



# Futures Insights

### Introduction

Three grades of crude have emerged as the leading price indicators of crude oil – namely WTI, Brent and Oman – which have all acquired supremacy within their geographical and quality spectrum.

This document will largely focus on two of those three grades, namely Brent and Oman, which set the price for nearly all seaborne crudes around the world, and are the key reference grades for East/West and sweet/sour spreads.

## Oman background

Oman Blend is a medium-sour crude grade which in the last decade as usurped Dubai crude as the most important price reference and traded grade in the Middle East and Asia.

Oman is the only listed physical delivery crude contract East of Suez. The DME Oman contract was launched in 2007. It provides the backbone of the benchmark Dubai price -- essentially setting the price of Dubai -- a grade that has fallen to less 50,000 b/d of production.

Additionally, major Middle East producers such as Saudi Arabia and Iraq use a Dubai/Oman 50:50 pricing formula in their Official Selling Price for Asian customers. So with Oman typically setting the price of Dubai, most Middle East-origin crude sold into Asia is highly dependent on the Oman market. As such, it has become the most important East of Suez price indicator among refiners, producers and traders.

Oman production is currently running at around 950,000 b/d, including up to 800,000 b/d of export crude,

which is fully tradeable and free of any destination restrictions. Some Middle Eastern producers prefer to sell crude with certain restrictions and while this may give the seller an additional level of control over its crude, it renders the grade unsuitable as a reference price since resale is not an option.

The Dubai price is underpinned by the physical delivery of Dubai, Oman and Upper Zakum. As of mid-March 2014, all but one of the cargo deliveries into the Dubai pricing mechanism in 2014 have been Oman, representing more than 95% of deliveries.

## Oman trading

The majority of Oman crude is sold through the DME, whose settlement was adopted by the Government of Oman in 2007 as the Official Selling Price. Similar to WTI, Oman is a physically delivered futures contract, trading in lots of 1,000 bbls, although relatively few participants actually take physical delivery.

Typically, between half and two thirds of Oman's export program is delivered via the DME, but Oman is free for resale and trades on the parallel cargo market, which is usually priced as a differential to the Dubai swap.

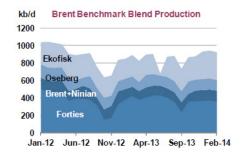
Oman crude is consumed almost entirely by Asian refiners, with a very occasional cargo going to the Mediterranean when a rare arbitrage opportunity opens up, but this is becoming increasingly a trend of the past with oil demand growth concentrated in the East.

### **Brent background**

Dated Brent is light sweet crude which emerged as the premier

benchmark brand for the North Sea during the mid-1980s, quoted by specialized price reporting agencies such as Platts, Argus and ICIS London Oil Report.

The Brent market was also assessed and reported by the broader financial news providers such as Reuters, Bloomberg and Dow Jones, reflecting



Brent's position as the bellwether for European oil prices.

The term Dated Brent represents physical crude oil trading in the North Sea, and has undergone a number of changes to tackle declining production.

The initial trading window was 7-15 days hence the original name 15-day Brent. The pricing window has subsequently widened out to 25 days and further amendments are planned in order to compensate for tumbling North Sea production, including the addition of crudes from outside of the immediate region.

Brent has already undergone a number of changes to the physical makeup of the index, and is now comprised of Brent, Forties, Oseberg and Ekofisk, or BFOE. The lowest of the four grades sets the price of Dated Brent.



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## **Brent trading**

In recent years, the price of Dated Brent and related instruments such as cash BFOE, have been largely set by Forties, which is most competitively priced, or cheapest, of the four BFOE grades.

The addition of so-called Quality Premiums in 2013 for Oseberg and Ekofisk has made those two grades more competitive within the BFOE complex and, while more relevant, Forties is still the key Brent/BFOE grade.

In production volume terms, Forties and Ekofisk are by far the most relevant.

The London-based International Petroleum Exchange launched a successful Brent contract in 1988, having initially failed on the first two attempts to launch Brent futures.

The IPE was later acquired by the US-based Intercontinental Exchange, maintaining Brent as its flagship crude price. The CME also relaunched its NYMEX Brent contract in 2012 and subsequently a Brent/Oman contract. (see box opposite)

Brent futures are settled against reported cash BFOE trades on expiry day, which is 15 days prior to calendar month expiry.

## **Brent/Oman spread**

There is a strong correlation between Brent and Oman, with the fortunes of both grades largely tied to global supply/demand fundamentals and geopolitical factors, although Brent can be prone to sharp upside moves during periods of field maintenance, particularly

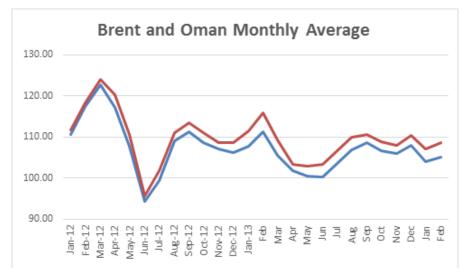
unscheduled maintenance.

Brent is also subject to upswings when arbitrage opens for the Forties grade to move to China and Korea.

In fact, Forties arbitrage and Libyan

summer's turmoil surrounding Syria, both Brent and Oman moved sharply higher, but Brent increased at a faster pace, pushing the spread to over \$3/b.

However, political turmoil in Syria



crude exports have emerged as key components in determining Brent/ Oman spreads.

The Brent/Oman spread averaged around \$2.80/b during 2013, up from the \$1.95 in 2012, and has ranged from \$1.00/b to more than \$4.50/b in that period (based on monthly average prices).

In the first quarter of 2014, Brent/ Oman has ranged from \$3.20/b to \$3.60/b, with the wider spread attributed to regular flows of Forties crude oil moving from the North Sea to Asia, plus a small increase in Middle East crude availabilities and sluggish margins for Asian refiners.

As the more established global benchmark and therefore attracting greater liquidity, Brent will usually have 'first mover' status during fast-moving geopolitical stories.

For instance, at the height of last

also coincided with renewed upheaval in Libya, resulting in export cuts. Since Libyan crude is light sweet and therefore closer in quality to the North Sea, Brent prices are impacted to a greater extent.

## Trading Brent-Oman on CME Globex

Transaction savings – there are no exchange fees for screen trading CME Brent

Margin savings – the offsets between CME/DME products are substantial

Convenience to trade – trading the Brent-Oman spread on Globex means there is no risk of 'legging' as both markets sit on the same matching engine.



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Forties Arbitrage to Asia

The Brent/Oman spread in the first quarter of 2013 and 2014 saw a significant widening, whereby the premium for Brent against Oman increases.

Both periods saw a similar pattern, starting with a relatively narrow spread of \$2-2.50/b – a level which given the right conditions, including favorable shipping rates, can open up arbitrage opportunities.

As Forties is shipped out of the North Sea, Brent prices typically strengthen in relation to Oman, as availabilities of the key North Sea price-setting grade become tighter.

Seasonal factors such as North Sea maintenance, which is typically confined to the summer months when offshore weather conditions are more favorable, also generally act as a booster for Brent prices and Brent/Oman usually widens for the summer months.

After a summer lull on flows of Forties crude to Asia, weak European refining margins saw a resumption in the fourth quarter of 2013, but the overall depressed state of the European refining market kept Brent values relatively subdued.

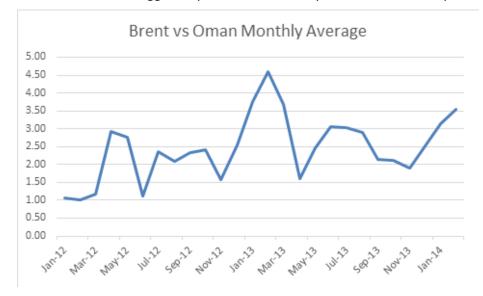
South Korea was the mainstay of Asian-destination Forties buying during 2012 and 2013, prompted by the nation's trade agreement with the EU, allowing for a 3% saving on import duty on European-origin crudes.

But in recent months China has emerged as the key Asian buyer of Forties crude, prompting suggestions that China is looking to diversify supplies, while at the same time having a greater influence on the Dated Brent benchmark as China cements its position as the world's biggest importer of seaborne crude.

The US remains the biggest import-

production and declining European demand, has looked to consumers in Asia.

China typically buys over half of Angola's 1.5 million b/d exports, followed by Taiwan, India and Japan,



er of crude oil adding pipeline and seaborne imports together, but the US shale oil revolution has opened up new trade patterns as displaced crude seeks new outlets.

As the US become less reliant on imports, crude oil from the likes of West Africa seeks new homes, with Asian refiners often the most desirable destination.

For instance, the US has cut average daily imports of Nigerian crude from well over 1 million b/d five years ago, to as little as 200,000 b/d in 2014.

That displaced crude is increasingly finding its way to Asia, further cementing pricing links between West and East.

Angola has emerged as a new powerhouse producer in West Africa and faced with the upsurge in US with only a handful of cargoes heading for Europe.

## Conclusion

As US production continues to soar, trade patterns linking West and East will grow and the link between Brent and Oman prices will increasingly be the key oil spread in any trading portfolio. Likewise, as the Americas steps up oil trade with Asia, WTI/Oman will be another spread to watch for in future.



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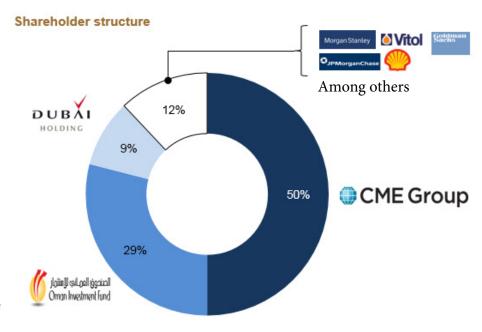
## **About DME**

DME is the premier international energy futures and commodities exchange in the Middle East. It aims to provide oil producers, traders and consumers engaged in the East of Suez markets with transparent pricing of crude oil.

Launched in 2007, DME has rapidly grown into a globally relevant exchange. Its flagship Oman Crude Oil Futures Contract (DME Oman) contract is now firmly established as the most credible crude oil benchmark relevant to the rapidly growing East of Suez market. Reflecting the economics of the Asian region like no other contract, and the largest physically delivered crude oil futures contract in the world, DME Oman is the world's third crude oil benchmark and the sole benchmark for Oman and Dubai exported crude oil.

DME is a fully electronic exchange, with regulatory permissions allowing access from more than 20 jurisdictions, including the major financial centers of Asia, Europe and the United States. The Exchange is located within the Dubai International Financial Center (DIFC), a financial free zone designed to promote financial services within the UAE. The DME is regulated by the Dubai Financial Services Authority and all trades executed on the DME are cleared through and guaranteed by CME Clearing.

DME is a joint venture between Dubai Holding, Oman Investment Fund and CME Group. Global financial institutions and energy trading firms including Goldman Sachs, JPMorgan, Morgan Stanley, Shell, Vitol and Concord Energy also hold equity stakes in the DME.



## Surpassing all records



Record Open Interest: 24,750 Lots on 27 Nov 2013 Record Volume Traded: 14,282 on 26 Feb 2014 Record Overall DME ADV: 10,764 in Feb 2014 Record Window Volume: 6,511 on 26 Feb 2014

Record Physical Delivery: 16,770 in Jun for Aug 2013

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