



FUTURES INSIGHTS

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Benchmark oil pricing – lessons from 2020

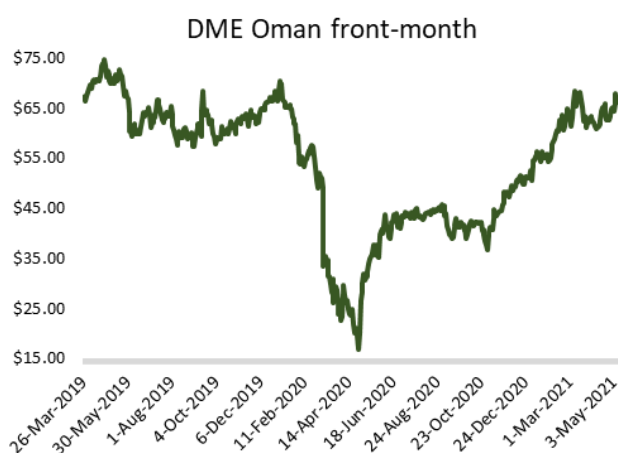
In April 2020 global oil prices tumbled to 20-year lows as the coronavirus pandemic spread globally. Prices have subsequently recovered and this look-back review examines some of the lessons learnt and how markets can better absorb any future price shocks.

Collapse and recovery

The retreat in oil prices February-April 2020 was one of the most dramatic periods in energy market history, comparable with the credit-crunch led price collapse of 2008 – albeit from a much higher starting point in 2008.

Fast forward to April 2021 and one-year on from the lows, oil prices are back to pre-pandemic levels.

Oman futures trading on DME averaged just over \$65.00/b in January 2020, reaching a low of \$16.82/b on April 28 as lockdowns across the globe severely hampered economic and industrial activity. In early May 2021, Oman futures were back at around \$65/b.



The 2020 price drop was also accelerated by the OPEC+ producer group failure to back a Saudi proposal in March to scale back production.

But the rebound was kick-started by the historic OPEC+ agreement in April to reduce supplies to match the demand side. From over 100 million barrels per day (bpd) of pre-coronavirus demand, consumption was estimated to have dropped by over 20 million/b day at the peak of demand destruction, and one-year later consumption is still around 6 million bpd from the peak.

Futures markets and arbitrage

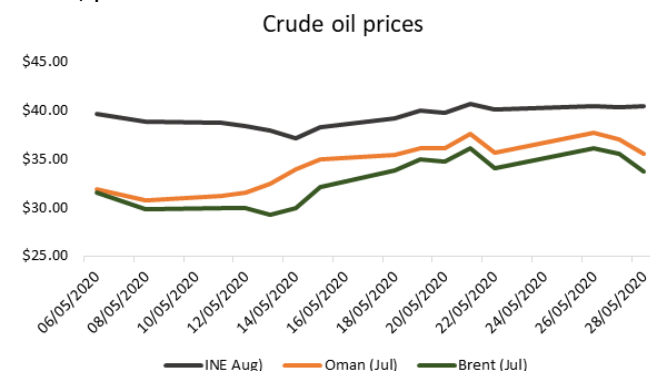
The expansion of derivatives, particularly futures contracts, has been a major factor in driving arbitrage, plus allowing refiners greater opportunities for hedging and comparing the broader array of crudes on offer.

One such example was in the second quarter of 2020,

coinciding with the height of the pandemic and oil prices tumbling to 20-year lows.

China led the demand recovery, not just for Asia but globally, as it imported record volumes of crude oil over the summer months of 2020. At one point there was a spread of around \$10/barrel price difference between Middle East medium sour crude and China's INE sour crude contract.

DME Oman can also act as a proxy hedge for other Middle East medium sour grades such as Basra Light, Upper Zakum or Qatar Marine, and some 40 million barrels of Middle East medium sour was delivered via INE. Around half was Iraq's Basra Light, with the balance made up of Oman, Upper Zakum from Abu Dhabi, plus Qatar Marine.



Having the ability to lock in a pricing differentials between the producing and consumer regions via futures markets is a major enabler of such arbitrage opportunities.

Likewise, refiners can also compare and hedge crude oils priced on a different basis. Asia refiners sourcing global crudes can easily contrast and compare values of DME Oman against WTI or Brent futures, calculating which grades represent the best value. US export grades, in particular, have made waves in Asia with South Korea, China and India all major buyers.

Oman

Oman Blend is a medium sour crude, representing the majority of Middle East crude oil production, which is typically on the heavier side.

Oman has been a key benchmark crude and reference price in the Middle East for several decades, with NOCs using Oman in pricing formulas since the 1980s. Additionally, Oman is a major component of Dubai pricing, while DME has played host to the Oman futures contract since 2007.

The grade is one the largest freely traded crude stream in the region with a production capacity of around 1 million b/d and exports of over 800,000 b/d. This is typically higher than the five North Sea grades in the Dated Brent 'basket'

Hedging the correct Pricing Formulae

Both DME Oman and Platts Dubai benchmarks historically reflect medium sour crude in the Middle East and while prices are typically aligned, the second quarter of 2020 highlighted the need to match hedging requirements against the correct benchmark.

Major Middle East National Oil Companies (NOCs) – Saudi Arabia, Kuwait and Bahrain utilize a 50/50 pricing formulae of DME Oman and Platts Dubai for barrels being exported East of Suez.

This allows traders to manage their price risk completely by hedging 50/50 on DME Oman Futures and Platts Dubai MOC.

Other NOCs including Oman and Dubai utilize the DME Oman price as a 100% pricing formulae whereas Iraq and Qatar price 100% against Platts Dubai.

Physical Dubai production has gradually eroded from around 400,000 bpd to less than 50,000 bpd leaving the Dubai assessment with little physical exposure.

To increase the validity of the Dubai benchmark, additional crude grades have been added to the basket over time to include similar-quality medium sour grades (Oman, Upper Zakum and Al Shaheen) followed later by a very different API, light sweet Murban crude.

The 2020 demand collapse was primarily in transportation fuels (jet, diesel and gasoline), which light sweet crudes are geared towards producing.

Light sweet crudes historically charge a premium to Sour Crude however as the Light Sweet products (jet, diesel and gasoline) demand collapsed from COVID restrictions, resulting in steep discount against other medium sour grades.

As Murban was part of the Dubai basket, then this Light Sweet Crude became the cheapest to deliver and therefore set the Dubai Benchmark price.

At the peak of the demand/price collapse Murban was trading at a discount of more than \$5/b to Oman – therefore valuing Dubai \$5/b under DME Oman.

The Murban disconnect coincided with oil prices trading at 20-year lows, so a \$5/b disconnect on \$20/b oil would potentially lead to a hedging position being 25% off market.

Over the last two years the price of Brent futures has often dipped below Oman futures (and even Dubai), especially during the coronavirus pandemic when demand for road transport fuels declined sharply.

Light sweet crudes have higher yields of gasoline and diesel, therefore less need for additional processing.

The balance has tipped back towards Brent in 2021, but likely to remain unpredictable going forward with many factors in play.

Conclusion

The trading of medium and heavy barrels against a benchmark exposed to light crude fundamentals last year proved costly – particularly for those producers with 100% pricing exposure to Dubai.

Historically Oman and Dubai benchmark prices have had similar correlation leading to traders feeling confident to just hedge on one side, often Dubai or even away with Brent.

2020 has highlighted that by not hedging the correct pricing risk formulae to your exposure can leave end users vulnerable to price movements in the benchmark that they have not covered.

This highlighted the importance of matching hedging to the underlying exposure, rather than against a different benchmark.

In short, to fully mitigate price risk buyers and sellers should choose the correct underlying benchmark, which for Oman, or grades priced against Oman, is the DME OQD/Platts Dubai 50/50 strategy.



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