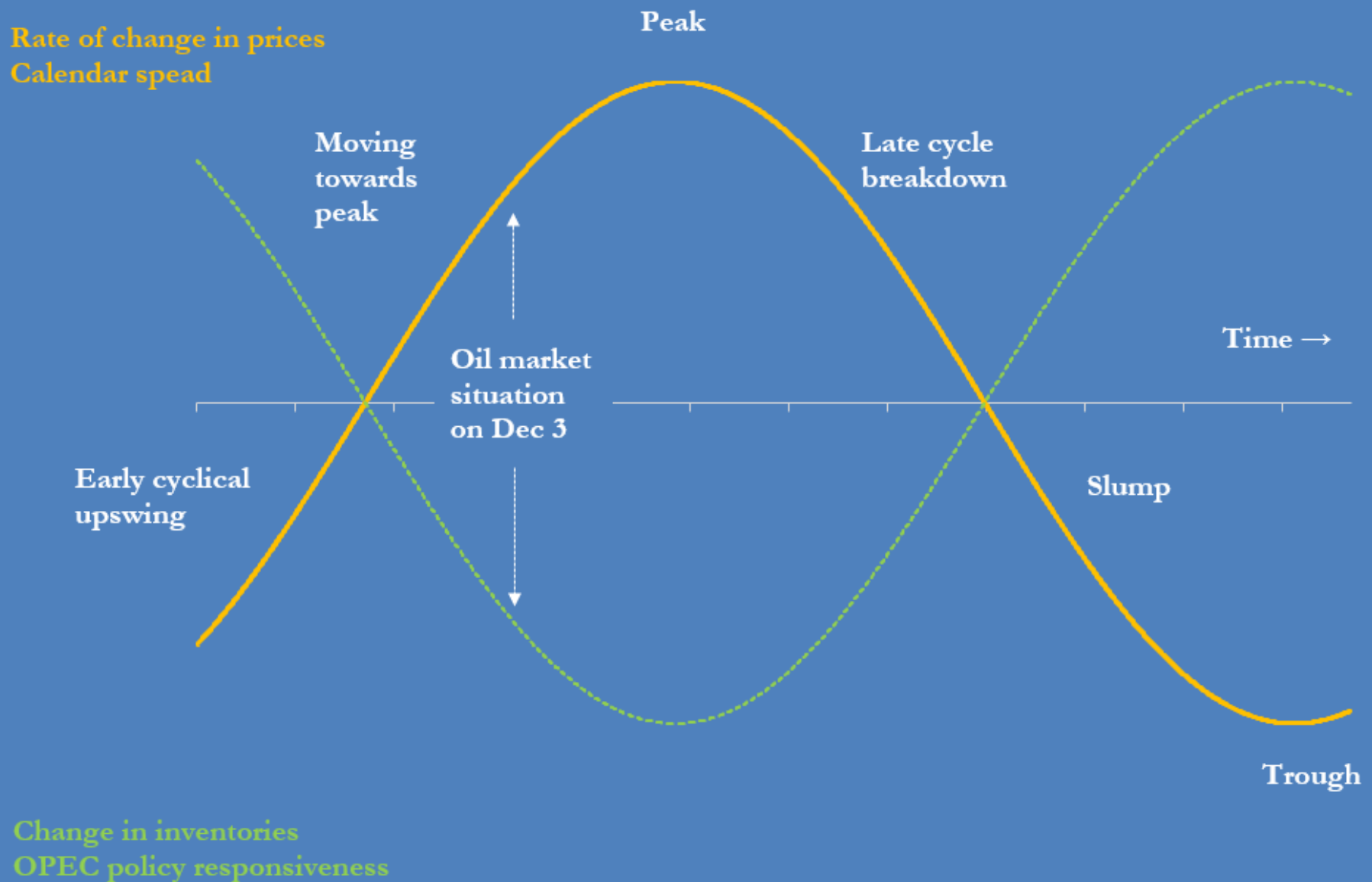
X-axis: six-month calendar spread (M1-M7) (U.S\$ per barrel)

Y-axis: percent change in spot price over previous two months (five-day avg)



Global petroleum cycle, a stylised view

Oil prices, calendar spreads, inventories and OPEC policy responsiveness



Global petroleum market cycle - prices and inventories

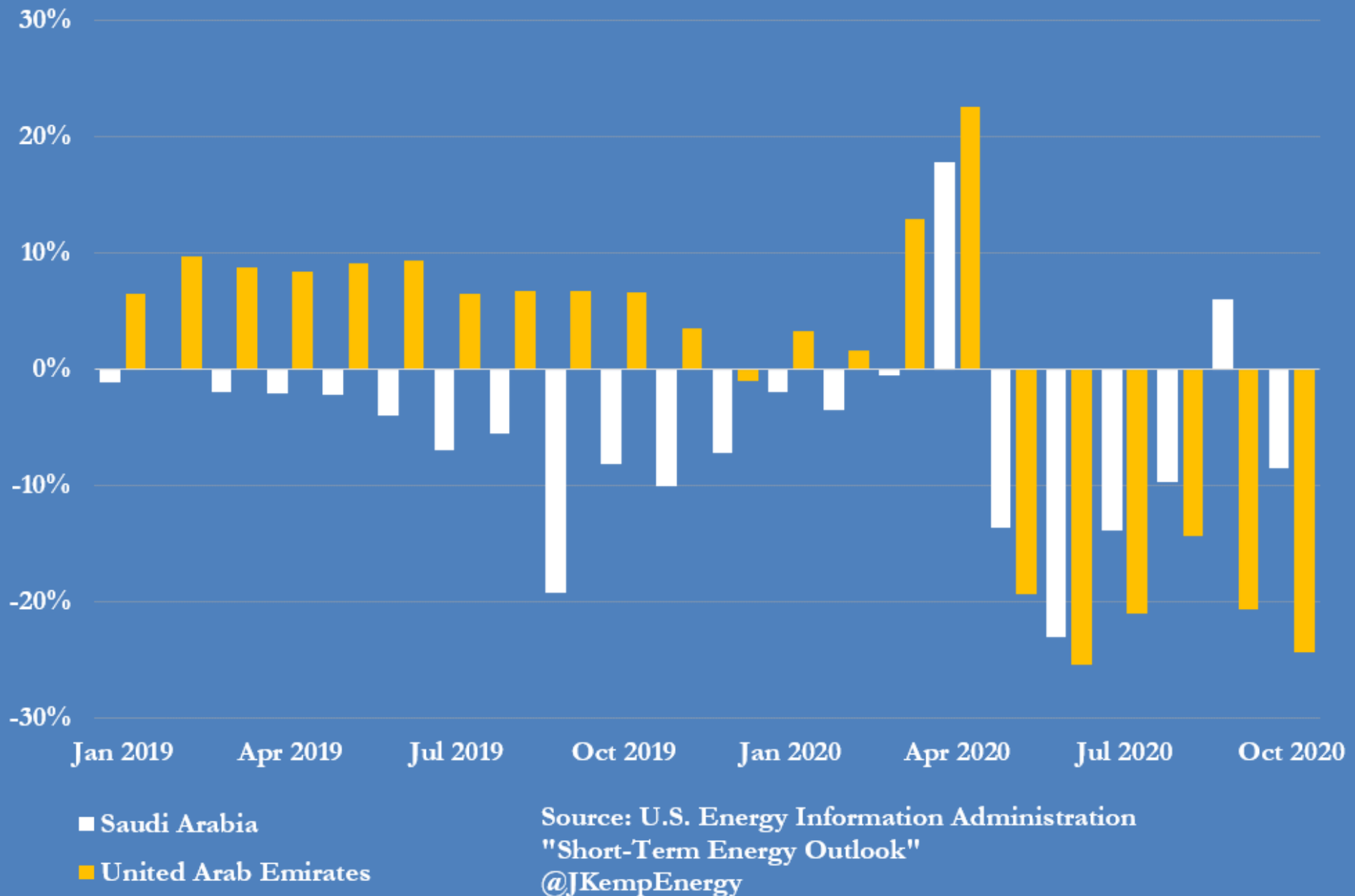
CYCLICAL POSITION	SPOT PRICES	CALENDAR SPREAD	INVENTORIES	OPEC RESPONSE
Early cyclical upswing	Increasing Accelerating rate	Contango → Backwardation	High Falling	OPEC compliance weakens
Moving towards peak	Increasing Decelerating rate	Backwardation Widening	Moderate Falling	OPEC agreement dissolves
Peak	Level stabilising Extreme daily volatility	Backwardation Narrowing	Low Steadying	OPEC under pressure to raise output
Late cyclical breakdown	Decreasing Slowly	Backwardation → Contango	Moderate Rising	OPEC postpones decision on cuts
Slump	Decreasing Rapidly	Contango Widening	High Rising	OPEC agrees to cut production
Trough	Level stabilising Extreme daily volatility	Contango Narrowing	High Steadying	OPEC focuses on compliance

Global petroleum market cycle - production and consumption

CYCLICAL POSITION	OPEC PRODUCTION	NON-OPEC OUTPUT	CONSUMPTION
Early cyclical upswing	Output restraint Compliance weakens	Falling Decelerating rate	Growing above trend Low prices spur consumption
Moving towards peak	Restraint relaxed Compliance dissolves	Rising Accelerating rate	Growing above trend Economic expansion spurs use
Peak	No restraint Maximum output	Rising Rapidly (boom)	Growing below trend High prices inhibit consumption
Late cyclical breakdown	No restraint Pump at will	Rising Decelerating rate	Growing below trend High prices inhibit use
Slump	Fiscal crisis Cuts agreed	Falling Accelerating rate	Growing below trend Oil producers in recession
Trough	Cuts implemented Compliance high	Falling Rapidly (bust)	Growing above trend Low prices spur consumption

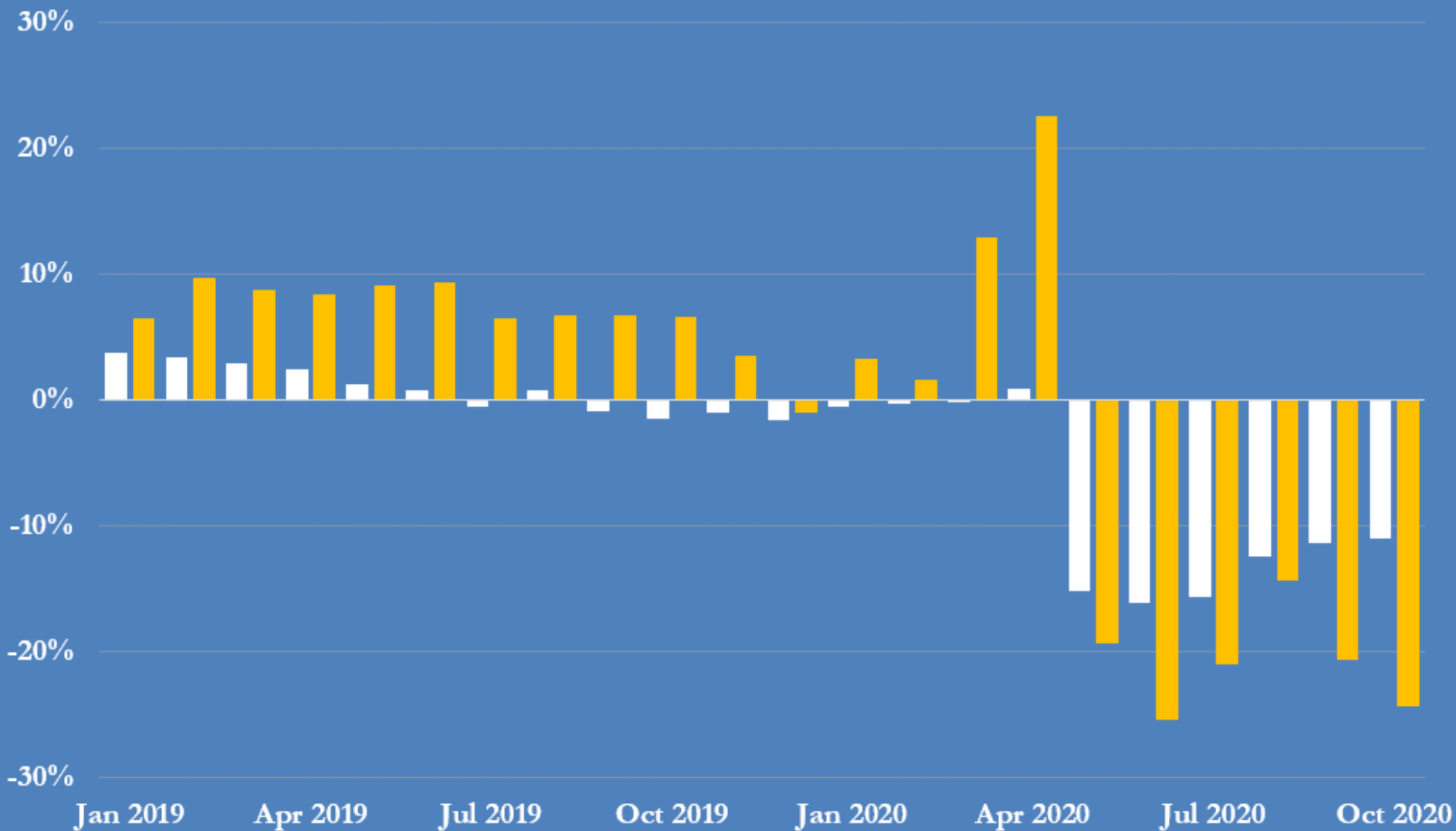
Saudi Arabia and United Arab Emirates crude output, 2019-20

monthly, percent change from prior year



Russia and United Arab Emirates crude output, 2019-20

monthly, percent change from prior year



■ Russia
■ United Arab Emirates

Source: U.S. Energy Information Administration
"Short-Term Energy Outlook"
@JKempEnergy