

Forecast and Market Drivers

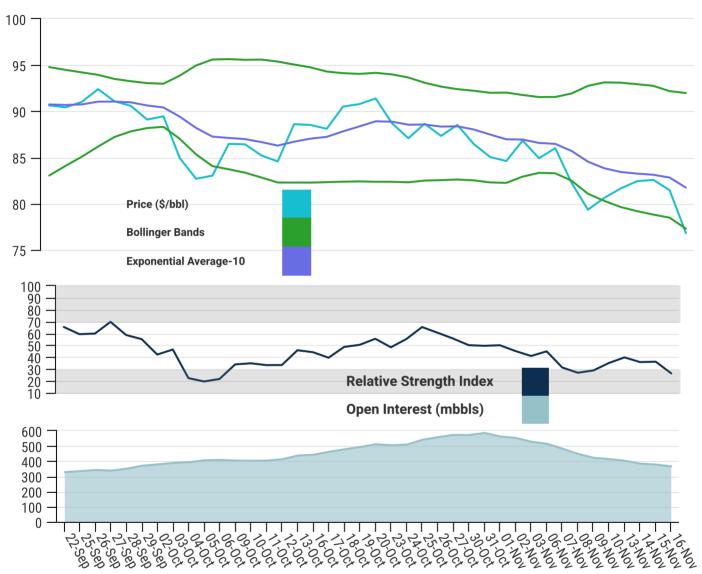
| Product | Current | View | 1W Forecast |
|-----------------------------|---------|------------|-----------------|
| Jan Brent | \$81.95 | SMALL BULL | \$82-84 |
| Jan WTI | \$77.37 | SMALL BULL | \$78-80 |
| Jan WTI/Brent | -\$4.58 | NEUTRAL | -\$5.00-(-4.00) |
| Jan Gasoil Futures Crack | \$24.83 | SMALL BULL | \$25.00-27.00 |
| Jan RBOB Futures Crack | \$9.71 | SMALL BULL | \$10-10.50 |

Summary

- **Technical indicators:** Brent futures escaped oversold RSI territory, as prices were supported during the week, however, with the sharp decline in price action on Nov 15-16, it re-entered oversold territory in RSI and fell beneath the lower Bollinger band. Jan RBOB weakened over the past few days as it dropped to \$2.07/gal on Nov 16. The RSI for RBOB is neutral but is very close to oversold at 32. Prices have broken the lower Bollinger Band and open interest has seen an 18% increase in the week, growing to over 120mbbls. Gasoil futures are still in neutral territory, although price action has recently weakened amid mixed fundamentals.
- In the past week, the **correlation** between the crude complex and gasoil cracks has been seen to strengthen from last weeks next-to-nothing relationship, now displaying a weak negative correlation of around -0.3. Gasoline contracts started to see prices retrace higher due to the ongoing supply disruption in the US, in turn leading to a strong positive correlation of 0.8 between RBOB and crude.
- The **WTI/Brent remains in contango** to April, due to WTI weakness at the front and clear uncertainty about the US economy and demand. It has stopped to the lowest value in 4 weeks in Jan, under -\$4.20/bbl. Jan24/Jan25 Brent structure dropped again w-o-w but with a smaller magnitude than previously seen.
- In the latest CFTC data, we saw a decrease in net positioning for the 3rd and 7th consecutive weeks
 for Brent and WTI, respectively. Bullish speculators in both contracts removed length, with money
 manager shorts in WTI liquidating their positions for the 5th week in a row. In prod/merc Brent and
 WTI again saw a removal of both long and short positions, however it varied in extent, with more longs
 removed in Brent and more shorts removed in WTI on a percentage basis.
- The **volatility skew** for both Brent and WTI options was lower than last week's, although Brent options saw a higher puts skew w-o-w, signalling investors' bearish sentiment.
- **Refinery margins** increased by \$1.30bbl/ in the week from Nov 10 to Nov 17. This was helped significantly by a \$1.12/bbl decrease in Dated Brent w-o-w and by a bullish week for all products but EBOB. EBOB suffered as spreads in Asia and Europe weakened and gasoil saw a reversal from the previous week as it saw the largest w-o-w gain.
- **ETF flows** were mixed over the last week. SCO was more muted as its net delta only averaged to 2kbbls. A very mitigated flow in <5-days-to-expiry options is hinting at uncertainty in the coming days. Although bearish sentiments in USOs and UCOs, as well as an overall bullish sentiment in SCO, signal bearish expectations in crude.

Crude Oil - Technical Analysis

January24 Brent Futures (\$/bbl)

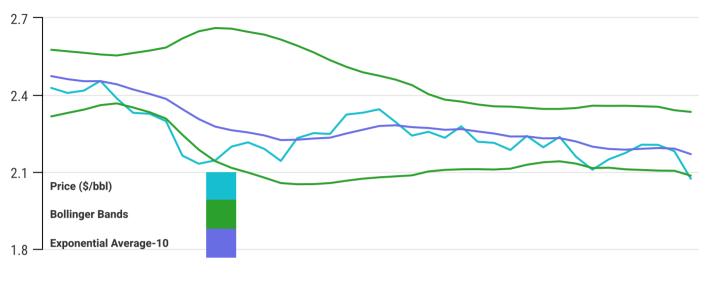


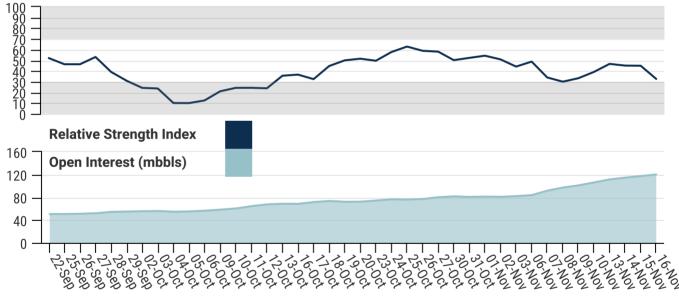
Key Summary

- **RSI Status:** After a short recovery in price action, Jan Brent futures price fell off again to below \$80/bbl, in turn taking the RSI below 30 and into oversold territory.
- **Bollinger Bands Indication:** Prices increased at the start of the week by \$3/bbl to \$82.59/bbl on Nov 14, after falling beneath \$80/bbl on Nov 08, thus, returning price action to above the lower Bollinger band. However, as a result of the EIA confirming two builds in US crude oil stocks, one being the third largest of the year, prices fell off sharply, down to \$77.42/bbl on Nov 16, taking price action below the lower Bollinger band as a consequence. Price remained below the exponential average for the entirety of the week, finishing the week 6.5% below.
- **Open Interest Insights:** Open interest in the January tenor saw a continued decline in the week to Nov 16, falling a further 15% from the previous week, as investors take a risk-off approach with market participants still wary of the poor economic data coming out of the US and China, alongside the EIA stock data portraying 5 builds in the last 6 weeks, including two builds over 10mbbls.
- Overall, indicators signal that Brent futures could be in oversold territory, however, bullish fundamental factors currently remain few and far between. Focus is firmly on the upcoming OPEC+ meeting on Nov 26 to see how the cartel reacts to the continued lower price movements.

RBOB Futures - Technical Analysis

January24 RBOB Futures (\$/gal)



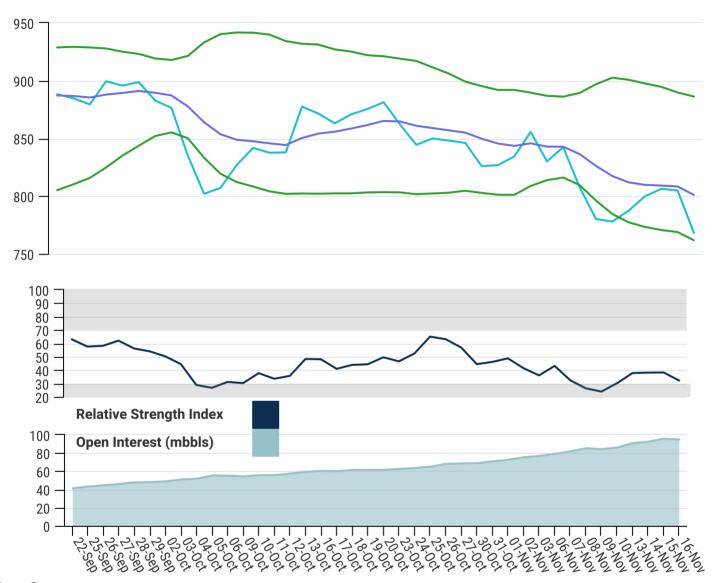


Key Summary

- **RSI Status:** The RSI remains neutral, however, it has been pressured to within touching distance of the oversold territory at 32 as prices were pressured over the past few days.
- Bollinger Bands Indication: Prices have now broken the lower Bollinger Band as the Jan contract crashed to \$2.07/gal on Nov 16. RBBRs strengthened intermittently at the end of the week, being bid in the US windows but remaining in the low \$10s following a low of \$9.77/bbl reached on Nov 16. The week to Nov 15 saw a 1.5mbbls draw in the US gasoline stocks, compared to the 622kbbls build forecast. In the week to Nov 14 there was a 12.7% increase in long positions put on with a 5% closure of short positions. This bullish attitude seemed to only last until Nov 14 as the prices dropped over 6% in two days.
- Open Interest Insights: The open interest highlights the continued appetite in the market this week with levels increasing over 18% between Nov 9 and Nov 16, growing to more than 120mbbls. Although refinery issues in the US continue, it seems the spec interest in longing the RBOB on the back of this has ceased, as the prices crash in combination with the significant increase in OI which suggests players are more than happy to get short at the higher levels, and possibly greater weakness in response to the Russian gasoline export restriction being lifted.
- As the Brent structure levels off around \$80/bbl this weakness may no longer support RBBR buying so we may see RBOB lose some support there. It will be interesting to monitor the refinery outages to see if the there is further support to be lost when the Baton Rouge refinery, amongst others, restarts.

Gasoil Futures - Technical Analysis

January24 Gasoil Futures (\$/mt)

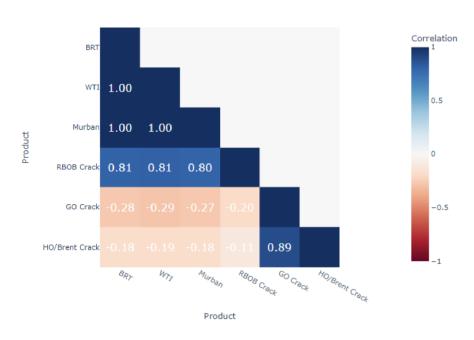


Key Summary

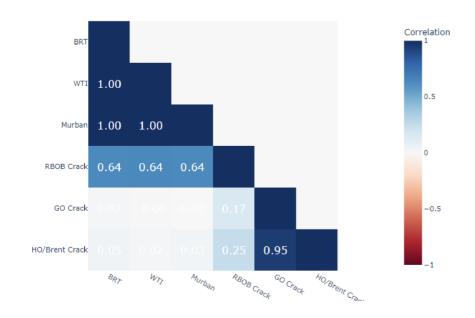
- **RSI Status:** The RSI has been hovering in the 30-40 handles and has been trending downwards towards oversold territory, with a score of 32.2 on Nov 16.
- **Bollinger Bands Indication:** Bollinger bands have kept a similar width after last week's widening indicating a stable volatility w-o-w. Price action is strongly heading towards oversold as Nov 16 saw daily prices drop to only 0.8% above the lower Bollinger bands at \$768.26/mt.
- **Open Interest Insights**: Open interest has steadily risen over the last week with a 10.4% rise w-o-w, continuing the risk-on trend from last week. The EIA reported a 3.294mbbls draw for the week to Nov 08 and a draw of 1.4mbbls for the week of Nov 15. This brings distillate stocks to 13% lower than the five-year average. Although the fundamental picture is tight, low demand for gasoil has kept a lid on price action.
- From a technical perspective, although indicators are heading towards oversold territory. They are hovering right above it, making us think prices might soon start to rise again once oversold territory is reached after a small decline as prices are still high, historically.

Correlation Matrix

Intraday Correlation Matrix Across Most Futures on: 2023-11-16



Intraday Correlation Matrix Across Most Futures on: 2023-11-09



Looking at the January tenor for a range of futures contracts, there was a reversal from last week's trend. with the correlation between gasoil crack and crude becomina slightly stronger, despite being negative - which was last seen Similarly. Oct 26. correlation with RBOB crack has also strengthened to now sit at 0.80 levels, suggesting a strong positive relationship with crude.

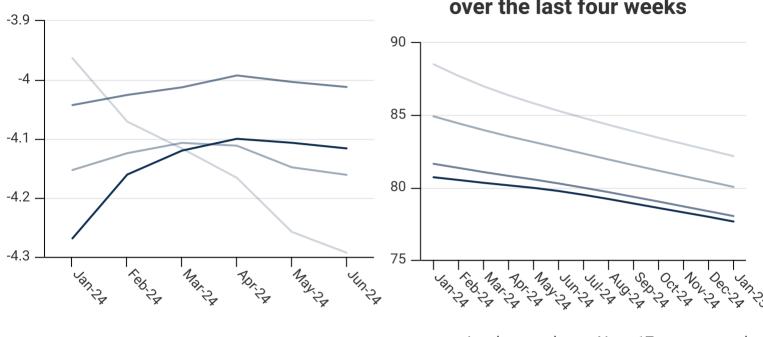
Crude levels continued recover at the start of the week. before a steep fall saw both Brent and WTI break through support levels to reach \$77.43/bbl and \$73.09/bbl on Nov 16, respectively. Gasoline contracts started to see a resurgence higher on the back of ongoing supply disruption in the US, with RBBR in particular finding some good support, outperforming both EBOB and Sing 92, buoyed by a more supportive fundamental outlook and weakness in Dated Brent.

Notably, despite the crude selloff and bearish money manager positioning, gasoil cracks have held-up, leading to a slightly stronger negative relationship with the crude complex.

Crude Oil - Curve Structure

WTI/Brent Structure

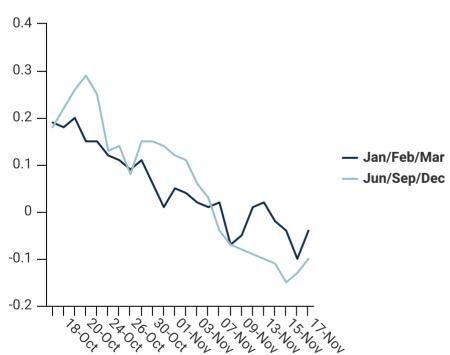
Brent Jan24/Jan25 Structure over the last four weeks



Brent Futures Flies (\$/bbl)

03-Nov

17-Nov



In the week to Nov 17, we saw the WTI/Brent structure remain in contango until April as weakness in WTI seems concentrated in the front of the curve. The whole curve has dropped as the WTI structure fails to hold onto its strength compared Brent. to There US 3.6mbbls build in the inventories in the week to Nov 10 which exceeded the forecasted value. US employment may be weaker than previously thought suggesting economy may not be as strong as hoped, as 150k jobs were added in Oct, fewer than expected and the previous month's value was revised.

The 12-month Brent futures spread has continued to fall below recent levels, however the drop was less sizable than in previous weeks. CFTC data showed both long and short positioned money managers taking off 1.9% and 1.7% of positions respectively.

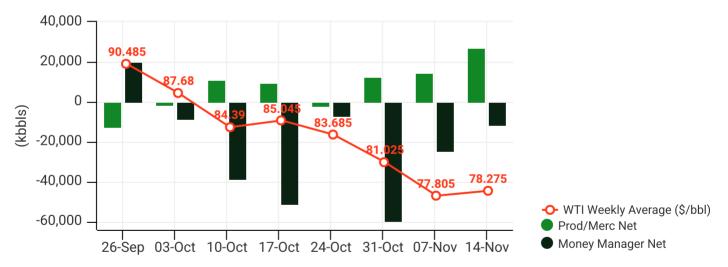
Both the Jan/Feb/Mar and Jun/Sep/Dec Brent futures flies recovered slightly, though remain at negative levels, with the latter weakening significantly.

Crude Oil - Commitment of Traders

Brent - Weekly Net Change in Producer/Merchant and Money Manager Positions



WTI - Weekly Net Change in Producer/Merchant and Money Manager Positions



In the week to Nov 14, despite both Brent and WTI seeing slight upticks in price action, 0.4% and 0.6% respectively, money managers maintained their bearish attitude, taking it to 3 consecutive weeks of net positions decreasing for Brent and 7 weeks in a row for WTI. Bearish sentiment continued across the contracts, with both Brent and WTI speculators removing length for the third consecutive week. Additionally, WTI saw a fifth consecutive increase in short money-managed positions, albeit witnessing the lowest addition to shorts in these past five weeks. Fundamentals remain weak with low Chinese refinery margins, alongside the continued builds in crude inventories reported by the EIA.

In regards to prod/merc net positions, similar to the previous three weeks, Brent and WTI saw contrasting results for the week to Nov 14 in terms of net weekly change. In Brent, we saw a decline in both long and short positions, by 4.6% and 0.5%, respectively. Despite to a lesser extent than seen in the previous two weeks, WTI, like Brent, saw a liquidation of both long and short positions. However, shorts came off to a far greater extent, 7% compared to 0.2% for longs. With WTI prompt flat price recovering from hitting a 4-month low on Nov 08 at \$75.75/bbl, both sell-side and buy-side hedging interest decreased from producers and end-users, respectively.

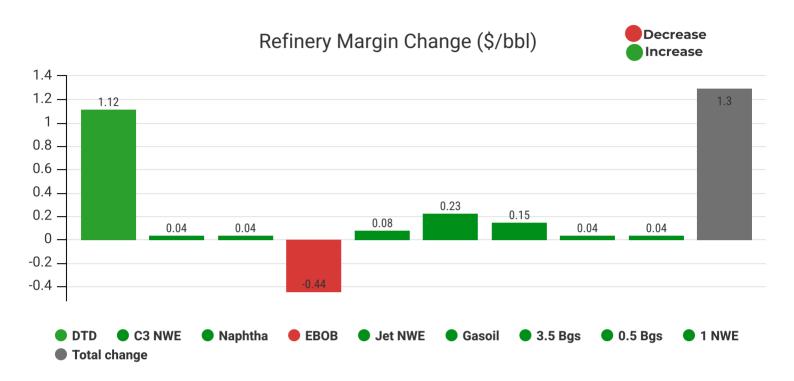
Crude Oil - ETF Flows

| ETFs | 5-day Sentiment | Flows | Call OI Chg | Put OI Chg | P/C Ratio Chg |
|------|--------------------|--|----------------|---------------|------------------|
| USO | Bearish | Although flows were mixed, the average net delta over the last week was -43.9kbbls. Nov 16 was notably the lowest net delta, with a net of -218.3kbbls, with institutional investors being the most significant contributors to that downside, contributing -223.2kbbls. Institutions were seen exclusively on the sell side. There was mostly selling in <5 days to expirations options with the exception of Nov 17 which saw a bullish net delta, indicating more positive sentiment in <5-days-to-expiry USO options. | +11.2% | +6.1% | -4.5% |
| UCO | Bearish | Flows were mixed this week with an overall average daily net delta of -4.3kbbls as Nov 17 saw a notable negative delta of -116.7kbbls where other days were mostly rangebound between -30kbbls and 60kbbls. Professional investors were consistently active this week. As opposed to USO, strong bearish interest was found on Nov 17 in the <5 days-to-expiry options. | +10.0% | -28.7% | -35.2% |
| SCO | Bullish | Interest this week has been consistently flipping between bearish and bullish interest. However, net deltas were muted as the weekly average amounted to 2.8kbbls. Professional and institutional investors were mostly on the sell-side until Friday, when professional investors were seen on the buy-side. Small retail and retail investors were almost always on the buy-side throughout the week. Although the start of the week saw large selling in <5-days-to-expiry options, worth 143.1kbbls of positions on Nov 13 and 14 combined. Nov 16 saw a flip to buy-side in the same contract, with 303kbbls of long positions opened for Thursday and Friday combined. | +4.3% | +5.0% | +0.6% |

^{*}Sentiment and Open interest changes refer to the changes in open interest and overall sentiment in the ETF in the last 5-days.

Trading activity for the week was very mixed for all contract with SCO notably muted. USO was slightly bearish this week with a strong negative net delta seen on Nov 16 as -218.3kbbls worth of positions were added, although the Put/Call ratio increased overall, hinting at more sold calls than bought puts. The UCO flows were also mixed with an average negative net delta of -116.5kbbls. A notable participation of professional investors was seen. SCO saw a very muted week as the average net delta amounted to only 2.8kbbls. Professional investors were mostly on the sell-side, when that interest flipped to the buy-side on Friday. Bearish sentiment in USOs and UCOs as well as an overall bullish SCO sentiment signals a bearish sentiment for crude.

Refinery Margins



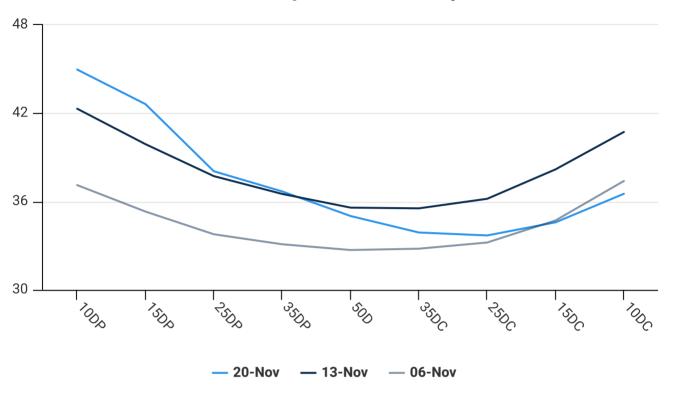
European refinery margins saw crude-driven support from the 10th and the 17th of Nov. Although Dated saw a little support over the week it reached a low of \$0.00/bbl for the Dec/Jan spread on Nov 17, losing 48c/bbl from Nov 10.

Products have seen a constructive week with the exception of EBOB. The greatest strength was in gasoil, in a reversal of the previous narrative, as the market reacted to the tight fundamentals and the ARA stocks fell by a further 39kmt. We saw the ICE cracks rally across the curve, with Cal24 reaching \$23.70/bbl on Nov 17. Nov 20 saw heavy Q1 crack buying continue, allowing it to reach \$24.60/bbl.

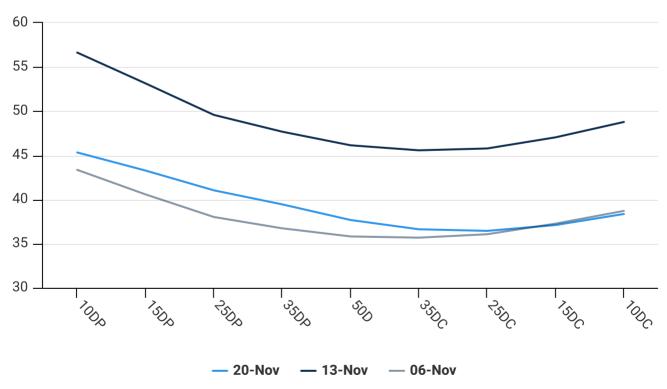
The most notable weakness was seen in EBOB this week, trade houses sold 1.476mbbls of the prompt EBOB crack to Onyx showing a shift in the market sentiment, and reflecting the weakening spreads in both Europe and Asia. The Dec crack reached a low of \$7.10/bbl on Nov 17, before correcting to \$7.85/bbl on Nov 20.

Crude Oil - Option Analysis

Jan24 Brent Options - Volatility Skew



Jan24 WTI Options - Volatility Skew



Looking at the volatility skew graph for both Jan24 Brent and WTI, there has been a shift downwards in January options from last week's levels, with the exception of Brent delta puts. Brent's put skew is higher, week-on-week, signalling higher implied volatility in puts than calls and showing the market is happy to pay more for protection against weak price action. A similar trend, although to a lesser extent can be seen in WTI.