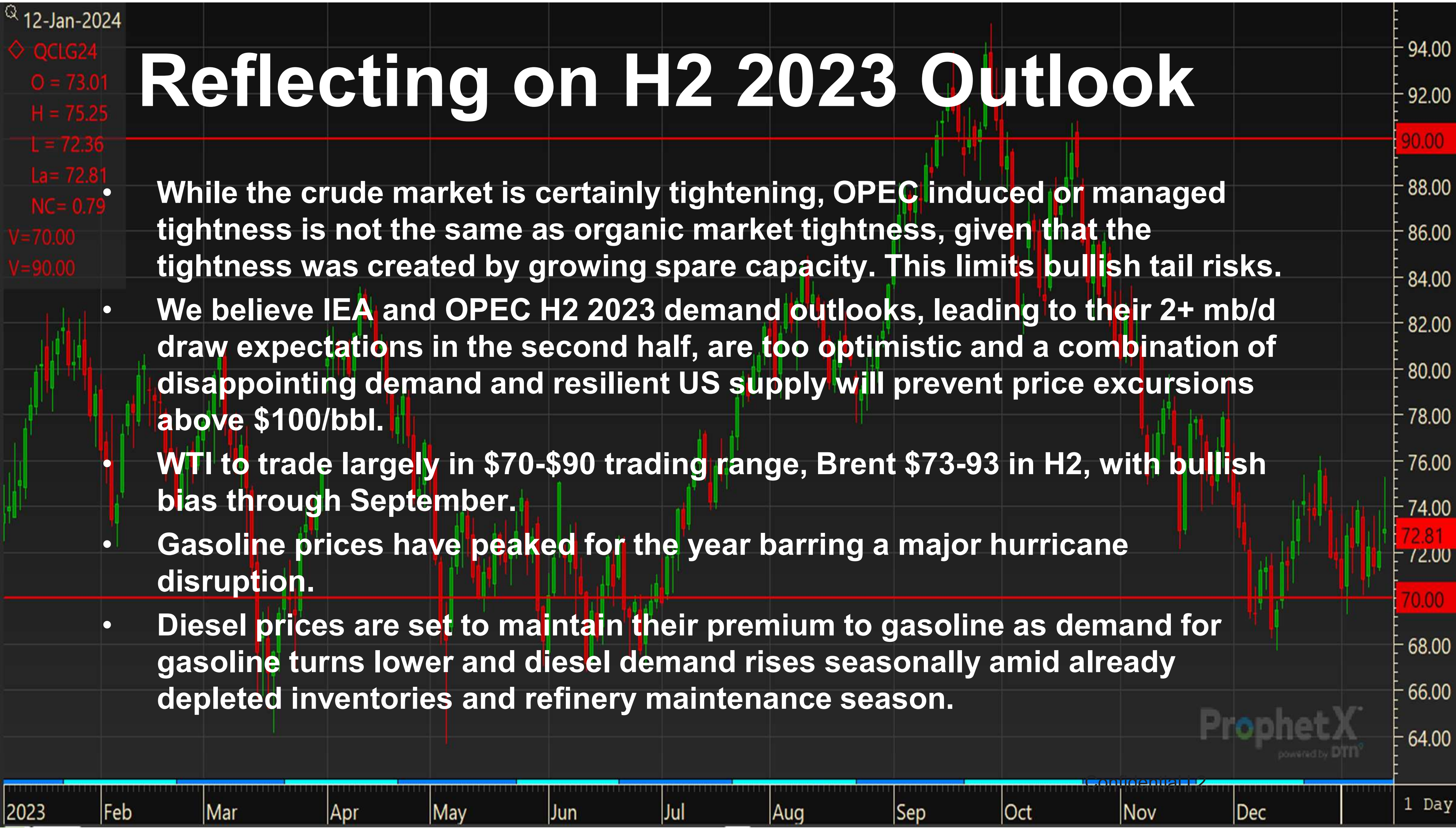
H1 2024 Outlook

by Troy Vincent & Karim Bastati

Will OPEC+ Cuts Finally Deliver a Tighter Market and Higher Prices?

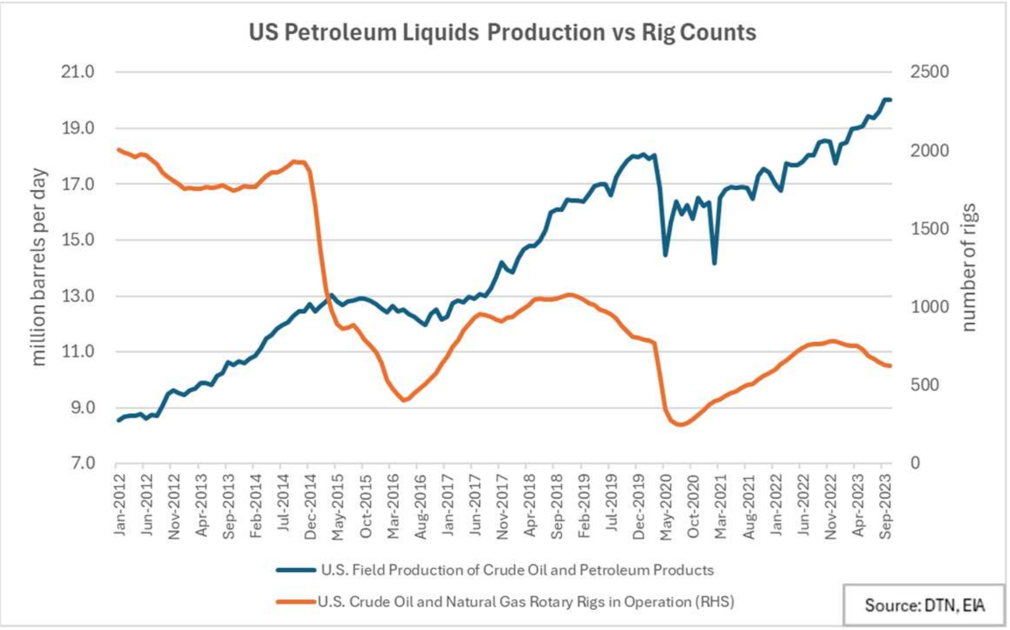


Reflecting on H2 2023 Outlook

- While the crude market is certainly tightening, OPEC induced or managed tightness is not the same as organic market tightness, given that the tightness was created by growing spare capacity. This limits bullish tail risks.
- We believe IEA and OPEC H2 2023 demand outlooks, leading to their 2+ mb/d draw expectations in the second half, are too optimistic and a combination of disappointing demand and resilient US supply will prevent price excursions above $100/bbl.
- WTI to trade largely in $70-$90 trading range, Brent $73-93 in H2, with bullish bias through September.
- Gasoline prices have peaked for the year barring a major hurricane disruption.
- Diesel prices are set to maintain their premium to gasoline as demand for gasoline turns lower and diesel demand rises seasonally amid already depleted inventories and refinery maintenance season.

US Oil Production & Rig Counts

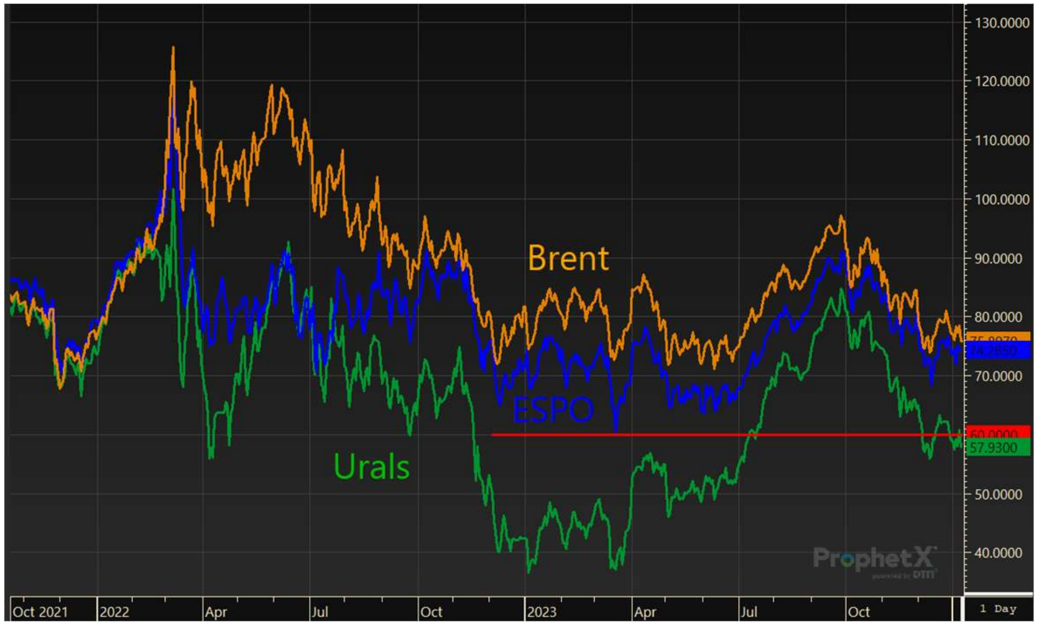
- **2023 crude production averaged a new annual record high of 12.9 mb/d**
- In Dec ‘22 OPEC MOMR, OPEC forecast total US liquids production would rise 1.1 million bpd in 2023
- In Dec ’22 STEO, EIA forecast US crude production to grow 460,000 bpd in 2023
- **US crude production alone grew 1.0 million in 2023**
- **US crude, NGL and renewables (total liquids) production grew 1.6 million bpd in 2023**
- A 20% decline in rigs will finally weigh on production growth in 2024
- **We believe US crude production growth will slow but will still outpace EIA expectations in H1 by growing 250,000 bpd**



DTN

Russian Oil: Ineffectual Sanctions

- **G7 price cap tame by design** (prioritized **fighting inflation** over RUS revenues)
- **Ineffectual price cap for Urals**
  - Relies on European shippers
  - Traded below $60/bbl cap from Dec-June
- **Irrelevant price cap for other Russian grades**
  - ESPO traded above cap, but relies on Chinese shippers
- **Large dedicated tanker shadow fleet**
- **Waterborne crude exports actually** rose 1mn bpd from Dec-May 2023
- **Crude Redirected to India and China**
  - India 2023: 1.77mn bpd (+116% y/y)
  - China 2023: 1.32mnbpd (+33% y/y)



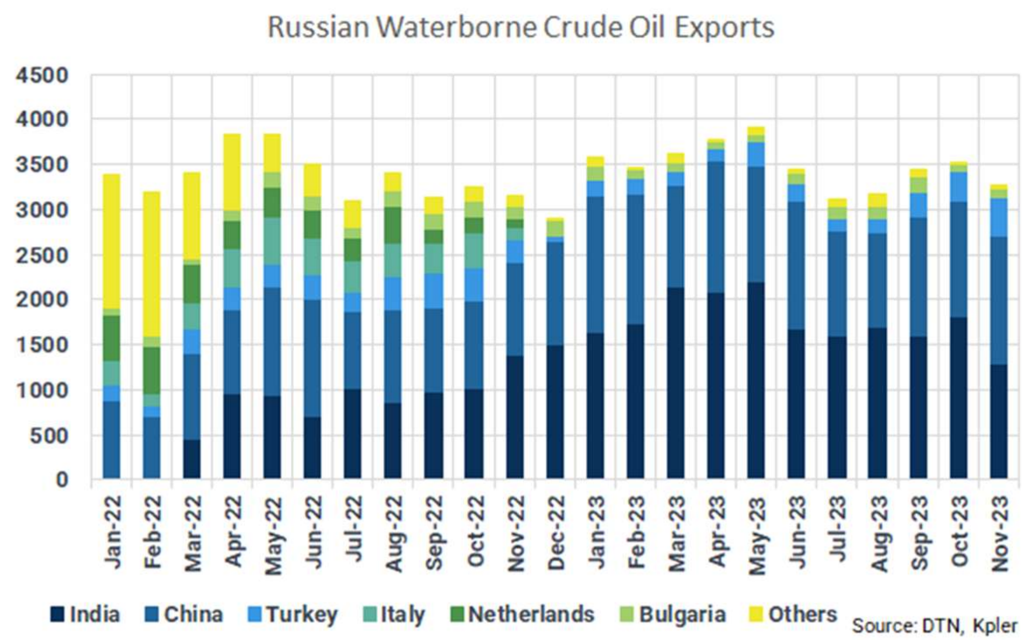
Russian Oil: Underwhelming Cuts

- **2H23: Russia more determined about cuts**, in solidarity with OPEC+, announcing **export cuts**:
  - Aug: 500 kbd export cut from July lvls
  - Sep-Dec: 300 kbd export cut from July lvls
  - 1Q24: 500kbd export cut from **May-June 2023 levels** (highs) (200kbd refined products)

- **But waterborne exports +3% y/y in 1H and 2H**
  - India stepping back, more to China, Turkey
  - Jan **exports** up, 150kbd **over target**

- **Production declined**, but remained above target
  - **Dec** production **375,000 bpd** below Feb baseline, 125,000 bpd **over target**
  - **2023:** 10.76mn bpd (**-220,000 bpd y/y**)
  - **1H24:** 10.57/**10.71mn bpd** (OPEC/EIA)

- However, Transneft saw volumes moved in 2023 **flat**, and oil **E&P** activity **picked up**



Russian Oil: Product Push

- **Disty-go-round**: Russian Diesel redirected from Europe to Saudi, Turkey, who in turn ramped up exports to Europe

- Russian **product exports** to Middle East **soared with sanctions**, **plummeted** after prices **surpassed cap**

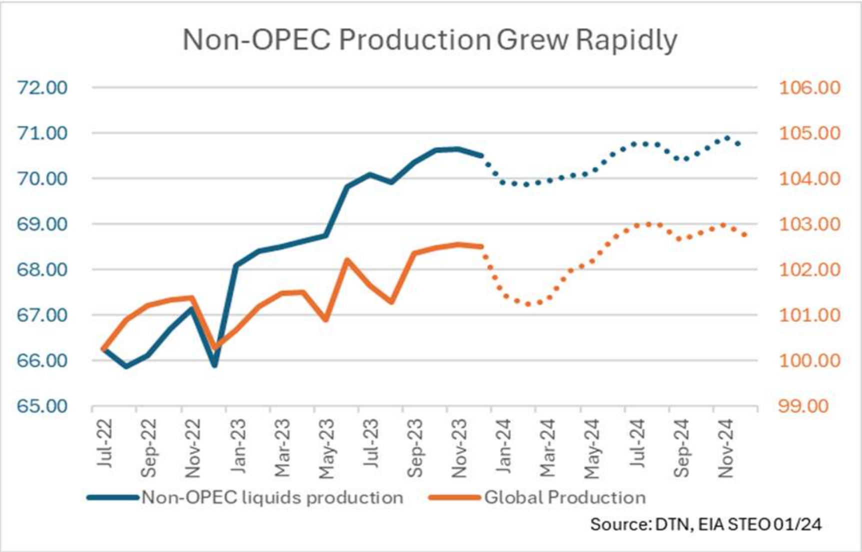
- Product **export bans** implemented amid deep refinery maintenance

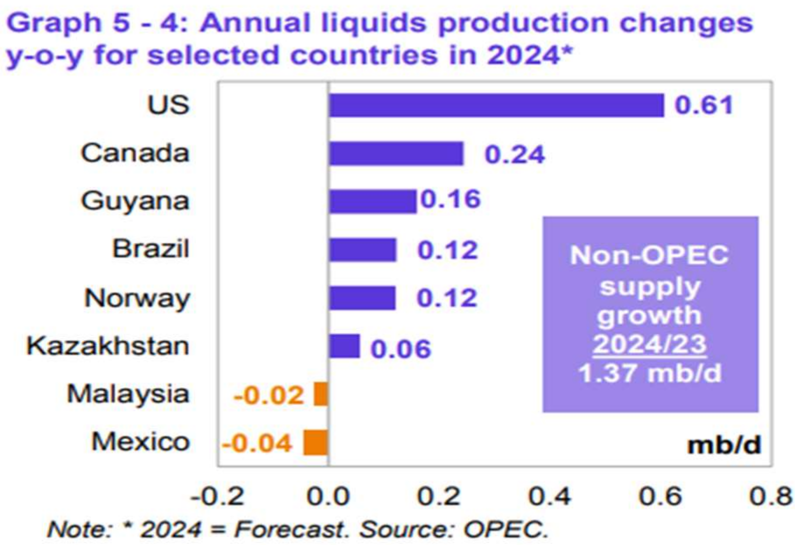
- Diesel exports dropped, naphtha and fuel oil exports increased by a similar amount

- Export bans were short-lived. Diesel exports already **rebounding**

Non-OPEC Production Growth

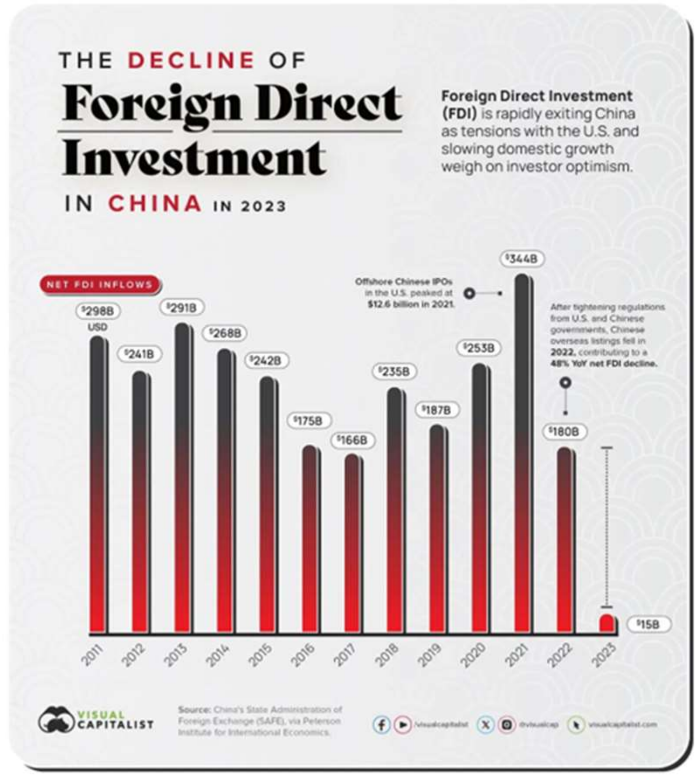
- **Non-OPEC liquids production grew 2.5mn bpd in 2023**
  - US +1.6mn bpd, Brazil +400,000 bpd, Iran, Venezuela, Guyana, China, etc.
  - Non-OPEC liquids production in **2H23 1.66mn bpd higher than 1H23**
  - Guyana, Brazil, Norway expected to drive 2024 production growth





China’s Reopening Disappointment

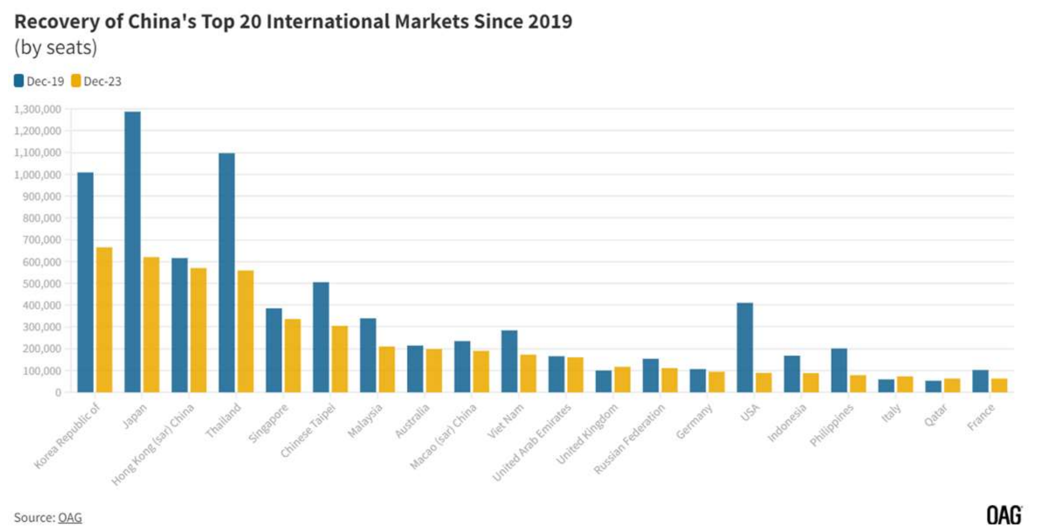
- **The policy pivot away from “Zero-COVID” failed to propel the Chinese Yuan, investment in China, and oil and commodity markets higher in 2023.**
- China’s manufacturing activity is still in contraction according to official PMI but Caixin/S&P PMI beginning to show signs of recovery
- **China’s property sector will continue to be a major drag on the economy and domestic private consumption**
- China’s annual exports fell for the first time since 2016 in 2023
- Household private consumption accounts for just 39% of Chinese GDP, paling in comparison to 68% of GDP in the U.S.
- **Chinese government continues to stimulate the least efficient sectors of the economy i.e. infrastructure construction**



DTN

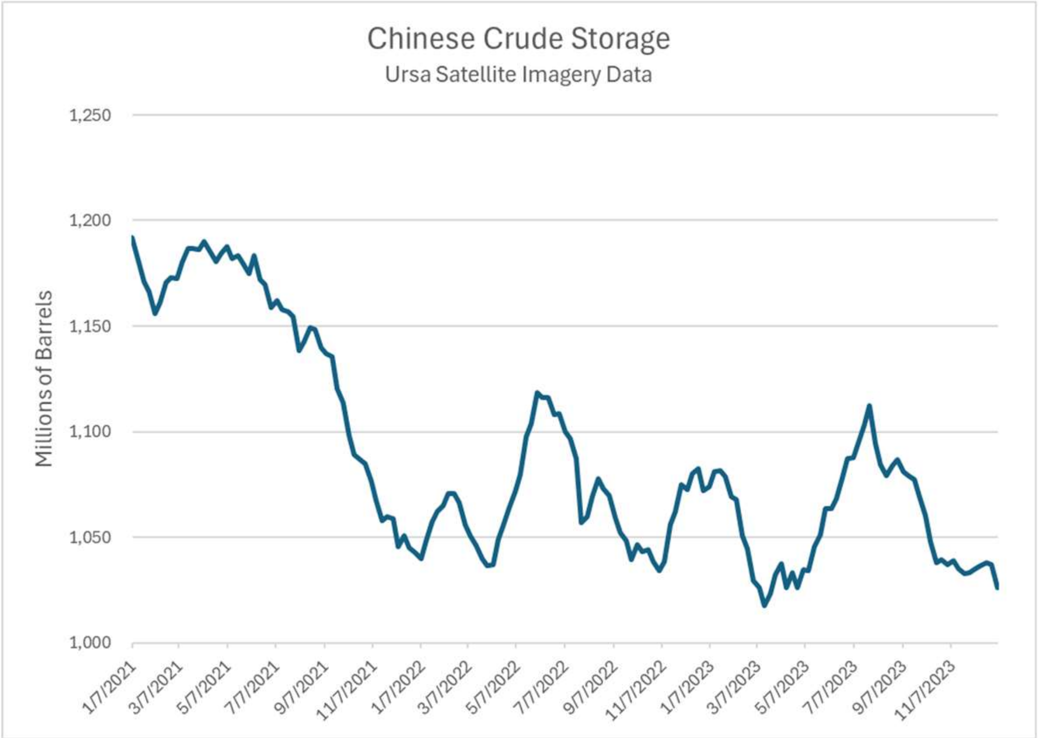
International Travel to and From China Continues to Suffer

- During the 3-day New Year's holiday, China recorded 1.72 million trips, in line with pre-COVID levels
- China's highway traffic jumped 43.6% in 2023 from 2022 levels
- **Domestic flight capacity is up 11% from 2019**
- Chinese Lunar New Year holiday in February expected to be the busiest travel season since 2019
- **But international flight capacity is still down 40% from pre-COVID levels**
- Recent policy measures have been taken to allow visa-less travel to China from more countries and have removed all covid-related restrictions



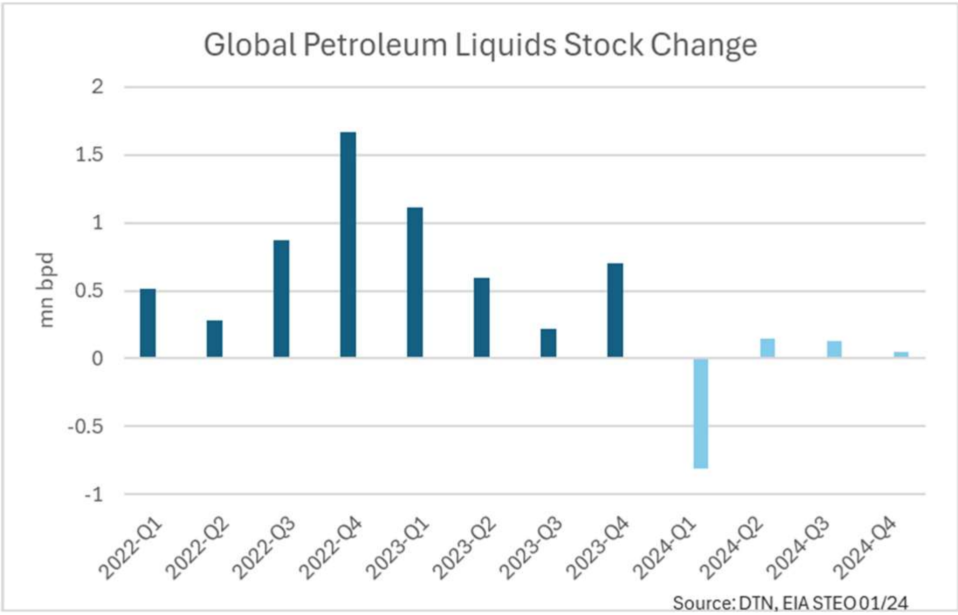
Chinese Crude Imports Should Soon Surge

- Chinese regulators did not approve another round of refined product export quotas in Q4, weighing on Chinese crude imports and refining activity
- **Chinese crude imports were up 11% y/y in 2023 but decelerated sharply in Q4 with November crude imports dropping 9.2% Y/Y**
- China tends to load up heavily when crude prices are low and import quotas are available
- **China is likely to go on a crude buying spree in the coming weeks, helping put a floor under crude prices after regulators issued a full year of crude import quotas in January**
- **But how much of that crude is being refined and consumed domestically as product rather than stored or exported will continue to be key for oil markets**



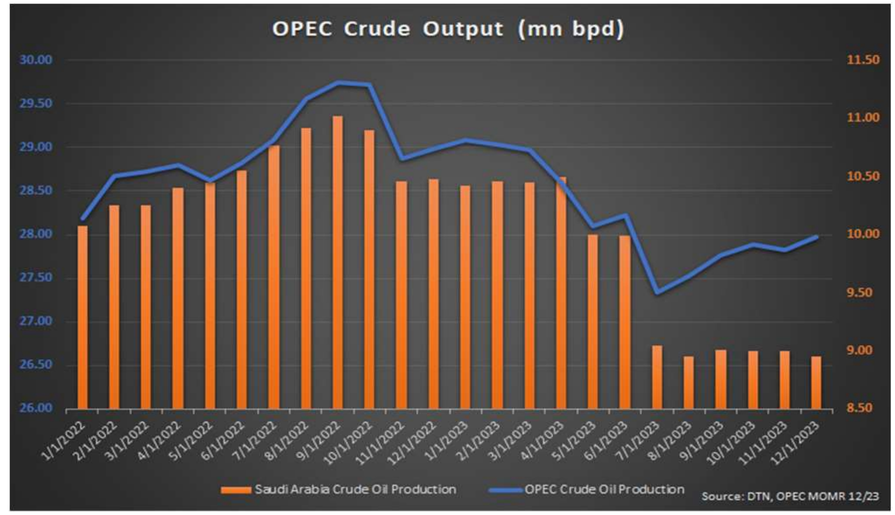
Forcing OPEC's Hand

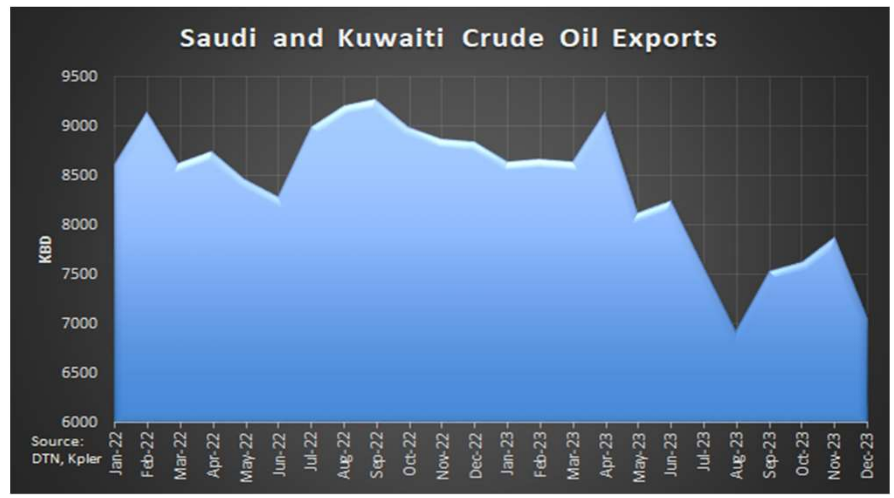
- **Russian oil** continued to hit the market
- **Non-OPEC production** grew **2.5mn bpd** in 2023
- Demand growth trailed expectations
- Oil prices ended the year where they started
- **OECD commercial oil inventories grew**
    - +127mn bbls in 2022 (+5%)
    - +76mn bbls in 2023 (+3%)
- Forcing Saudi, OPEC+ hands to **extend production cuts**, shoulder **voluntary cuts**



OPEC+'s Past Cuts

- **2H23**: OPEC+ production discipline, output **-1mn bpd** from 1H23
- Saudi exports picked up despite production cuts as domestic demand moved seasonally lower 400,000 bpd
- Throughout 2023, Saudi energy minister has been vowing to **punish oil short sellers,** but **price rallies** following cut announcements were **short-lived**
- **OPEC intervention** in oil markets lost **some of its bite**



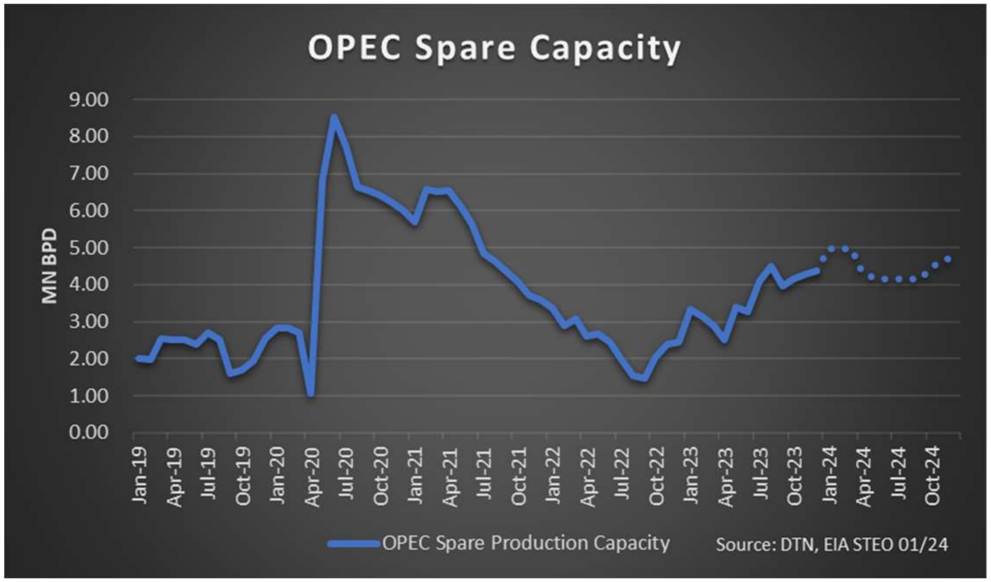


OPEC+'s Dilemma

- Just in early November, Abdulaziz bin Salman brushed off concerns that the market was oversupplied
- Days later, OPEC+ **voluntary cuts are raised to 2.2mn bpd**
- Market seems increasingly **numb** to OPEC messaging
- Voluntary nature of cuts makes them **less dependable**
- Prolonged cuts **risk waning support** from countries needing production reinvestment and those overly dependent on oil revenues – **Iraq overproduces, Angola quits OPEC**
- Bearish risk of **OPEC divide** looming
- Artificial tightness not as supportive of price as organic tightness
- Price support from cuts **counterbalanced by growing spare capacity**

OPEC Spare Capacity

- Since November 2022, a series of production cuts catapulted OPEC **spare capacity to twice pre-COVID levels**
    - October 2022: 1.67mn bpd
    - December 2023: 4.36mn bpd
- **Comfortable cushion to supply-side risks diminishing price-supporting risk premium**

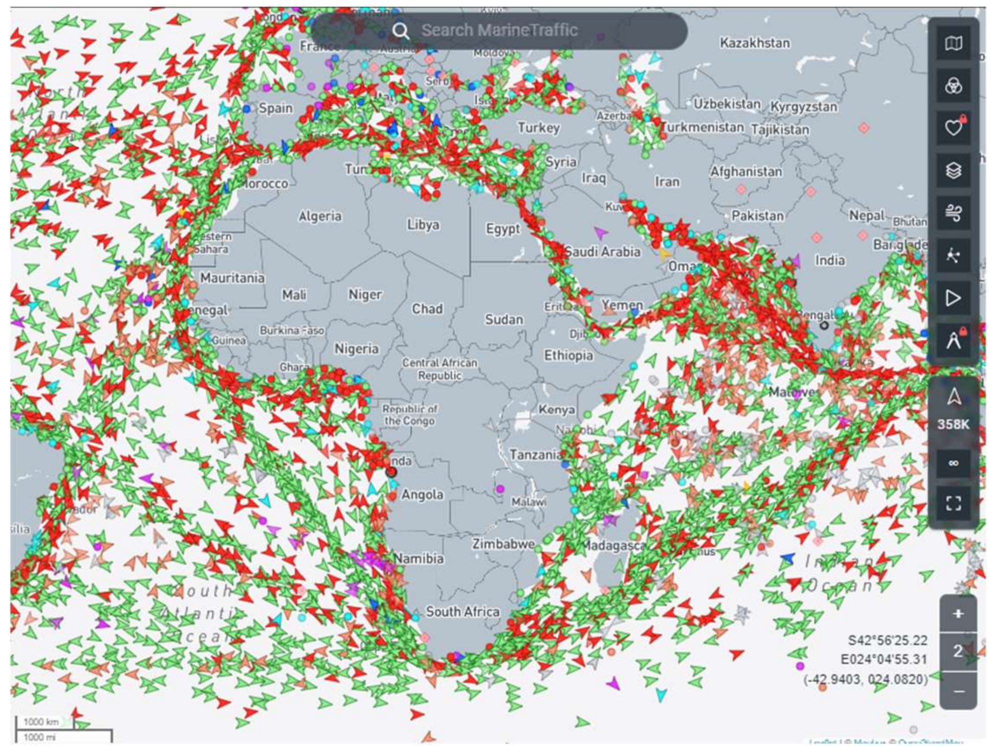


Impact on Crude Quality Spreads, Refining Margins

- Outages, OPEC+ cuts have **tightened the sour crude market**
- Simultaneously, global **light sweet output surged**
- Product yield from **sweeter, lighter global slate bullish for diesel**
- Given the price moves in medium and heavy sours, **actual refining margins** are **much weaker** than WTI/Brent based cracks would suggest

Geopolitical Developments Hold Both Bullish and Bearish Risks

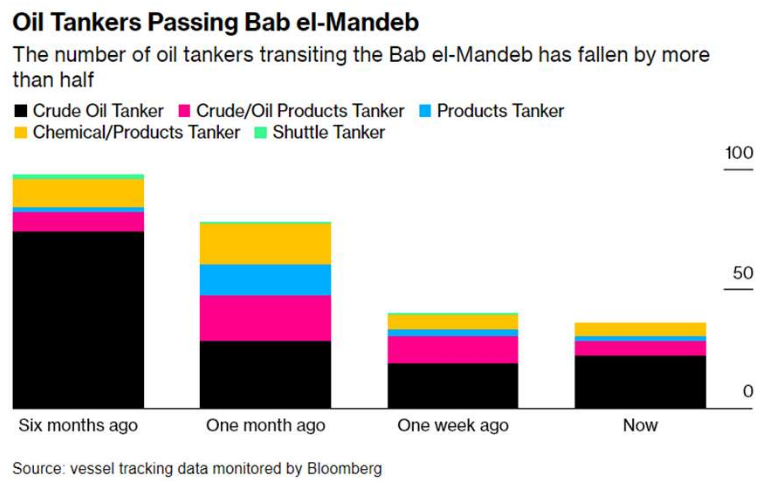
- 400,000 bpd of Kurdish oil still cut off from the export market
- Recent disruptions in Libya
- ~250,000 bpd potential increase from Venezuela in 2024 following the US relaxing sanctions
- Venezuela will not successfully interrupt Guyana oil production growth expectations
- Risk of Israel-Hamas conflict spreading into regional war
- Red Sea escalation

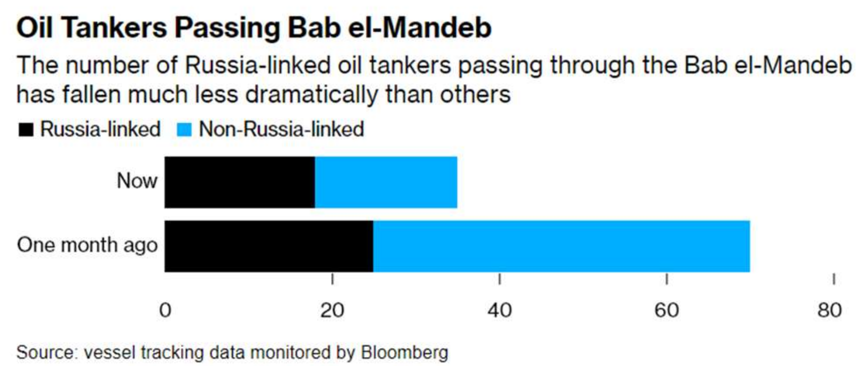


DTN

Red Sea Tanker Disruptions

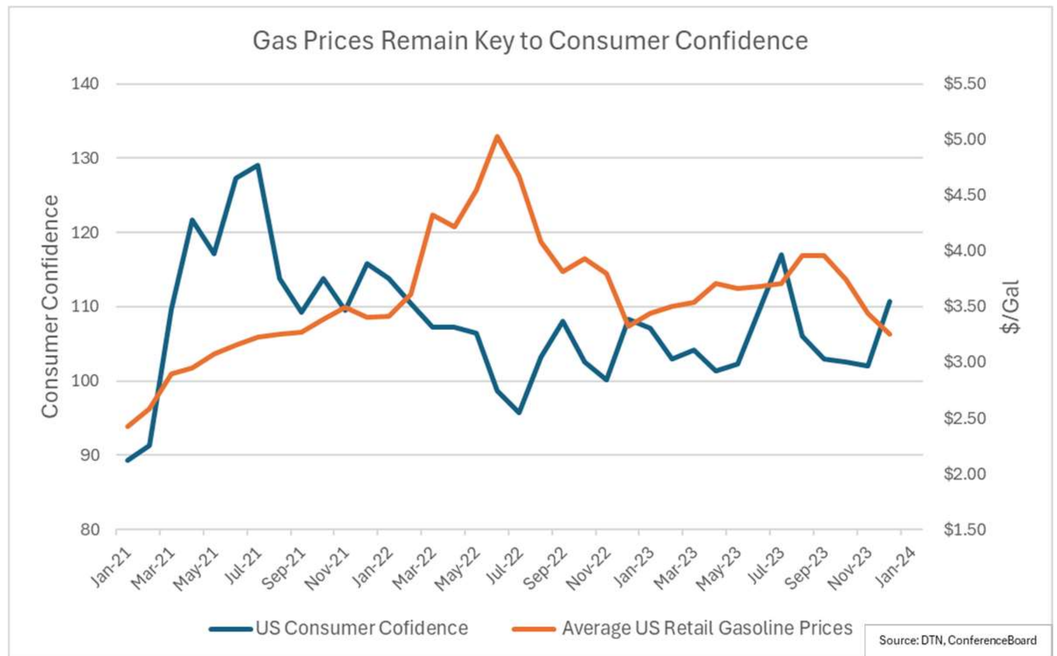
- Tanker traffic through **Bab El-Mandeb dropped sharply** as shippers are avoiding Red Sea (BP, Equinor, Qatarenergy, Shell, Euronav, etc.)
- **Russian exports** to Asia, Arab Gulf exports to Europe most affected
- Russian tankers not a target for Houthi, but the Russian-linked **shadow fleet** may be accidentally targeted
- No signs of Russian oil being rerouted so far. 8 of 10 tankers passing through Bab El-Mandeb Monday carried Russian oil.





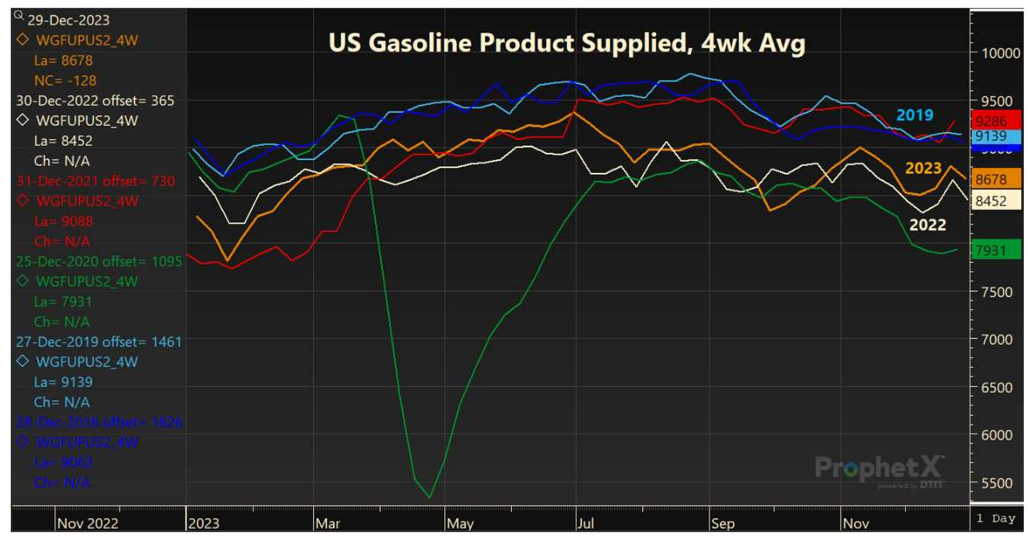
U.S. GDP and Employment

- **Despite the Fed's rate hikes, US GDP and employment has held up**
- US GDP slowing from 4.9% peak in Q3 but likely to average around 2.6% in 2023
- Monthly nonfarm payrolls grew by 232,000 per month on average in 2023, 55,000 more jobs per month than the average pace in 2018 and 2019
- **A fiscal policy inspired construction boom has been a major contributor – manufacturing investment hit a record high**
- Rising real wages for low-income earners have boosted consumer spending this year
- **Inflation trending lower while the labor market has remained strong has allowed for an outlook of a potential soft landing**



US Gasoline Demand

- US gasoline demand +1.5% y/y in 2023 but -4% from 2019 levels
- **Work From Home is continuing to play a major role in limiting gasoline demand and is likely to be an indefinite headwind for US gasoline demand**
- Rising fuel efficiency, EVs and hybrids
- **The relative recovery in gasoline demand vs diesel demand speaks to stronger recovery in services than industrial activity and manufacturing**

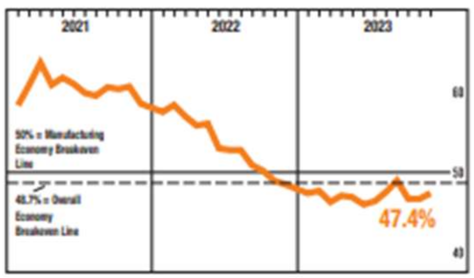


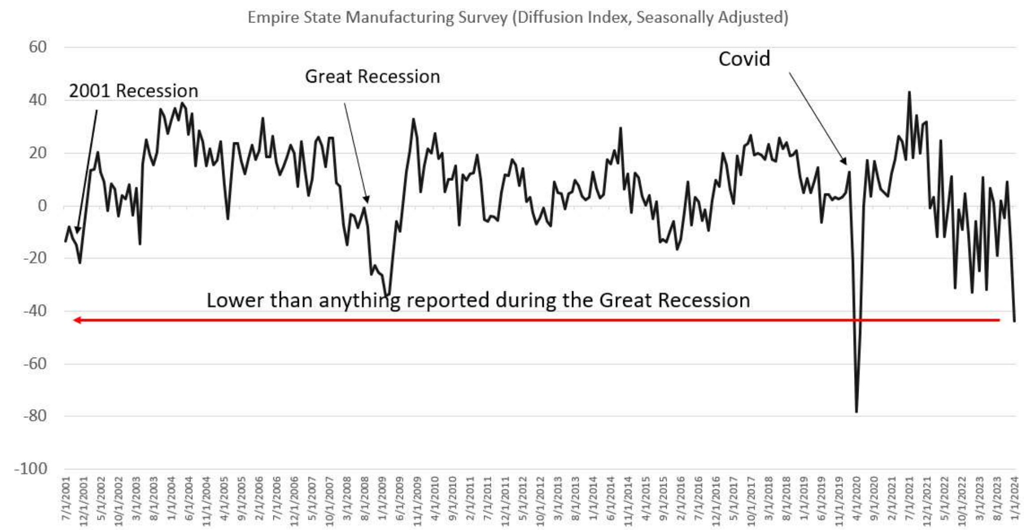
Manufacturing, Industrial & Freight Contraction Drags On Despite Resilient U.S. GDP

MANUFACTURING

PMI® at 47.4%

The U.S. manufacturing sector contracted in December, as the Manufacturing PMI® registered 47.4 percent in December, up 0.7 percentage point as compared to November's reading of 46.7 percent. This is the 14th month of contraction. Four out of the five subindexes that directly factor into the Manufacturing PMI® are in contraction territory, down from all five in November. The New Orders Index logged its 16th month in contraction territory at a faster rate in December. Of the six biggest manufacturing industries, none registered growth in December.

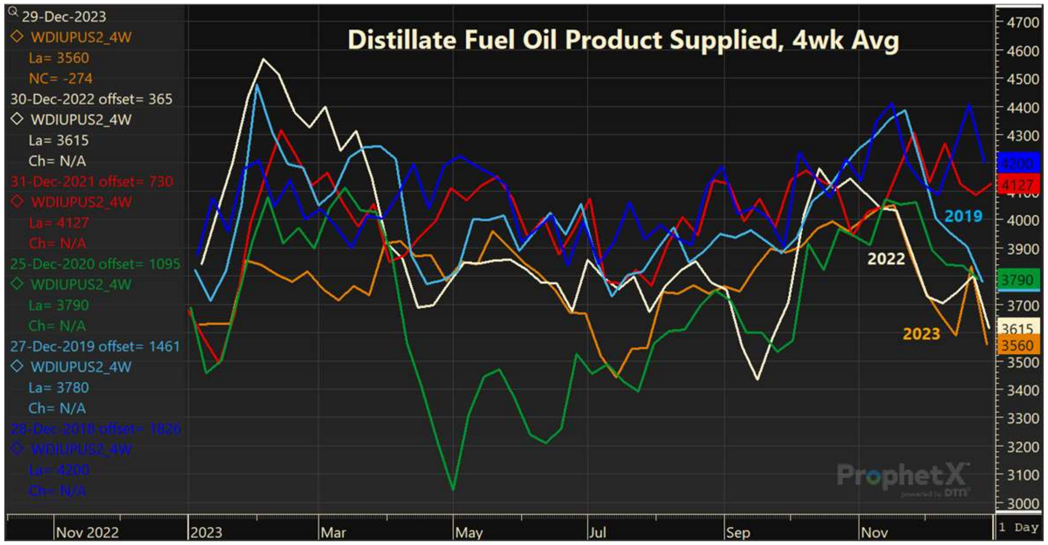




DTN

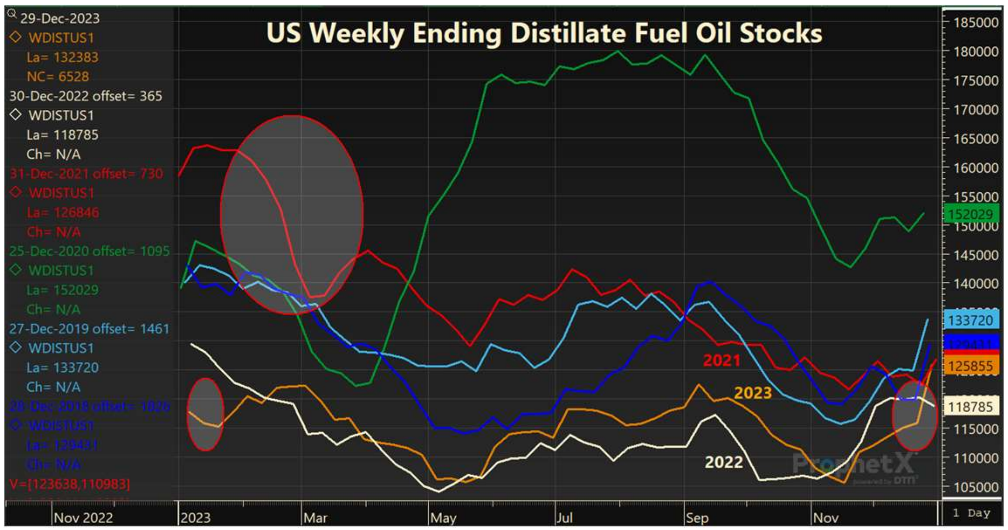
US Distillate Fuel Oil Demand

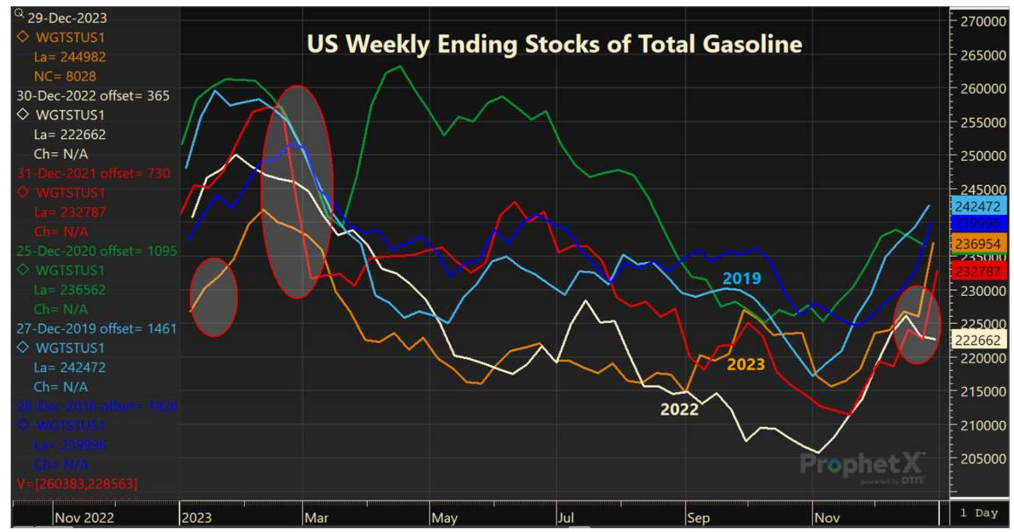
- **Weakness in freight, industrial and manufacturing activity led distillate fuel oil demand to average 2% below 2022 levels in 2023 and 4% below 2019 levels**
- Distillate demand weakness was exacerbated moving through Q4 amid weak industrial activity and heating oil demand weakness with a warm start to the winter
- **As economic growth is expected to continue to slow from its Q3 '23 highs moving through H1 '24, distillate fuel oil demand is expected to hold in line with the weakness experienced last year averaging ~4.0 million bpd**



DTN

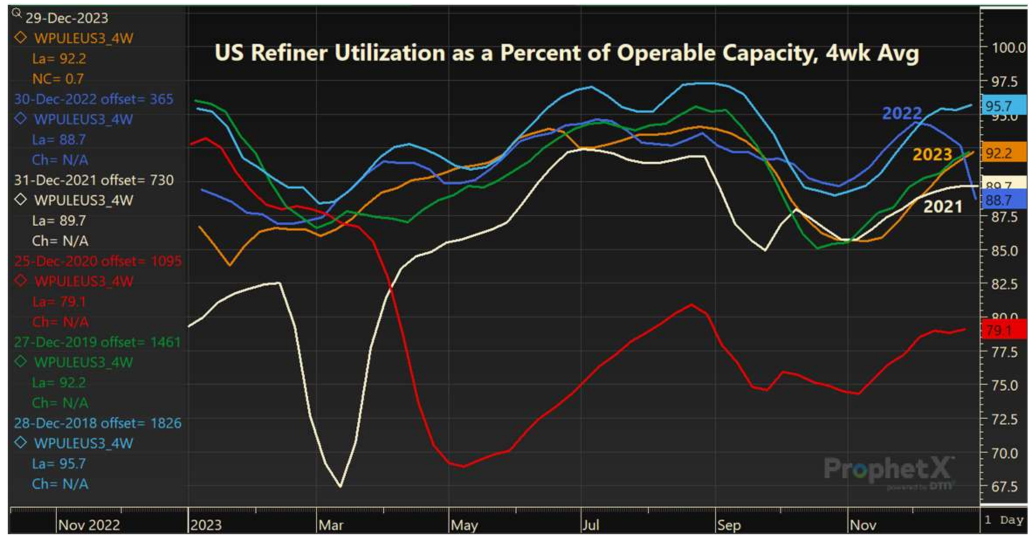
U.S. Refined Product Stocks





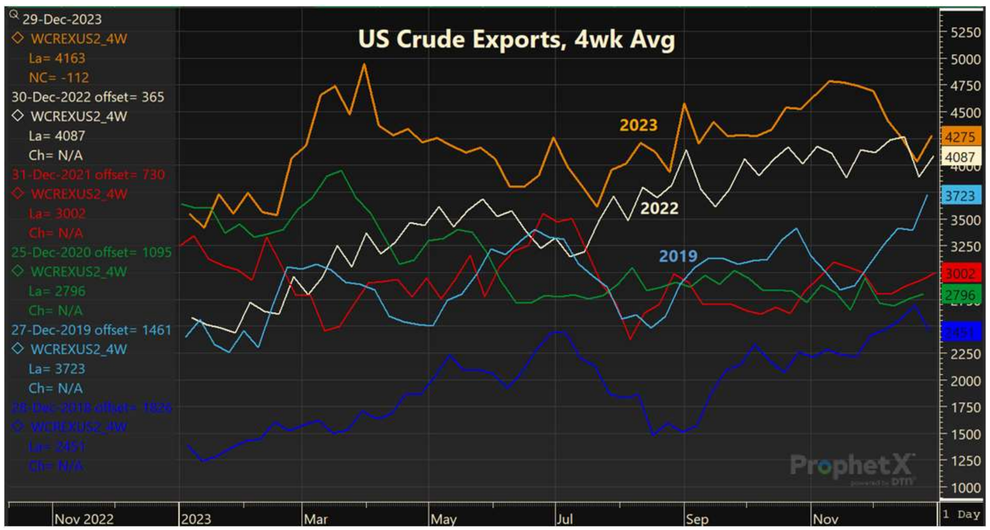
US Refiners Finally Back to Normal Operations

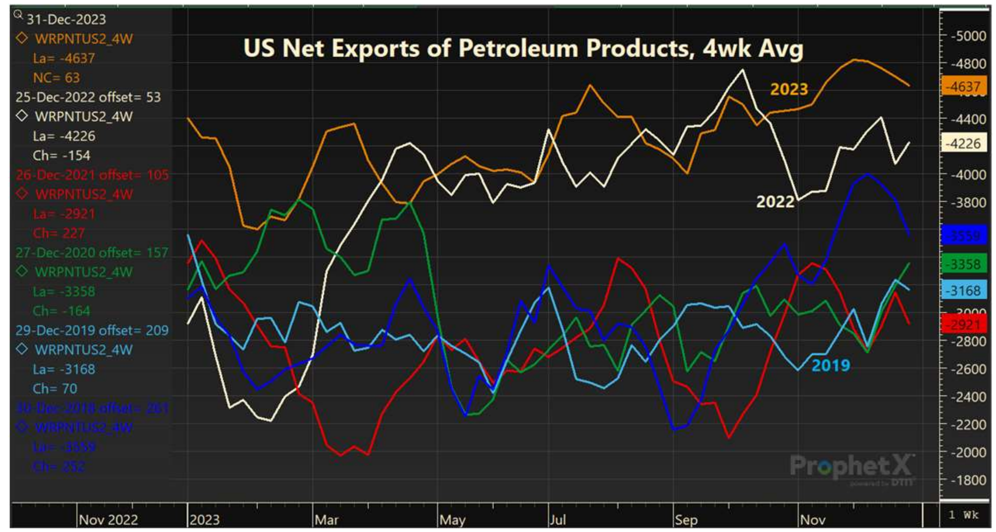
- Unplanned US refinery outages from winter 2022 lingered into summer 2023
- Extreme summer heat led to a slew of unplanned outages across the Gulf Coast
- Fall maintenance was longer and deeper than expected
- US refinery utilization is currently its highest for the seasonal period since 2018 at 93%
- **Relative refining margin strength for USGC refiners and a likely light spring maintenance season following lengthy repairs last year should lead US refinery runs 250,000-300,000 bpd higher Y/Y in H1 '24**
- **Extreme cold has disrupted refining activity once again but far less than last 2 years**



US Crude and Product Exports

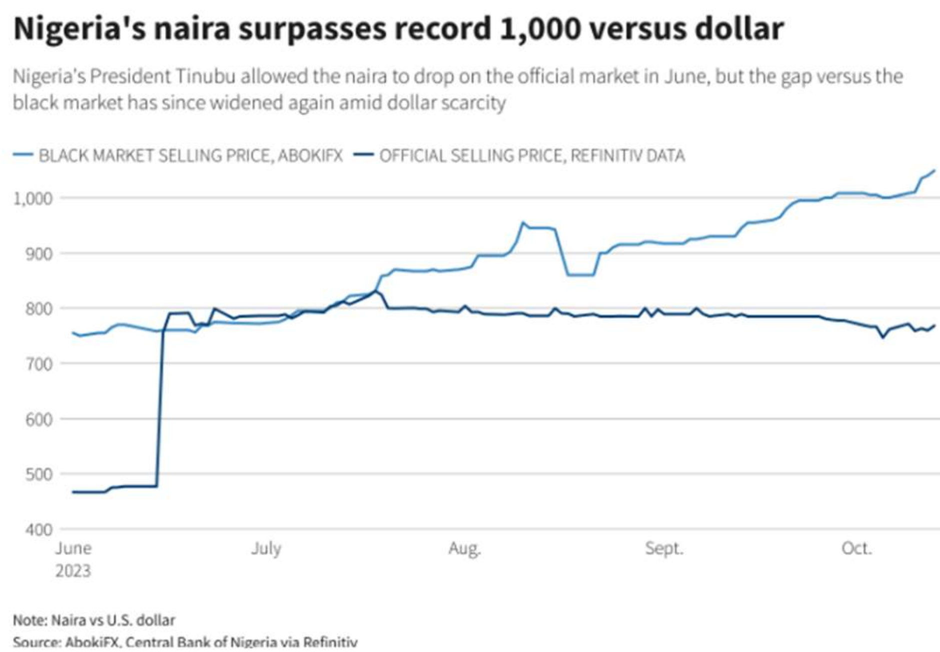
Surging exports reveal both the strength in domestic petroleum production and the weakness in domestic product demand





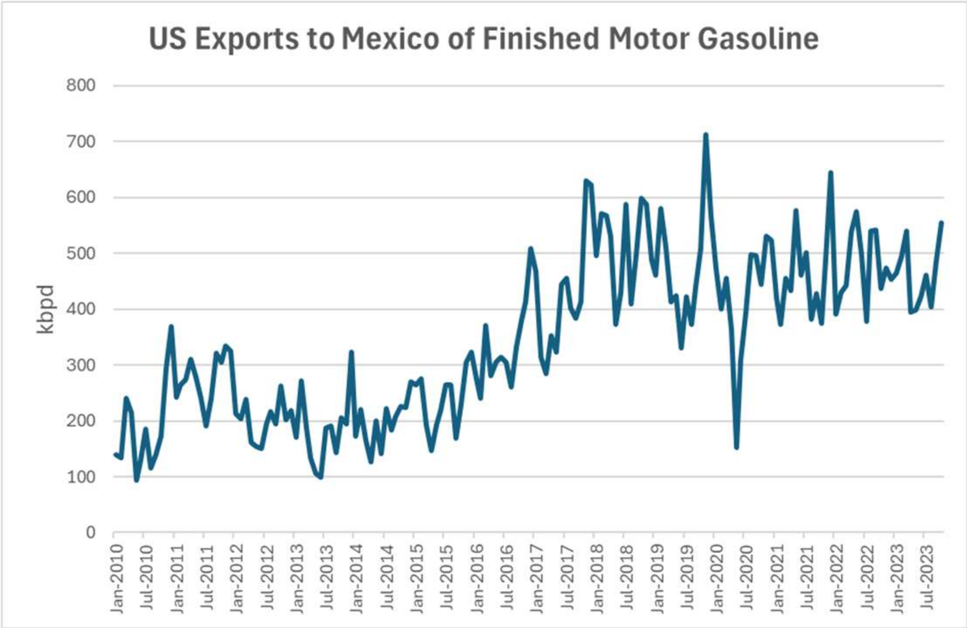
Atlantic Basin Refinery Capacity Growth

- **650,000 bpd Dangote refinery in Nigeria set to shake up Atlantic Basin gasoline trade with world's largest single CDU**
- After recently receiving 6 million bbl of Nigerian crude, test runs are now beginning, and Dangote hopes to soon run 350,000 bpd before getting up to capacity late this year
- Since this summer following the lifting of the Nigerian gasoline subsidy Nigeria has been buying gasoline via tenders rather than crude swaps
- **Nigeria is currently the largest importer of refined products in Africa, imports more than 80% of its fuel and relies heavily on Northwest European refiners**



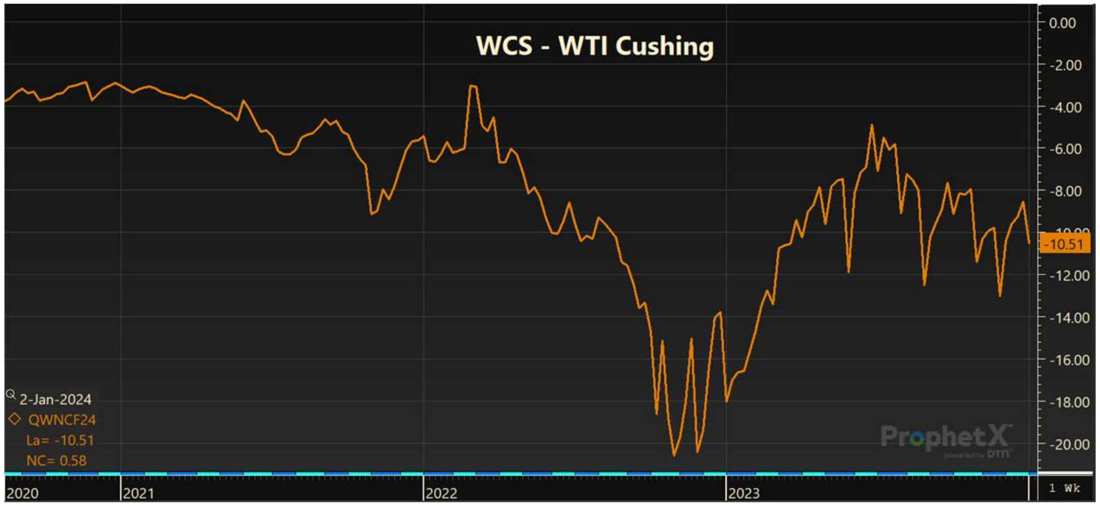
Mexican Refinery Capacity Expansion

- New 340,000 bpd Olmeca refinery is located near the Dos Bocas port on Mexico's southern Gulf Coast
- New cokers at Pemex's Tula refinery and Salina Cruz refinery expected to be completed this year.
- Mexico hopes to stop importing gasoline and diesel this year
- **Mexican imports of US gasoline averaged 460,000 bpd in 2023 (Jan-Oct)**
- **US imports of Mexican crude have averaged 913,000 bpd and products (unfinished oils and fuel oil) 182,000 bpd in 2023**



Trans Mountain Pipeline Expansion

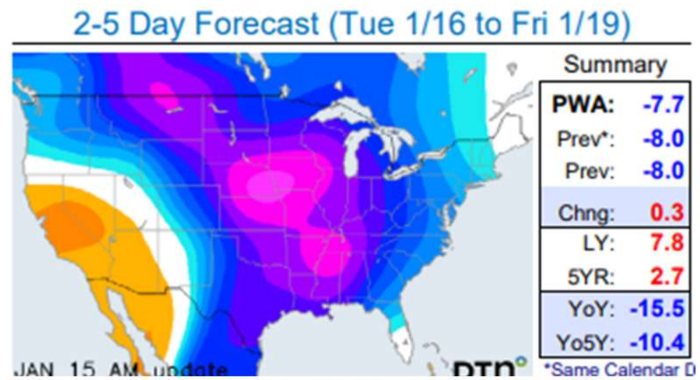
- The expansion project when finished would triple shipments of Alberta crude to Canada's Pacific coast to 890,000 bpd
- In mid-December the Canada Energy Regulator (CER) denied a variance request from Trans Mountain following drilling challenges in the mountains of BC
- After warning CER that this could lead to a two-year delay with billions of losses, CER just approved the needed change
- **US imports of Canadian crude have averaged 3.8 million bpd in 2023**
- **Midwest (PADD2) and Gulf Coast refiners will face growing competition and narrowing discounts for Canadian crude this year**

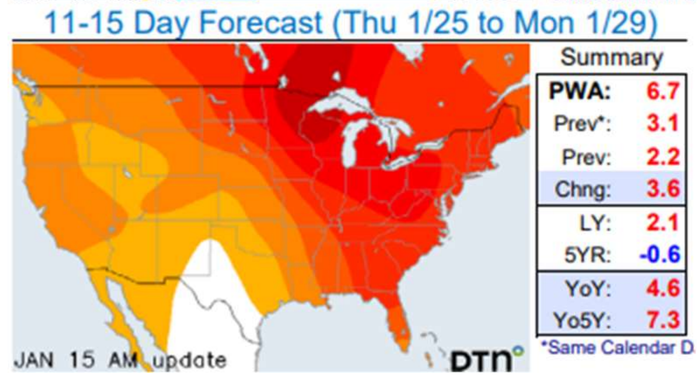


DTN

El Nino Inspired Winter Weather Limits NatGas & Heating Oil Demand

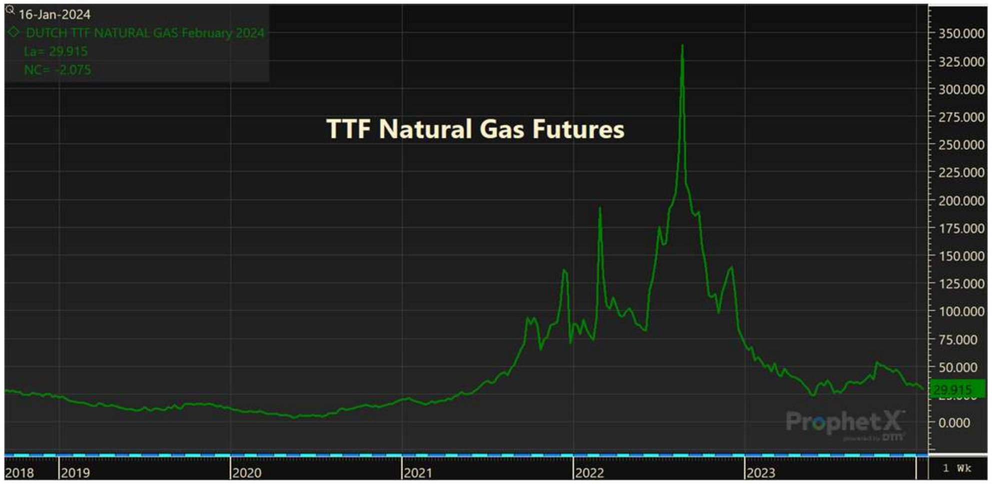
- El Nino inspired wind shear helped prevent hurricanes from making landfall and damaging oil & gas infrastructure in H2 ‘23
- **El Nino has continued to influence the weather this winter with above average temperatures leading US natural gas prices 15% lower year-on-year**
- El Nino skews the Northeast US warmer – the home of nearly all US heating oil demand
- Extreme cold has shut in 600,000 bpd of Bakken oil production & 1.1 BCFPD of natgas
- **US season to date HDDs are 167 (9%) below last year and 159 (9%) below the 5-year average and we expect will return to below average for the winter after the current polar vortex**





EU Natural Gas Storage Leading Prices Lower

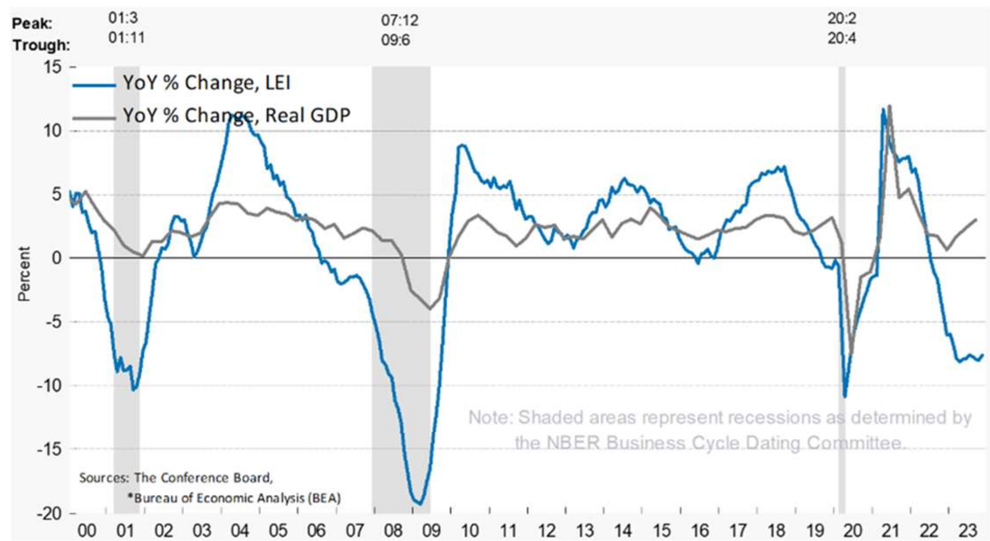
- The very mild winter in Europe last winter was followed by an extremely hot summer and followed by well above average temperatures at the start of the heating season this year
- **The EU entered winter with storage capacity 99% full and current storage is still extremely strong at 79% full**
- So far this winter, Europe has seen HDDs 20% below the 30-year average and 6% below last winter
- **We expect very limited upside potential for European natural gas with heating season ending with storage ~55% full**



DTN

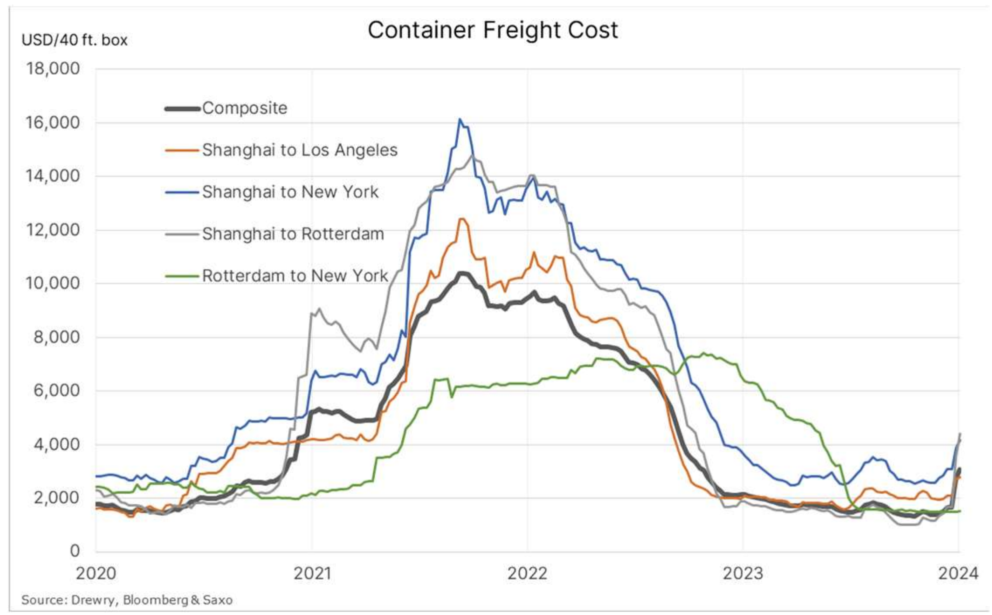
US Economic Soft Landing Debated

- Leading economic indicators still suggest a US recession is likely but have so far failed to be the reliable indicators they have been in the past
- Tightening monetary policy has long lagged impacts that are not easily timed
- A recent move higher in long dated treasury yields is de-inverting the yield curve which typically precedes recession
- **However, US recession has never started with the US budget deficit this high**
- **A truly unprecedented scenario as we have experienced can lead to unprecedented outcomes so we should not rule out a soft or at least mostly soft landing**



Slowing International Trade & The Global Economy

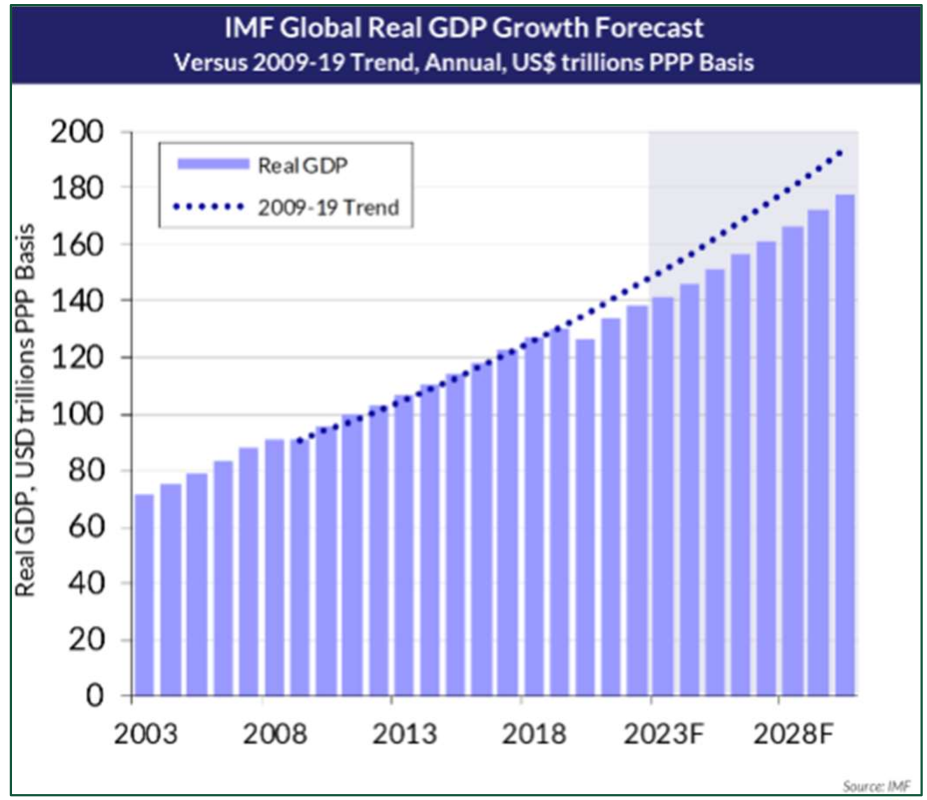
- Global real GDP showed surprising strength in 2023 at ~3.2%, primarily reflecting US and Indian outperformance
- **Global real GDP growth expected to slow to 2.6% in 2024, with US growth slowing considerably in H1, Europe remaining stagnant & slowing Chinese growth**
- The Chinese economy is still extremely dependent on export markets
- Maersk saw a near 4% decline in container freight volumes in 2023 vs 2022
- Weakness in Chinese exports and trade expected to continue in H1 2024



DTN

Demand Growth Expectations and the Global Economy

- Growing global economic fragmentation and deglobalization is proving costly and will continue to do so going forward
- Forecasts for global economic growth at ~2.9% are their weakest in decades
- Slowing US and Chinese economic growth will prove to be a headwind for oil demand as we move through the year
- **Global oil demand growth expected to slow from 2.3 mb/d in 2023 to 1.1 mb/d in 2024**



Bullish and Bearish Risk Summary

BULLISH

- OPEC+ cuts should flip the market into undersupply and could mean 500,000-700,000 bpd of global draws in Q1 before moving back to modest builds in Q2
- OPEC+ likely to extend cuts beyond Q1
- Large Chinese crude import quota allotment, ample storage capacity and growing refinery capacity to lead to a rebound in Chinese imports
- Potential for interest rate cuts and weaker US Dollar later in H1
- Non-OPEC supply growth expected to slow in 2024
- Geopolitical Risk – Middle East & Russia

BEARISH

- OECD oil stocks currently in line with 10-year average
- US refined fuel stocks staged a strong rebound moving into 2024
- Slowing global economic growth that is set to continue to lag well behind pre-COVID trend leading to slowing oil demand growth
- OPEC spare capacity currently at 4.3 mb/d, up from 2.5 mb/d moving into 2023
- Non-OPEC production growth has potential to continue to outpace expectations
- Likely widening discount for WTI as US refinery maintenance season leads to US stock builds even as stocks draw globally

DTN

Looking Forward

- Two straight years of quarterly petroleum liquid stock builds should flip to draws in Q1 2024 but the market is expected to be well balanced for the remainder of H1 2024.
- WTI set to trade largely in $68-$88 trading range, Brent $73-93 in H1, with bullish bias through April amid strong Chinese purchases, slowing non-OPEC production growth, and global inventory draws.
- Gasoline prices are currently near their lows for H1 and should move higher through refinery maintenance season as demand holds up early in the half before the slowing economy grips.
- Diesel prices should follow crude prices higher in the near term as demand rebounds seasonally, but as we work through the first half, and a slowing global economy is realized, demand should continue to disappoint relative to gasoline and lead diesel prices toward parity with gasoline.
- **While the crude market is set to tighten, OPEC induced or managed tightness is not the same as organic market tightness, given that the tightness was created by growing spare capacity. This limits the potential impact of bullish tail risks.**

For More Information Visit

https://www.dtn.com/refined-fuels/trader/prophetx/

https://www.dtn.com/weather/

or email

Troy.Vincent@DTN.com Karim.Bastati@DTN.com