NUMERA
ANALYTICS

Global commodity outlook

This month's focus: Crude oil and natural gas

February 2025

Investment recommendations:

- **All commodities** – *Neutral***.** Commodity upside has improved relative to 2024. Near-term, tariff-related inflation worries should benefit hard assets, despite a strong dollar. We also expect domestic demand in China to improve this year, improving expected gains on industrial commodities.

- **Crude oil** – *Long.* Brent is trading at a discount, even if speculative demand picked up in early 2025. This improves upside risk, as does a high probability the market will remain in deficit. While a strong dollar curbs the near-term outlook, we find a high (71%) chance that oil will exceed 12M futures.

- **Natural gas** – *Neutral*: Cold weather lifted prices via stronger demand and speculative positioning. Gas is trading at a premium, but should benefit from higher industrial activity and tight supply, keeping prices above $3.5 / MMBtu.

Updated price forecasts (24M ahead):

Commodity outlook Price forecasts (USD)	Baseline scenario 2/25	 12M	 24M	12M probability forecasts Probability pos. returns	 Probability > futures	 Left-tail risk
S&P GSCI	108	113	117	63%	-	-29%
Brent crude oil	77	83	87	64%	71%	-49%
Henry Hub	3.54	4.01	4.30	57%	34%	-79%
LME copper	9245	9156	9301	48%	39%	-41%
Iron ore (62%)	106	102	108	45%	52%	-82%
Gold	2898	3041	3163	64%	45%	-20%

Units: S&P GSCI: Price return index (2010 = 100); crude oil: USD / bbl; Henry Hub: USD / MMbtu; copper: USD / MT; iron USD / MT; gold: USD / ounce.

Source: History: S&P, EIA, LME, ICE, China Iron Ore & Steel Association; Forecasts: Numera Analytics. Models run on 11 February 2025.

Special section: Drill, baby, drill?

Will a shift in energy policy fuel US oil production?

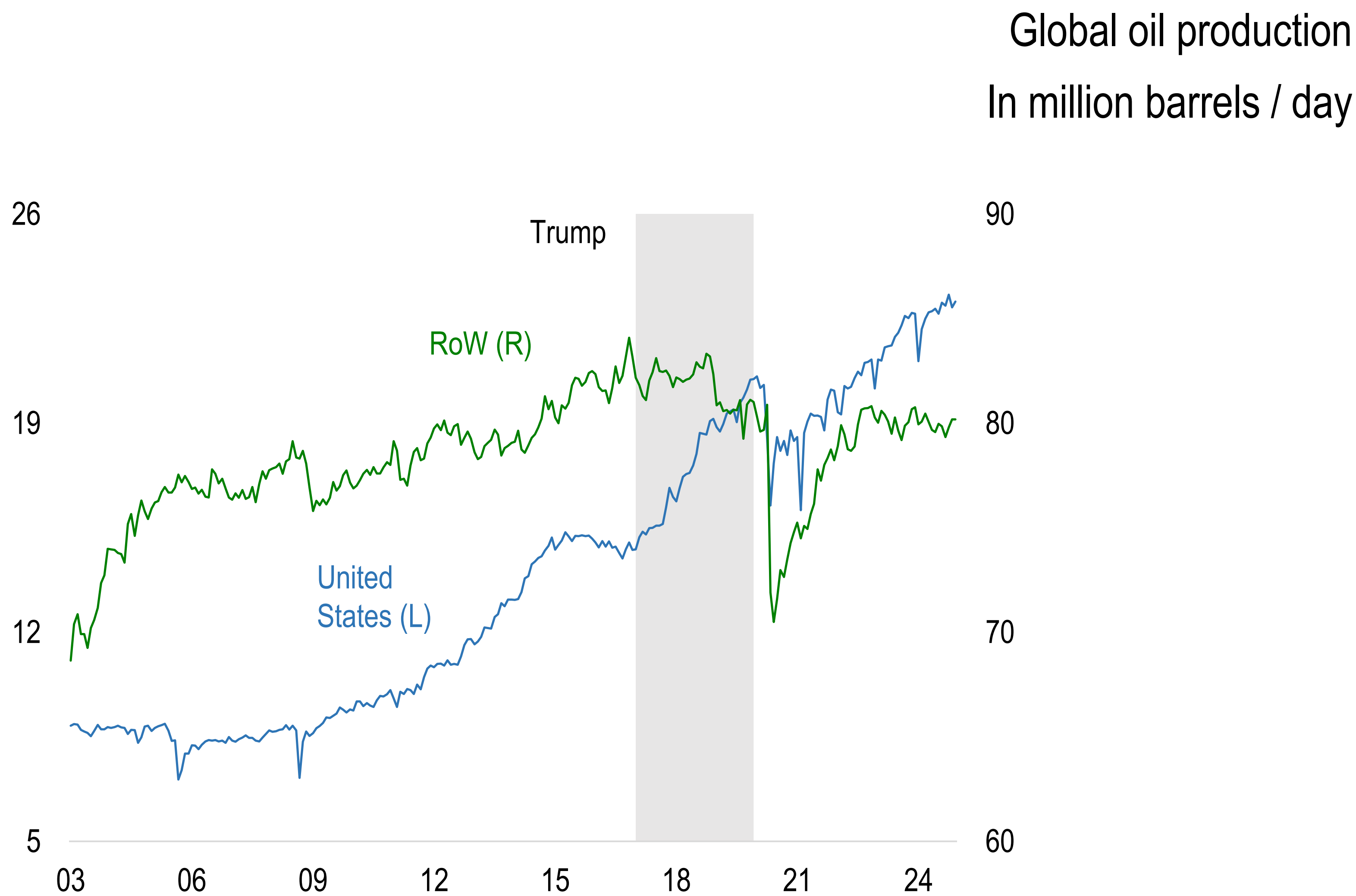
- Looking to lower prices at the pump, the Trump administration is hoping to drive up US oil production by allowing drilling on federal land (mainly in Alaska).

- US oil supply grew sharply during Trump's first term, exerting a major drag on oil prices. But while the administration extended O&G leases, 80% of the growth in supply came from rapid growth in shale rig counts, rather than the policy shift.

- E&P producers already have large amounts of unexploited acreage in federal land, choosing to focus on non-conventional drilling in the Permian basin. As such, a further extension in permits is unlikely to have a large impact.

- Large producers, holding the majority of O&G leases, are in fact looking cut back on investment in 2025, in an effort to protect sound upstream margins.

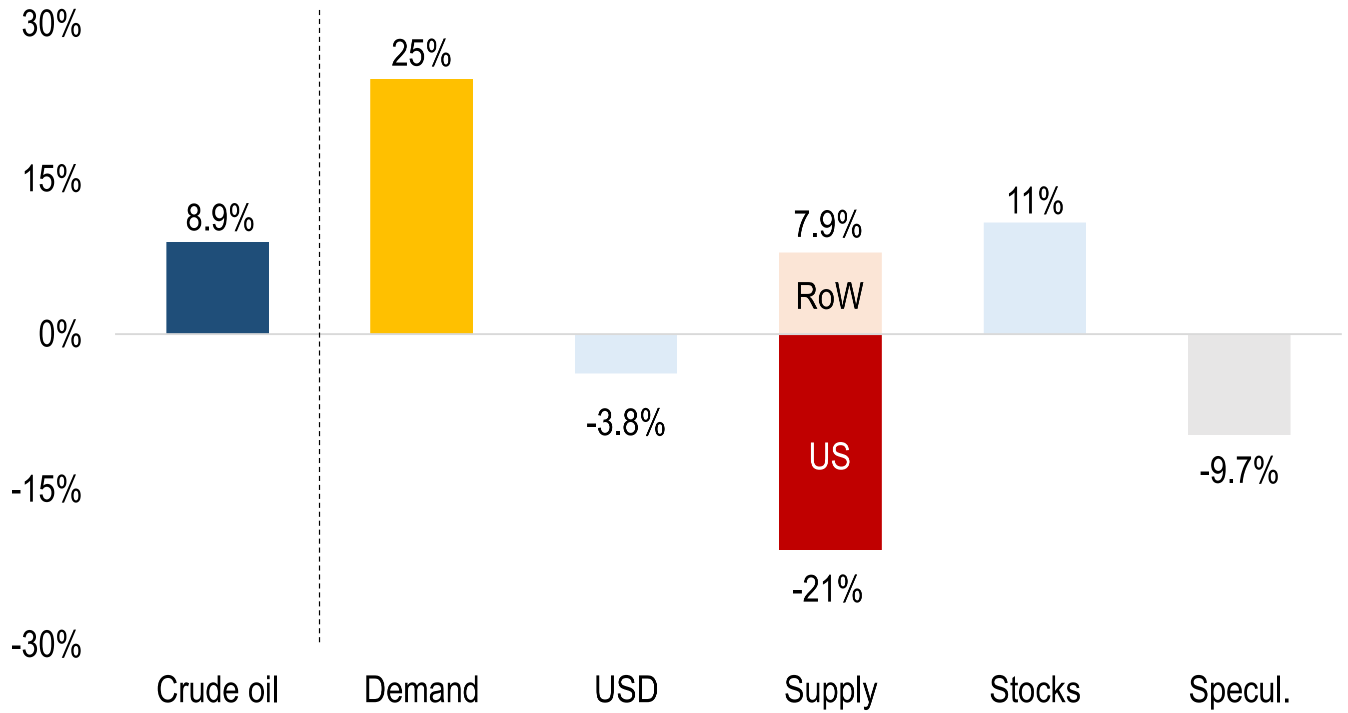
US oil production grew 5+ Mbbl during 2017/19



Source: Energy Information Agency (EIA); Numera calculations

This weighed on prices, but offset by other factors

Drivers decomposition – Crude oil prices
Change in real Brent prices – 2017/19

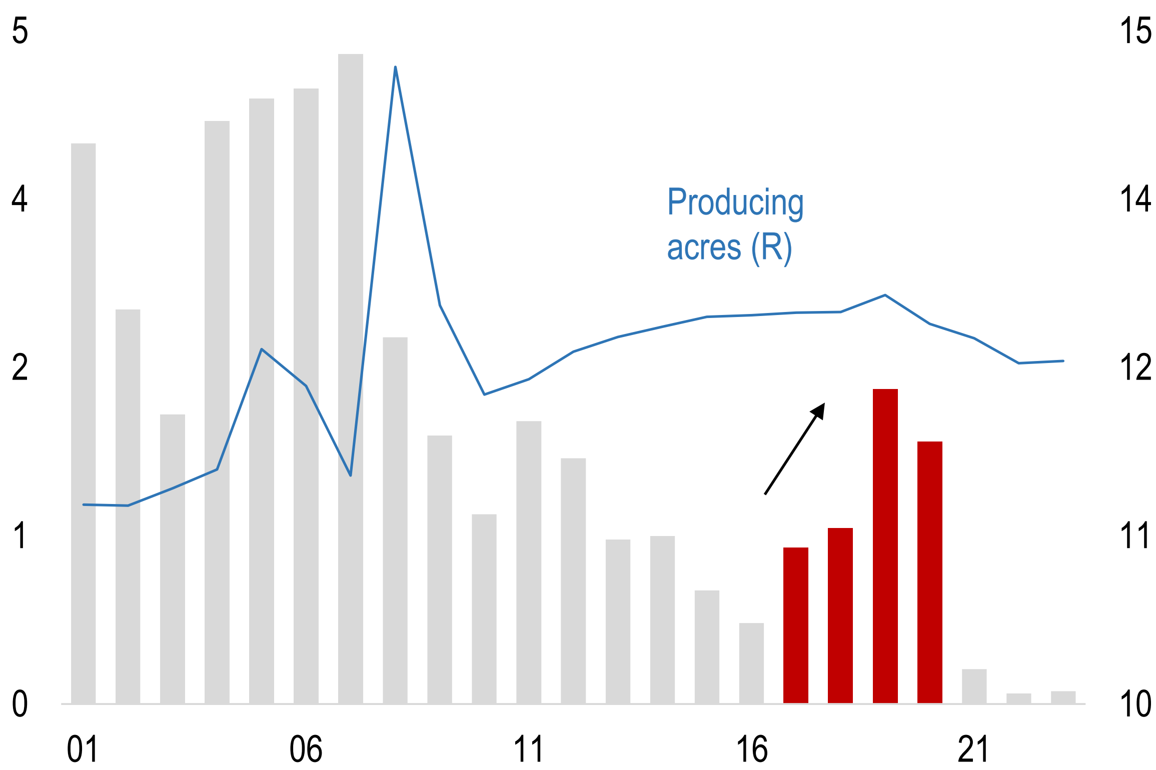


Note: Chart shows the estimated contribution of selected market drivers to the change in real oil prices between January 2017 and Dec. 2019 Speculation proxied by net long positions on Brent futures in the NYMEX.

Source: Numera Analytics

Shift in energy policy led to greater O&G leasing

New leases to O&G companies Federal land (BNs of acres)

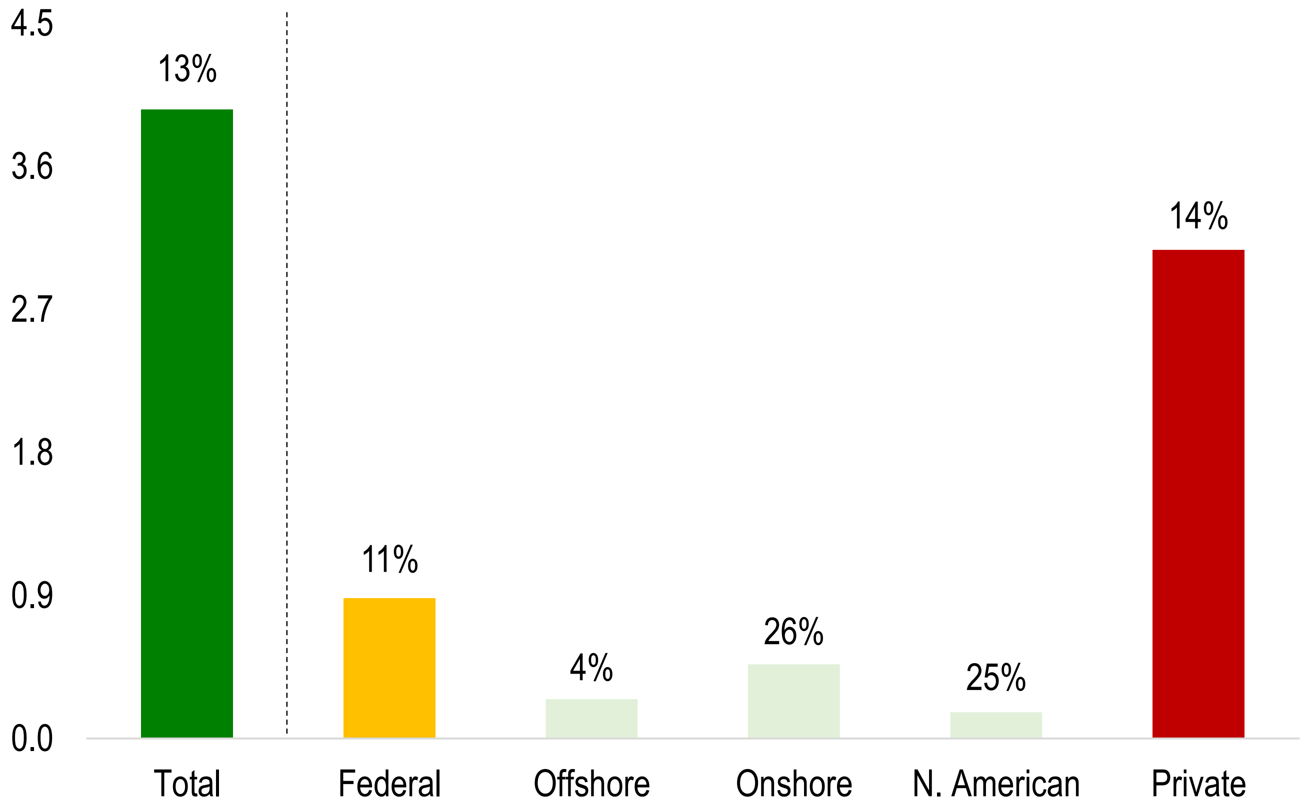


- New leases to O&G firms are much lower than in the 90s;
- During 2017/19, new leases grew 25%, adding 2.7B acres;
- Yet producing acres only grew 0.7%, with most of the acreage kept unused by oil firms;
- In Alaska, leased acres grew 250%, but less than 4% have been put into production.
- Most permits are held by oil majors and concentrated / integrated O&G companies.

Source: US Bureau of Land Management (BLM); Numera calculations

Yet 80% of output growth came from private land

US oil production growth (ex. condensates)
Change in Mbbl / day and CAGR – 2017/19

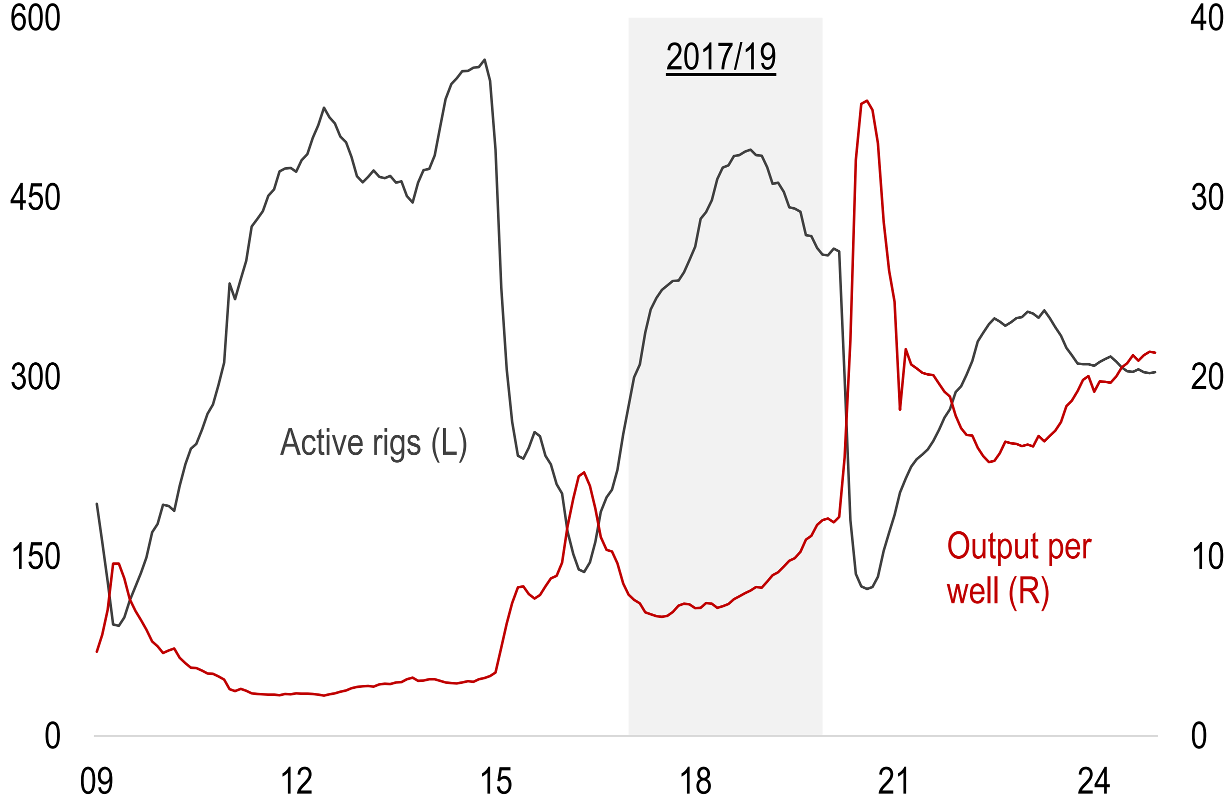


Source: EIA, BLM; Numera calculations

Propelled by a sharp increase in shale rig counts

Permian crude oil production

Active rigs and output per well

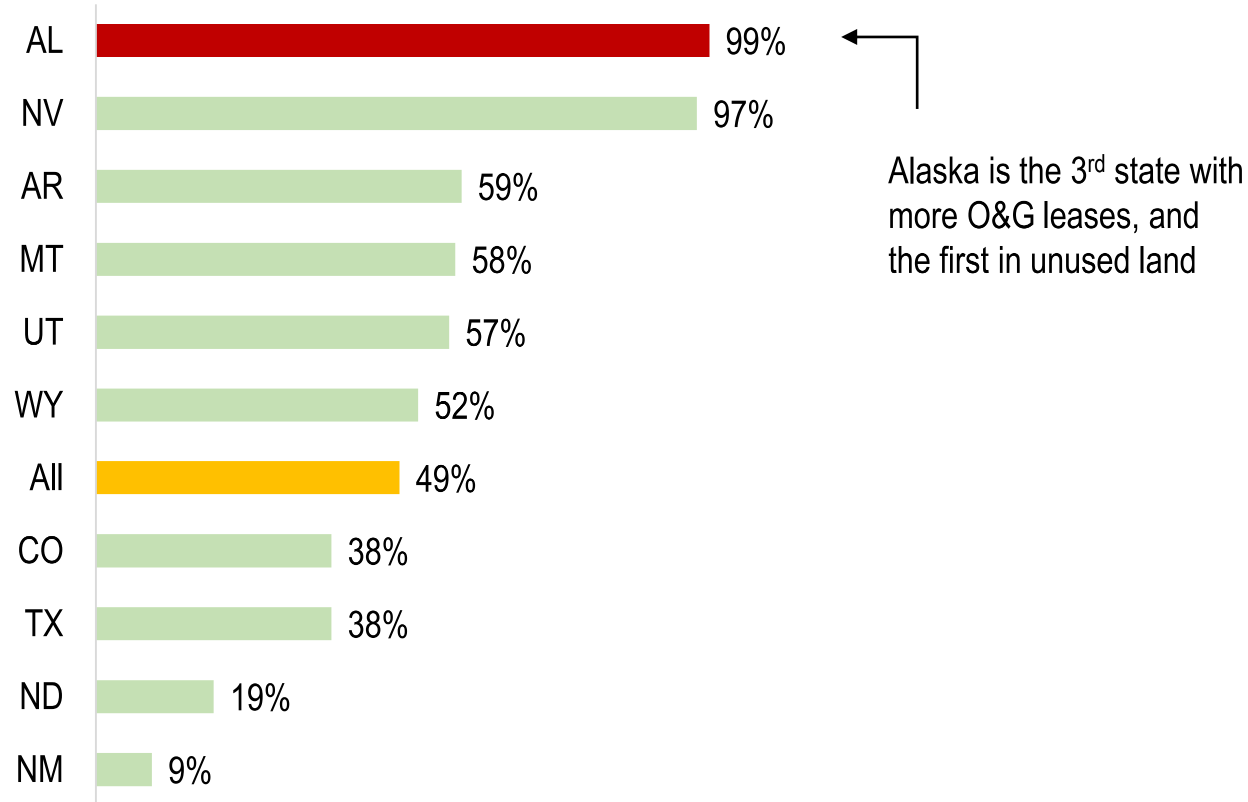


Source: EIA, Baker Hughes; Numera calculations

There is already a lot of unused Federal land

US leased federal land to O&G

Share of unused land (%)

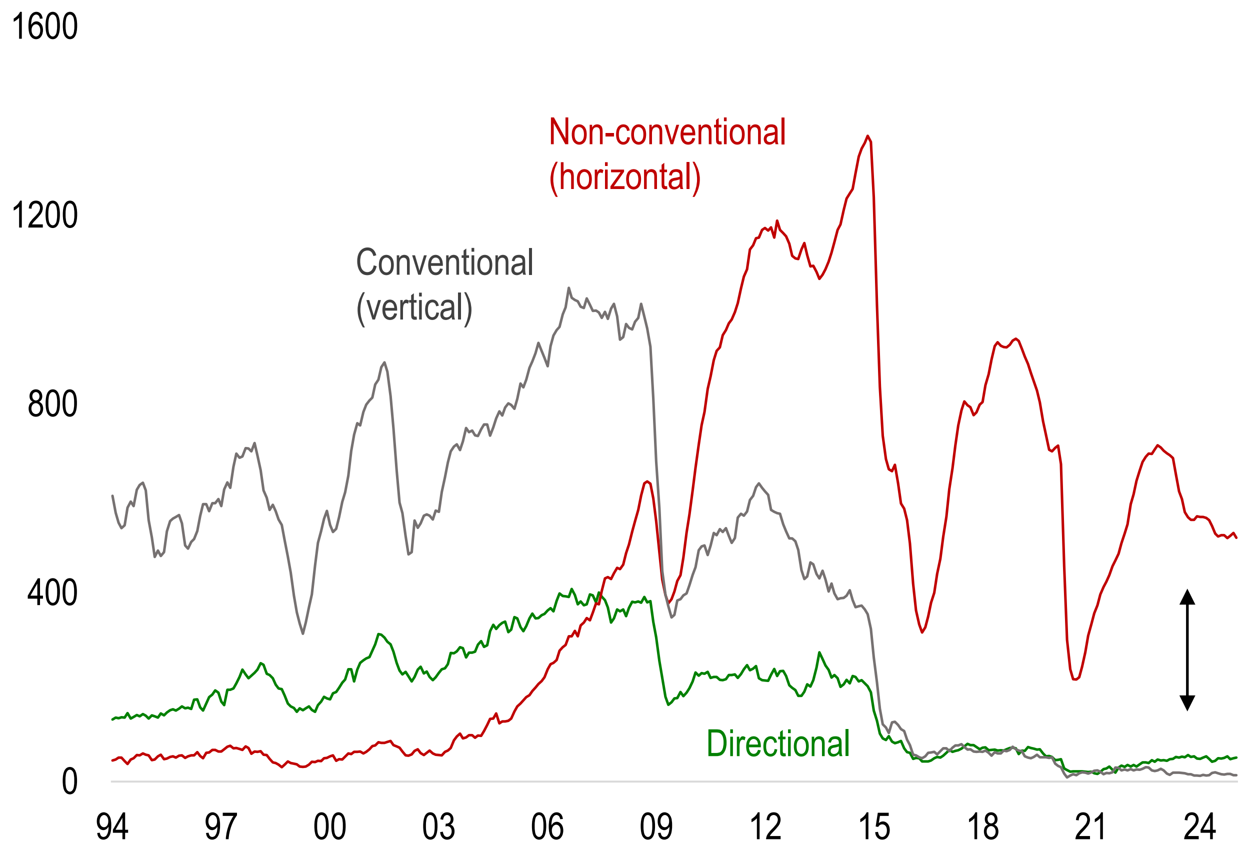


Source: BLM; Numera calculations

As E&P firms prioritize non-conventional drilling

US oil rigs by trajectory

Number of rotary rigs

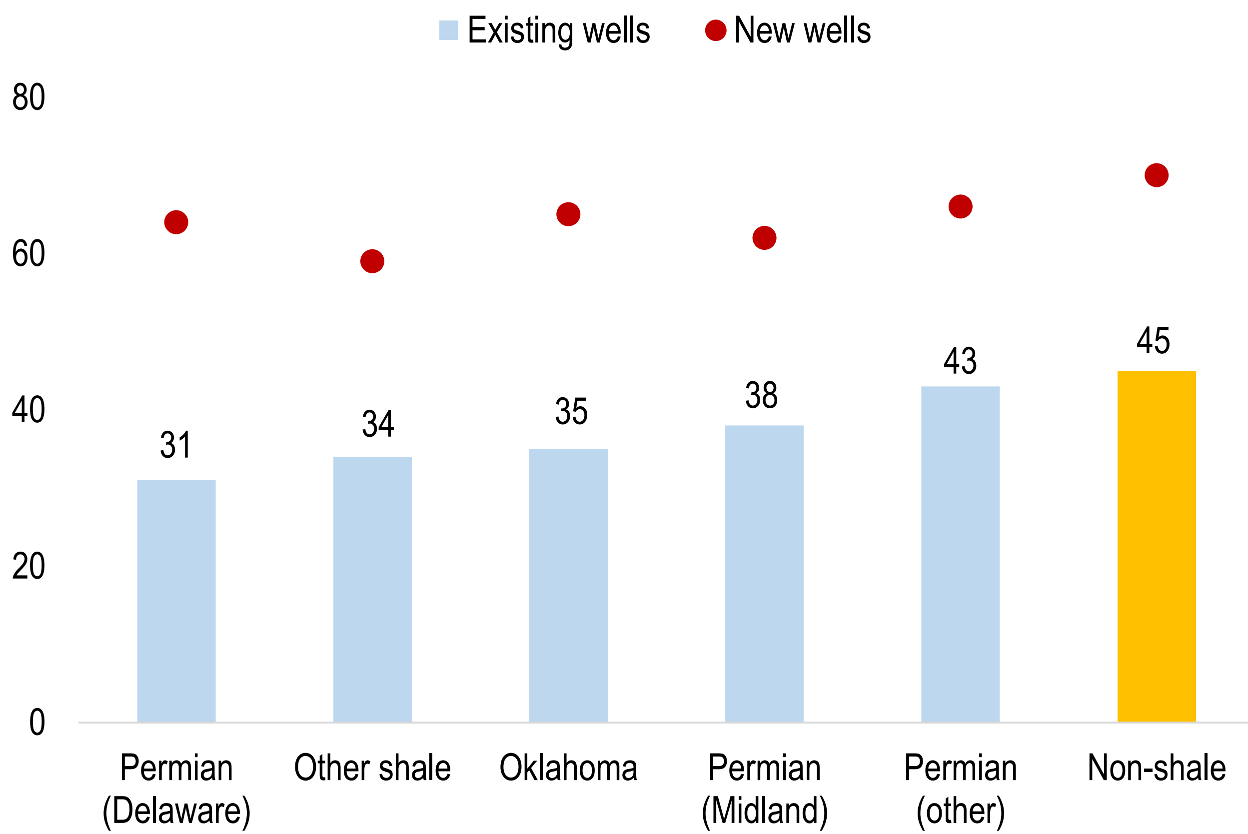


Source: Baker Hughes

Owing to shale's considerably lower drilling costs

WTI breakeven price by play

In USD / barrel, Q4/24

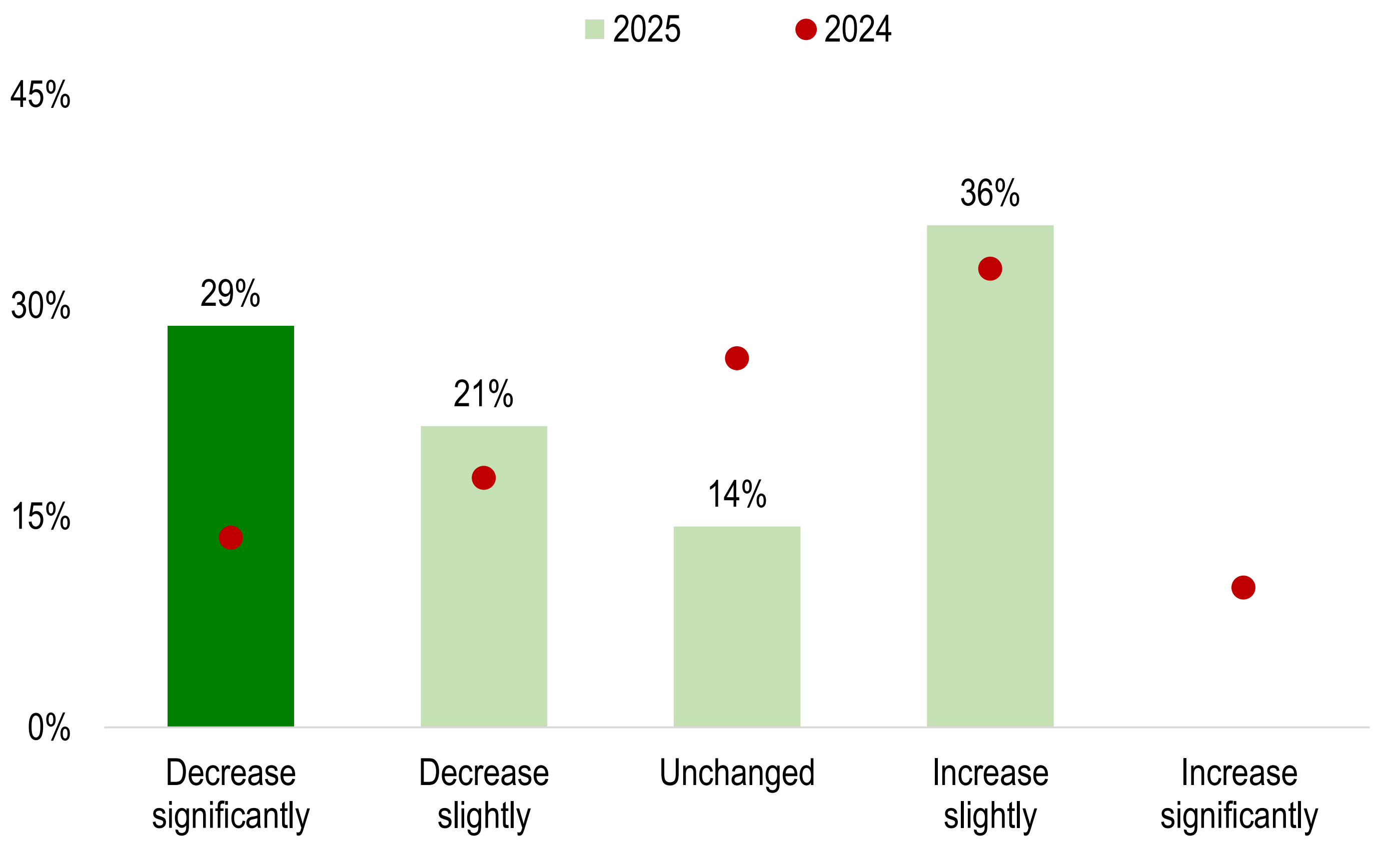


Source: Dallas Fed; Numera calculations

Leaseholders are planning on *reducing* CAPEX

Investment plans for upstream operations

Share of large firms, 2024/25

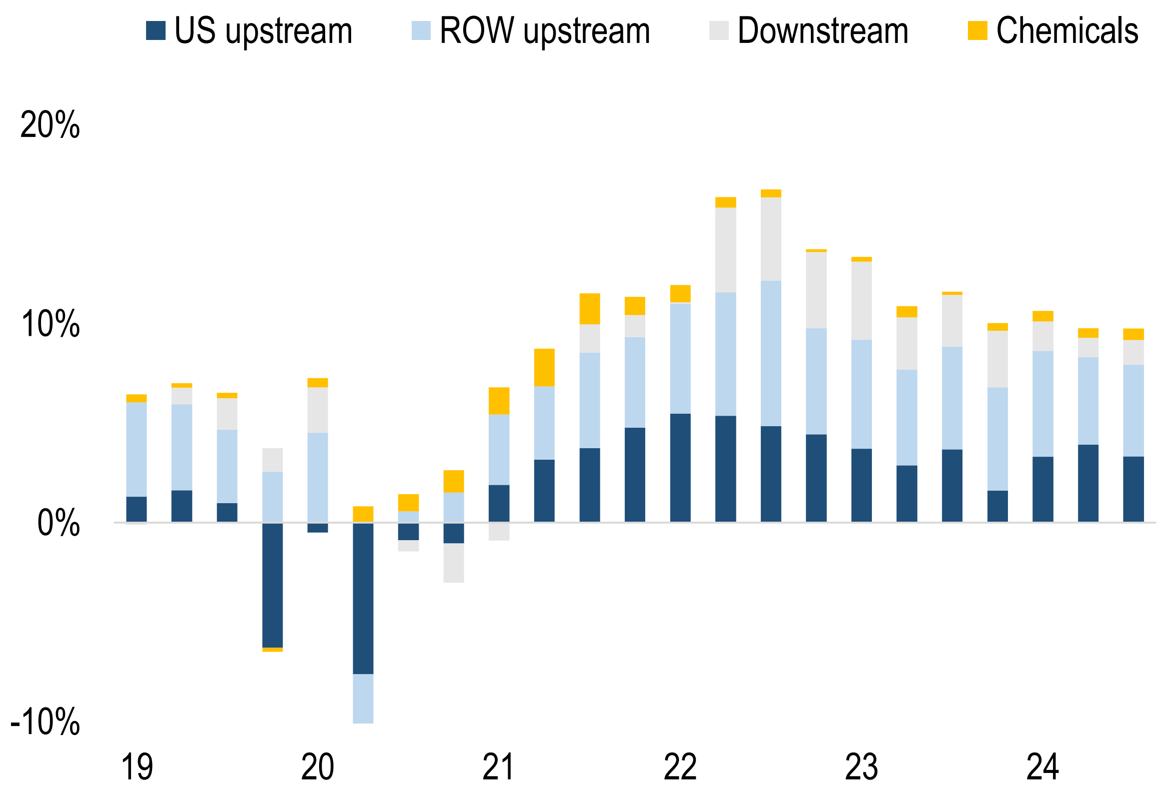


Source: Dallas Fed Energy Survey (Q4/24)

As majors looking to preserve upstream margins

US oil major earnings by segment

Contribution to operating margin (%)



Source: Numera calculations on 10Q filings

How will policy changes affect gas production?

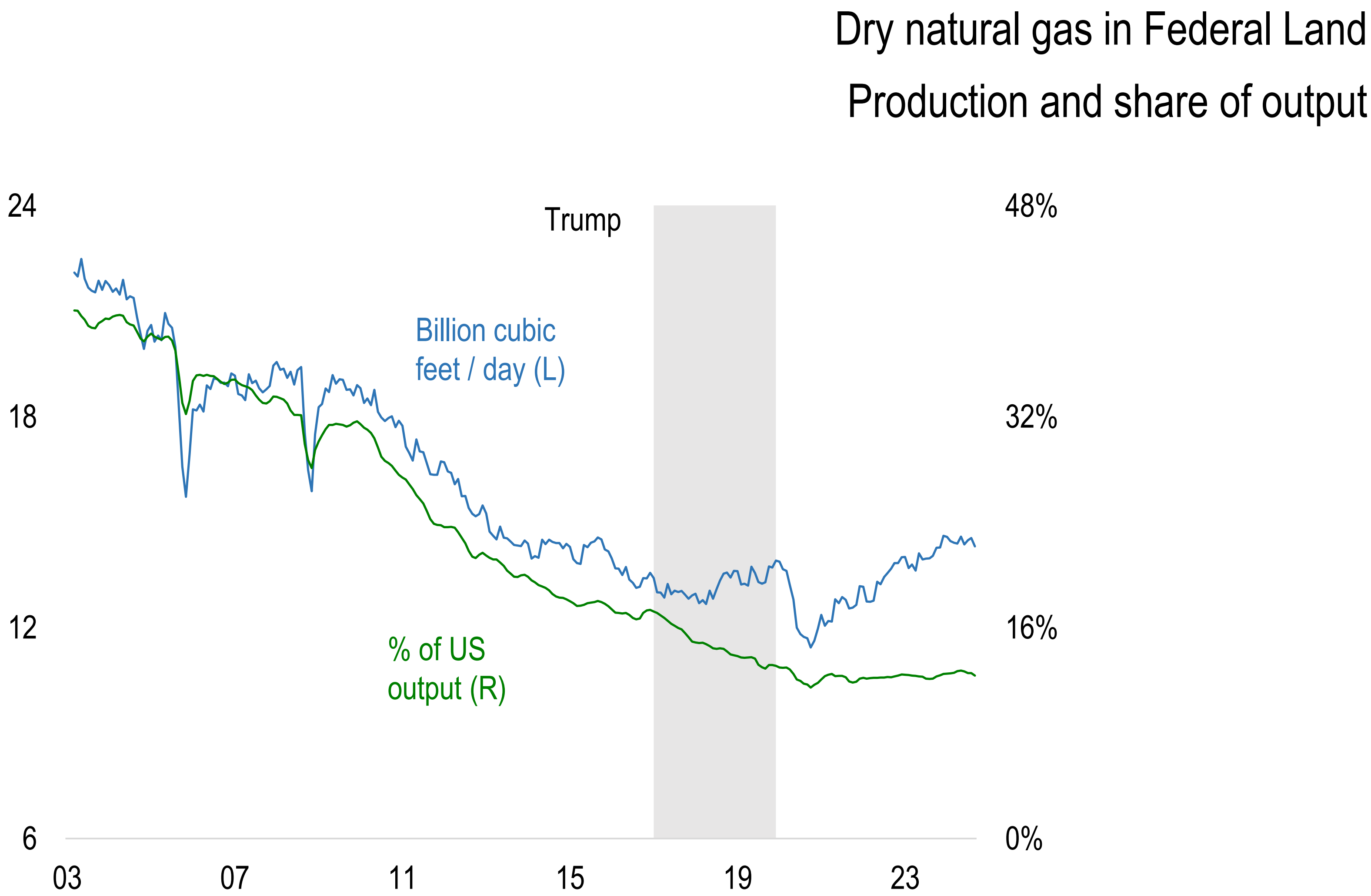
- Leasing in federal land matters less for dry gas production than it does for crude oil. Greater lease issuance during Trump's first term had only a modest impact on production in federal lands, with firms favouring non-conventional plays.

- The key policy change for gas is the renewal of LNG export licenses, which had been suspended by the Biden administration in early 2024. LNG export approval should help *tighten* the domestic market by removing excess supply.

- One potential headwind for gas producers are the 15% tariffs imposed by China on US LNG in response to the 10% duties on CN goods levied this month.

- China is a small export market for US LNG. However, the trade conflict could compromise the buildout of close to 20 LNG projects in the US by CN firms.

Federal leasing matters less for gas production

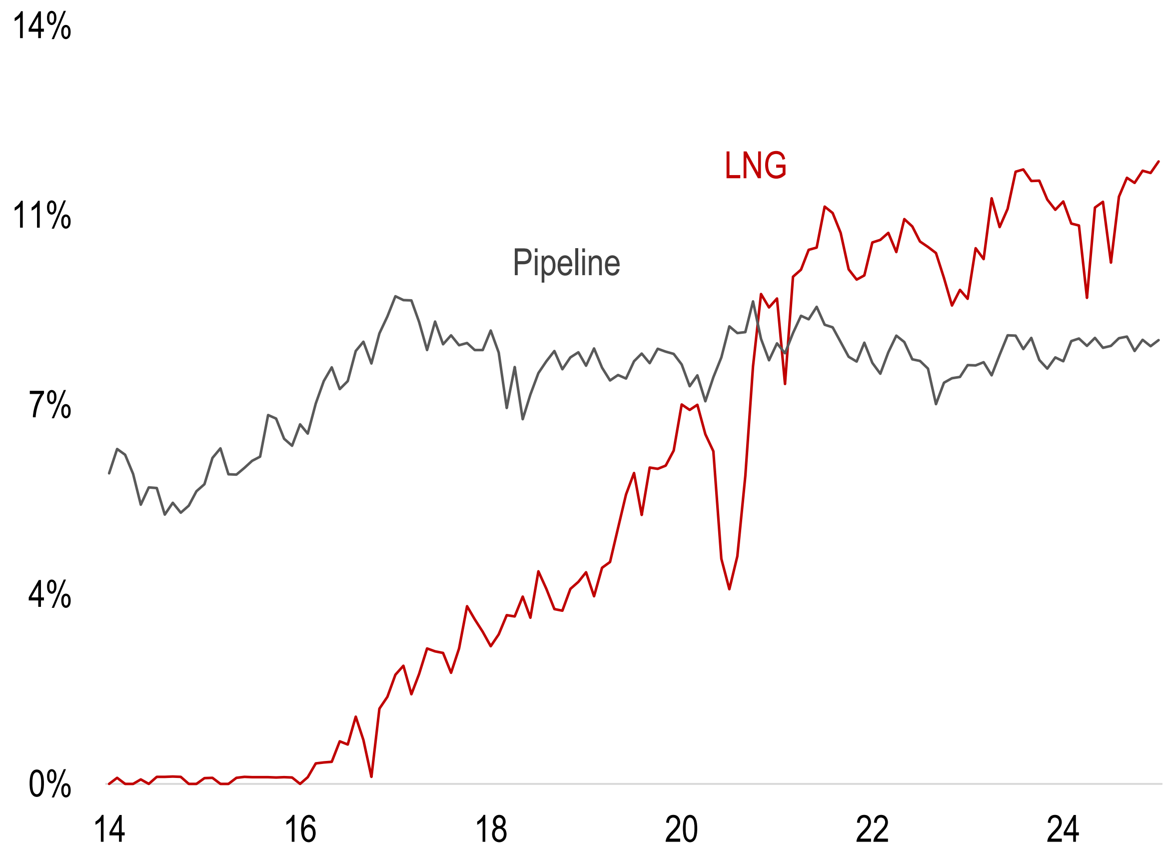


Source: Numera Analytics on BLM, EIA data

Key change is renewal of LNG export licenses

US natural gas exports

Share of production (%)

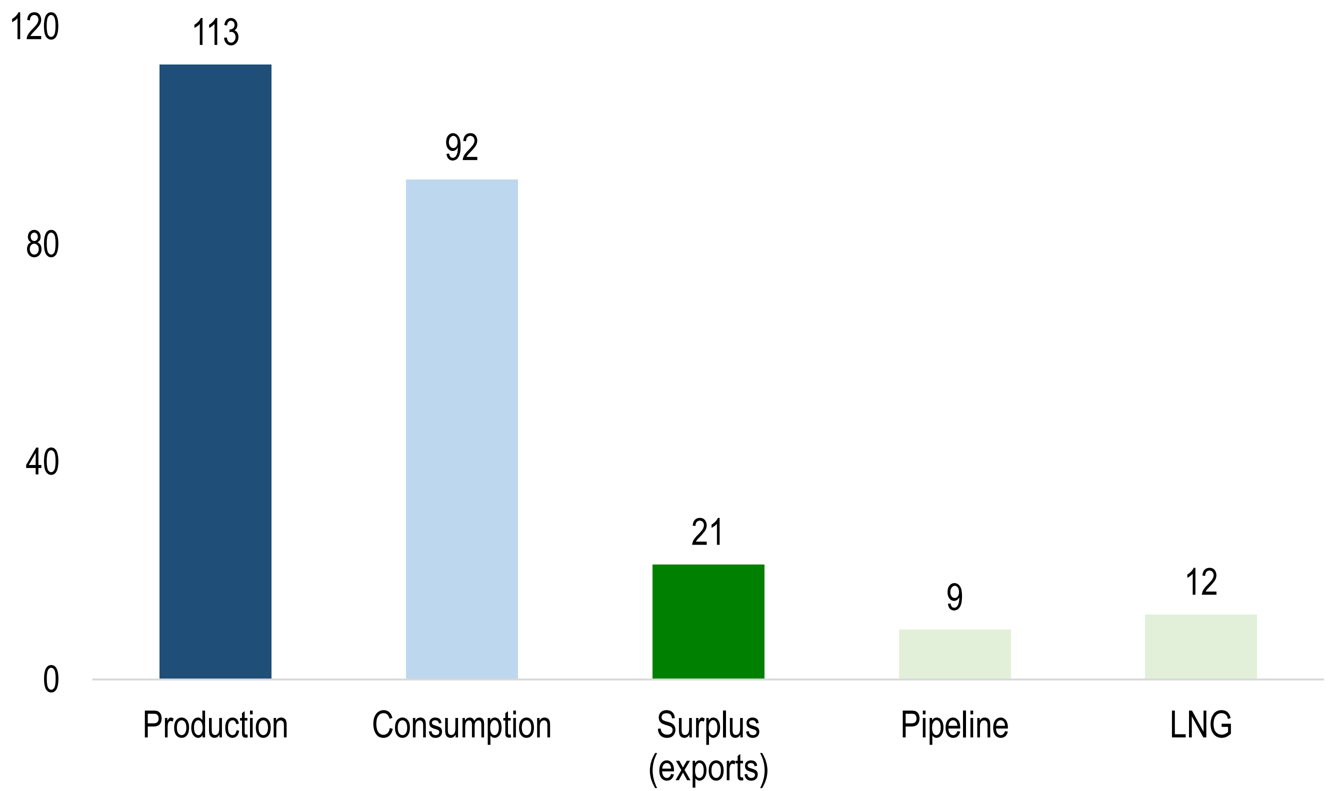


Source: Numera Analytics on EIA data

As freeing up licenses reduces domestic surplus

US natural gas balance

BN cubic feet per day, 2024

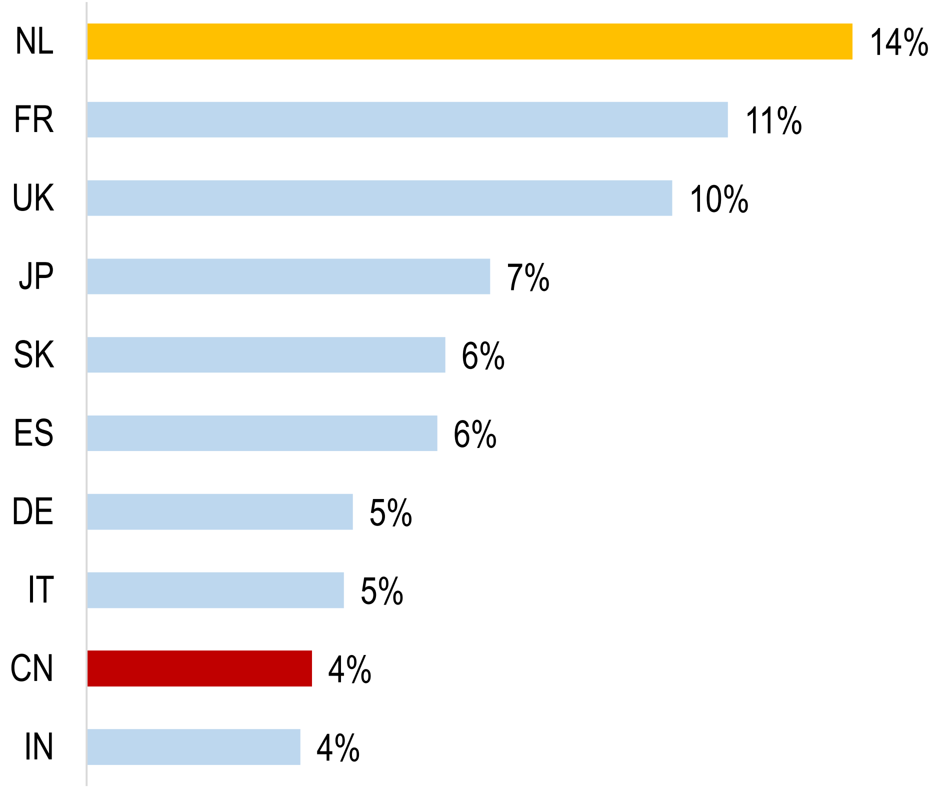


Source: Numera Analytics on EIA data

China retaliation does not endanger LNG exports

US LNG export destinations

Share of total, 2023 (%)

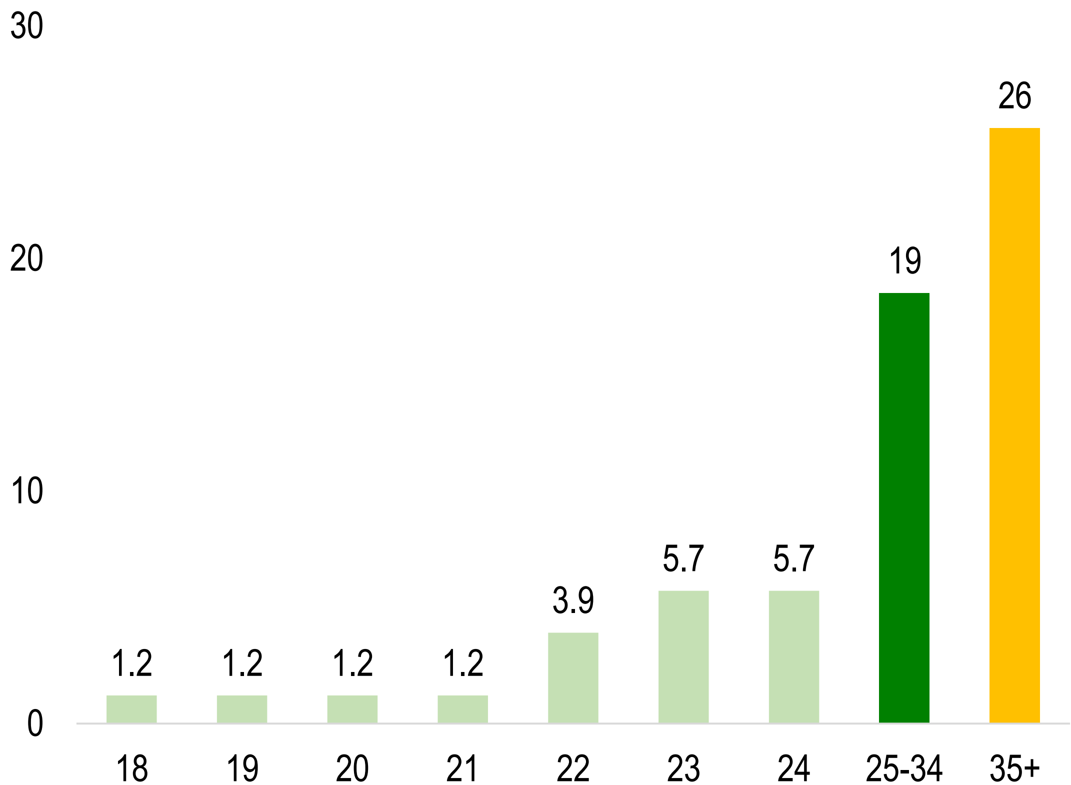


Source: Numera Analytics on EIA data

But conflict does threaten planned LNG projects

LNG volumes tied to long term contracts

Estimated capacity (MTPA)



- China levied 15% duties on US LNG imports following the imposition of 10% US tariffs on all CN goods;
- Tariffs should have no major impact on gas production today, as China is a fairly small export market;
- However, the brewing trade conflict does compromise close to 20 LNG projects by CN companies in the US;
- There are currently 19 MTPA of new capacity under construction, and an additional 8M planned LNG projects that may get postponed or canceled.

Source: Center on Global Energy Policy

1. Oil market review

Crude oil prices continue to trade at a discount

- As we anticipated in our Q4 reports, Brent gained nearly $10 / bbl in late Dec. and mid-Jan. However, prices have now reverted to their H2/24 average.

- A strong US dollar has proved a major drag on prices since October. Still-high inventories and below-trend consumption growth are further limiting factors.

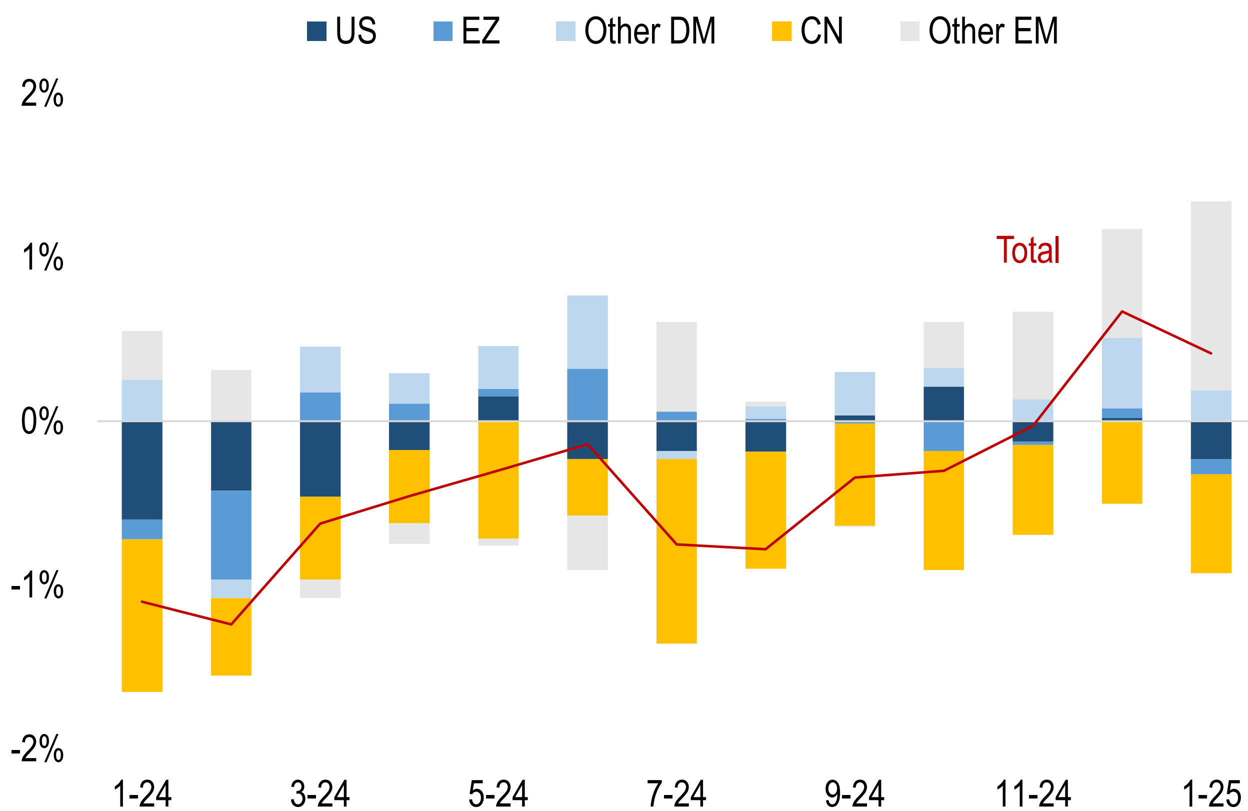
- The late-year rally largely reflected a ramp up in net long positions by traders in response to tariff-related inflation worries, and extended sanctions on RU crude. Tight OPEC supply also helped, by keeping the market in a deficit.

- Global economic uncertainty and duties on Canadian crude have weighed on speculative purchases in recent weeks. As a result, we continue to find that Brent is trading below 'fair' value (which we estimate at $80-85 / bbl).

Demand growth picked up in Q4, but is still weak

Global oil consumption growth by region

Cumulative growth since 12/23 (%)

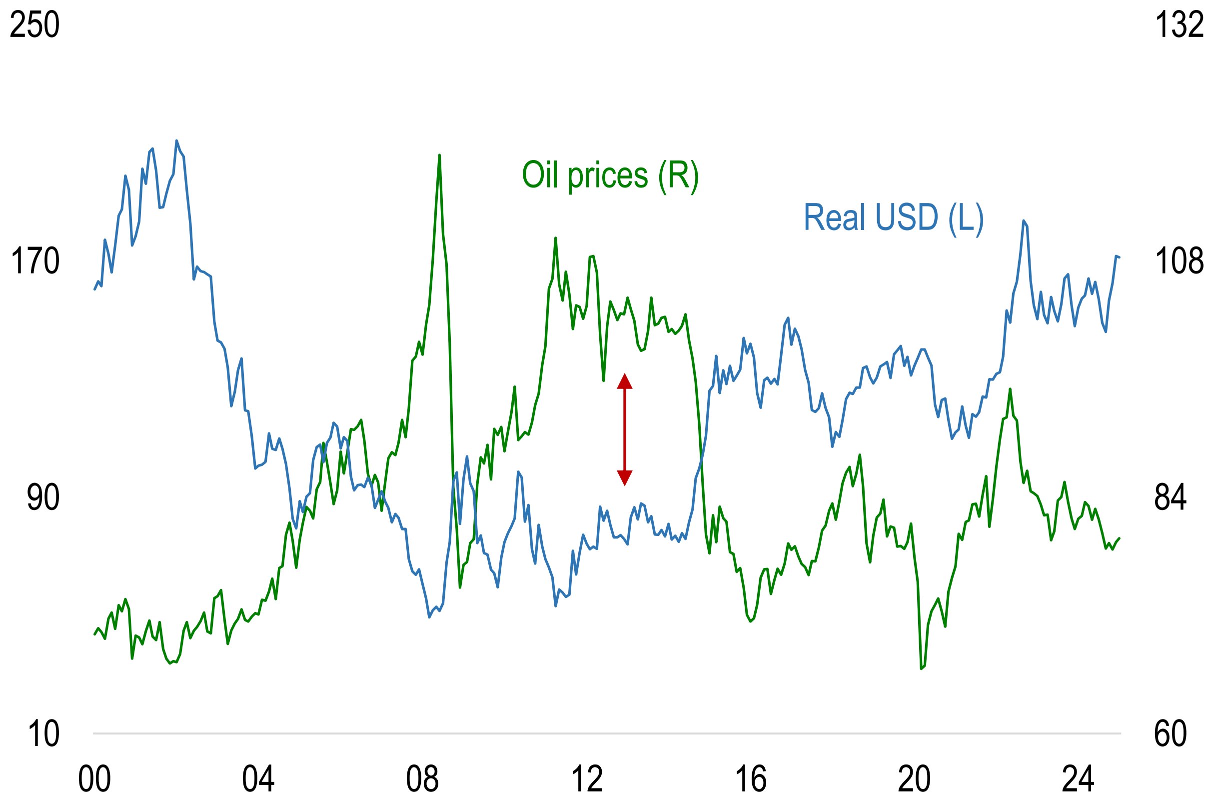


Source: Numera Analytics on EIA data

While a strong dollar keeps weighing on prices

Global oil production growth by region

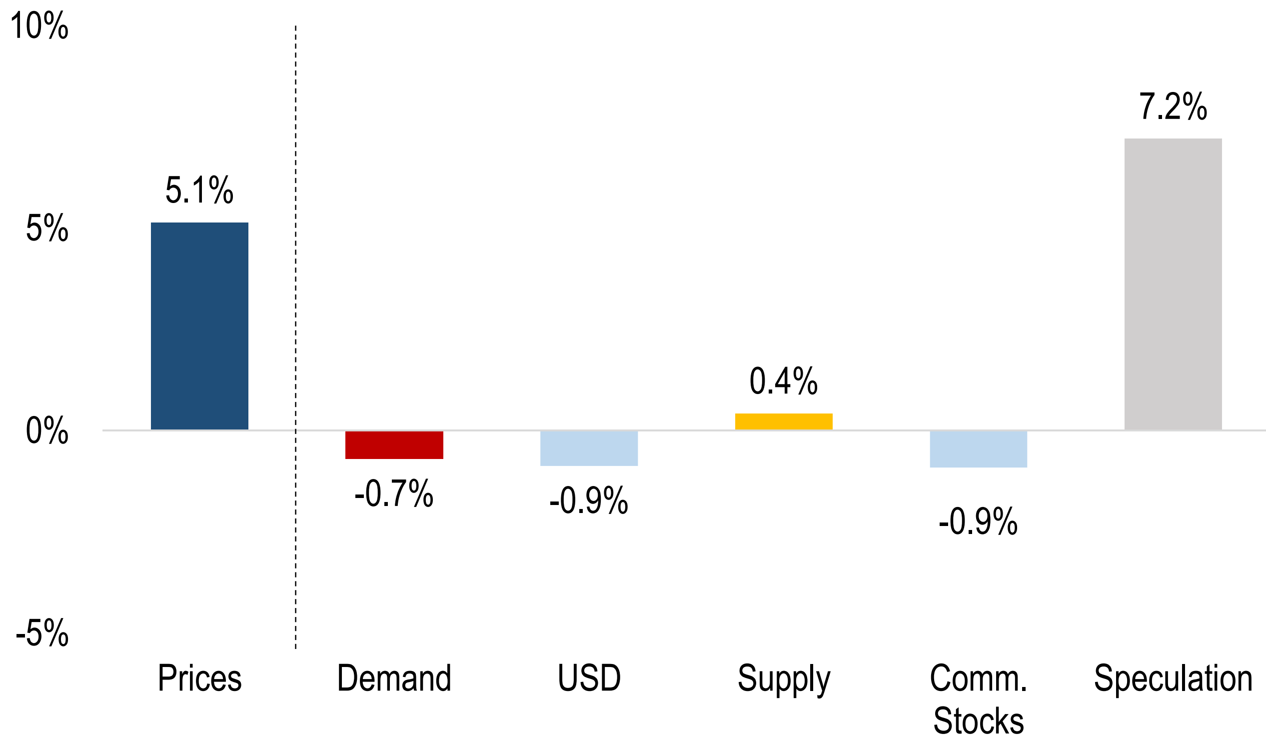
Change in Mbbl / day and %, 12M average YoY



Source: EIA; Numera calculations

Recent gains reflect stronger investor demand

Drivers decomposition – Crude oil prices
Change in real Brent prices – 11/24 – 01/25



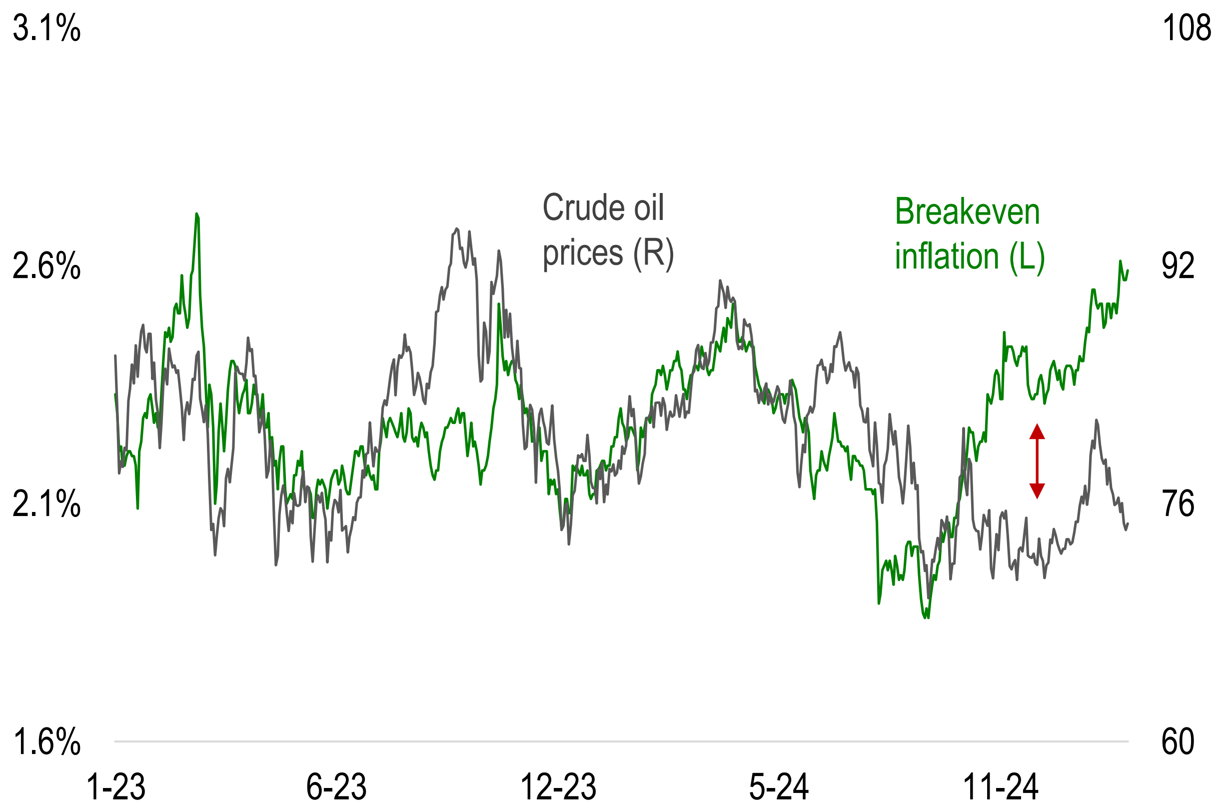
Note: Chart shows the estimated contribution of selected market drivers to the change in real oil prices between October 2024 and January 2025 Speculation proxied by net long positions on Brent futures in the NYMEX.

Source: Numera Analytics

As tariff inflation worries drove shift to petro assets

Net long WTI positions vs. oil prices

’000 contracts and USD / bbl

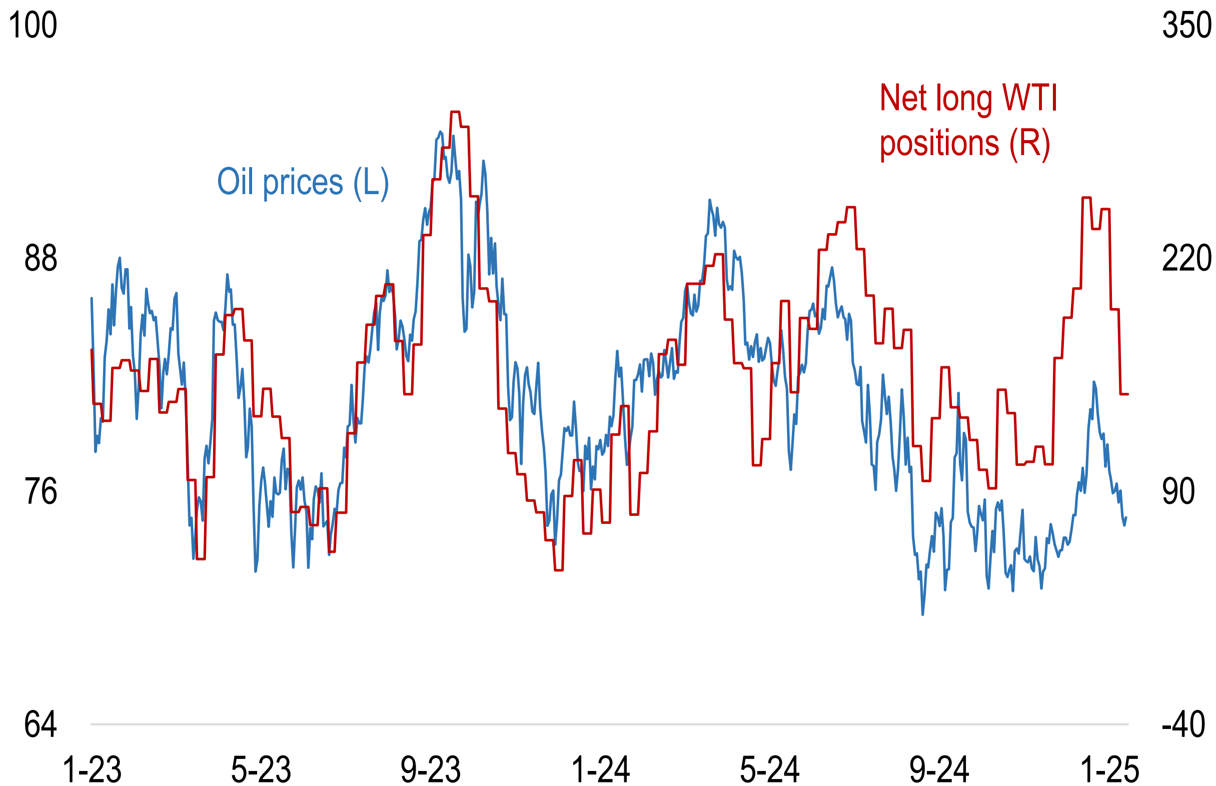


Source: NYMEX, ICE

Yet long oil positions have eased in recent weeks

Net long WTI positions vs. oil prices

'000 contracts and USD / bbl

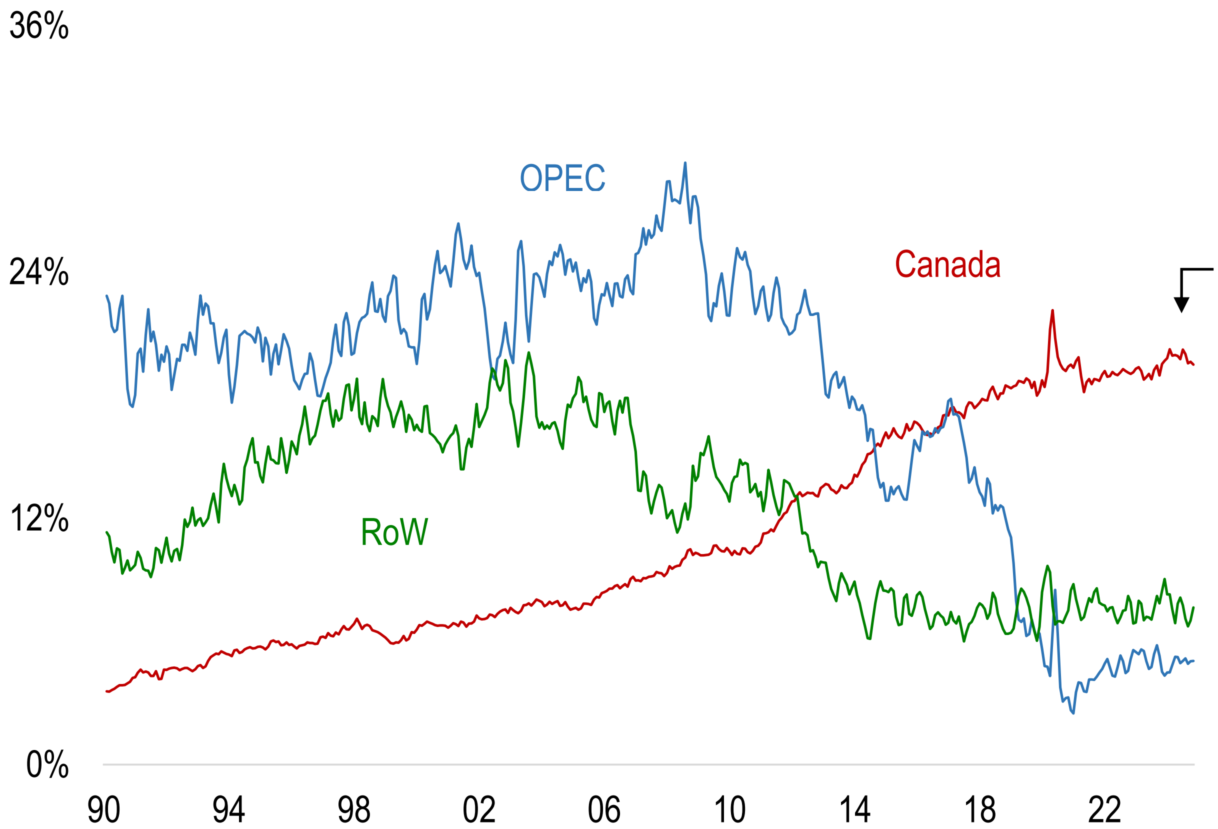


Source: NYMEX, ICE

As duties on CA oil fueled US demand concerns

US crude oil imports by origin

Share of consumption, SA (%)

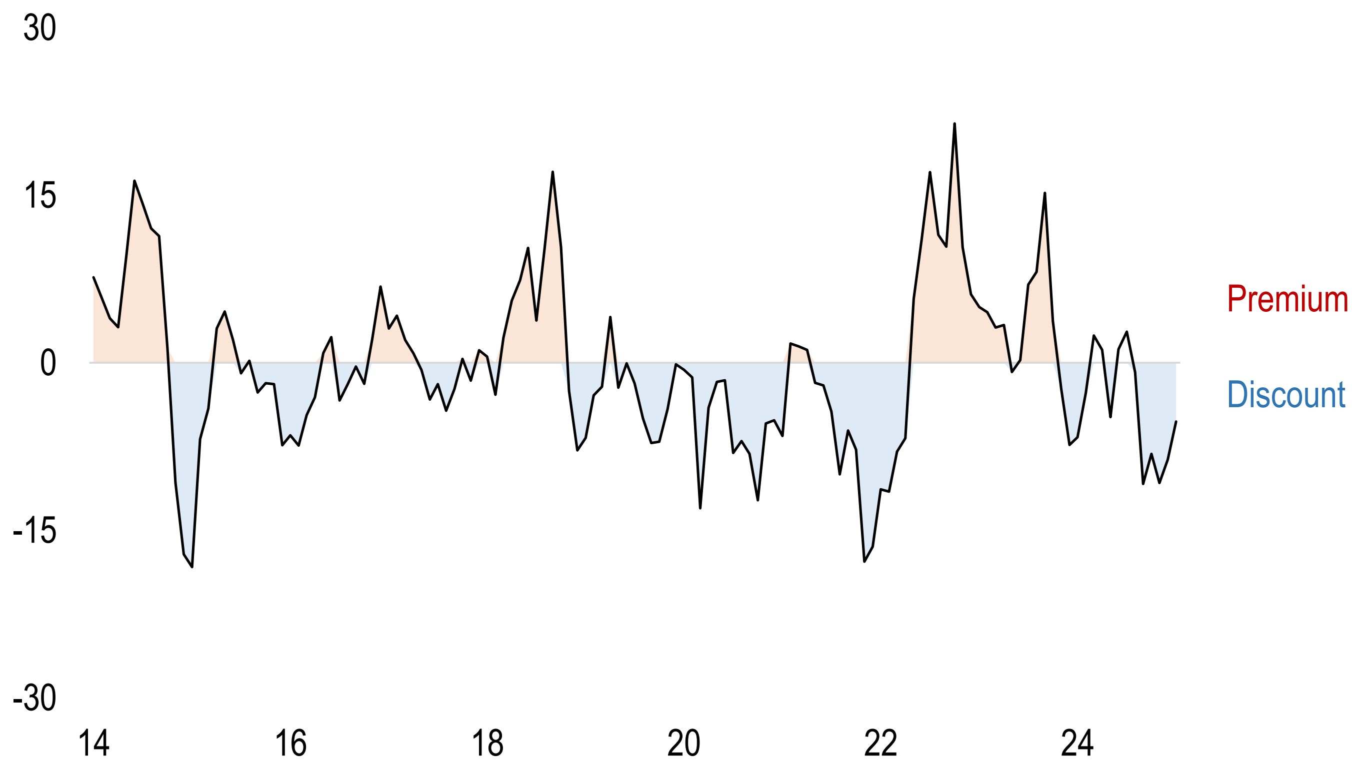


Heavier Canadian crude makes up 20% of US oil demand (primarily from Midwest refineries)

Source: EIA, Numera Analytics

In this context, oil continues to trade at a discount

Crude oil risk premium
Spot price – ‘fair’ value



Note: The oil risk premium is the difference between the Brent spot price and its modelled ‘fair’ (equilibrium) value. A positive gap indicates oil is trading at a premium, e.g. due to geopolitical risk.

Source: Numera Analytics

2. Oil market outlook

Outlook remains supportive, even if upside is modest

- A tight market balance improves the risk-reward profile of oil prices in H1/25. Oil should also benefit from its usefulness as an inflation hedge, and from stronger road traffic in China as domestic activity shows signs of improvement.

- Oil supply should pick up this year, but less than what markets expect. Saudi has little incentive to eliminate the oil deficit, while US E&P companies are unlikely to respond to the Trump's administration call for higher production (see above).

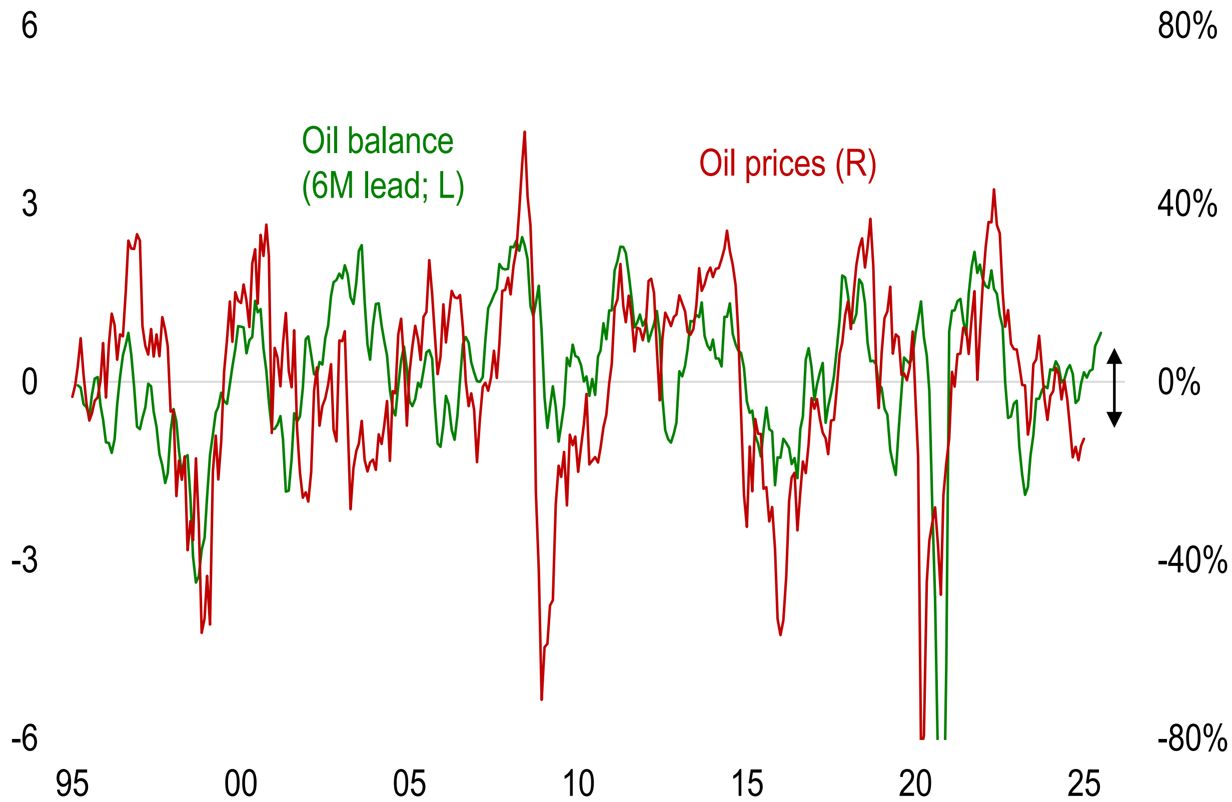
- In this context, and despite headwinds posed by a strong US dollar, Brent retains upside, with a 64% probability of higher prices over the next 12M.

- Since the futures curve is backwardated, the likelihood that spot prices exceed 12M futures is higher at 71% - justifying long positions on crude.

Tight physical balance limits near-term downside

Real crude oil prices vs. oil balance

Deviations from trend and Mbbl / day

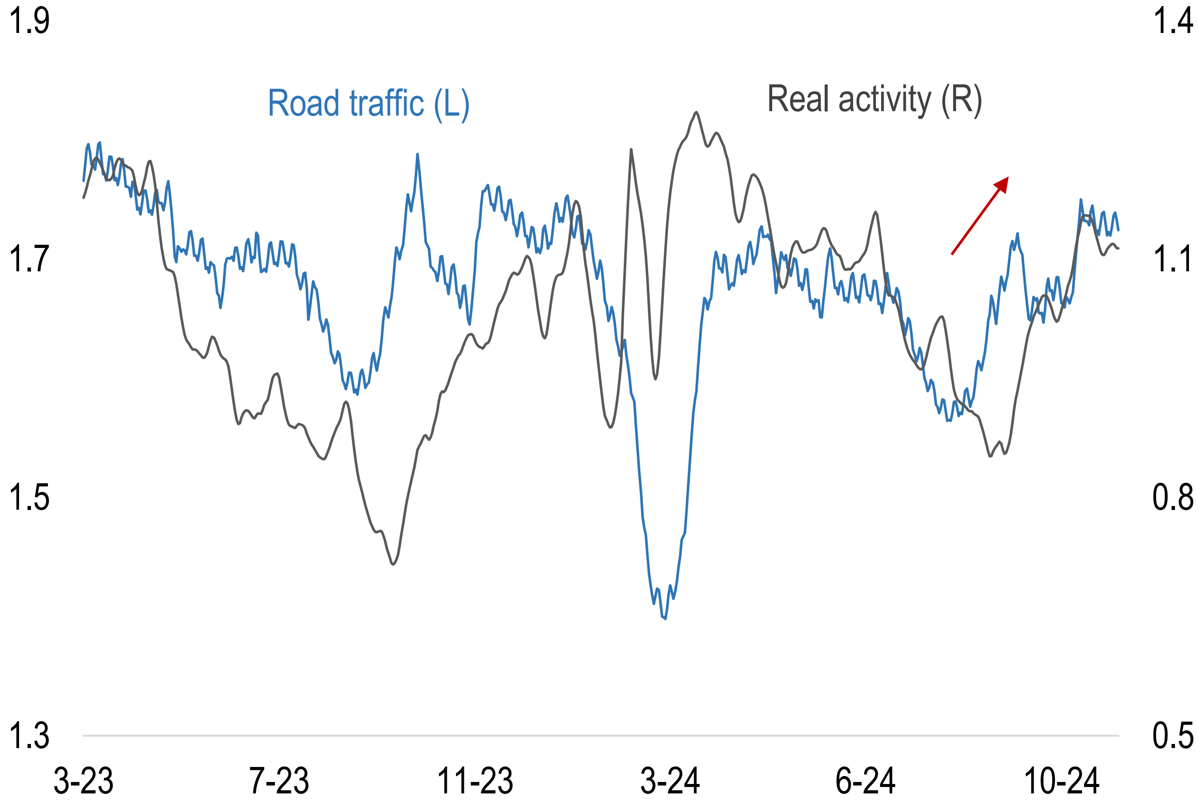


Source: EIA; Numera calculations

Signs of stronger CN activity is also a tailwind

China road traffic vs. real activity index

Traffic congestion and diffusion indices

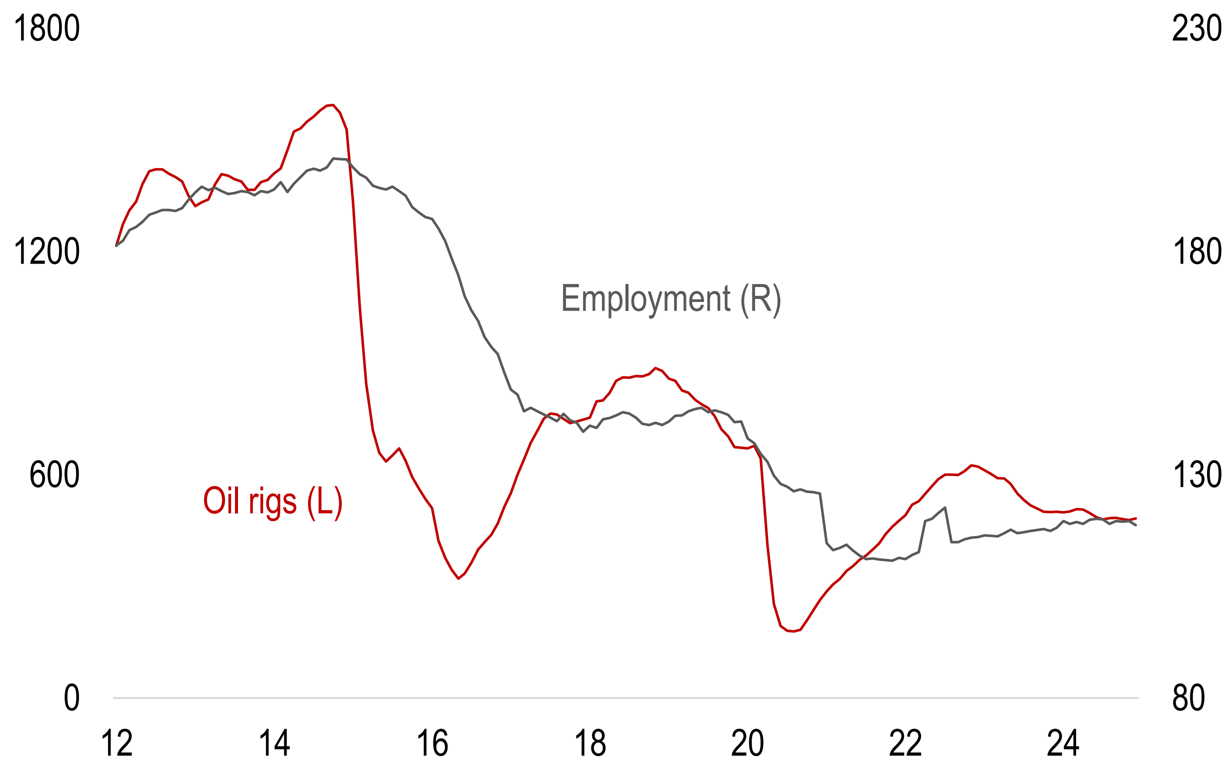


Source: China Ministry of Transport, Yicai Research Institute

On the supply side, low US rig count limits growth

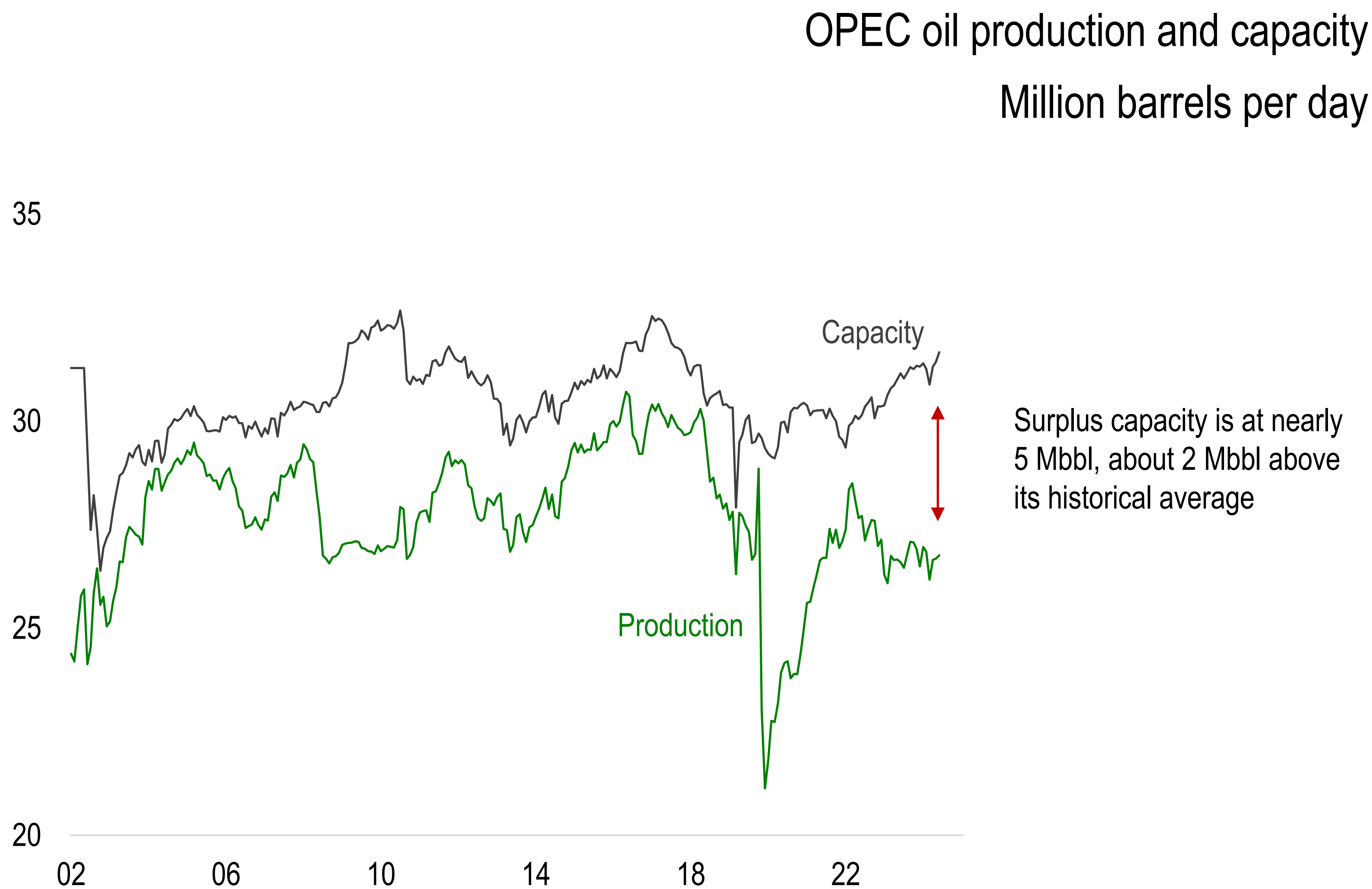
US oil rigs and employment in oil and gas fields

In 000 contracts (SA) and number of rigs



Source: Baker Hughes, EIA; Numera calculations

Excess OPEC capacity arguably the key headwind

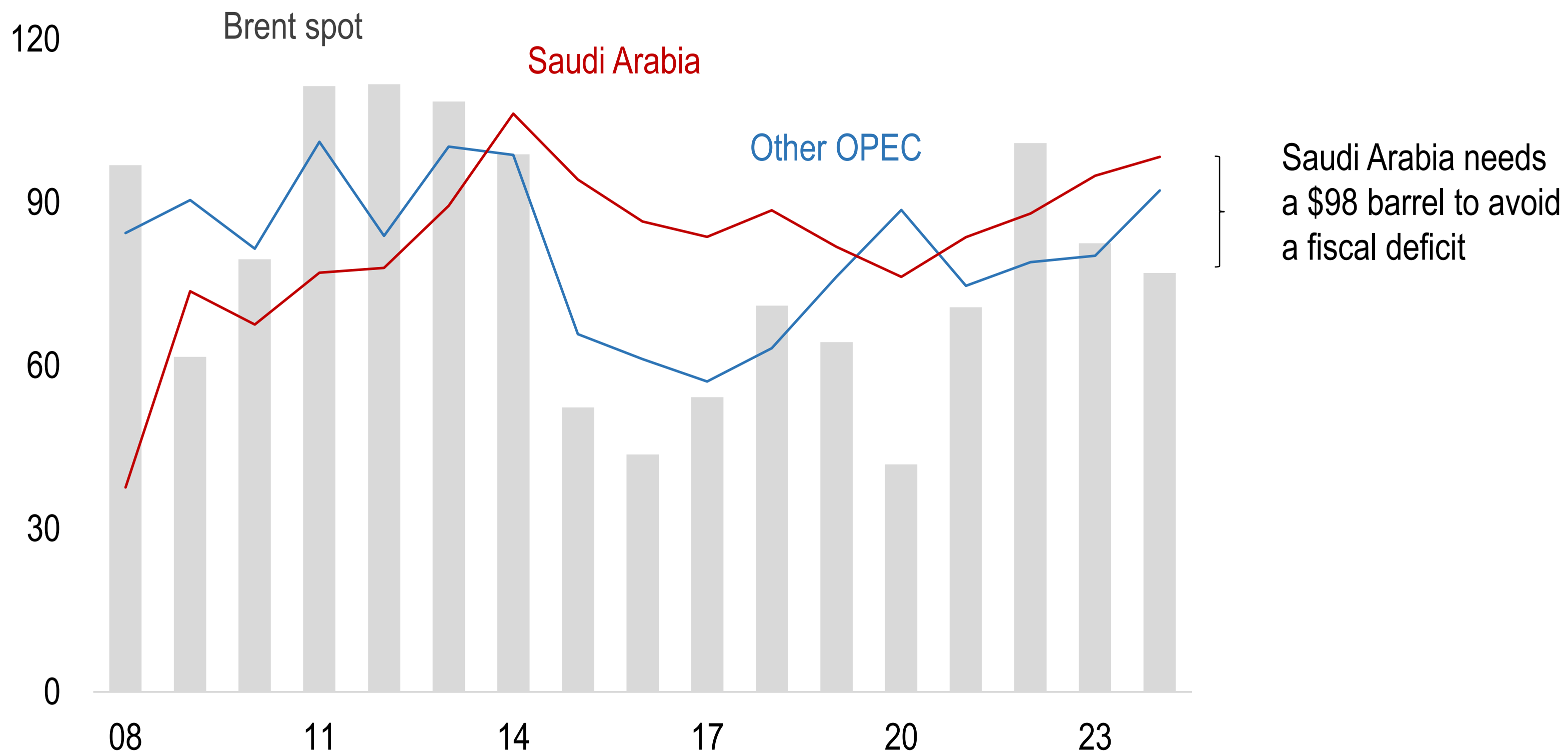


Source: IMF, ICE

But Saudi lacks incentives to ramp up production

Oil fiscal breakeven vs. spot prices

US dollars / barrel by country



Source: IMF, ICE

As such, we expect oil market deficit to continue

World oil balance	Baseline outlook				2025 probabilities	
Million bbl / day	2023	2024e	2025f	2026f	Tail risk	> 2024
Consumption	**101.9**	**102.7**	**104.2**	**104.5**	98.9	76%
Growth (%)	*2.4%*	*0.8%*	*1.4%*	*0.3%*	*-3.5%*	38%
United States	20.3	20.3	20.6	20.3	18.4	49%
(%)	*1.3%*	*0.1%*	*1.6%*	*-1.8%*	*-8.4%*	24%
Production	102.1	102.6	103.3	104.0	111.1	66%
(%)	*1.9%*	*0.5%*	*0.7%*	*0.6%*	*5.1%*	53%
OPEC	32.2	32.2	32.5	32.5	37.2	55%
(%)	*-2.0%*	*0.0%*	*0.9%*	*-0.1%*	*8.7%*	50%
Surplus (+) / Deficit (-)	0.2M	-0.1M	-0.9M	-0.6M	2.2M	-

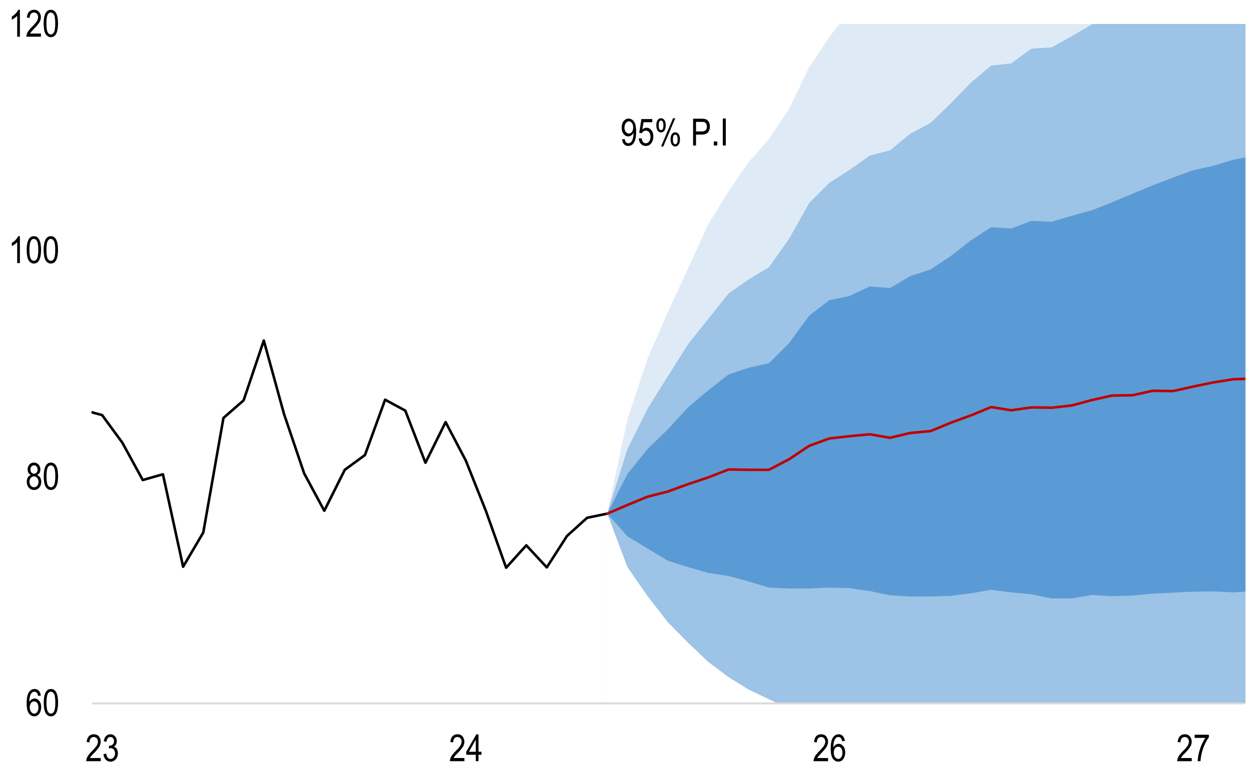
Note: Tail risk consumption presents the 5 percentile while tail risk production represents the 95 percentile.

Source: History: EIA; Forecast: Numera Analytics

Allowing Brent to revert to the $80-85 / bbl range

Brent price outlook and forward curve

USD / bbl – 2024/27



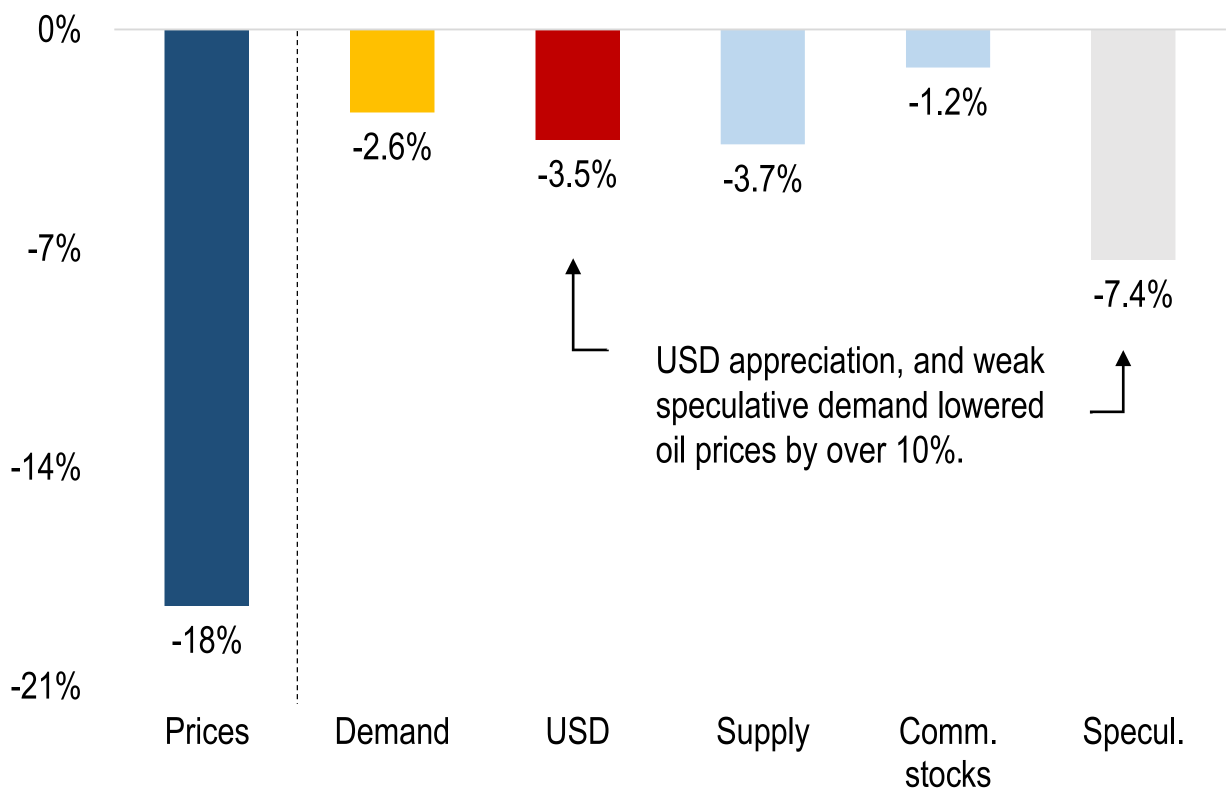
Note: Fan chart denotes 50 / 80 / 95% prediction intervals.

Source: Numera Analytics, ICE

Even if a strong dollar, potential tariffs limit upside

Drivers decomposition – Crude oil prices

Change in prices during 2018/19 Trade War

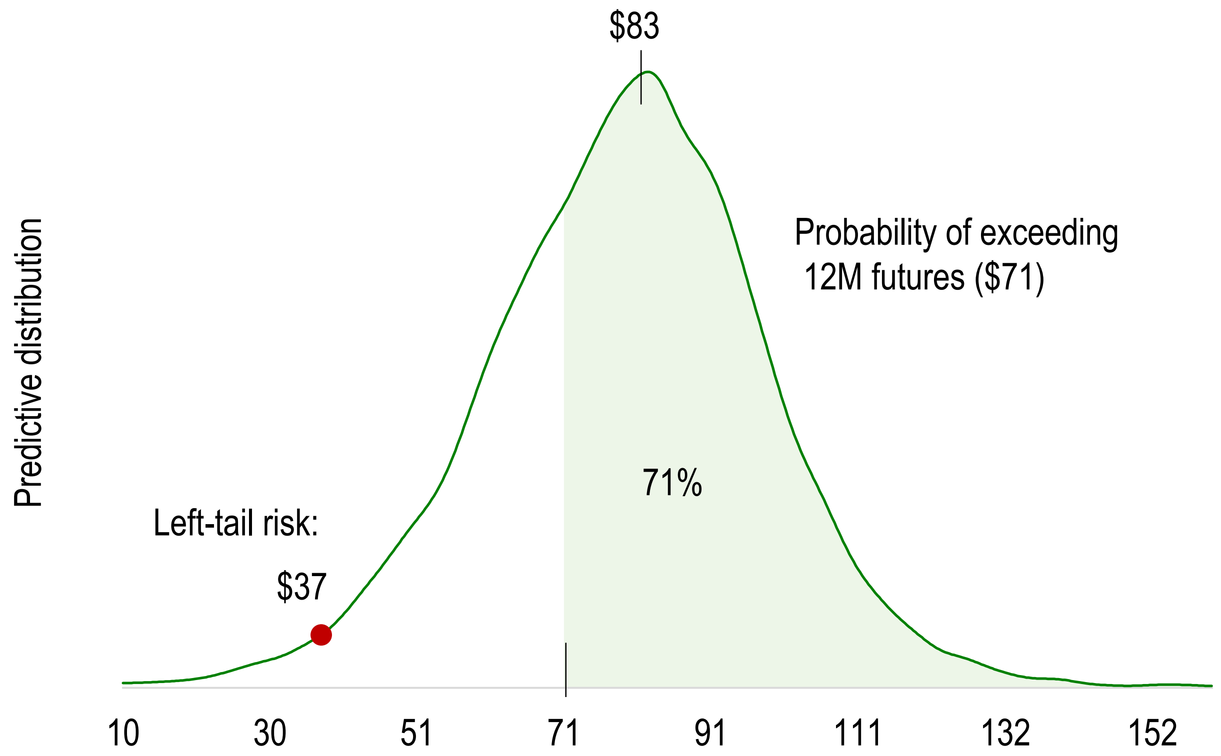


Source: ICE, FED

Backwardated futures justifies long positions

Brent price outlook (USD / bbl)

12M probability forecast



Source: Numera Analytics, ICE

3. US natural gas

Does Henry Hub's winter rally still have legs?

- Colder-than-usual temperatures has caused residential demand to surge at the start of the year, supporting total demand and driving down inventories.

- Gas availability has also decreased in response to weak domestic production and (to a lesser extent) and increase in pipeline exports. We find that market fundamentals explain around two-thirds of the 30% jump in prices since Q3.

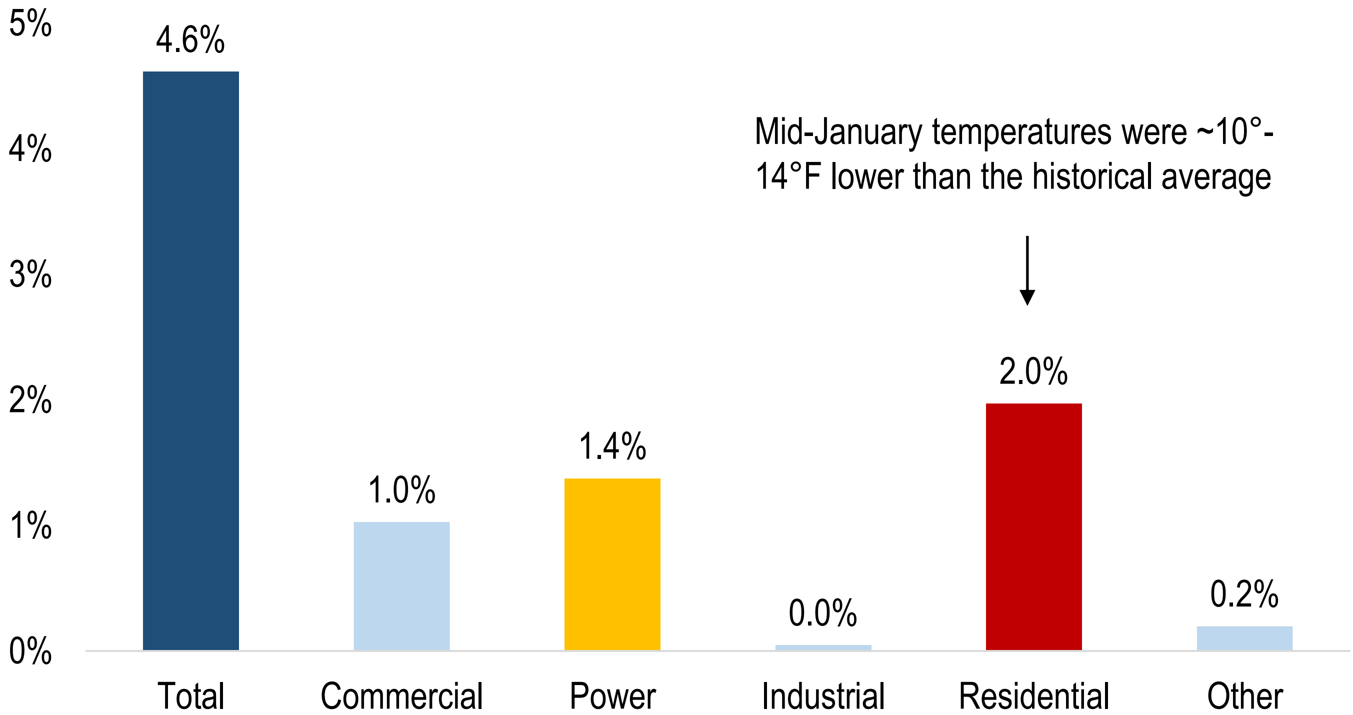
- The tighter balance has lifted the estimated 'fair' value to around \$3 / MMBtu. While speculative purchases cap the overall upside, we expect prices to trade above \$3.5 in 2025, in line with the Henry Hub forward curve.

- Two important sources of support is a likely pick-up in industrial activity (as signaled by rising new orders) and persistent declines in O&G rig counts.

Colder-than-usual temperatures have lifted demand

US natural gas consumption by sector

Contribution to growth since 11/24, SA (%)

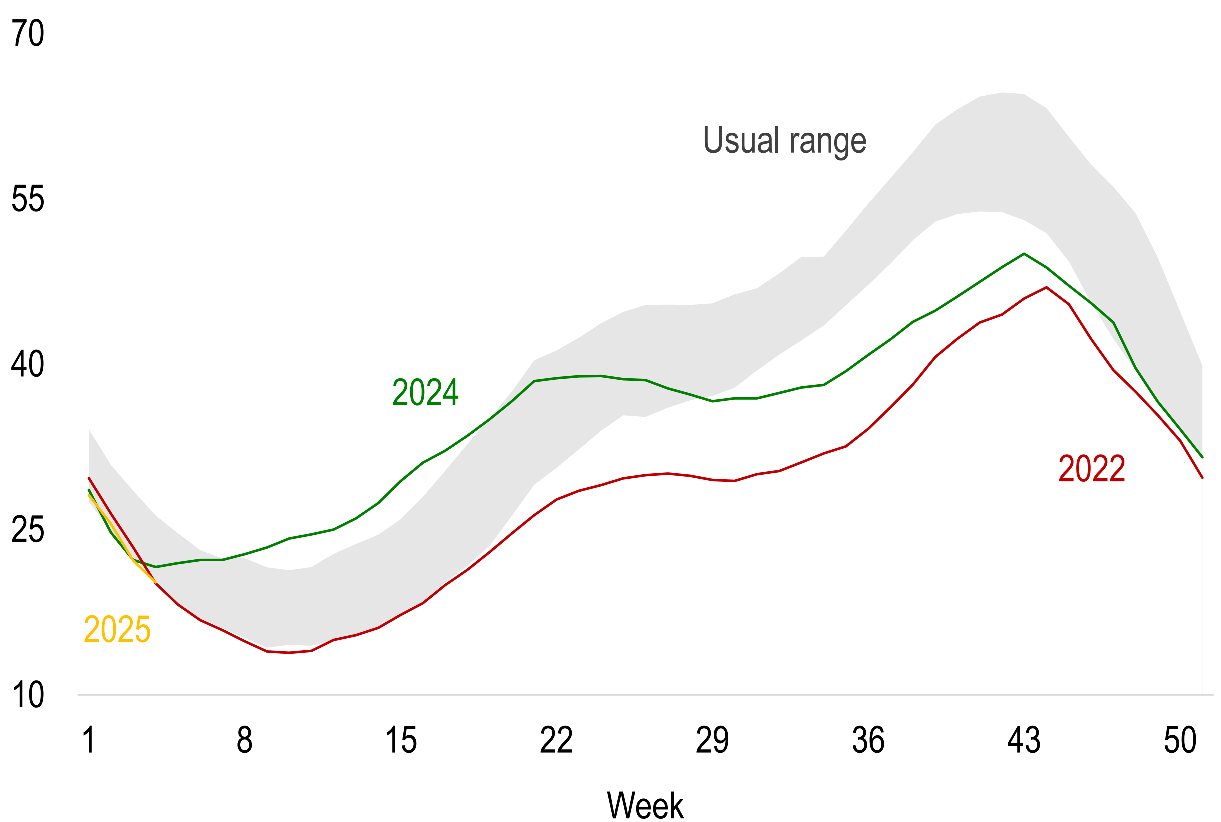


Source: EIA; Numera calculations

Pushing inventory DOS below their usual range

US natural gas days of supply

Underground stocks / deliveries

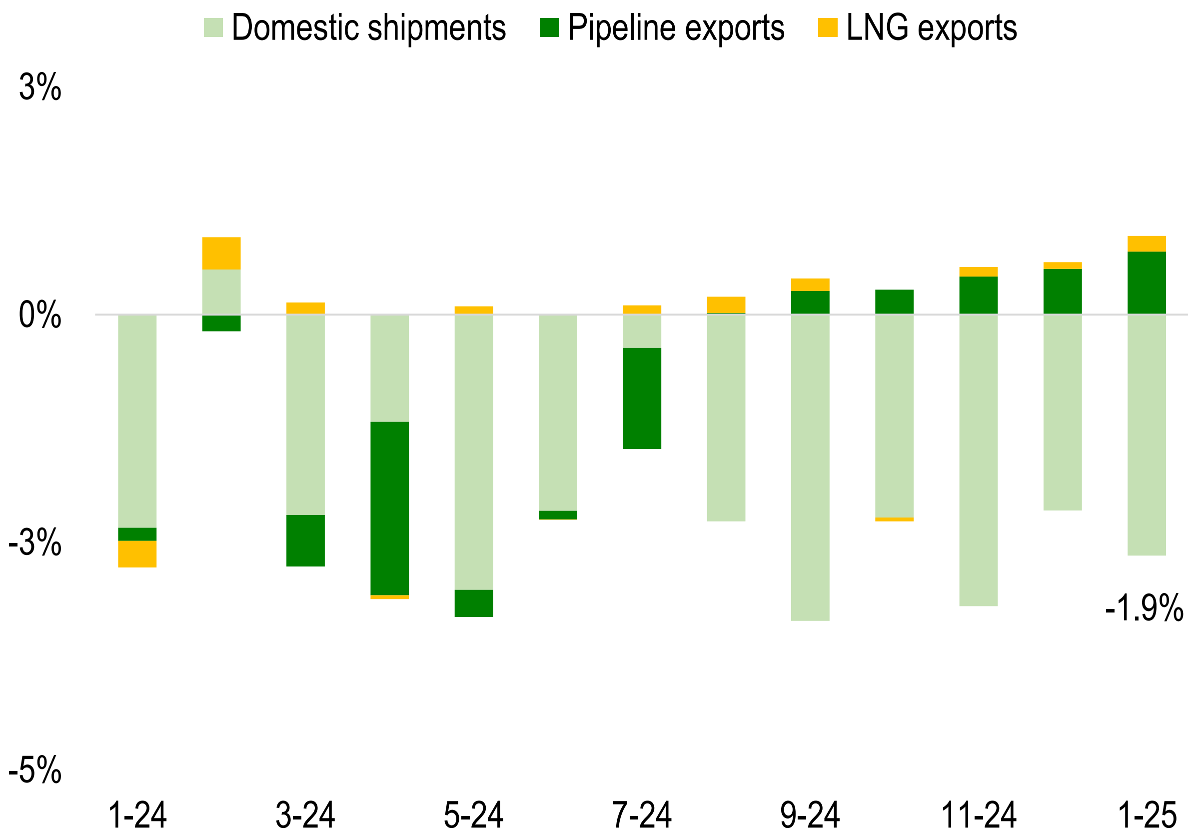


Source: EIA, Numera Analytics

Tight production also holding down inventories

US gas production by destination

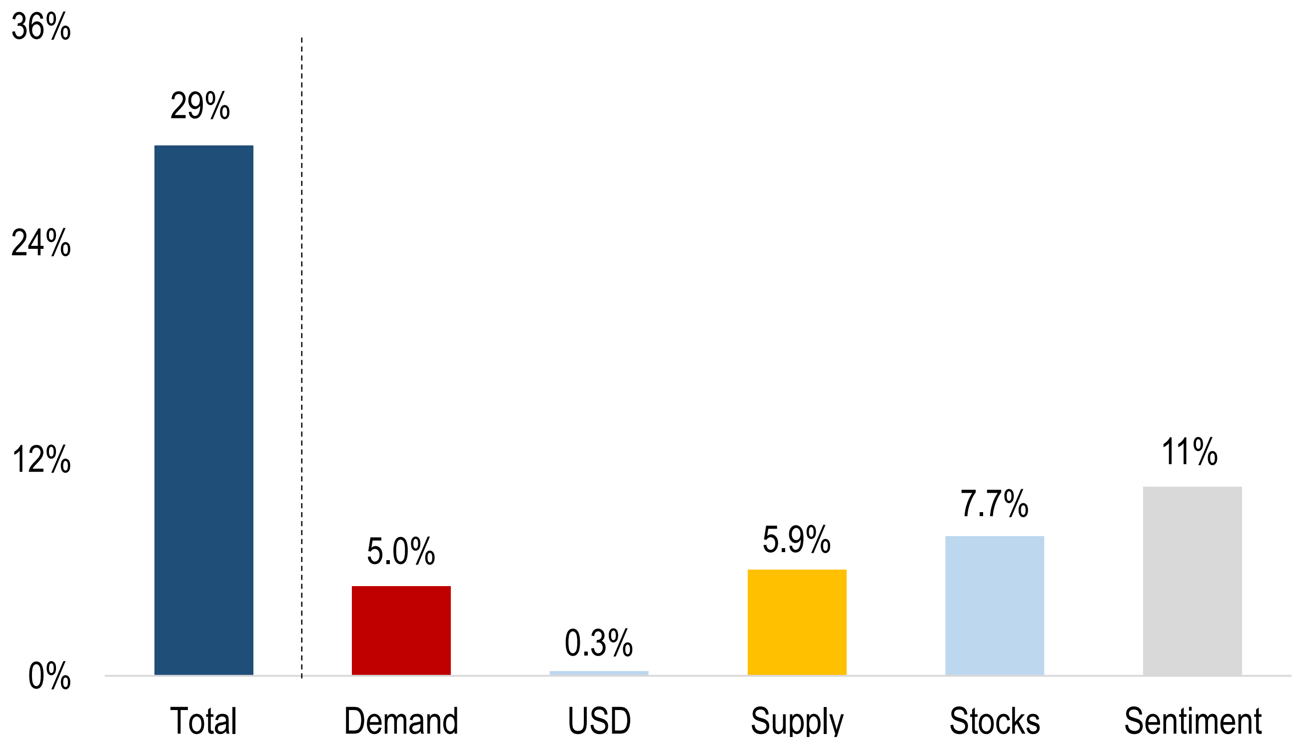
Cumulative growth since 12/23 (%)



Source: Numera Analytics on EIA data

Fundamental gains amplified by bullish sentiment

Drivers decomposition – US natural gas prices
Change in real Henry Hub prices – last 6M



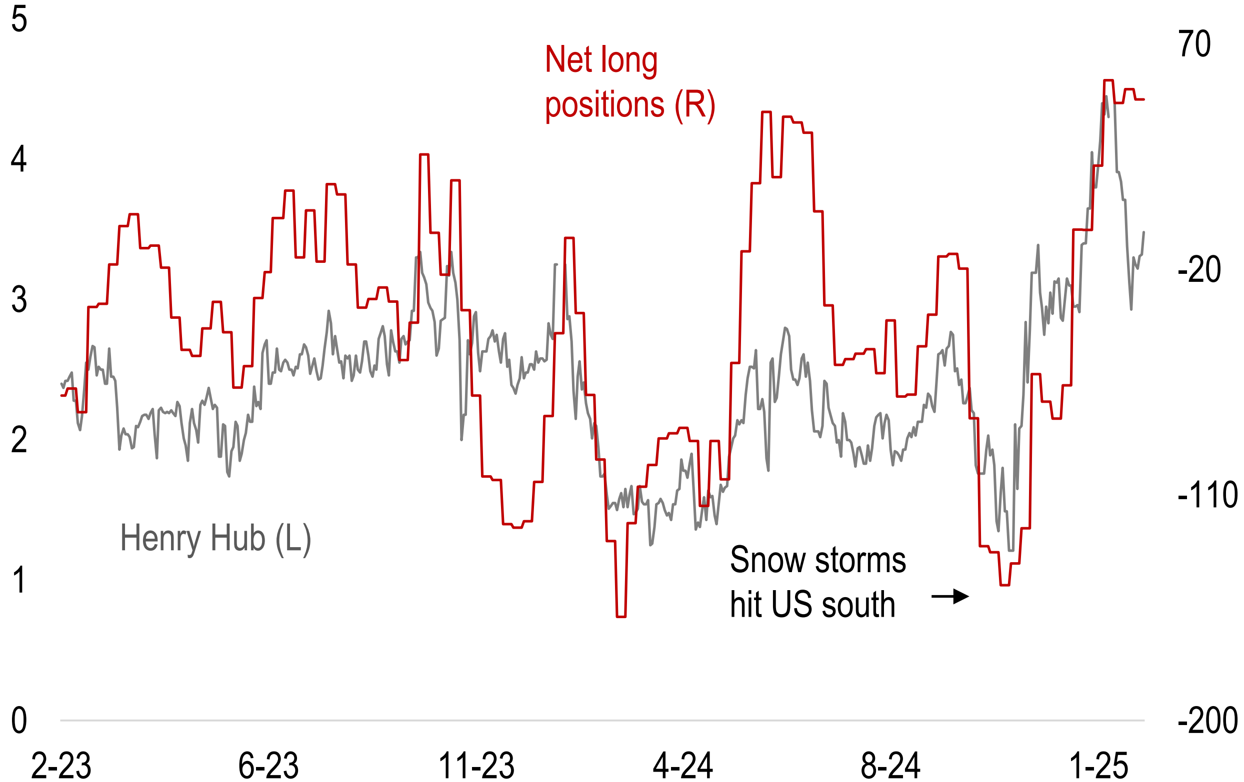
Note: Chart shows the estimated contribution of selected market drivers to the change in real natural gas prices since September 2024. Sentiment proxied by net long positions on Henry Hub by US money managers.

Source: Numera Analytics

As captured by a surge in net long positions

Henry Hub vs. speculative positions

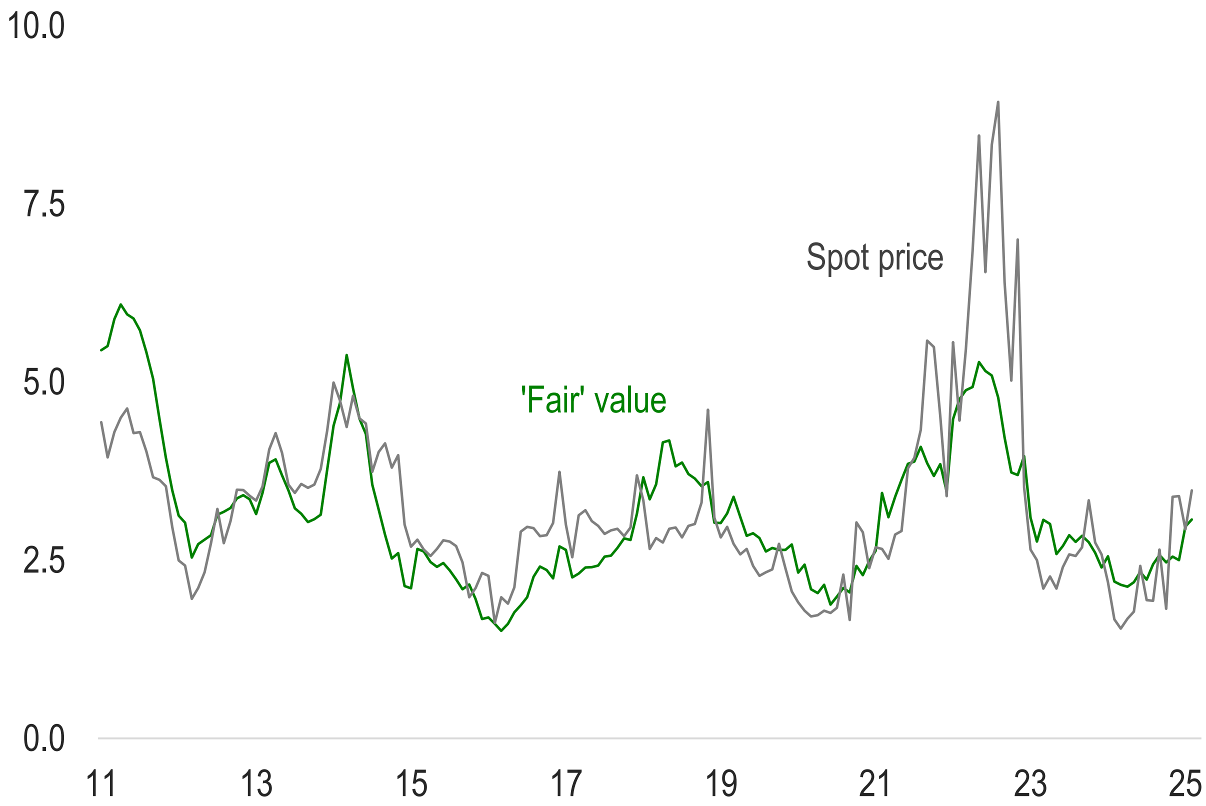
USD / MMBtu and 000s of contracts



Source: EIA, NYSE CFTC; Numera calculations

Keeping spot prices 10-15% above ‘fair’ value

Henry Hub prices
Spot vs. ‘fair’ value

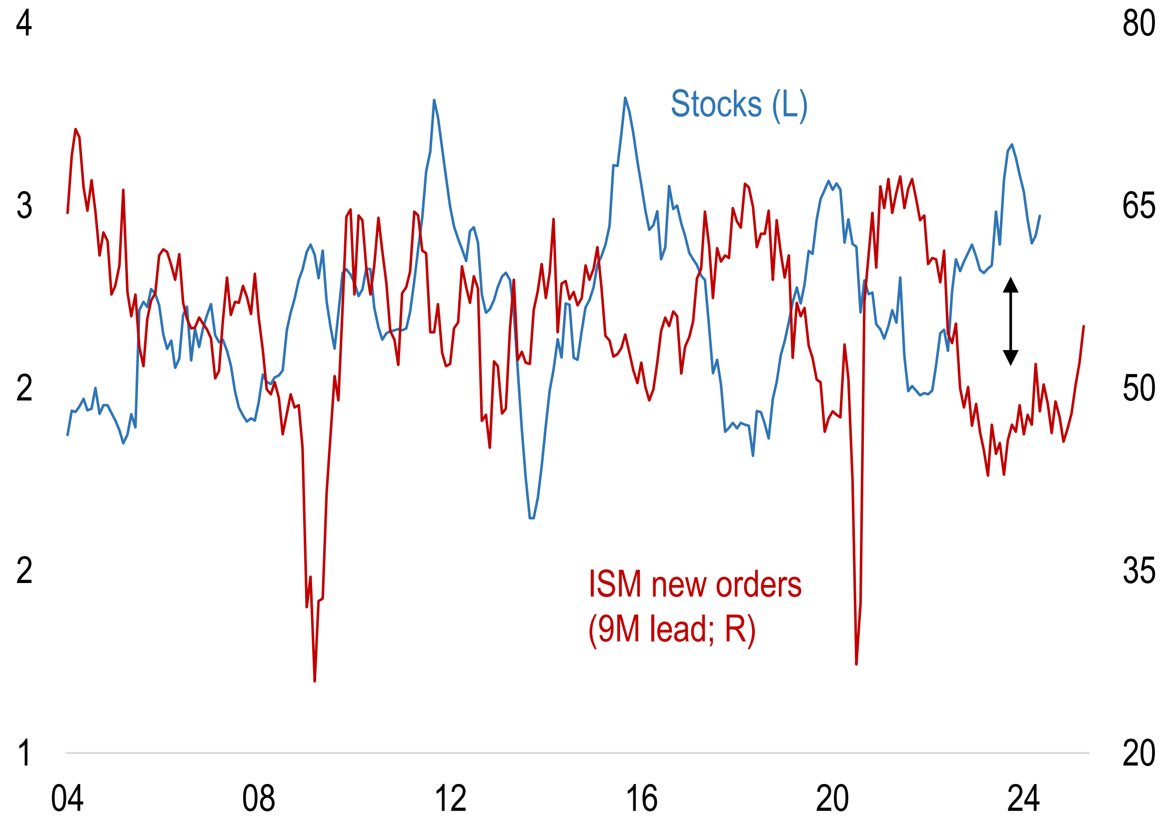


Source: Numera Analytics, EIA

Pick-up in industrial activity should fuel demand

Natural gas inventories vs. ISM new orders

TR cubic feet (SA) and diffusion index

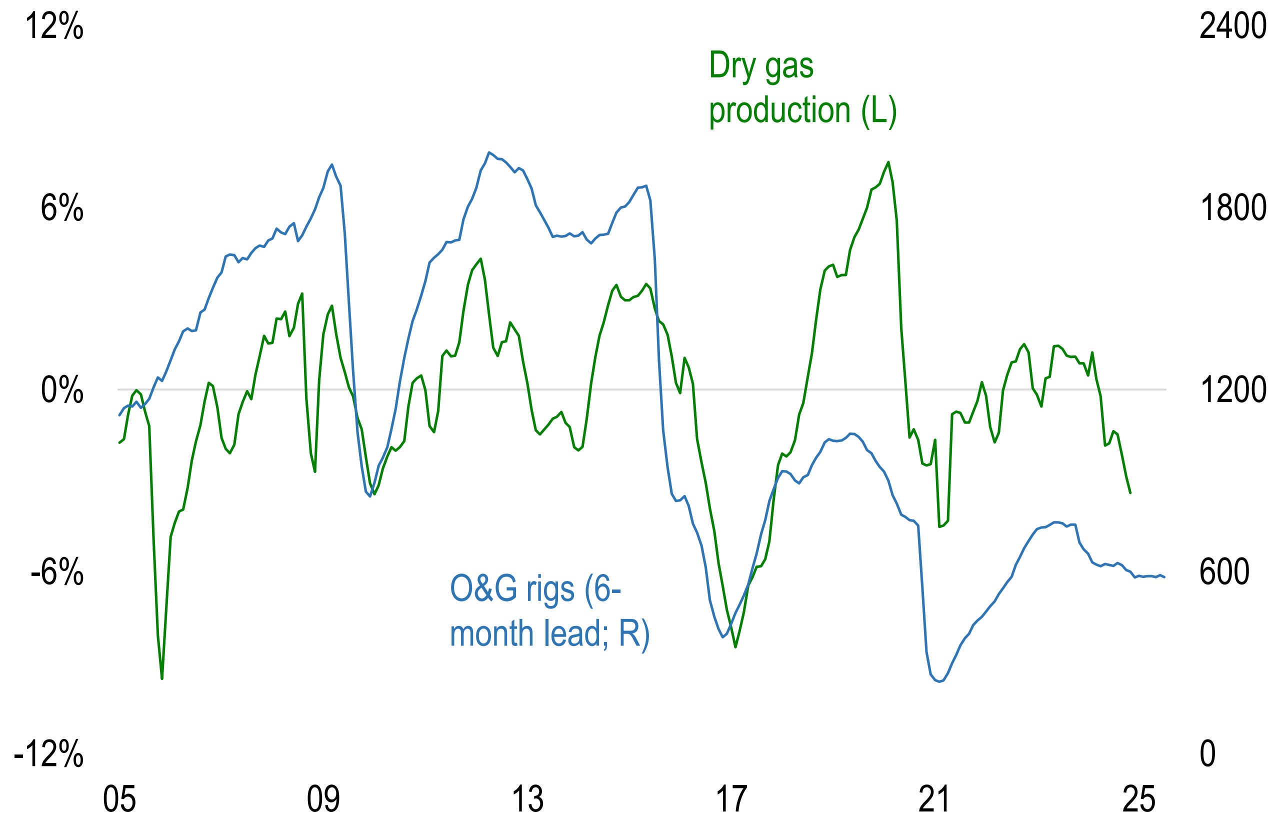


Source: EIA, ISM; Numera calculations

While falling rig counts curb production growth

Natural gas production vs. oil & gas onshore rigs

Deviations from trend (%) and number of rigs

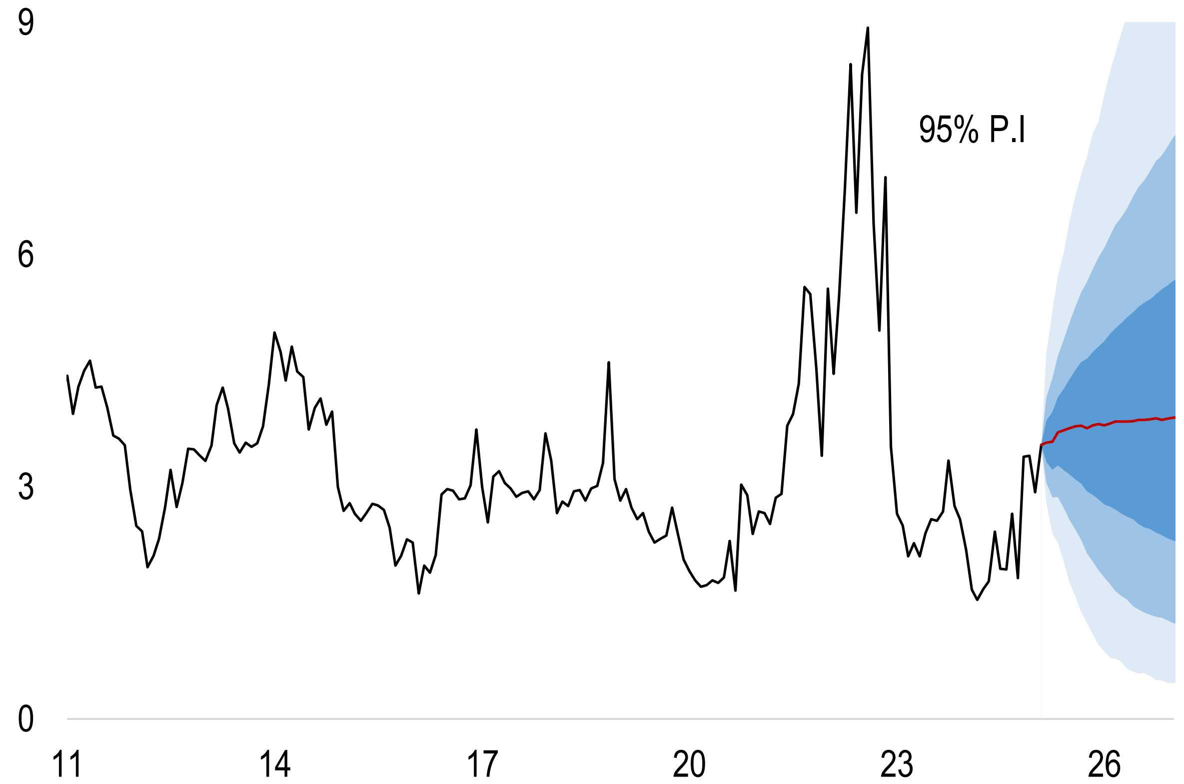


Source: Baker Hughes, EIA; Numera calculations

Both factors should keep gas above $3.5 in 2025

Henry Hub price outlook

USD / MMBtu – 2024/26



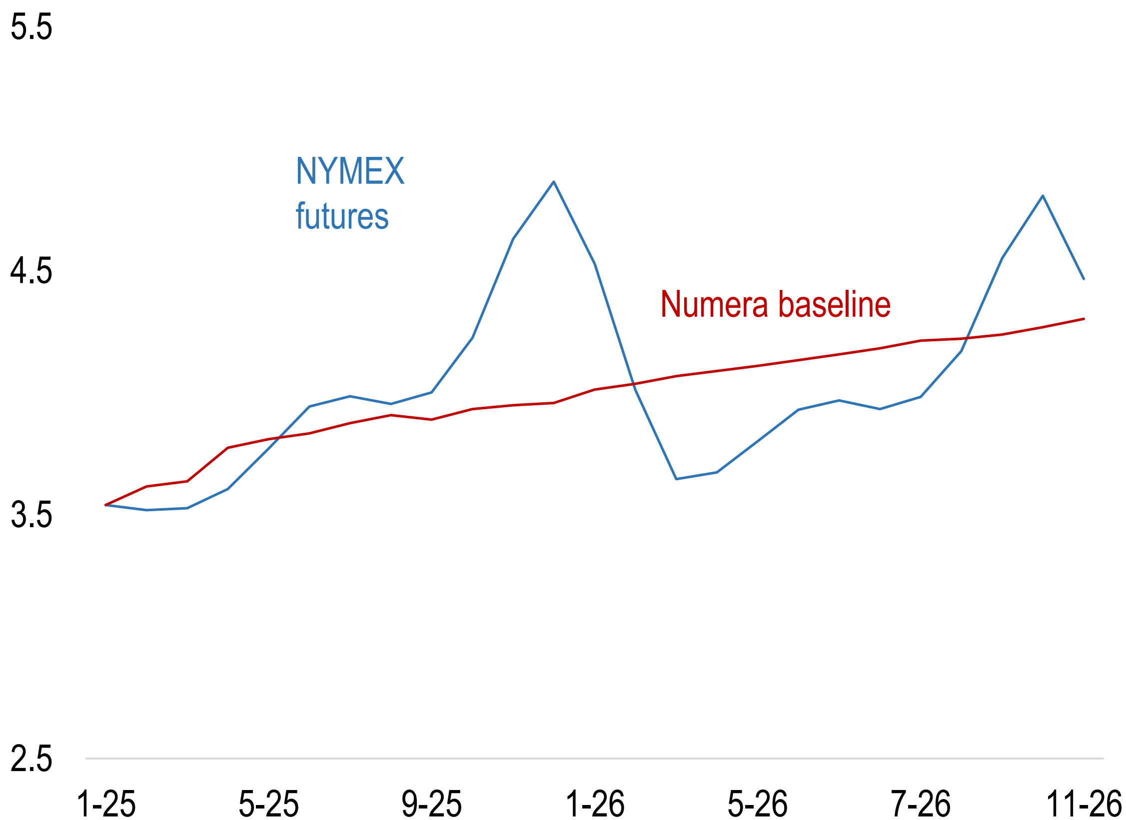
Note: Fan chart denotes 50 / 80 / 95% prediction intervals.

Source: History: EIA; Forecast: Numera Analytics

Which is roughly in line with market expectations

Henry Hub price outlook and forward curve

USD / MMBtu – 2025/26



Source: Numera Analytics, NYMEX

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