

Global Energy Weekly

A slow grind oil price war

OPEC+ decided to return another 411k b/d to market

For the second consecutive month, OPEC+ has accelerated the return of oil production to market, delivering another 411 thousand b/d increase for the month of June. Since some members are already producing oil above quotas and some members may struggle to increase it from here, this means net output may increase by about 170 thousand b/d from the current levels, much lower than the headline number. Still, the oil market is poised to remain oversupplied and we believe Brent may average \$62/bbl for the balance of the year compared to \$80 last year. And of course, macro tensions also mean that oil prices could temporarily sink to \$50/bbl [as trade war and price war collide](#).

Why is OPEC+ adding oil barrels to a sinking market?

So why is Saudi adding more oil production into a sinking market? The Kingdom has long stated a desire to recover its fair share of the oil market. Its share has fallen relative to the US and also relative to OPEC+ for years. Plus, Saudi spare production capacity is high and set to increase as the country moves to renewables. There is a strong economic logic behind the planned return of idle output. True, cheating by other members may also be playing a role in the decision to speed up the return of barrels, with OPEC+ cohesion sitting at relatively low levels. One more factor at play: lower energy prices could help offset about half of the inflation impact from tariffs on the US economy.

What did we learn in previous OPEC price wars?

Looking back at history, we note OPEC has fought multiple price wars in the past half century, but they all differ. In 1998, internal cohesion broke down in a “kitchen sink” price war that sent oil to \$10/bbl as the Asian financial crisis deepened. In a “protracted” price war during 2014-16, demand held up but OPEC drove down prices until US high yield issuance dried up for the energy sector and companies changed behavior. The more recent “fast and furious” price war of 2020 was very different from previous episodes. Saudi crude supply surged dramatically as COVID hit, imposing discipline across the group by brute force within weeks after WTI oil prices went negative.

In our view, we are entering a “slow grind” oil price war

The length and depth of the price war will depend on whether the main driver behind the OPEC+ production increase is: (1) a market share grab, (2) a discipline action from the group leader, or (3) a play to help bring down US inflation. Because we believe market share and inflation carry a higher weight, we also think this price war could be long. Yet we would also highlight that the Saudi government budget oil breakeven price is \$90+/bbl and that US shale supply could start to roll over with Brent below \$60/bbl. As such, long dated Brent prices could remain anchored in a \$60-\$80/bbl band as prompt prices eventually drop below \$60/bbl and oil flips into contango. In turn, a contango market could potentially act as a signal to slow down the return of more OPEC+ volumes. But if the price war persists, our 2026 \$70/bbl Brent forecast will be at risk.

07 May 2025

Commodities
GlobalGlobal Commodity Research
BofA Europe (Madrid)**Francisco Blanch**
Commodity & Deriv Strategist
BofA Europe (Madrid)
+34 91 514 3070**Andy Pham**
FICC Quant Strategist
BofAS
apham3@bofa.com**Rachel Wiser**
Commodity Strategist
BofAS
+1 646 743 4069**Michael Widmer**
Commodity Strategist
MLI (UK)
+44 20 7996 0694

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Refer to important disclosures on page 16 to 17.

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Exhibit: BofA Global Research Commodity Themes and Outlook

Key takeaways

| | View | Recent reports |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Macro outlook | ■ Our economists see world GDP rising 3.2% in 2025 and 3.3% in 2026. | |
| WTI and Brent crude oil | <ul style="list-style-type: none"> ■ We project Brent and WTI to average \$70/bbl and \$66/bbl, respectively, in 2025. ■ The global oil market should shift into a small surplus in 2025 as demand growth slows and OPEC+ begins to ramp up production, offsetting the impact of sanctions elsewhere. ■ We forecast global demand growth of ~900k b/d YoY in 2025 and 1.2mn b/d in 2026. ■ Non-OPEC supply should grow roughly 1.2mn b/d YoY in 2025 and 1.1mn b/d in 2026. ■ We project total US crude and NGL supply to rise 550k b/d in 2025 and 360k b/d in 2026. ■ OPEC crude oil supplies should remain flat in 2025 and fall by 150k b/d in 2026. | <ul style="list-style-type: none"> • The fallout of peak American exceptionalism 11 March 2025 • Punitive actions limit downside risks to oil 27 January 2025 • Sanctions give oil bears a break 13 January 2025 |
| Atlantic Basin oil products | <ul style="list-style-type: none"> ■ Refined product markets face risks from OPEC+ cuts, slowing demand growth, and the pace of global refining capacity growth. ■ Global refining capacity growth of 1.13mn b/d in '24 and 730k b/d in '25 to overwhelm oil demand next year, weighing on margins. ■ We forecast RBOB-Brent to average \$12/bbl in 2025, and we see ULSD-Brent cracks averaging \$19/bbl over the same period. | <ul style="list-style-type: none"> • Refining's platinum age comes to a close 18 October 2024 • Oil demand on the rocks 14 June 2024 |
| US natural gas | <ul style="list-style-type: none"> ■ US gas supply and demand growth should hit 2.8Bcf/d and 4.1Bcf/d YoY in 2025, keeping stocks below 3.6Tcf at the end of October. ■ We forecast US Henry Hub natural gas prices will average \$4.64/mmbtu in 2025 and rise to \$4.50/mmbtu in 2026. | <ul style="list-style-type: none"> • Enough isn't enough yet for gas E&Ps 18 March 2025 |
| LNG | <ul style="list-style-type: none"> ■ Global gas markets have tightened considerably heading into 2024/25 winter and are subject to upward price shocks if cold weather or further geopolitical escalation materialize. ■ LNG supply is set to rise 22mn mt YoY in 2025 and 28mn mt in 2026 and we expect Europe to boost import by 15mn mt next year, leaving little room for demand growth elsewhere. ■ We forecast TTF prices to average 40EUR/MWh in 2025 and 35EUR/MWh in 2026. | <ul style="list-style-type: none"> • EU gas does away with the seasons 09 December 2024 • Full storage is false comfort for EU gas 22 August 2024 |
| Thermal coal | <ul style="list-style-type: none"> ■ Spot and forward thermal coal prices rallied this year as seaborne supply ex-Indonesia struggled to expand. ■ While OECD countries are prioritizing clean energy, EMs are poised to further grow coal-fired power gen. ■ With demand set to hold and inventories in a normal range, we keep our Newcastle forecast of \$125/t for 2025. | <ul style="list-style-type: none"> • The down and dirty truth about coal 14 October 2024 • Coal: still dirty, but no longer cheap 12 March 2024 |

Source: BofA Global Research estimates

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Exhibit 1: BofA Global Research Commodity Price Forecasts

BofA Global Research estimates

| | units | 2024 | 1Q25F | 2Q25F | 3Q25F | 4Q25F | 2025 | 1Q26F | 2Q26F | 3Q26F | 4Q26F | 2026 |
|--------------------------------------------------|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| WTI Crude Oil | (\$/bbl) | 76 | 71 | 54 | 57 | 62 | 61 | 64 | 66 | 66 | 68 | 66 |
| Brent Crude Oil | (\$/bbl) | 80 | 75 | 58 | 61 | 66 | 65 | 68 | 70 | 70 | 72 | 70 |
| US NY Harbor ULSD (HO) Cracks to Brent Crude Oil | (\$/bbl) | 23 | 20 | 18 | 19 | 19 | 19 | 20 | 20 | 20 | 20 | 20 |
| US RBOB Cracks to Brent Crude Oil | (\$/bbl) | 17 | 11 | 16 | 13 | 8 | 12 | 12 | 17 | 15 | 9 | 13 |
| NWE Low Sulphur Gasoil Cracks to Brent Crude Oil | (\$/bbl) | 20 | 16 | 14 | 14 | 14 | 15 | 15 | 16 | 16 | 16 | 16 |
| NWE Eurobob Cracks to Brent Crude Oil | (\$/bbl) | 13 | 5 | 10 | 10 | 5 | 8 | 9 | 12 | 11 | 6 | 10 |
| NWE 1% Residual Cracks to Brent Crude Oil | (\$/bbl) | -6 | -5 | -5 | -5 | -5 | -5 | -5 | -5 | -5 | -5 | -5 |
| NWE 0.5% Residual Cracks to Brent Crude Oil | (\$/bbl) | 5 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| NWE 3.5% Residual Cracks to Brent Crude Oil | (\$/bbl) | -10 | -11 | -11 | -11 | -13 | -12 | -13 | -11 | -11 | -13 | -12 |
| US Natural Gas | (\$/MMBtu) | 2.41 | 3.90 | 4.15 | 4.75 | 5.75 | 4.64 | 5.00 | 4.15 | 4.35 | 4.50 | 4.50 |
| Thermal coal, Newcastle FOB | (\$/t) | 150 | 125 | 125 | 125 | 125 | 125 | 112 | 112 | 112 | 112 | 112 |
| Aluminium | \$/t | 2420 | 2763 | 2350 | 2300 | 2500 | 2478 | 2750 | 3000 | 2750 | 3000 | 2875 |
| Copper | \$/t | 9,150 | 9,216 | 9,000 | 8,250 | 9,000 | 8,866 | 9,500 | 9,750 | 10,500 | 11,000 | 10,188 |
| Lead | \$/t | 2,071 | 1,861 | 1,800 | 1,600 | 1,750 | 1,753 | 2,024 | 2,024 | 2,024 | 2,024 | 2,024 |
| Nickel | \$/t | 16,829 | 15,551 | 15,000 | 16,000 | 16,500 | 15,763 | 18,000 | 18,000 | 18,000 | 18,000 | 18,000 |
| Zinc | \$/t | 2,778 | 2,582 | 2,500 | 2,100 | 2,500 | 2,420 | 3,000 | 3,000 | 2,750 | 2,750 | 2,875 |
| Gold | \$/oz | 2387 | 2850 | 2900 | 3200 | 3300 | 3063 | 3400 | 3400 | 3300 | 3300 | 3350 |
| Silver | \$/oz | 28 | 32 | 34 | 36 | 40 | 35 | 43 | 43 | 45 | 45 | 44 |
| Platinum | \$/oz | 956 | 969 | 950 | 920 | 900 | 935 | 920 | 920 | 900 | 900 | 910 |
| Palladium | \$/oz | 984 | 961 | 930 | 880 | 880 | 913 | 850 | 830 | 800 | 800 | 820 |

Source: Bloomberg, BofA Global Research estimates

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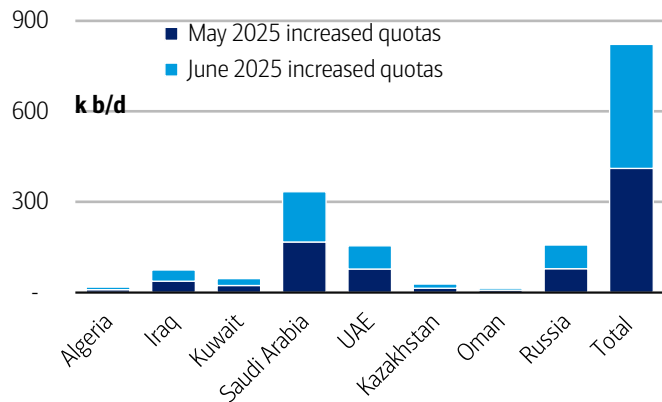
A slow-grind price war

OPEC+ decided to return another 411k b/d to market...

For the second consecutive month, OPEC+ has accelerated the return of oil production to market as agreed to in June 2024 (Exhibit 2), delivering another 411 thousand b/d increase for the month of June 2025. The headline number is once again in excess of the likely net increase that the group will deliver due to the fact that some members are already producing oil above quotas. This means output will likely increase by just 390 thousand b/d from March through June (Exhibit 3), not by the headline 1mn b/d.

Exhibit 2: OPEC+ recent quota increases

For the second month, OPEC+ has accelerated the return of oil production to market agreed in June last year

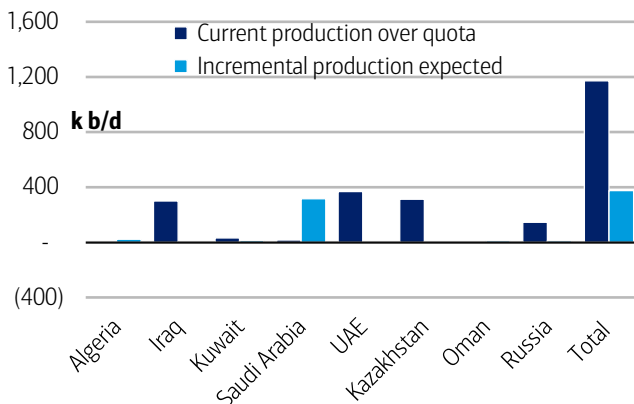


Source: OPEC, BofA Global Research estimates

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Exhibit 3: Estimated OPEC+ production over quota and incremental OPEC+ production expected

Since some members are above quotas, this means output will likely increase by about 390 thousand b/d from March through the end of June



Source: OPEC, BofA Global Research estimates

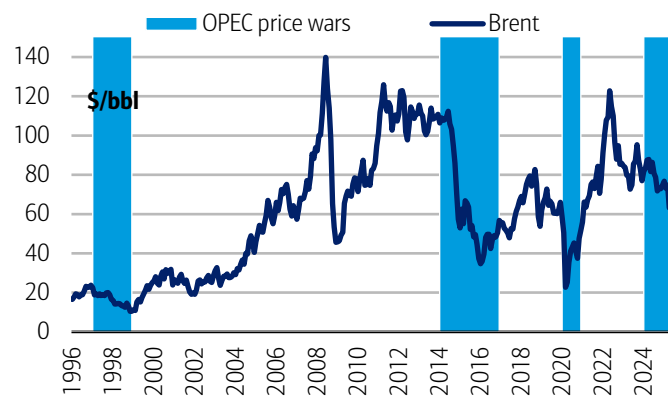
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...further pushing Brent crude oil prices below \$60/bbl

As it happened in previous price wars, oil prices have fallen rapidly on the increased OPEC+ crude oil volumes (Exhibit 4). The expectation of increasing production levels from both OPEC+ and non-OPEC nations over the coming months creates an increasing risk of a glut in 2H25, although the relatively low levels of inventories have so far prevented the Brent market from flipping from backwardation in near dated contracts into full contango (Exhibit 5).

Exhibit 4: Brent oil price and prior OPEC price wars

As it happened in previous price wars, oil prices have fallen rapidly on the increased OPEC+ crude oil volumes...

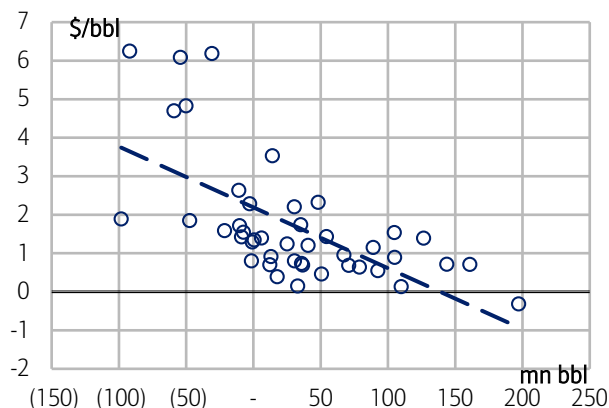


Source: Bloomberg, BofA Global Research estimates

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Exhibit 5: Monthly average Kayros global crude oil inventories difference to five year avg versus Brent 1-3 month timespreads

...although the relatively low levels of inventories have so far prevented the Brent market from flipping into contango



Source: IEA

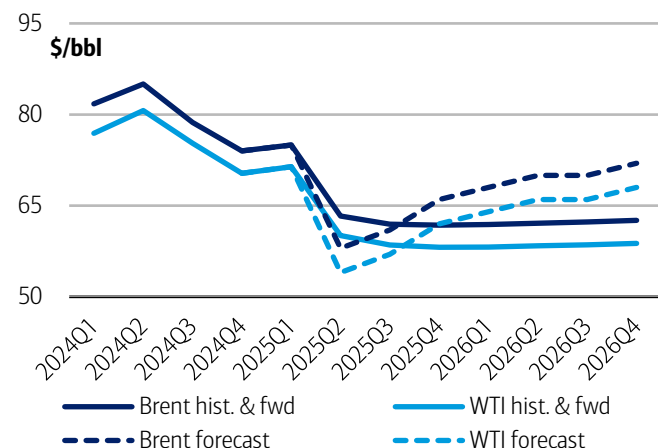
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Brent may near \$58/bbl in 2Q25, but 2H25 risks rising...

Still, if OPEC+ continues to add barrels to the market as planned, the Brent crude oil market may not be in backwardation for long. Our projected path continues to show a drop in Brent crude oil prices to \$58/bbl this quarter due (Exhibit 6) in part because we expect a market surplus to build quickly over the coming months as increased OPEC+ supplies leads to growing inventories (Exhibit 7). True, this scenario has yet to unfold, but rising supplies and slowing demand are a recipe for lower prices.

Exhibit 6: Historical and forecasted quarterly Brent prices

Our projected path continues to show a drop in Brent crude oil prices to \$58/bbl this quarter because...

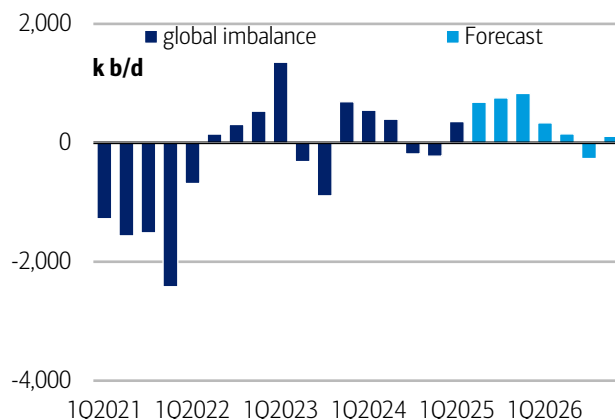


Source: Bloomberg, BofA Global Research estimates

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Exhibit 7: Global market imbalance

...we expect a market surplus to build quickly over the coming months as OPEC+ pushes up supplies and inventories



Source: IEA, BofA Global Research estimates

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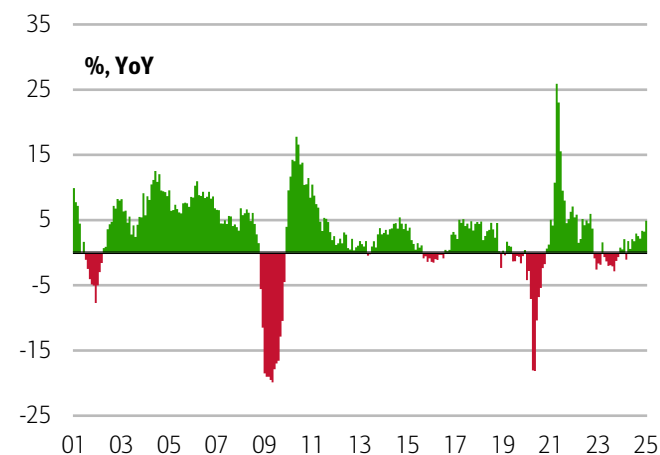
...as the price war collides with the ongoing trade war

We recently argued that the US trade war and the OPEC oil price war (see [When trade war and price war collide](#)) could quickly lead to a deterioration in prices and market conditions. Indeed, global trade was barely growing in recent months, with YoY figures at 5% in January and could contract over the next few months (Exhibit 8). In turn, oil price moves tend to correlate strongly to changes in global trade, as most modes of transport rely on oil (Exhibit 9).



Exhibit 8: Global Trade Growth

Global trade was barely growing already in recent months, with YoY figures at 5% in January and could contract next

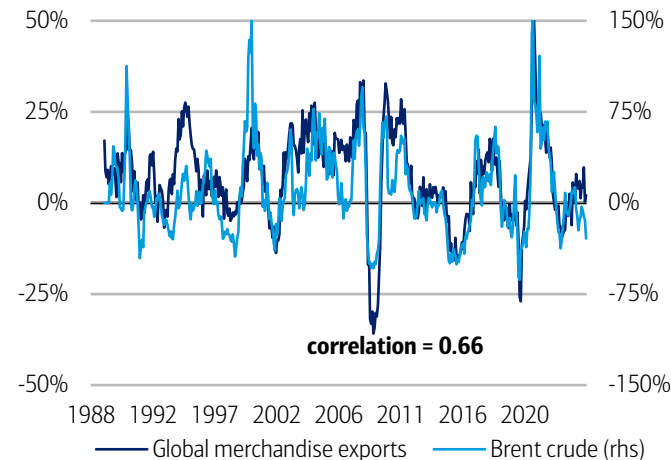


Source: Bloomberg

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Exhibit 9: Global merchandise exports growth and Brent crude returns (% year-on-year)

Oil price moves tend to correlate strongly to changes in global trade, as most modes of transport rely on oil



Source: IMF, Bloomberg, BofA Global Research

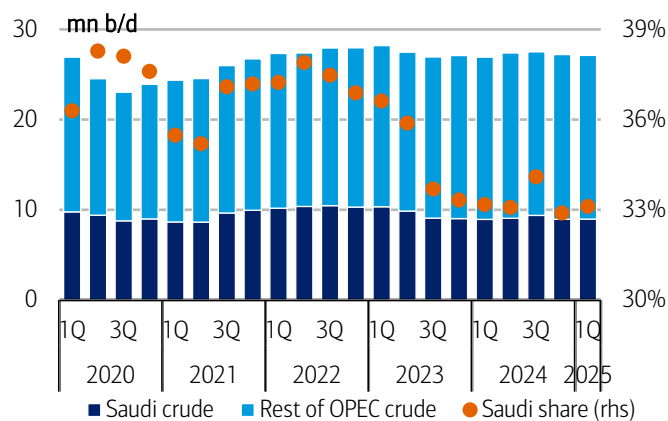
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Why did OPEC+ accelerate the plan to return barrels?

A key question behind the increase in oil production from OPEC+ is both the rationale as well as the magnitude of the volumes added to the market. Looking at Saudi's share, we note that it is now very low compared both to OPEC+ and the rest of the market (Exhibit 10), while their spare capacity is quite high and poised to increase substantially as the country moves to renewables (Exhibit 11). Maintaining all this spare capacity is expensive so, from this viewpoint, there is a strong logic behind the planned return of idle output.

Exhibit 10: Saudi Arabia's share of OPEC crude production by quarter

Looking at Saudi's share, we note that it is now very low compared both to OPEC+ and the rest of the market...

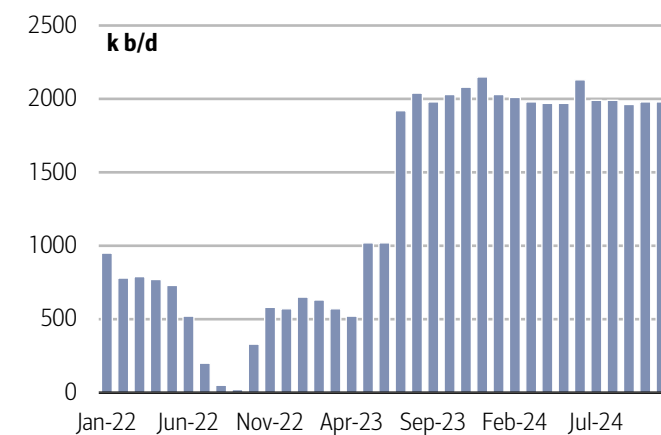


Source: IEA, BofA Global Research estimates

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Exhibit 11: Saudi Arabia spare capacity

...while their spare capacity is quite high and poised to increase substantially as the country moves to renewables



Source: IEA, BofA Global Research estimates

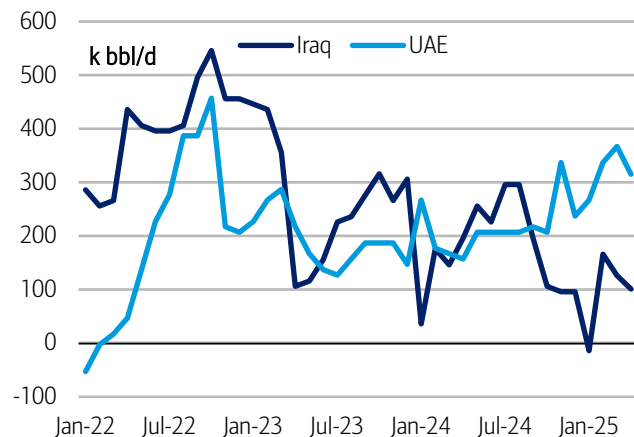
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Cheating by other members may have played a role...

The question of why so much production is coming back to market at once, however, is more difficult to answer. Is it simply because Saudi Arabia wants to discipline some members or are there ulterior political motives? In truth, a number of OPEC+ members that are part of the voluntary production cuts have failed to meet their quotas (Exhibit 12) such as Iraq or Kazakhstan. Having said that, there are also plenty of OPEC+ members that are producing well below their target levels (Exhibit 13).

Exhibit 12: Iraq and UAE surplus to the May 2025 production quotas

A number of OPEC+ members that are part of the voluntary production cuts have failed to meet their quotas



Source: Bloomberg, OPEC

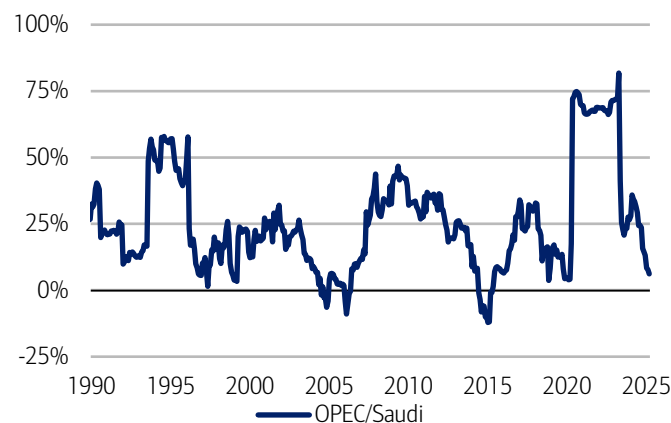
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...with OPEC+ cohesion sitting at relatively low levels

One of the main issues impacting the group these days is a relatively weak level of coordination. In our estimates, the correlation of individual OPEC+ members production changes to Saudi output has been declining in recent years (Exhibit 14), after hitting a record level during the early months of the pandemic. Even within the group committed to voluntary cuts, there is relatively little cohesion when looking at how output changes (Exhibit 15) have evolved.

Exhibit 14: OPEC cohesion (correlation between Saudi supply changes and other OPEC supply changes)

The correlation of individual OPEC+ members production to Saudi output has been declining in recent years



Source: IEA, BofA Global Research estimates

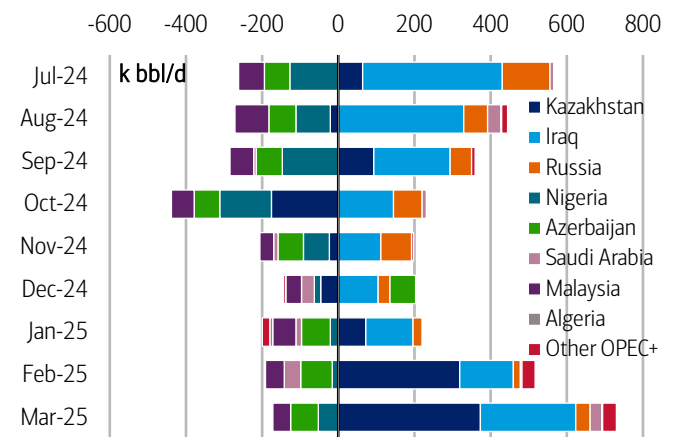
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Also, OPEC+ is likely hoping to recover market share

There is little doubt that OPEC+ needs a plan to recover some market share after the spectacular increase in US oil output during the past 15 years. Indeed, OPEC+ market share has declined structurally in recent years as US shale oil supply surged (Exhibit 16). OPEC+ market share could deteriorate further if the group does not act to slow down the rapid increases in non-OPEC supplies expected to come online over the next five years (Exhibit 17). After all, demand is also poised to slow down as the energy transition continues.

Exhibit 13: Output above OPEC+ members' target production rate

Having said that, there are also OPEC+ members that are producing well below their target levels

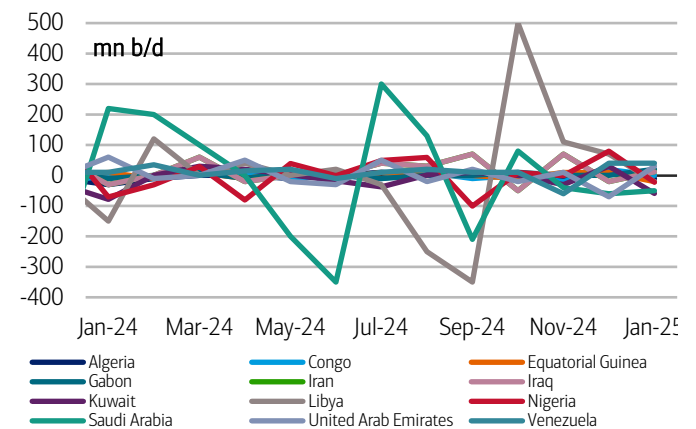


Source: BloombergNEF

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Exhibit 15: Month over month crude production change by country

Even within the group committed to voluntary cuts, there is relatively little cohesion when looking at output changes

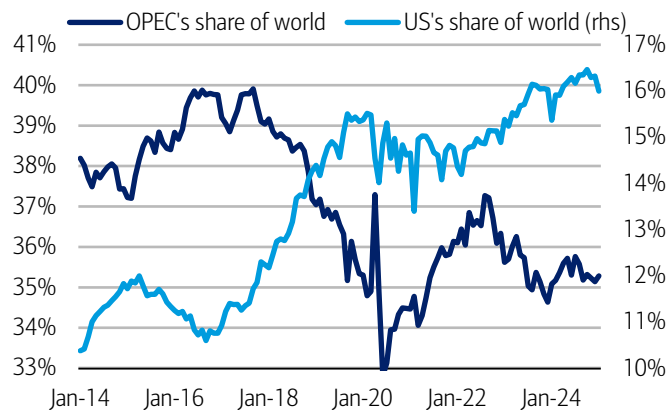


Source: EIA

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Exhibit 16: OPEC and US share of global crude production (monthly)

OPEC+ market share has declined structurally in recent years as US shale oil supply surged and...

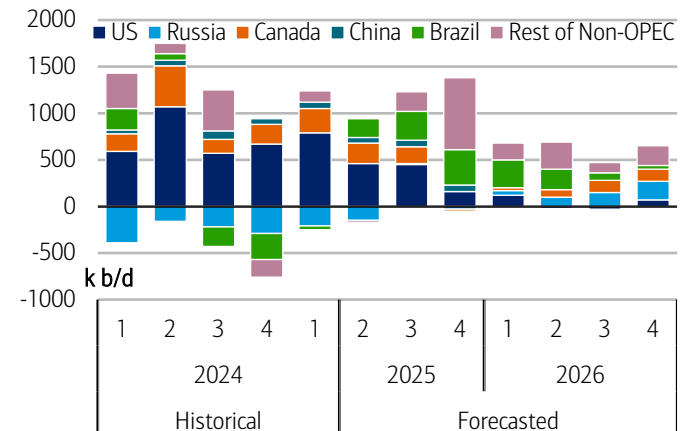


Source: EIA

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Exhibit 17: Historical and forecasted YoY quarterly growth in non-OPEC countries

...it could deteriorate further if the group does not act to slow down the rapid increases in non-OPEC supplies ahead



Source: IEA, BofA Global Research estimates

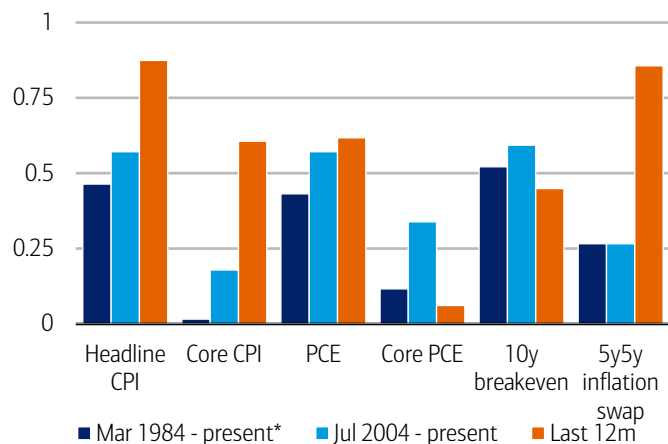
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Lower oil prices will likely push down US inflation too

One important consequence of rising OPEC+ crude oil production and falling oil prices is that US and global inflation would likely surprise to the downside. Specifically, the link between headline inflation and oil or gasoline prices in the US has been very strong historically (Exhibit 18) and headline inflation has also tended to lead core inflation in both significant up and down cycles (Exhibit 19). If we look at the relationship between WTI returns and CPI energy, remaining at this level or going lower could add another 10-40bps if we stay in the \$50-60/bbl range. This is on top of the 21 bps drag the market has accumulated so far. All in all, our estimates suggest that lower energy prices could help offset about half of the increase from US tariffs.

Exhibit 18: Correlation between WTI crude returns, realized inflation, and inflation expectations (% year-on-year)

The link between headline inflation and oil or gasoline prices in the US has been very strong historically...

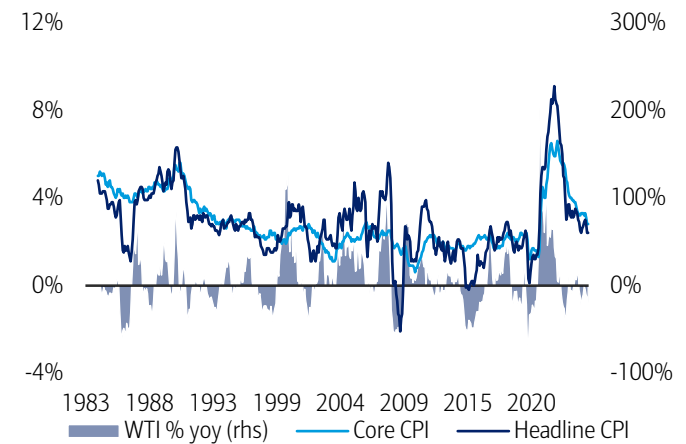


Source: Bloomberg, BLS, BEA, BofA Global Research.

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Exhibit 19: US headline and core inflation, and WTI crude oil returns (% year-on-year)

...and headline inflation has also tended to lead core in both significant up and down cycles



Source: Bloomberg, BLS.

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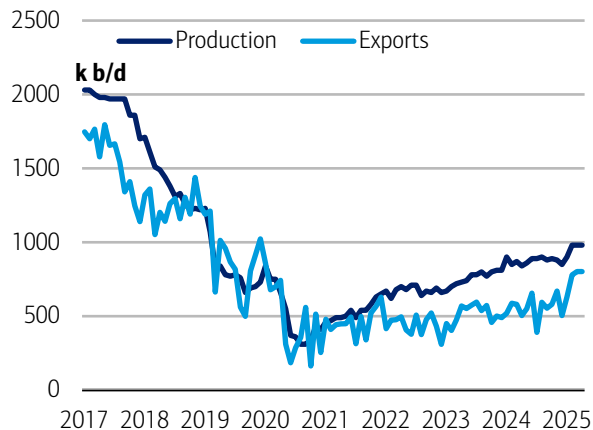
Plus falling Venezuelan output creates some scope

So is Saudi Arabia bringing back volumes only to help lower US inflation? It is probably not that simple. We note that Venezuela's crude oil production has increased from a low

of around 300k b/d in 2020 to current levels of nearly 1mn b/d (Exhibit 20), but a large part of these volumes are produced using foreign inputs from foreign operators in the country (Exhibit 21). As the Trump administration reimposes limits on foreign operators working in Venezuela, there is more room for additional Saudi barrels, even if at lower prices.

Exhibit 20: Venezuela production and exports

Venezuela's crude oil production has increased from a low of ~300k b/d in 2020 to current levels of nearly 1 million b/d...

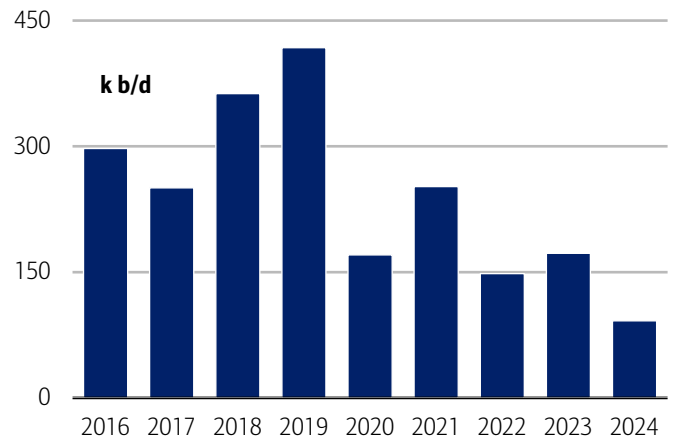


Source: Bloomberg

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Exhibit 21: Venezuelan oil imports

...but these volumes are produced using foreign inputs from foreign operators in the country



Source: EIA

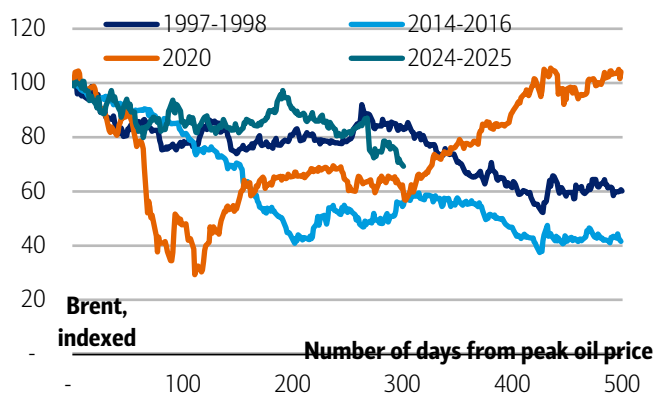
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What did we learn from previous OPEC price wars?

Looking back at history, we note that OPEC+ has fought three price wars in the past thirty years and may currently be in the process of fighting a fourth one (Exhibit 22). But the question is not so much whether OPEC+ is in the midst of a price war but rather what kind of price war it is and what the objectives are. So far there is little information and much speculation as to how it will play out. As a reminder, the group increased production by 2.6mn b/d on average in each of the prior three price wars (Exhibit 23).

Exhibit 22: Brent oil price performance during prior OPEC price wars

OPEC+ has fought three price wars in the past thirty years and is currently in the process of a fourth one

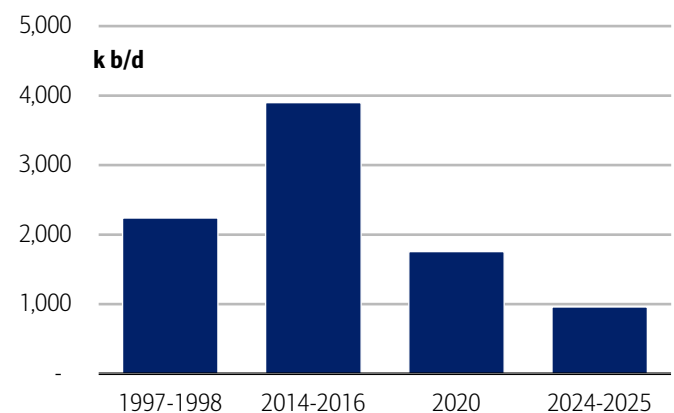


Source: Bloomberg, BofA Global Research estimates

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Exhibit 23: OPEC production increases during prior OPEC price wars

The group increased production by 2.6mn b/d on average in each of the prior three price wars



Source: OPEC, BofA Global Research estimates

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In 1998, Saudi Arabia led a price war to discipline...

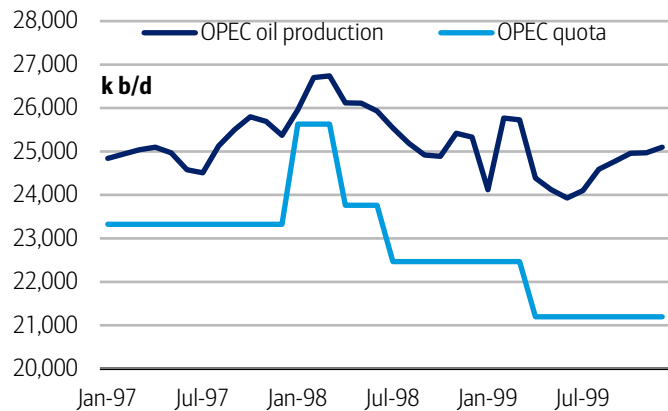
Back in the mid-1980s, Saudi fought a price war that accelerated the economic decline of the Soviet Union after it cut exports from 7 to 1.5mn b/d to protect oil prices as demand collapsed and new supplies from places such as the North Sea rose. Then Saudi did it again in the late 1990s. We note that OPEC+ discipline during the 1998 episode



was very weak as demand faltered (Exhibit 24), with members exceeding their quota by 2.2 mn b/d or 9.3% above the established quota in 1998 on average (Exhibit 25).

Exhibit 24: OPEC oil production and quotas

Looking at the 1998 episode, we note that OPEC+ discipline back then was very weak as demand faltered...

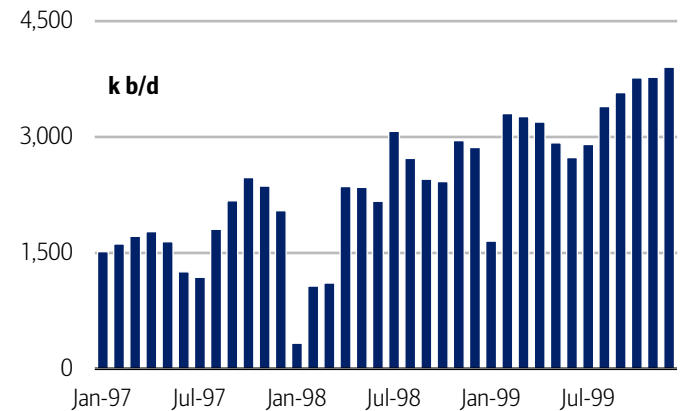


Source: OPEC, Bloomberg

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Exhibit 25: OPEC oil production in excess of quotas

...with members exceeding their quota by 2.2mn b/d or 9.3% above the established quota, on average during 1998



Source: OPEC, Bloomberg

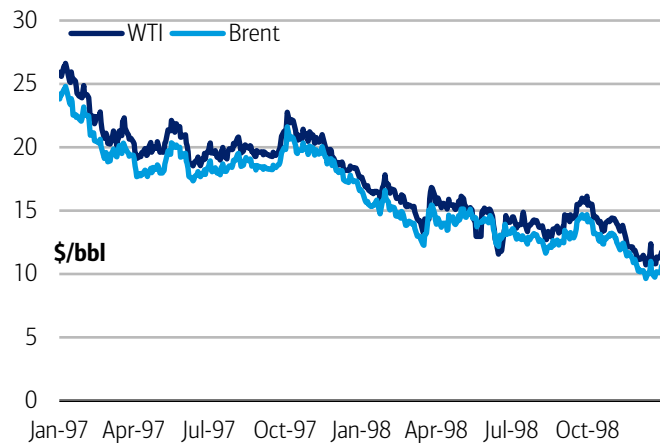
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...cheaters, sending oil to \$10/bbl in the Asian crisis

While OPEC+ cohesion was very weak back in the late 1990s, demand was even weaker due to a string of crisis across numerous emerging markets. Before the start of the Asian financial crisis in 1997, Brent was around \$25/bbl and swiftly dropped to \$10/bbl in 1998 (Exhibit 26), prompting some analysts to call for \$5/bbl. The debt levels of OPEC+ members increased significantly over this period due to lower oil revenues (Exhibit 27), as the oil price collapse overwhelmed the higher oil production volumes.

Exhibit 26: Oil prices during 1997-1998

Before the start of the Asian financial crisis in 1997, Brent was around \$25/bbl and swiftly dropped to \$10/bbl in 1998

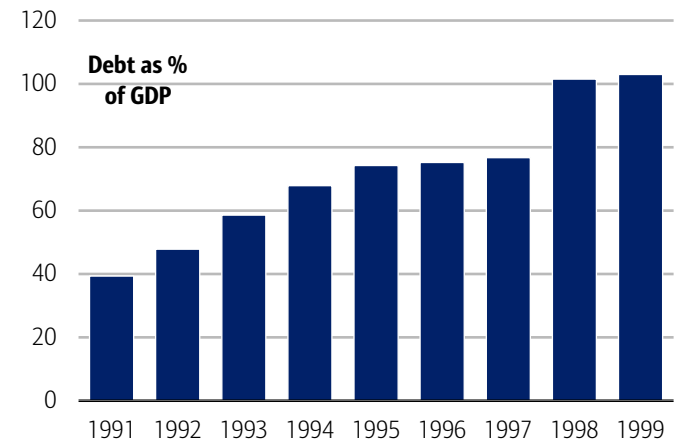


Source: Bloomberg

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Exhibit 27: Saudi debt as % of GDP

The debt levels of OPEC+ members like Saudi increased very significantly over this period due to the lower income



Source: Bloomberg

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In 2014-16, OPEC production surged by 4.4mn b/d...

The “kitchen sink” price war of 1998 was certainly an episode for the history books and marked the lowest global oil prices in half a century. But then the group held together until US shale surged during the early 2010s. Looking at production dynamics in 2014-16, we note that OPEC+ increased supplies by 4.4mn b/d over 23 months (Exhibit 28), triggering a huge surge in global oil inventories and a meltdown in Brent crude oil prices from over \$110/bbl in 1H 2014 to an eventual low of \$27/bbl in early 2016 (Exhibit 29).

Exhibit 28: OPEC oil production

Looking at production dynamics in 2014-16, we note that OPEC+ increased supplies by 4.4mn b/d over about 23 months...

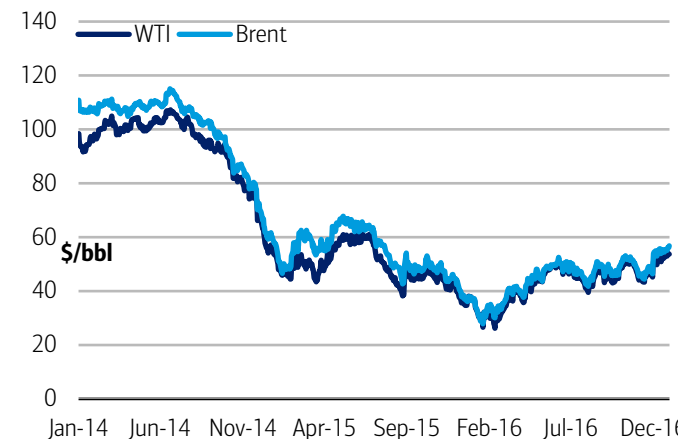


Source: Bloomberg

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Exhibit 29: Oil prices during 2014-2016

...triggering a huge surge in global oil inventories and a meltdown in Brent crude oil prices that hit a low of \$27/bbl



Source: Bloomberg

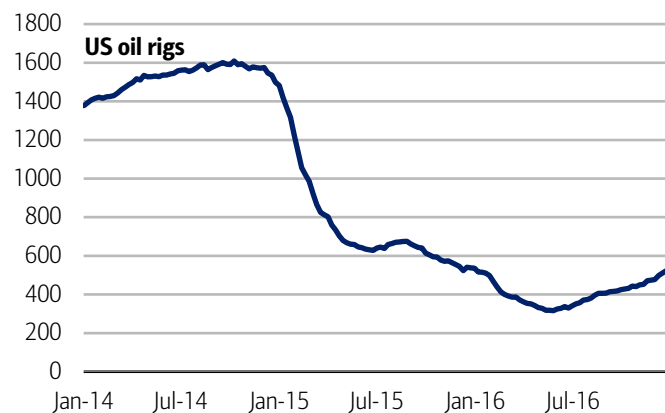
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...eventually destroying levered US crude production

In this “protracted” price war, we note that the objective was not to drive down profitability, since US shale was not really generating any free cash flow but just growing output for growth’s sake. Instead, OPEC+ continued to increase output and drive down prices until US oil sector high yield issuance and oil activity dried up, forcing industry consolidation (Exhibit 30). Following this “protracted” price war, capital discipline emerged and the industry started to show a strong linkage between oil drilling activity in the US and the average price of oil (Exhibit 31).

Exhibit 30: US oil rigs

OPEC+ continued until US oil activity declined significantly, forcing industry consolidation

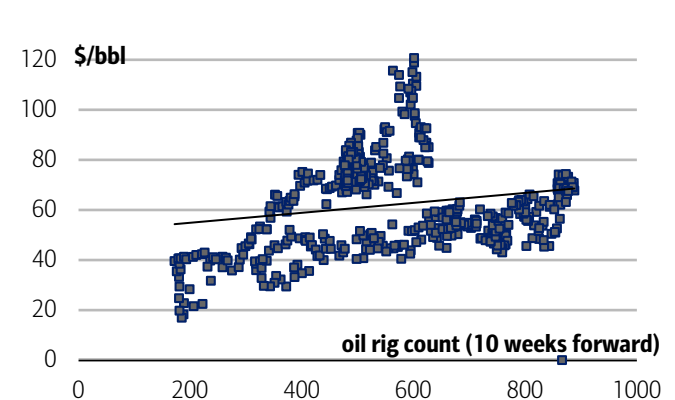


Source: Bloomberg

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Exhibit 31: Oil rig count versus WTI prices (weekly) since 2015

There is a very strong linkage between oil drilling activity in the US and the average price of oil



Source: Bloomberg

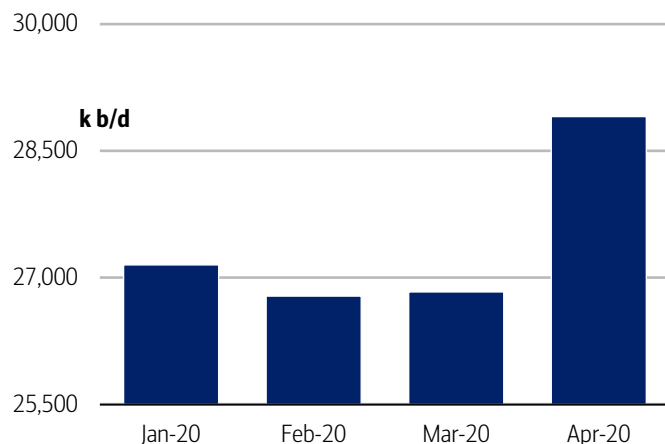
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In 2020, oil output rose by 1.8mn b/d in 4 months...

American exploration and production companies learned OPEC+’s lesson the hard way, but the length of the price war ended up being very costly for Saudi Arabia and other members of the group as well. As such, the more recent “fast and furious” price war turned out to be very different from previous episodes. During the 2020 price war, OPEC+ supply surged dramatically by 1.8mn b/d in just 4 months (Exhibit 32), with Saudi delivering the largest increase across the group and eventually hitting a record 11.8mn b/d of output (Exhibit 33)

Exhibit 32: OPEC production

During the 2020 price war, OPEC supply surged dramatically by 1.8mn b/d in just 4 months...



Source: Bloomberg

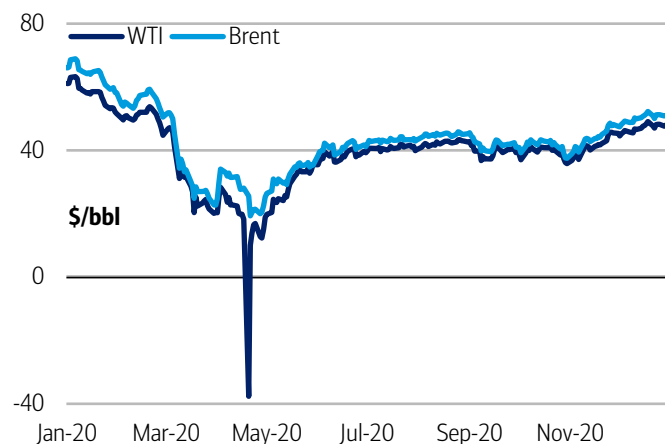
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...but OPEC+ discipline was restored in short order

The underlying reason behind the price war was the lack of an agreement between Saudi and Russia to cut production as the pandemic unfolded. When global mobility collapsed and oil demand dropped by almost 30% YoY in April 2020, the surge in output was a bold move by Saudi Arabia. With prices in West Texas going negative and Brent hitting a low of \$19.3/bbl, panic ensued (Exhibit 34) and eventually a stable OPEC+ framework emerged. However, this set-up only lasted for about 2 years until the Ukraine war started and US/European sanctions on Russia kicked in (Exhibit 35).

Exhibit 34: 2020 oil prices

With prices in West Texas going negative and Brent hitting a low of \$19.3/bbl, panic ensued...



Source: Bloomberg

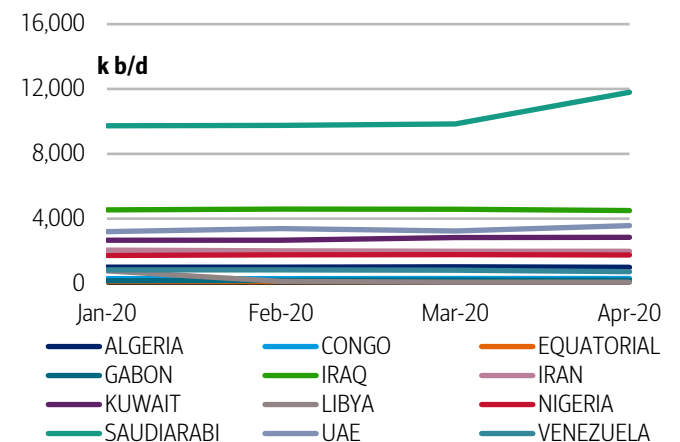
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Prices averaged \$45/bbl in the past two price wars

It is not clear whether the reason behind the increases in OPEC+ production are linked to a market share grab, a discipline act from the group leader, or a political play to help bring down inflation matters. But analyzing prior price wars can help us to understand how prices could evolve. Looking at the two price wars that occurred in the past 10 years, we note Brent averaged \$45/bbl during these periods (Exhibit 36). On the inventory front, our analysis suggests industry crude/petroleum stocks built by 213mn barrels during the prior price wars (Exhibit 37).

Exhibit 33: OPEC production by country

...with Saudi delivering the largest increase across the group and eventually hitting 11.8mn b/d of output, a record

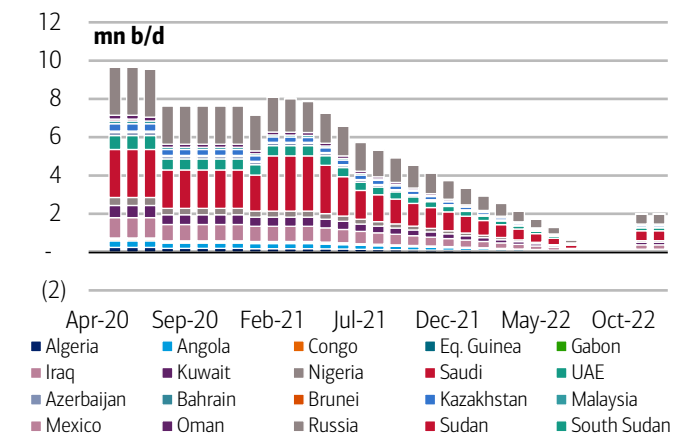


Source: Bloomberg

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Exhibit 35: OPEC+ supply cuts (voluntary and mandatory) following oil price crash in April 2020

...leading to a stable OPEC+ framework that lasted for about 2 years until European sanctions on Russia kicked in

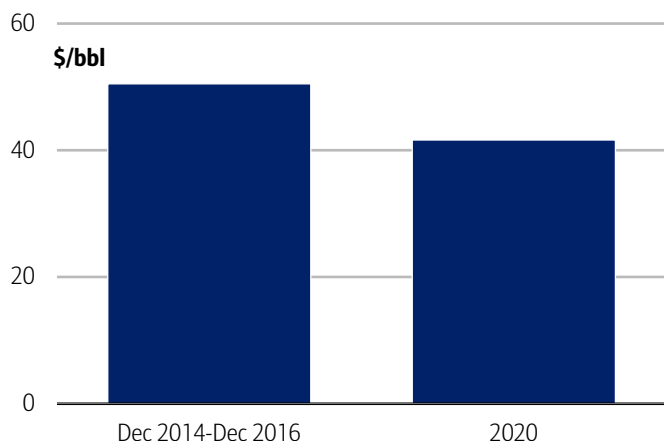


Source: OPEC, BofA Global Research estimates

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Exhibit 36: Average Brent oil price

Looking at the two price wars that occurred in the past 10 years, we note Brent averaged \$45/bbl during these periods

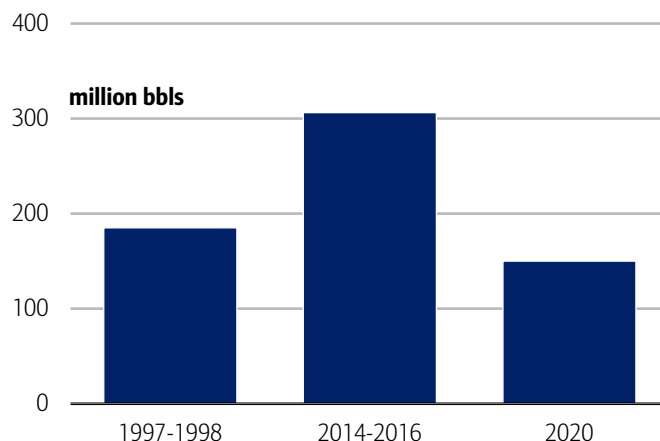


Source: Bloomberg

BofA GLOBAL RESEARCH

Exhibit 37: OECD crude oil and liquid fuels inventory builds

On the inventory front, our analysis suggests industry crude oil and liquid fuels stocks build by 213mn barrels during the prior price wars



Source: Bloomberg

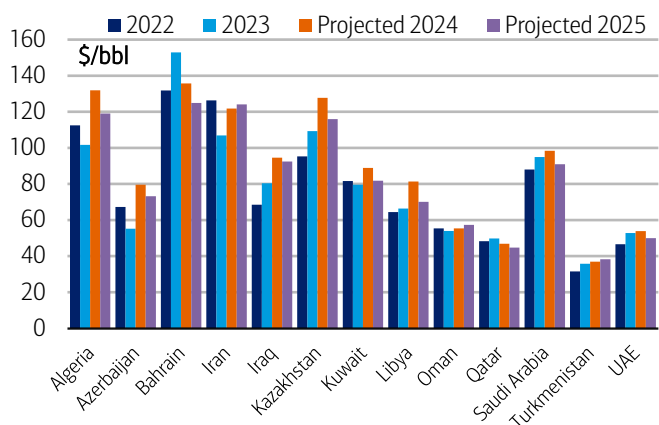
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Ultimately, OPEC+ budgets are already stretched...

It is also important to understand how much financial pain members can withstand to determine both the depth and the length of the price war. In that regard, we note that OPEC+ members, on average, require a price of \$67/bbl to balance their government budgets (Exhibit 38). So lower oil prices could put some pressure on the foreign exchange and sovereign asset reserves of members (Exhibit 39), and in some cases creating very negative externalities within just a few months.

Exhibit 38: Fiscal Breakeven Oil Prices

OPEC+ members, on average, require a price of \$67/bbl to balance their government budgets and...

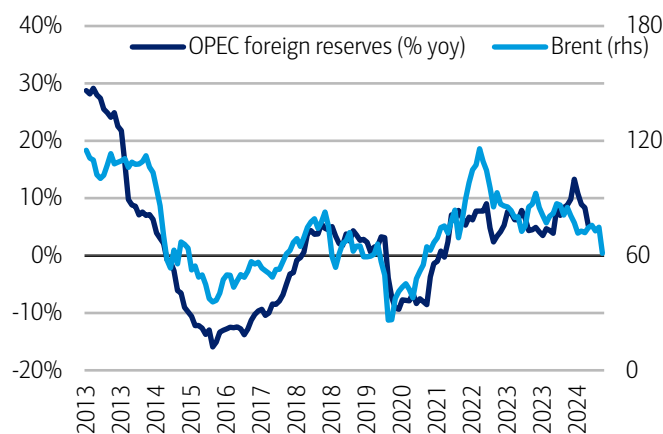


Source: IMF

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Exhibit 39: Aggregate OPEC foreign reserves growth and Brent crude front month futures price

... lower oil prices could put some pressure on the foreign exchange and sovereign asset reserves of some members



Source: Saudi Central Bank, Central Bank of Iraq, Central Bank of Kuwait, Central Bank of Nigeria, Central Bank of the UAE, Banque Centrale du Congo, Banco Nacional de Angola, Central Bank of Oman, Bank of Central African States, Banco Central de Venezuela. OPEC countries include Saudi Arabia, Iraq, Kuwait, Nigeria, UAE, Congo, Democratic Republic of Congo, Angola, Oman, Gabon, and Venezuela.

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...but we see a risk the price war lasts for 12-18m...

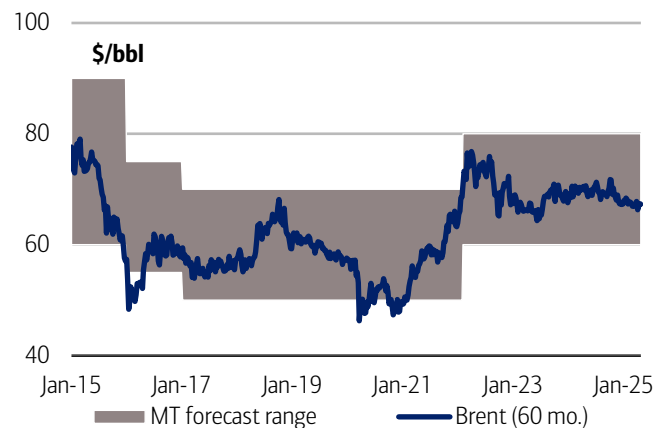
Still, this latest OPEC+ action appears to us more as a “slow burn” than a “fast and furious” price war. Because the price war has a market share element, a political element, and a group discipline element, we believe it is likely going to be long. But perhaps not particularly deep. Net, we continue to believe that long dated Brent crude oil prices will remain anchored in a \$60-\$80/bbl band (Exhibit 40), but we do not rule out



prompt prices trading below this band over the next 12-18 months, if a glut unfolds (Exhibit 41)

Exhibit 40: Long dated Brent prices

We continue to believe that long dated Brent crude oil prices will remain anchored in a \$60-\$80/bbl band...

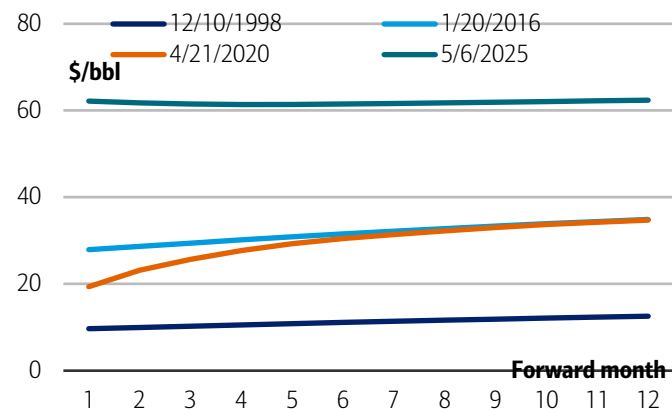


Source: Bloomberg, BofA Global Research estimates

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Exhibit 41: Historical Brent forward prices

...but we do not rule out prompt prices trading below this band over the next 12-18 months, if a glut unfolds and the curve goes into deep contango



Source: Bloomberg

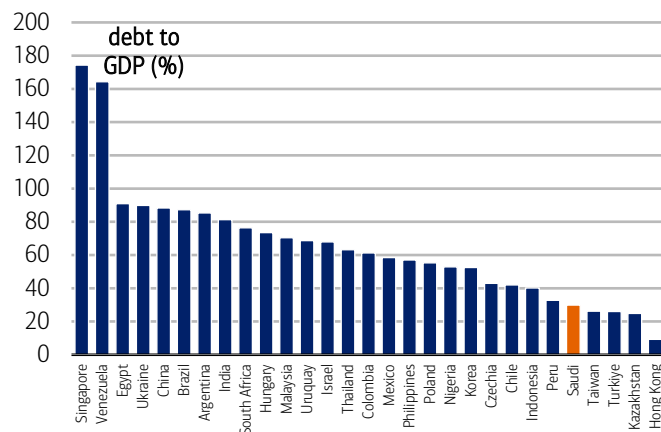
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...if Saudi maintains the pace of volume increases

While we remain comfortable with our \$62/bbl Brent forecast for 2025, we see some downside risks to our 2026 \$70/bbl forecast due to the likely length of the price war. Will Saudi Arabia keep increasing volumes from here? We would highlight that, from a total oil export revenue standpoint, there are a number of ways to fulfill the Saudi government's budget (Exhibit 42). After all, exports of 6mn b/d at \$80/bbl provide the same export revenues as 8mn b/d at \$60/bbl. So how to bridge the gap for now? KSA and Aramco's leverage levels are relatively low compared to many other countries, so there is some room (Exhibit 43) to use financial instruments until Saudi recovers its market share.

Exhibit 42: Debt to GDP for various EM countries versus Saudi Arabia

From a total oil export revenue standpoint, there are a number of ways to fulfill the Saudi government's budget because the KSA's...



Source: IMF

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Exhibit 43: Aramco's 2025E gearing (US\$bn) estimate at different levels of production (mb/d) and oil prices (US\$/bbl)

...and Aramco's leverage levels are relatively low compared to many other countries. So there is some room to borrow.

| | | 2025E crude oil volumes (mb/d) | | | | | | |
|----------------------|-----|--------------------------------|-------|-------|-------|-------|-------|-------|
| | | 8.0 | 8.5 | 9.2 | 9.5 | 10.0 | 10.5 | 11.0 |
| Oil price (US\$/bbl) | 45 | 14.6% | 14.1% | 13.2% | 12.9% | 12.4% | 11.8% | 11.3% |
| | 55 | 12.1% | 11.4% | 10.4% | 10.0% | 9.3% | 8.6% | 7.9% |
| | 65 | 9.6% | 8.8% | 7.7% | 7.1% | 6.3% | 5.5% | 4.7% |
| | 75 | 7.5% | 6.6% | 5.2% | 4.8% | 3.9% | 2.9% | 2.0% |
| | 85 | 5.9% | 4.9% | 3.4% | 2.9% | 1.9% | 0.9% | -0.1% |
| | 95 | 4.2% | 3.2% | 1.6% | 1.0% | 0.0% | -1.1% | -2.1% |
| | 105 | 3.1% | 2.0% | 0.3% | -0.3% | -1.4% | -2.5% | -3.6% |

Source: BofA Global Research Equity team estimates. Figure highlighted in blue represents their base case scenario

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Exhibit 44: Acronym list

| MMBtu | Definition |
|--------------|--------------------------------------------|
| \$/bbl | dollars per barrel |
| 2H | Second half of the year |
| ACR | American Carbon Registry |
| API | American Petroleum Institute gravity |
| avg | average |
| b/d | barrels per day |
| bbl | barrel |
| Bcf | Billion cubic feet |
| Bcf/d | Billion cubic feet per day |
| BLM | Bureau of Land Management |
| bn | billion |
| boe | barrel of oil equivalent |
| Btu | British thermal unit |
| CAISO | California ISO |
| CAR | Climate Action Reserve |
| CARB | California Air Resources Board |
| CB | central bank |
| CCA | California Carbon Allowances |
| CCR | Cost Containment Reserve |
| CC3 | Corpus Christi stage 3 |
| CI | carbon intensity |
| CNG | compressed natural gas |
| CPI | consumer price index |
| CV | Calorific Value |
| D&C | Drilling and completion |
| DM | developed market |
| E&P | Exploration and production |
| EC | European Commission |
| ECB | European Central Bank |
| EM | European market |
| EM | emerging market |
| EPA | Environmental Protection Agency |
| ERCOT | Electric Reliability Council of Texas |
| ETS | Emissions Trading System |
| EUA | European Union Allowance |
| EUR | Euro |
| EV | electric vehicle |
| F | Fahrenheit |
| FID | Final Investment Decision |
| FOB | Free on Board |
| FPSO | Floating production storage and offloading |
| FTA | Free Trade Agreement |
| GHG | Greenhouse gas |
| GoM | Gulf of Mexico |
| GW | Gigawatt |
| GWa | Average gigawatts |
| GWh | gigawatt hours |
| HH | Henry Hub |
| Hz | Horizonttal |
| IEA | International Energy Agency |
| IMO | International Maritime Organization |
| IP | industrial production |
| IRA | Inflation Reduction Act |
| ISO | independent system operator |
| JKM | Japan Korea Marker |
| JPY | Japanese Yen |
| kWh | kilowatt hours |
| LCFS | Low Carbon Fuel Standard |
| LCOE | levelized cost of energy |
| LDV | Light duty vehicle |
| LMP | locational marginal price |



Exhibit 44: Acronym list

| MMBtu | Definition |
|--------------|--------------------------------------------------------|
| LNG | liquified natural gas |
| MA | moving average |
| mcm | million cubic meters |
| ME | Middle East |
| Mfg | manufacturing |
| MHDV | Medium and heavy duty vehicles |
| MMBtu | million British thermal units |
| mn | million |
| mt | metric ton |
| MVP | Mountain Valley Pipeline |
| MWh | Megawatt hours |
| NAAQS | National Ambient Air Quality Standards |
| NBS | National Bureau of Statistics of China |
| NDRC | National Development and Reform Commission |
| NEV | New Electric Vehicle |
| ngl | natural gas liquids |
| NWE | North west Europe |
| OECD | Organisation for Economic Co-operation and Development |
| OPEC | Organization of the Petroleum Exporting Countries |
| OPEC+ | OPEC countries plus ten additional countries |
| PJM | PJM ISO |
| plf | passenger loading factor |
| PMI | purchasing managers index |
| PUC | Public Utility Commission |
| RD | renewable diesel |
| Res/Com | Residential and commercial |
| RGGI | Regional Greenhouse Gas Initiative |
| rhs | righthand side |
| RIN | Renewable Identification Number |
| SAF | sustainable aviation fuel |
| SPR | Strategic Petroleum Reserve |
| st | short tons |
| TMX | Trans Mountain Expansion |
| TTF | Dutch TTF |
| TWh | terawatt hours |
| UCO | used cooking oil |
| UKA | UK allowance |
| VCO | voluntary carbon offset |
| VCS | Verra |
| VLSFO | very low sulfur fuel oil |
| VMT | Vehicle miles traveled |
| WCS | Western Canadian Select |
| WTI | West Texas Intermediate |
| YoY | year over year |
| yr | year |
| Ytd | year to date |

Source: BofA Global Research estimates

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