Federal Reserve Bank of Dallas/Kansas City Conference

Outlook for Global Oil Markets: Short-Term Volatility, Long-Term Tension

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CONTACT DETAILS

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Key Takeaways
Main points for oil market outlook

Near-Term Volatility and Uncertainty

Limited Progress on Alleviating Capacity/Capex Crunch

Years of Just-in-Time Supply Ahead, Higher Prices

Long-Term (Transition) Bumpy, Capacity Constrains Demand
# Key Oil Market Dynamics

Many moving parts and mixed messages, tug of war between supply and demand/macro.

## Macro Concerns
- US slowed economy, consumer (70% of GDP) under pressure/paring back
- Europe recession unfolding, with more pain ahead (some permanent)
- Periphery economies struggling with inflation, rates, currency, shortages
- China remains very uncertain, zero-Covid-19 … for now

## Russia/Ukraine Conflict
- Supply questions persist (see below)
- At the center of battle between supply issues and demand/macro fallout

## Demand Picture
- Consumption over the last few months has slightly underperformed, even leaving aside China Covid-19 issues
- Key economies like the US and India remain solid consumers for now
- Seasonality ahead, but boost possible with high gas/coal prices, diesel cracks
- **Demand growth expectations for 2023 falling, but demand still grows**

## Supply Picture
- Very limited spare capacity worldwide, including Opec-plus
- Recent market helped by massive SPR releases, less of a tool in 2023
- Questions on EU oil embargo and G7 price cap could well underwhelm
- **Opec-plus next meeting will be key, and Russia actions into 2023**

## Energy Policymaking
- **Confusing messaging on energy transition with near-term shortages**
- **Inability to effectively increase much-needed supply**
Demand: Room for Q4 Demand Upside, 2023 Still Uncertain

Economic softness easily stretches into next year, but demand can still recover

Energy Intelligence Forecast: Global Oil Supply-Demand (million b/d)

- Demand dip led by Covid-19 in China and macro
- Room for winter demand upside from fuel switching and strong refining cracks
- Demand impacts could well last into 2023, although demand trajectory is still higher not lower (even in a recession); China policy a major unknown
Opec-Plus Spare Capacity: Small ex-Iran, But Growing With Supply Cuts
Spare capacity will be put to the test again in the near term, with $100+ likely even in recession

Energy Intelligence Estimate of Opec-Plus Spare Capacity (as of October 2022, ‘000 b/d)

- High-End Estimate of Spare Capacity at 4 Million b/d; Readily Available at Best 2 Million b/d; Iran Supply (Extra) But Unlikely
- Spare capacity increases by roughly 1 million b/d by November
- Spare capacity for Russia muddied by sanctions and war
## Opec-Plus: External Break-Even Oil Prices on Average $80+/bbl

Defense of recent price slide is not surprising

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### Average Break-Even Price (US$/bbl)

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Discounts to be factored in for Russia looking ahead

Source: Energy Intelligence
SPR Releases: Expect More in 2023 — But It’s the Last Year It’s an Option

Even with a drawdown to 400 million barrels, more releases on deck over the near term

**Americas Crude Stocks, Demand Cover Outlook: 2022-23**

SPR release allows for stabilization and slight rebuild of domestic and regional commercial inventories and demand cover (depending on export dynamics) but …

**US Strategic Petroleum Reserve Stocks, Including Our Projections ('000 barrels)**

… massive SPR releases ahead take strategic stocks back to levels last seen in the 1980s; we assume further releases will be needed in 2023 to paper over shortages in the market, assuming demand continues to grow. This is barring a meaningful shift in strategy from Opec-plus
Our Price Outlook: $80-$90+ is the New $60, Balancing Russia and Recession

Likely higher than this range in the short term, even in a weak macro environment

- Five key market themes shape our outlook:
  - Market Tightness Underpinned by Low OECD Inventories – Heavy SPR Releases End Soon, Then What?  
  - Geopolitics of a Tight Oil Market in Strong Focus – Russian Oil Embargos and Disruptions Ongoing  
  - Strong Refined Product Cracks Support Oil Buying – Shortages Emerging Again, Supportive of Oil Prices  
  - Opec-Plus – Pulling Back on Supply (and Growing Capacity) But Several Questions Going Into 2023 Including More Infrequent Meetings Ahead, Iran Deal on Ice for Now  
  - Oil Demand Will Continue to Grow Despite Long-Term Climate Focus, Up Even in Recessionary Backdrop
Investment in Crisis: Some Capex Greenshoots With Energy Security Focus

But the pipeline remains thin and supply growth reliant on a small group of producers

- Global upstream spending in 2021 was up only modestly to ~$380 billion, and 2022 should see a ~15% increase to $440 billion (but that is still down ~10% vs. 2019). We do see an ongoing solid recovery over the coming years, with a renewed focus on energy security and adequate supply plus inflation also factoring into the increase.

- Capex recovers to $500+ billion, but market remains tight after years of underinvestment (total $500 billion of lost spend) and low inventories. With oil/gas demand returning to pre-Covid-19 levels, the recent conflict and supply shake-up likely means years of price spikes and shortage.

Source: Company reports, Energy Intelligence forecasts
Long-Term Oil Market: Rising Call on Opec-Plus, But Supply Limits Demand

Underappreciated how much supply limitations and price volatility/spikes will grate on demand over time.
The New Energy Landscape | Oil Market Outlook

Long-Term Demand Outlook Under Energy Transition Paths

Uncertainties and a rhetoric battle on the pathway for demand contribute to investment uncertainties.

- Our synthesis of external scenarios, plus in-house analysis, illustrates the oil/gas demand outlook.
- Oil demand trends differ sharply by scenario, ranging from continuing growth above 100 million b/d (in line with our Blowout scenario) to radical reductions to below 30 million b/d by 2050 (Net-Zero scenario).
- The most likely pathways lie between the Accelerate scenario (with demand above 100 million b/d until the mid-2030s) and the Boost scenario (a slightly faster transition, but skewed much later than the 2020s).

**Energy Transition Scenarios, Illustrative Oil Demand**

- In line with Blowout Scenario, 2050 demand >100 million b/d
- In line with Accelerate Scenario, demand peaks by 2030
- In line with Boost Scenario, demand falls fast post-2030
- In line with Net-Zero Scenario, 2050 demand <30 million b/d

**Energy Transition Scenarios, Illustrative Gas Demand**

- In line with Blowout Scenario
- In line with Accelerate Scenario
- In line with Boost Scenario
- In line with Net-Zero Scenario

Chart shows illustrative pathways, based on synthesis analysis of over 20 industry scenarios (from companies and agencies).

Source: Energy Intelligence, Energy Transition Research. Scenarios from IEA, EIA, IPCC, WEC, BP, Exxon, Total, DNV, Equinor.
Appendix
Inventories Remain in Murky Waters
Set up support for prices for years to come, non-OECD should remain higher than prior years

OECD levels and demand cover still tight, SPRs helping commercial inventories stabilize, risks remain in 2023

Products remain tight, will have an impact on pull on oil market too

Only flat because of large US SPR releases and China

Non-OECD excess led by China, but watch for Covid policy

Non-OECD Crude Oil Stocks

OECD Crude Oil Stocks

World Mogas Stocks

World Middle Distillate Stocks

World Crude Oil Stocks

World Middle Distillate Stocks

Source: Jodi, Energy Intelligence

*Range of same month in three prior years, excl. 2020.

Source: IEA, Energy Intelligence

*Range of same month in three prior years, excl. 2020.

*Range of same month in three prior years, excl. 2020. Source: IEA.
Over A Multiyear Period, Light Product Demand Exceeds Capacity

Curtailments/delays ensure tight refined product environment for years to come

Source: Oil & Gas Journal, BP, IEA, Energy Intelligence analysis