

Oil Markets: Recent Trends

TOTSA TotalEnergies Trading Research

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Oil prices retreated ahead of an US SPR release while facing US dollar headwinds

- Oil prices retreated even as OPEC+ refused to increment supply
- The US increased its rhetoric around an SPR release and called on other countries to participate
- The US officially announced an SPR release of 50 mb on 23 November. China, India, Japan, Korea and UK will participate. The market is now looking forward to OPEC+'s reaction.
- The US dollar has perked up with expectations of an early lift-off in the Fed Funds rate as US inflation is running high
- Recent Covid developments in Central Europe (Germany, Austria) and China have dented expectation around the pace of oil demand recovery



OPEC+ sticks to its July plan of monthly 400 kb/d supply increases

- The producer group keeps to its original plan, rebuffing once again calls by the US to increment supply
- OPEC+ is concerned about inventory builds in 2022: China's activity slowdown and Covid-related restrictions affect demand in the short term while a projected rise in US production and a potential return of Iran will boost oil supply.
- Saudi Arabia in particular is very cautious in how much oil to return to the market without generating stock builds
- The producer group meets again on 2 December



Gas prices ease, but still remain high in Europe – winter weather will determine impact

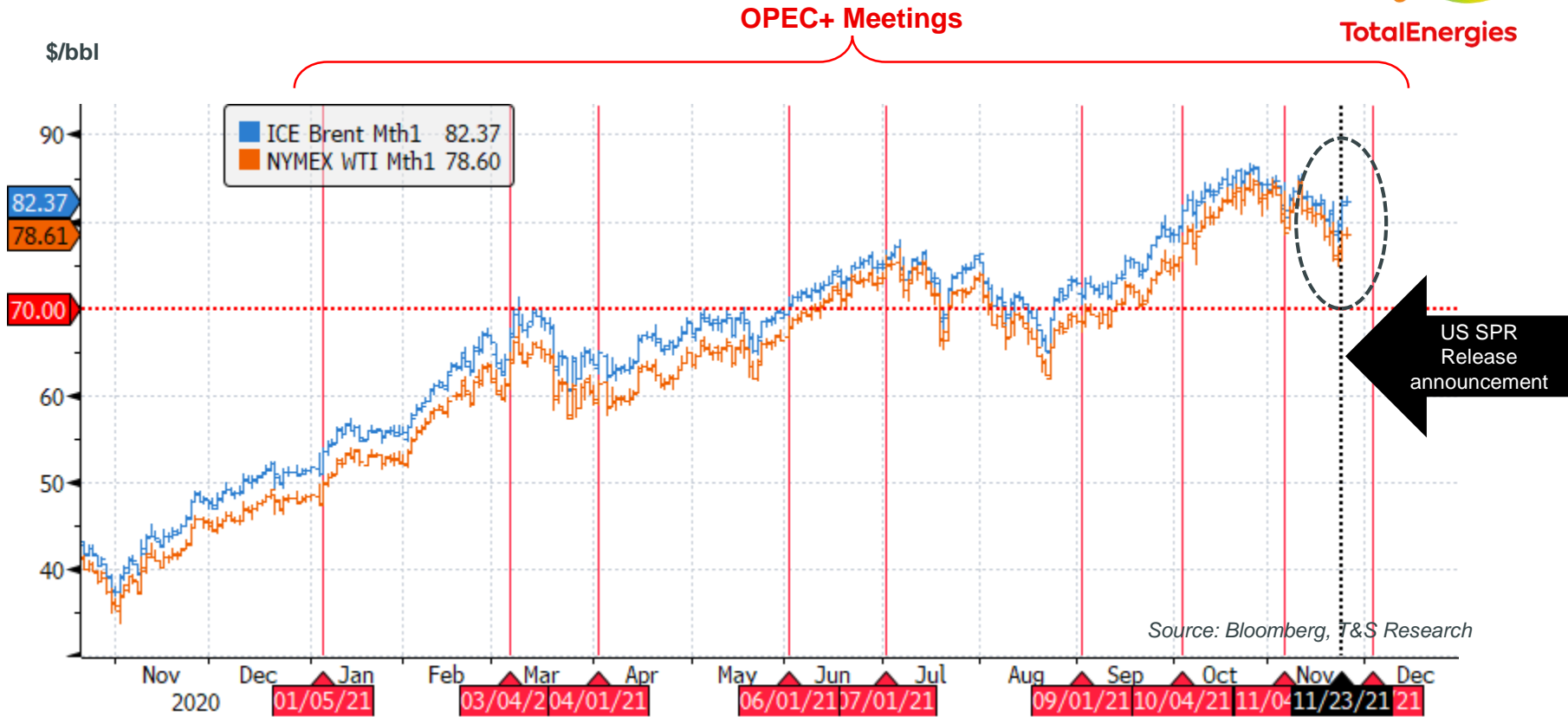
- Natural gas prices pulled back from recent highs, but still remain elevated in Europe, notably in absence of an increase of Russian supply and delays in the accreditation of the Nord Stream II pipeline
- Expectations around the amount of gas-to-liquids substitution have moderated, but much will depend on the weather
- High gas prices weigh on European refining margins (through their impact on hydrogen costs) even as product cracks were until recently well supported



Oil Balance: a tight 4Q 2021 with draws in oil stocks to extend to the first half of 2022

- In 4Q 2021: oil products are expected to draw while crude stocks are forecast to build
- The trend in crude stock builds is looking to continue through to 2Q 2022, while products draw through 2022
- Supply chain bottlenecks remain an issue across the world. An economic growth slowdown in China and Covid-related mobility restrictions carry downside risk to the global oil demand recovery in the first half of 2022.

Oil prices retreat ahead of US SPR release



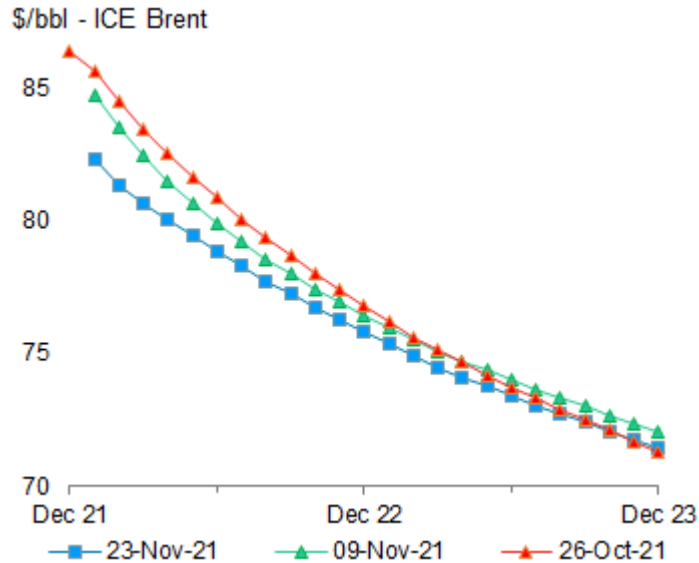
Oil prices ease ahead of an US SPR, faces US dollar headwinds

- The oil market looked past OPEC+'s decision to maintain its current supply policy to focus on a potential US SPR release
- On 23 November, the US announced a 50 mb release strategic stock
- Oil prices moved higher after the SPR announcement, potentially with the view that OPEC+ might respond by pausing its scheduled monthly increases in production and/or the release was too small to affect the global oil balance in Q1 2022
- Oil in November also faced the headwinds of stronger US dollar and signs of slowing economic growth in China
- Covid-related concerns in central Europe and China also contributed to retreat in oil prices from recent highs

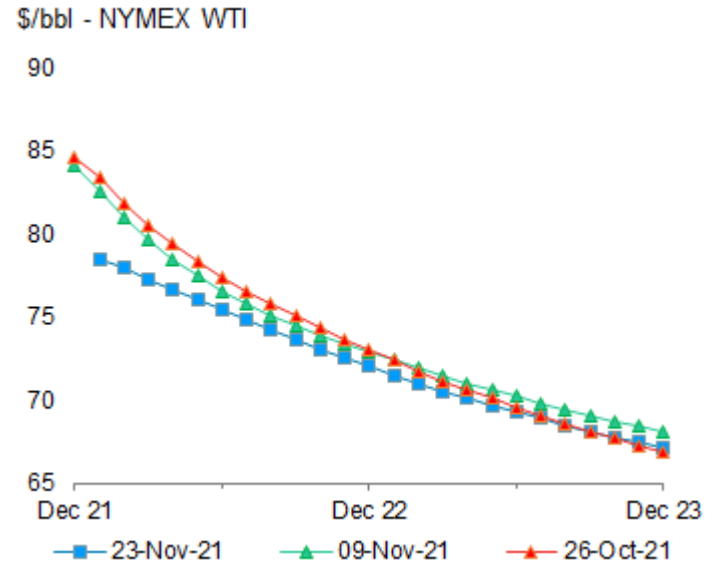
Back end of the curve has not moved as much as front end



ICE Brent



NYMEX WTI



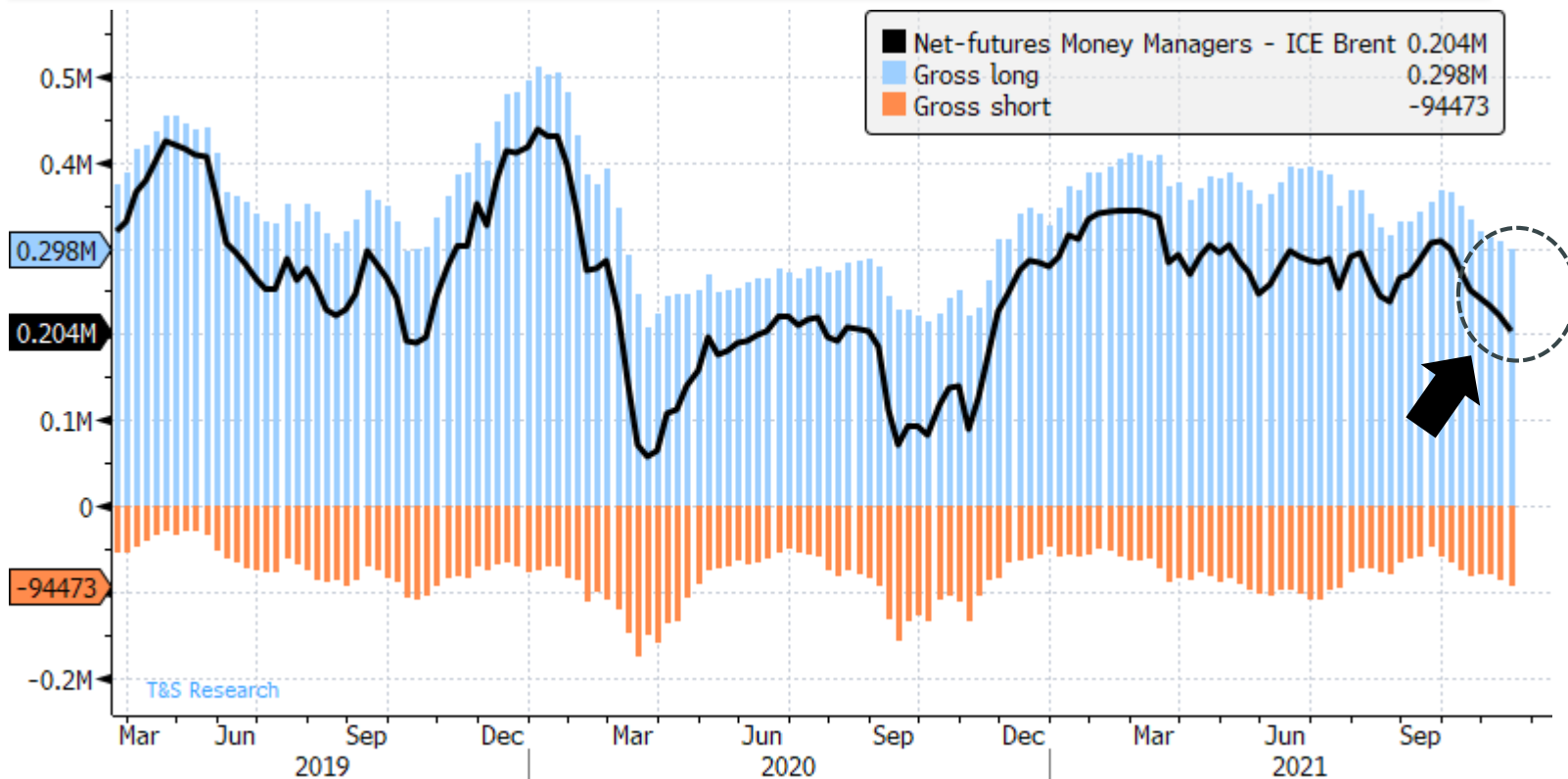
Source: Bloomberg, T&S Research

Prompt oil structure in backwardation as OPEC rations supply return to the market

- The oil futures curves remains in backwardation as OPEC+ chooses to return supply to the market at a measured pace.
- The level of crude oil stocks in both Europe and the US is currently at, or below the lower limit of their recent 5-year range
- More recently, the slope of the backwardation has been easing in anticipation of a SPR release in the US
- Longer dated prices remain well supported. Lower capex and oil demand recovery require that long-dated prices must remain sufficiently high to incentivise future supply

Funds reduce exposure on Brent

Funds net futures positioning: ICE Brent

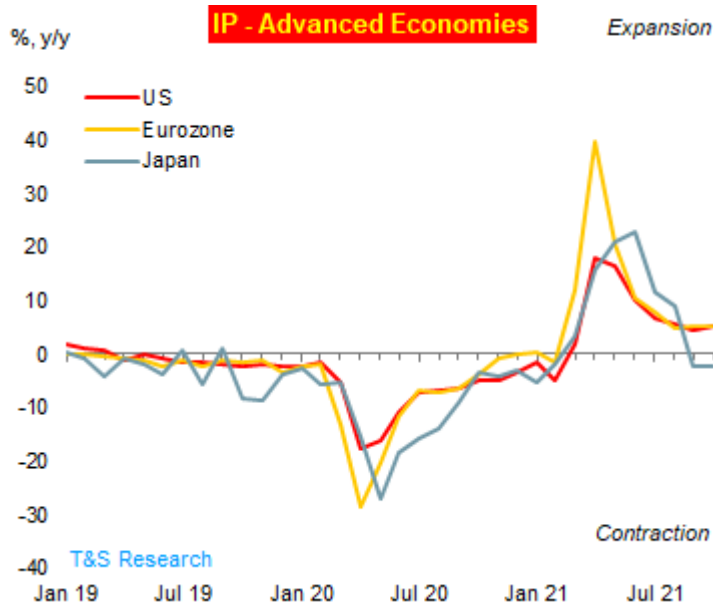


Hedge funds: reducing net-long exposure to ICE Brent futures

- Even before the US administration raised the rhetoric around a strategic stock release, funds on the ICE Brent contract have been paring their net-long futures position on demand concerns and signs of economic slowdown, notably in China.
- The reduction in exposure comes mainly through the **reduction in gross long positions**, rather than the additions in short positions, **suggesting prudence** rather than an outright shift in money manager sentiment

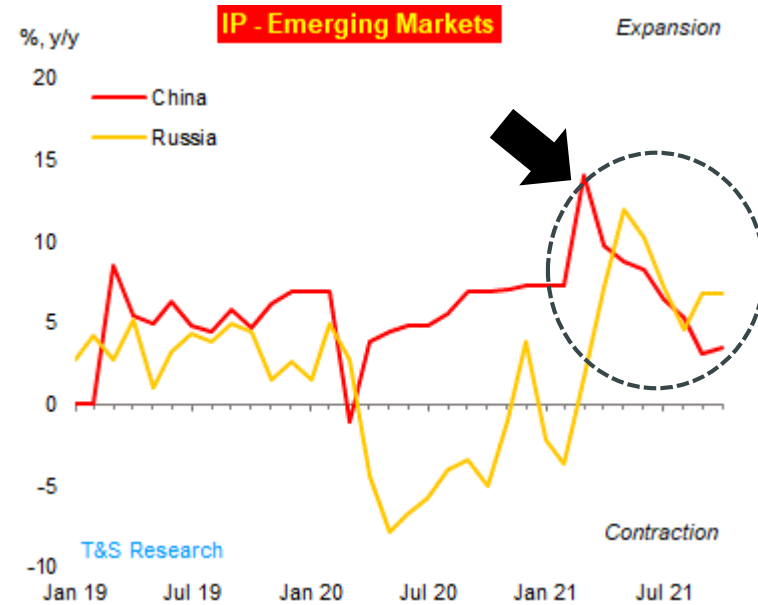
Industrial production – watch out for China

IP growth y/y, % - selected advanced economies



Source : Bloomberg, T&S Research

IP growth y/y, % - selected emerging markets

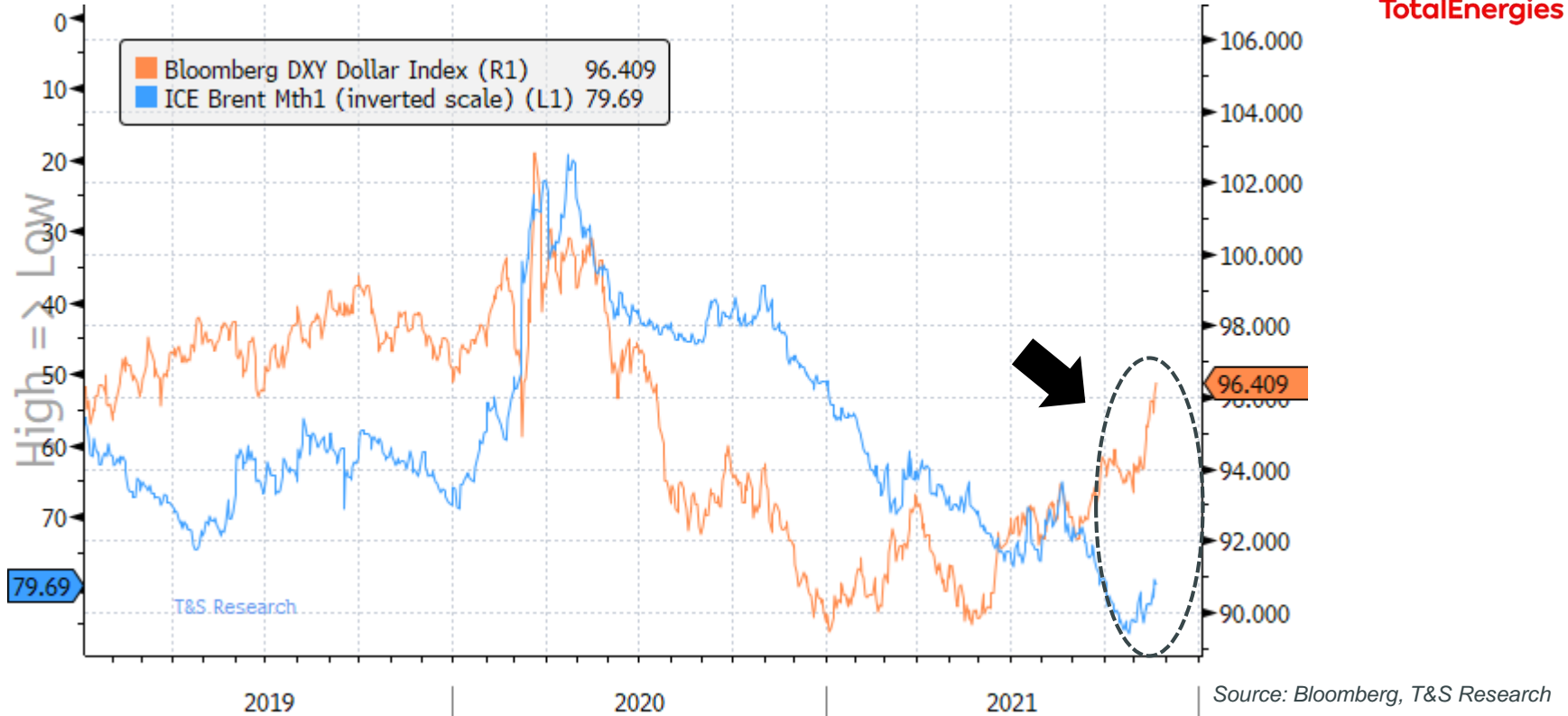


Source : Bloomberg, T&S Research

Despite a bounce back in China's IP in October thanks to mining, manufacturing is still sluggish

- China's October industrial output proved better than expected but mostly because supply shortages in coal and electricity abated following the implementation of extraordinary measures.
- Manufacturing output growth edged slightly higher to 2.5% y/y vs 2.4% in September
- China's fixed asset investment growth slowed, notably in infrastructure and property sectors.
- IP y/y growth in advanced economies has considerably slowed by mid-2021, but growth rates appear to have stabilized

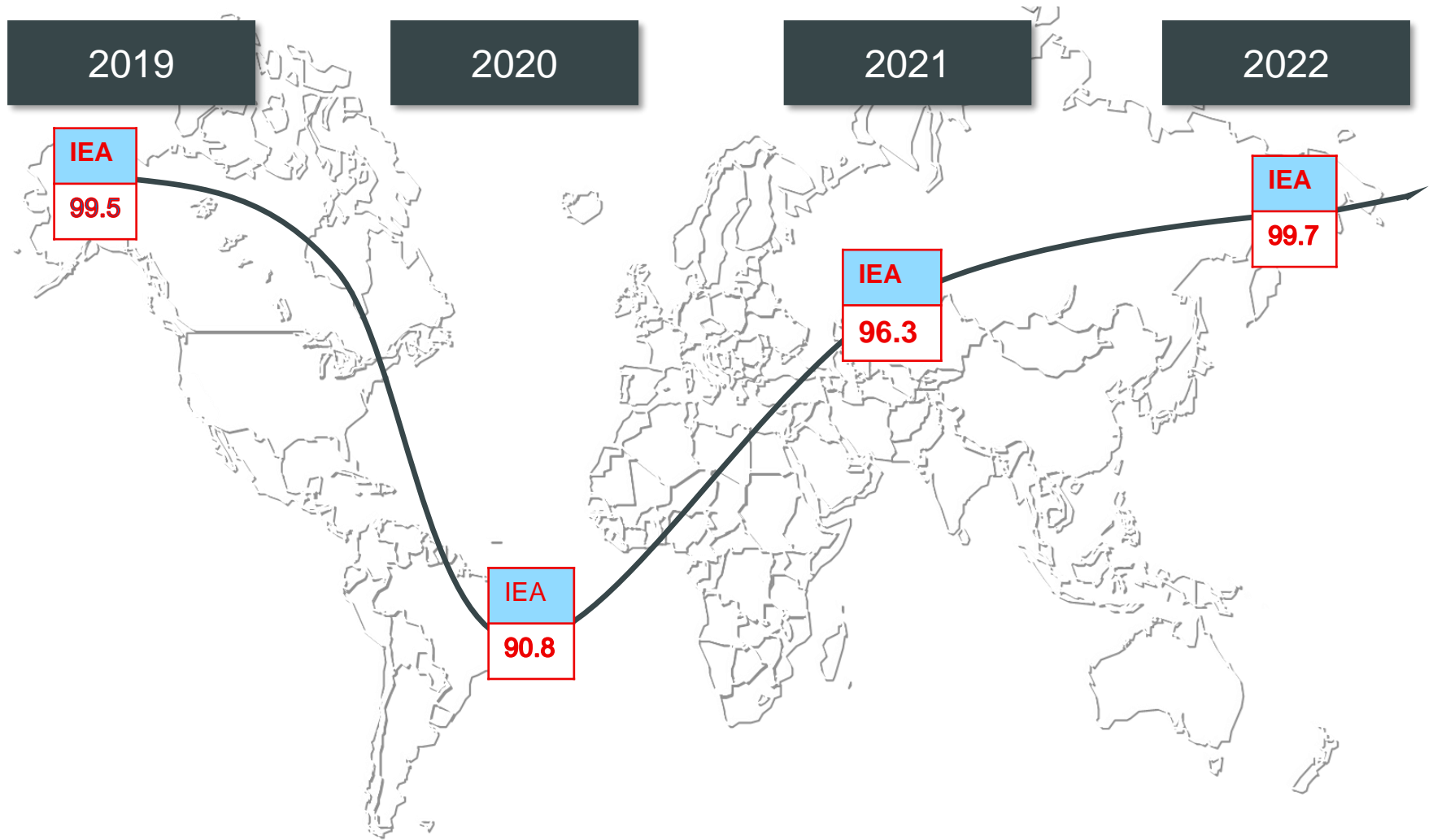
US dollar rises on expectation of higher US yields



US monetary policy and the inflation scare

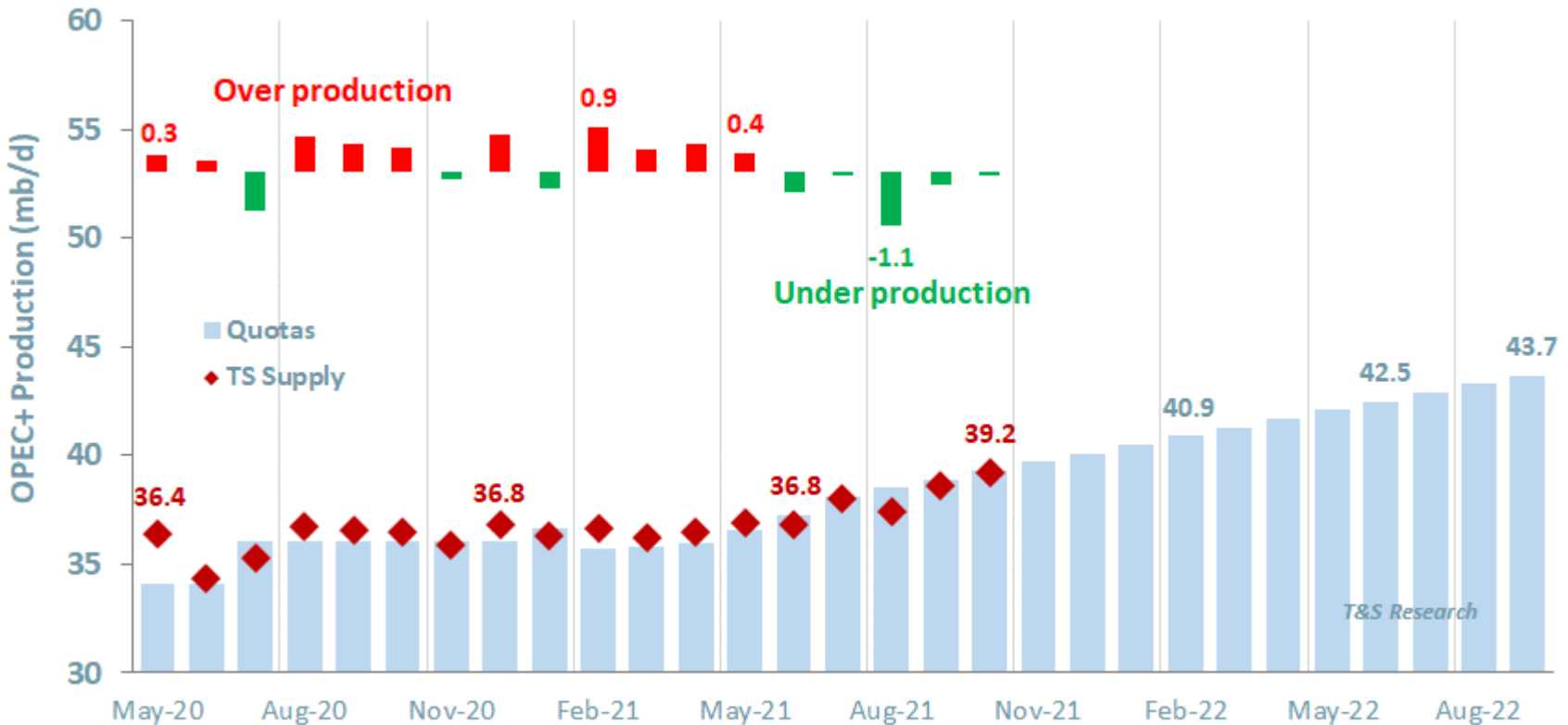
- The Fed is going to taper net-asset purchases, ending these by mid-2022
- With high US inflation, expectations are growing for an earlier hike of the Fed's fund rate, which in turn should push US Treasury yields higher. In expectation of this development, the US dollar (USD) has been strengthening.
- Further appreciation of the USD with the help of higher US yields is expected to generate more headwinds for oil prices

Global oil demand view: T&S Research and IEA



Source: IEA, T&S Research

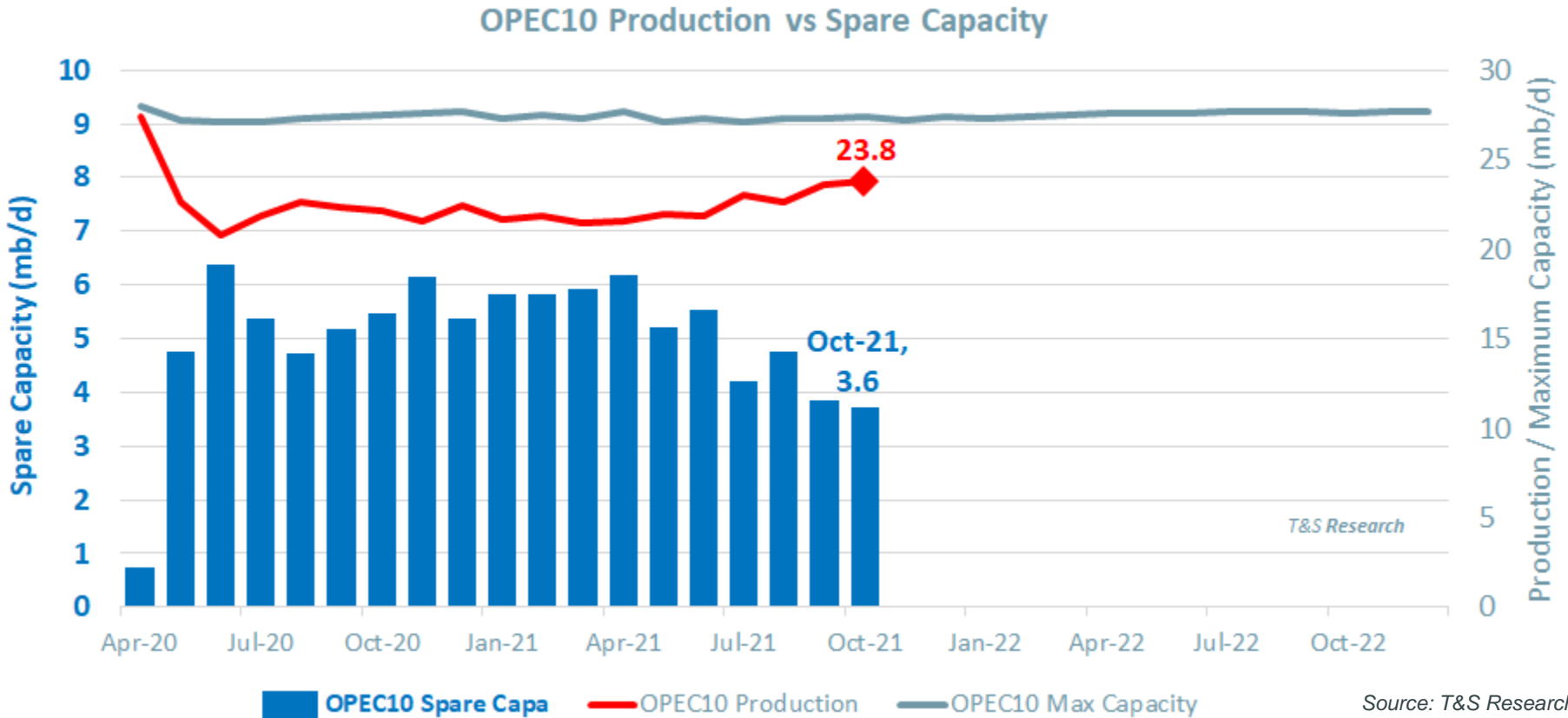
OPEC+ forecasted vs. planned production: the producer group is falling short of scheduled supply increases



OPEC+ continues to stay the course and increase quotas by 400 kb/d on monthly basis till April next year

- Insistent calls for more supply from consuming countries fell on deaf ears at OPEC+'s November meeting
- Saudi Arabia rebuffed consumer countries claims arguing that higher oil prices were connected to spiraling natural gas prices
- Some OPEC+ members are struggling to rise output to quota levels, but it is unlikely that other members with spare capacity will fill the gap of their peers

OPEC: spare capacity to become an issue in mid-2022



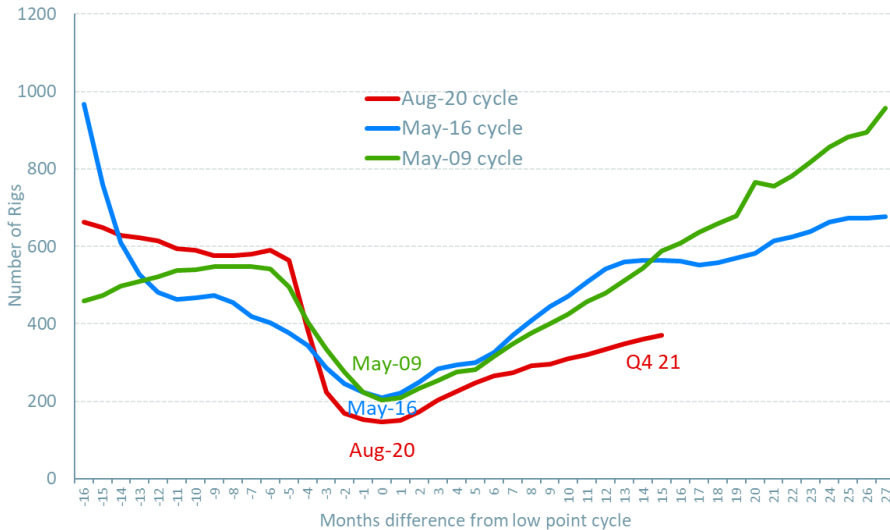
OPEC spare capacity dwindles in 2022 against a backdrop of lower global oil inventories

- OPEC10 spare capacity gradually is expected to decline significantly from 3.6 mb/d in Oct-21 in H2 2022 as output continues to rise
- The 2022 spare capacity is in the hands of only a few OPEC 10 members, such as Saudi Arabia and the UAE
- Despite a higher oil prices, it will be difficult for countries such as Nigeria, Angola or Kuwait to raise their production capacity

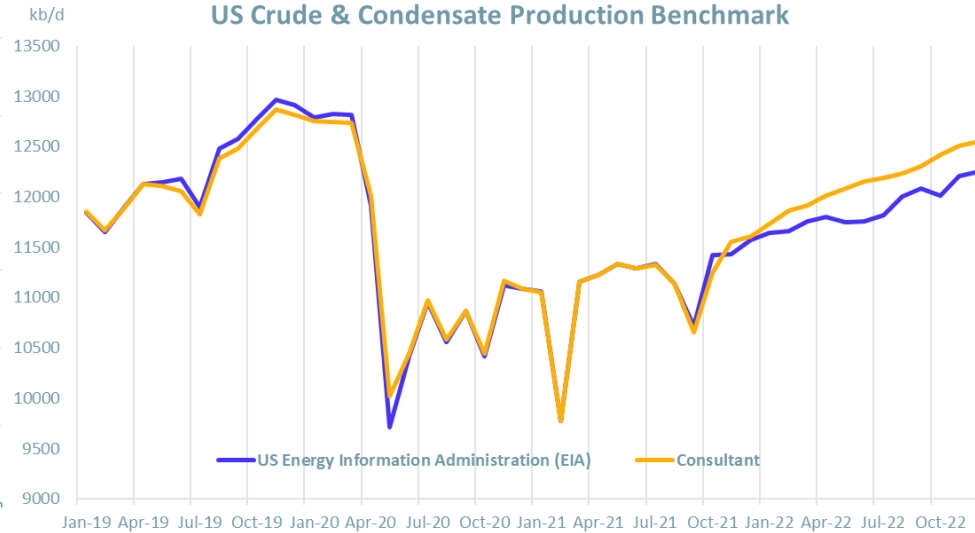
US oil output: extended capital discipline suggest an increase in supply in H2 2022



US Shale - Number of Rigs Centered on 3 Cyclical Lows



US Crude & Condensate Production Benchmark



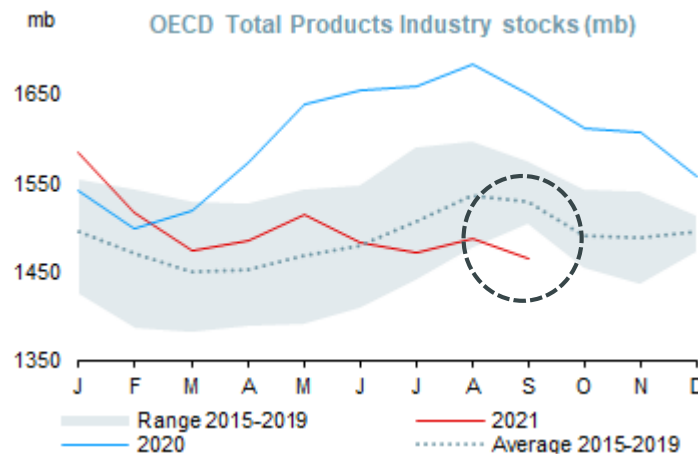
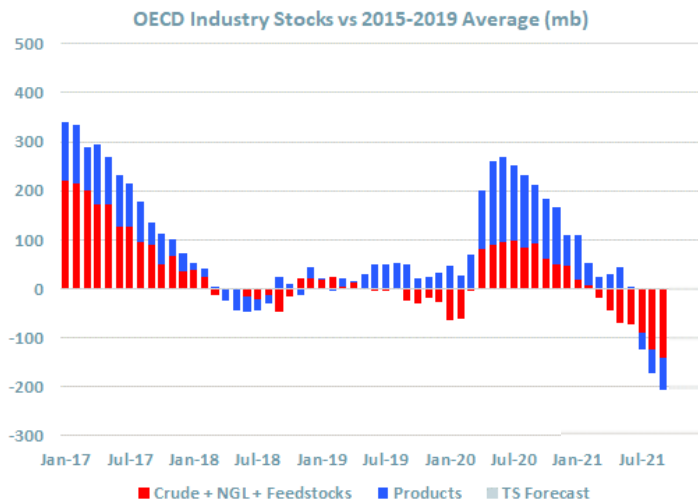
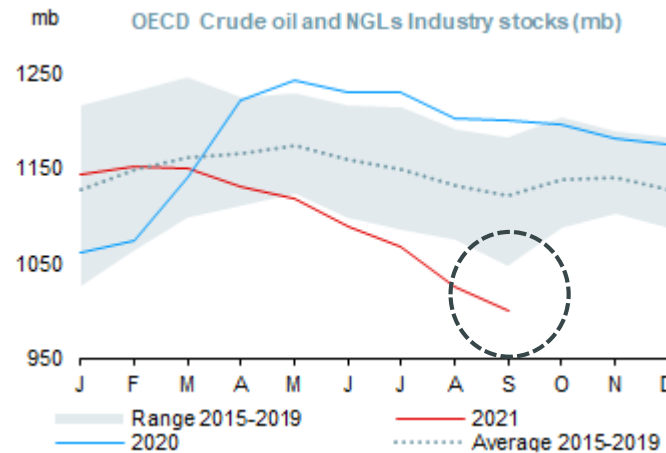
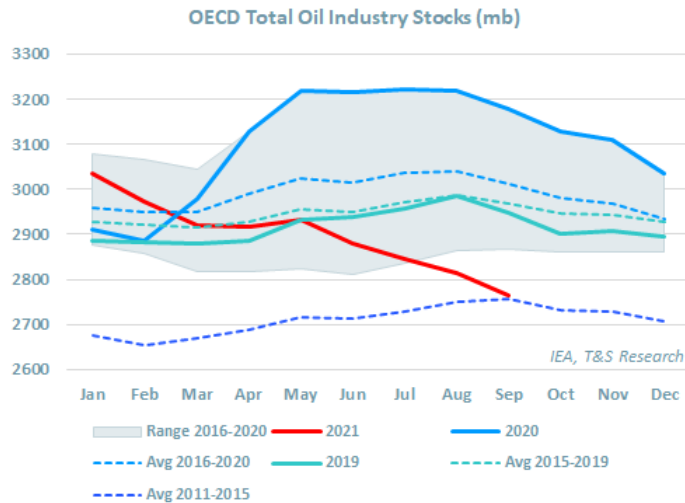
Source: T&S Research

US output continue to rely on the on the inventory of previously drilled wells

- Sustaining US production continues to rely on the inventory of previously drilled wells, rather than the drilling of new wells as capital discipline continues to guide spending decision of larger listed oil companies involved in shale production
- Shortages in drilling and fracking crews contribute to only a modest increase in our US output forecast through Q2 2022
- We assume that a significant rise in the number of rigs to take place after Q2 2022
- 2022 production is expected to rise based on strong improvements in the rigging activities pace

OECD oil stocks draw further in September

Deficit is wider in crude oil than in product stocks

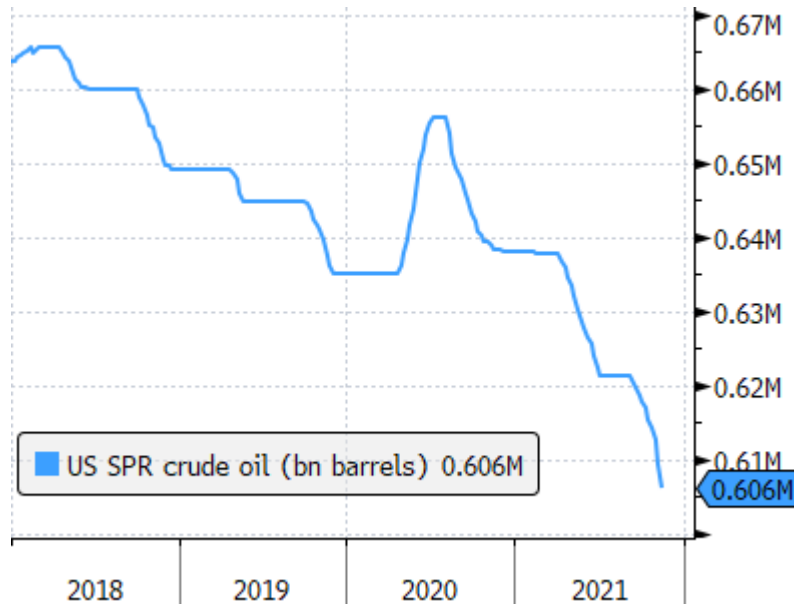


Source: IEA, T&S Research

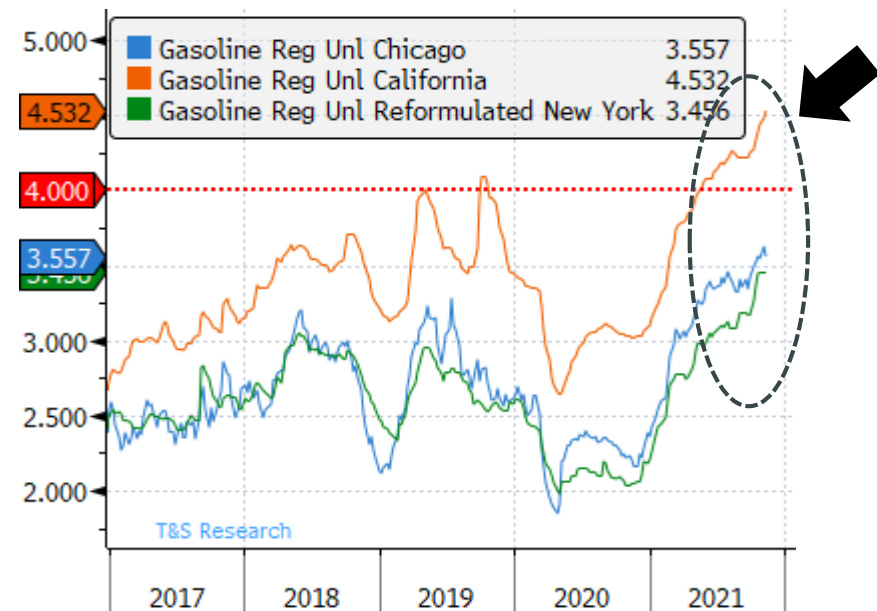
The US taps its strategic oil reserve (SPR) aided by China, India, Japan, Korea and UK



US SPR crude oil stocks (billion barrels)



US average retail price gasoline (\$/gal)

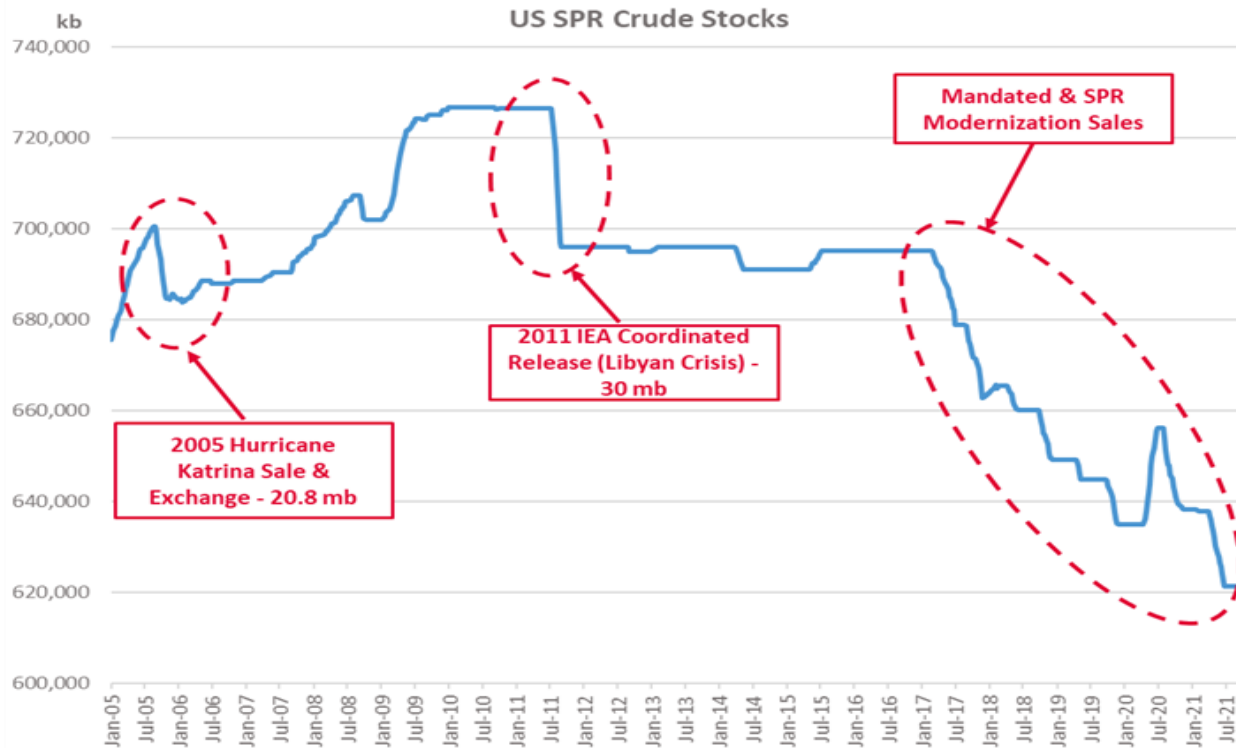


Source: Bloomberg, T&S Research

US organizes a coordinated release of oil from strategic stocks

- On 23 November, the US announced that it will release 50 mb of oil from its SPR in a coordinated move with China, Japan, India, Korea and the UK. At the time of writing, India was reported to contribute 5 mb and China some 7.3 mb.
- Of the US's 50 mb release, 18 mb of release was already scheduled for sale this fiscal year
- The release is political move for the Biden administration. Many experts have cautioned against its ineffectiveness to address high gasoline prices.
- Biden may still explore other policy options to tame high oil prices, including a ban on oil exports or relaxing fuel standards.
- Oil stored in the SPR has been declining since 2018 with in line with Congressional / Executive Decisions to mandate sales for budgetary purposes (non-Emergency sales) or emergency releases and swaps with weather related supply disruptions

The US SPR release – how will it work?



Source: US EIA, T&S Research

Oil released will be mostly swapped (on loan) – oil will need to be returned

- 32 mb will be an exchange over the next several months. These are similar to loans where exchange contracts provide for a loan of crude oil to be repaid, in kind, within a certain date, with additional premium barrels akin to interest. The most recent of such exchanges took place in September in the aftermath of Hurricane Ida.
- 18 mb will be an acceleration into the next several months of a sale of oil that Congress had previously authorized. This sale is part of the 2018 Budget Act (30 mb of sales from FY22-FY25), 12 mb of which have already been sold in an FY22 fall tender
- This release will be different from the previous release in 2011, which was part of a coordinated IEA release while President Obama signed an executive order to release 30 mb of SPR crude amidst the Libyan crisis. It is more of an accelerated release of mandated sales along with exchange agreements



Appendix

US SPR time line of releases (II)



Four types of releases of oil from the SPR

- **Emergency releases** are used as an emergency response to a disruption in oil supplies.
- **Crude Oil Test Sales** are conducted to ensure the readiness of the Reserve
- **Exchange Agreements** can be made with private companies during supply disruptions.
- **Non-Emergency Sales** are authorized to respond to lesser supply disruptions or to raise revenues.

SPR releases by US fiscal year (12 months running from 1 October to 30 September the following year)

- **FY 2018 Mandated Sales (Non-Emergency Sales)** – DOE offered 9 mb of crude oil as required under Section 5010 of the 21st Century Cures Act for FY 2018. Under Section 403 of the Bipartisan Budget Act of 2015, the Secretary of Energy is directed to draw down and sell a total of 58 mb of crude oil from the SPR, over eight consecutive FYs, commencing in FY 2018. Of this amount, DOE offered 5 mb as required for FY 2018.
- **FY 2018 SPR Modernization Sale (Non-Emergency Sales)** – Section 404 of the Bipartisan Budget Act of 2015 authorizes the Secretary of Energy to draw down and sell up to \$2 billion of SPR crude oil, for fiscal years (FY) 2017 through 2020, to carry out an SPR modernization program. On February 9, 2018, a Continuing Resolution was passed that included a provision to allow DOE to sell up to \$350 million worth of crude oil from the SPR, to carry out the SPR Life Extension Phase II project—a component of the SPR modernization program. A total of 4.74 mb, raising \$347.8 million, was delivered in April and May 2018.
- **FY 2019 Mandated Sales (Non-Emergency Sales)** – DOE offered 6 mb of crude oil as required under Section 5010 of the 21st Century Cures Act for FY 2019 and 5 mb Under Section 403 of the Bipartisan Budget Act of 2015 for FY 2019.

Source: T&S Research

US SPR time line of releases (II)



- FY 2019 SPR Modernization Sale (Non-Emergency Sales) – A total of 4.2 mb, raising \$300 million were sold in FY 2019 under Section 404 of the Bipartisan Budget Act of 2015.
- FY 2020 Mandated Sales (Non-Emergency Sales) – The Consolidated Appropriations Act of 2018 directs the Secretary of Energy to draw down and sell a total of 10 mb of SPR crude oil in the years 2020 and 2021. Of this amount, DOE sold up to 5 mb in FY 2020. Another 5 mb was sold under Section 403 of the Bipartisan Budget Act of 2015.
- FY 2021 Mandated Sales (Non-Emergency Sales)
- 2021 Hurricane Ida Exchange (Exchange Agreement) – As hurricane Ida caused supply disruptions in the USGC, SPR loaned 1.5 mb and 300 kb of crude oil to ExxonMobil Baton Rouge and Placid Port Allen refineries respectively under an exchange agreement.
- FY 2022 Mandated Sales (Non-Emergency Sales)

Source: T&S Research

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