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Prospects of the DME Oman Crude Oil Futures Contract

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Introduction

In June 2007, the Dubai Mercantile Exchange (DME)[1] launched the Oman Crude Oil Futures Contract to serve as a pricing benchmark and as a mechanism to improve risk management. Welcoming the launch, the Chairman of the DME Ahmad Sharaf declared the event as "a historic and long-awaited day". The Chief Executive Officer of the DME, Gary King, commented that the new crude oil futures contract "has been strongly desired and recommended by the marketplace" and that it is "especially advantageous in Asia, which imports more than two thirds of its crude oil from the Middle East and has long sought greater price transparency and better risk management tools." Other industry observers considered that the new futures contract would help create a new regional pricing system in which Middle East crude oil traded to Asia would be priced on the basis of DME's Oman crude oil futures contract.

The move towards an oil futures contract for pricing Middle East sour crudes is part of a more general shift in the international pricing system to the futures market for crude oil price discovery. Many consider this shift to the futures market as an important improvement on the existing pricing system. On the one hand, the reliance on Dubai spot market quotations for the 10 million barrels per day (mb/d) or so of exports to the Asia-Pacific region is no longer suitable as Dubai's production has fallen sharply to very low levels in recent years. On the other hand, reliance on NYMEX Light Sweet Crude Oil futures contract (usually referred to as WTI) or ICE Brent futures (usually referred to as Brent) for price discovery is not ideal for Middle East crude oil sellers and their buyers. While WTI and Brent benchmarks are highly liquid and useful for pricing sweet/light crude oil, they are less suitable for pricing sour/heavy crude oils which represent a large percentage of the Middle East's total crude oil exports.

It is almost ten months since the contract was introduced into the market. The optimism surrounding the contract is still strong with Gary King arguing very recently that the "Oman Crude Oil Futures Contract has established itself as the global benchmark for Middle East sour crude". Building on this perceived success, the DME is planning to launch two new financially settled contracts for Brent and Oman crude oil which would enable the trading of spreads between the two crude oil contracts or more generally the sweet-sour price differential.

[1] Initially NYMEX held 50% of DME and Tatweer (a part of Dubai Holding) controlled the other 50%. In May 2007, the two partners sold a 30% equity stake in the exchange to the state-owned Oman Investment Fund. The current shareholder structure is as follows: Tatweer and NYMEX hold 32.5%, Oman Investment Find holds 30%, while the remaining 5% is allocated to DME floor members.

However, not everyone shares the DME's optimism regarding the contract. A few observers doubt the viability of the contract in its current structure pointing to a number of major weaknesses that plague the contract such as its occasional erratic price behaviour, its low liquidity, the dominance of few traders, and its overemphasis on physical delivery. This paper re-assesses the prospects of DME's Oman Crude Oil Futures Contract by focusing on three aspects: retroactive pricing, physical delivery and liquidity. [2]

Abandoning Oman Retroactive Pricing

It has been realised for some time that for the DME's futures contract to have any realistic chance of success, Oman must abandon its official pricing system. As noted by Petroleum Argus on June 19, 2006, "Oman crude is retroactively priced by the oil ministry and it is not clear how this system could continue to operate in parallel with Oman futures. Either Oman changes its pricing policy or the DME contract will fail". Having both an official selling price (OSP) and futures market-related price undermines the market function of price discovery. Oman's strong backing for the DME contract and the Sultanate's decision to shift from a retroactive pricing system to a forward pricing system based on the DME contract is an important milestone. The OSP for Oman crude for a certain month (for physical delivery in two months) is now calculated as the arithmetic average of the daily settlement prices over the month. For instance, the OSP for Oman crude for the month of June is calculated as the arithmetic average of the daily settlement of price over the month of June for delivery in August. The Government of Dubai also announced that it will cease pricing its crude oil sales off its current mechanism and instead will utilise DME's futures prices providing additional boost to the contract.

Physical Delivery and Open Interest

Unlike ICE's Middle East Sour contract[3], DME's Oman futures contract allows settlement against physical delivery of Oman crude. Petroleum Development of Oman (PDO) and DME are responsible for delivery matching. DME spokesmen have emphasised physical deliverability as the key strength of DME's contract. According to Gary King, physical settlement "provides true price convergence between the cash and physical markets". Ahmad Sharaf, the DME Chairman, argues that the "high number of contracts going for physical delivery certainly confirms the market's need for a physically delivered rather than a financially settled crude oil futures contract".

In November 2007, the number of contracts going to physical delivery in January 2008 reached a high of 5997. This is equivalent to 5.997 million barrels a month comprising around 25% of Oman's monthly crude oil production. In December, 2007 and despite the low volumes of contracts traded, the number of contracts to be physically delivered in February 2008 increased to 6195 which is equivalent to 6.195 million barrels. By any standard, these are very large volumes to be delivered through futures contract. As noted by Reuters, physical delivery on the NYMEX contract, the world's most liquid market, exceeded four million barrels only once in January 1995. [4] In fact, in contrast with other

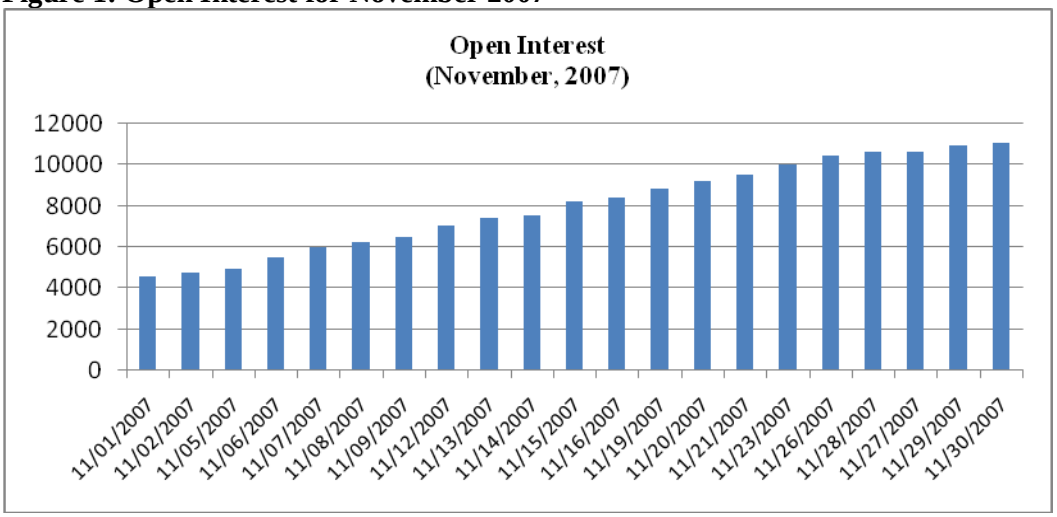
[2] See Fattouh, B, 2006, Middle East Crude Pricing and the Oman Crude Oil Futures Contract: A critical Assessment, Vol XLIX, No 37, September 11.

[3] In May 2007, ICE launched the Middle East Sour Crude Oil Futures Contract, a purely financial instrument settled on cash against a Platts Dubai assessment. ICE's main selling point has been its electronic trading platform and its growing popularity with market makers, financial institutions, and hedgers. The opening paragraphs of the document outlining the new contract's specifications emphasise that the contract does "not only brings the benefits of electronic trading to Middle East sour crude oil but also brings together the world's three most significant oil benchmarks on a single Exchange. This in itself offers a number of benefits to participants, including reductions in collateral requirements through the offsetting of margins".

[4] Reuters, "Big Physical Oman Oil Delivery Could Hurt DME", 20 December 2007. http://www.gulfinthemedia.com/index.php?m=economics&id=367153&lang=en&PHPSESSID=062

benchmark contracts, the open interest on the DME contract tends to increase as contract expiry approaches (see figure 1 below for the open interest during the month of November, 2007). This represents an important anomaly and implies that the DME contract is simply a means to access physical Oman crude oil. This feature sets aside the DME contract from the other successful benchmark contracts such as NYMEX's light sweet crude oil or ICE's Brent.

Figure 1: Open Interest for November 2007

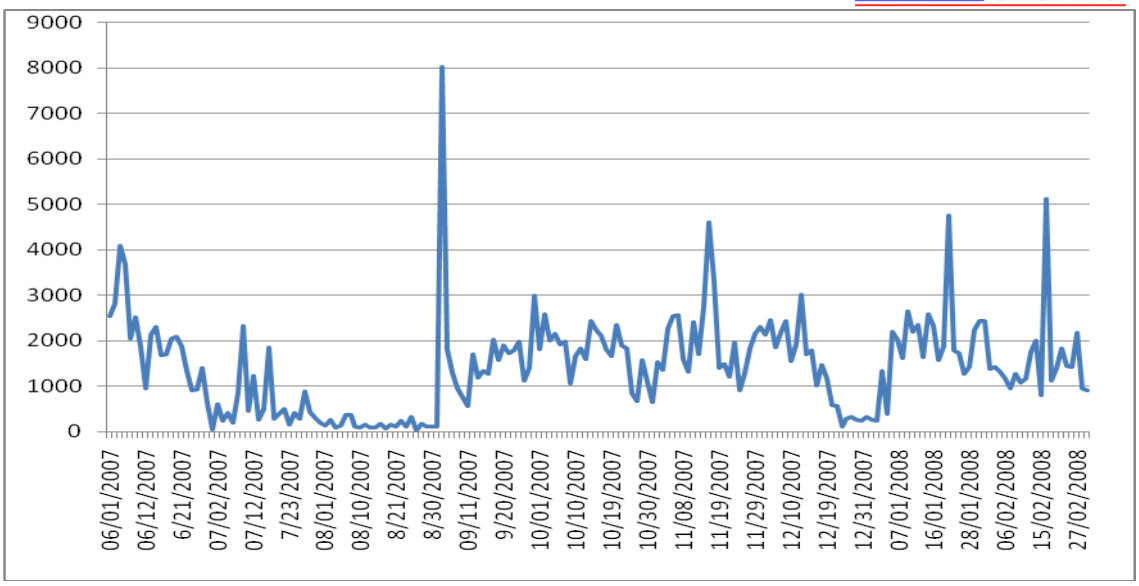


Source: Dubai Mercantile Exchange Website

Liquidity

Figure 2 below shows the volume of DME Oman futures contracts between 4 June, 2007 and 28 February 2008. After peaking at 4085 contract on 5 June, 2007, trading volumes went down, reaching very low levels in the month of August where the average volume per trading day amounted to 156 contracts. Liquidity picked up between September and in November the average volume per trading day increased to 2000 contracts. In December 2007, liquidity declined again and the average volume per trading day reached 1200 contracts. In January 2008, the average volume per trading day increased to around 2000 contracts but declined again in the month of February, 2008 to around 1500 contracts. These figures suggest that the volume of contracts traded are highly volatile and remain relatively low, especially when compared to WTI or Brent futures contracts.

Figure 2: Number of Traded DME Oman Futures Contracts



Source: Dubai Mercantile Exchange Website

The futures market plays two important roles: price discovery and hedging/speculation or what is termed as risk management. In order to efficiently perform these functions, liquidity remains the key factor. Physical deliverability, which the DME tends to emphasize, is less important. To put it differently, deliverability is a necessary but not a sufficient condition for the success of the DME Oman contract. In fact, physical deliverability can reduce the chances of the success of a futures contract if market participants have doubts about the likely performance of the delivery mechanism or if physical bottlenecks around delivery points result in some serious dislocations. In fact, inability to increase liquidity while physical deliverability continues to rise may undermine the contract as the risk of physical delivery tends to rise. During the month of December 2007, total trading volumes reached 27000 contracts while physical delivery stood at more than 6000 contracts yielding a ratio of deliverable oil to total volume traded of 22%. Such high ratio may discourage speculators and hedgers who are not interested in physical delivery. As one market participant points out, "If liquidity starts to build, the ratio of delivery will fall. But for now it may be scary for funds to participate if they do not want to take or make delivery".[5]

Thus, the survival of the contract in the long term primarily depends on its ability to attract more liquidity. If low liquidity persists, then the two functions of price discovery and risk management would be undermined and the contract would cease to be attractive for market participants. Hence, the main question is: where would the liquidity that is vital for the success of this contract come from? Generally, liquidity would come from producers, physical traders, and speculators/hedgers. The next question is: how does each of these parties view the current Oman crude oil futures contract?

Gulf oil producers, like any other oil company with sizeable production, do not hedge their oil production in the futures market. For Gulf oil exporters, the interest in a sour futures contract would only be for export pricing purposes. Low liquidity however is likely to discourage the already very cautious Gulf oil exporters from setting their crude price against the DME futures contracts. So far, none of the big gulf producers such as Saudi Arabia, Kuwait, Qatar, and Iran have shown much interest in the newly established sour futures contracts. Instead, these producers have adopted a wait-and-see approach. Saudi Aramco's former Marketing vice-president Ibrahim Mishari has been quoted as saying that Saudi Arabia is "watching this and probably will be the last one to join it". In August

[5] Reuters, "Big Physical Oman Oil Delivery Could Hurt DME", 20 December 2007. http://www.gulfinthemedia.com/index.php?m=economics&id=367153&lang=en&PHPSESSID=062

2007 Qatar decided to drop the link to Oman's crude for pricing its exports. Qatar did not rule out using Oman in the future, but stated that any decision to link again to Oman's crude would depend on the performance of the DME futures contract.[6]

Asian interest is also crucial for the long term success of the contract as the Asia-Pacific region is the main importer of Middle Eastern sour crude oil. However, Asian traders have also shown little enthusiasm so far. As Petroleum Argus notes[7], most of the trading of the DME Oman contract so far has been taking place during US and London time reflecting Asian traders' lack of enthusiasm in the DME contract. The price behaviour of the DME's Oman crude futures in a couple of instances may have made Asian players wary about using the benchmark. In December 2007, February 2008 Oman traded at a premium of $4/b to Dubai swaps. A few days later the price fell sharply and DME Oman traded at a discount of about $2/b to Dubai. These sharp movements puzzled observers with many attributing such movements to market squeezes. More recently, Petroleum Argus has raised the issue of whether the DME price reflects the fundamentals of the Mideast Gulf oil market arguing that the "DME's Oman price is out of step with a relatively weak Mideast Gulf market" with DME contract trading at high premiums over Dubai swaps. This was occurring at times when Asian refineries were cutting back their demand due to low margins. In fact, this is expected because as noted above the DME futures price is more responsive to trading conditions in Europe and the US than the trading conditions in Asian markets. In other words, it still strongly linked to the Brent complex.

As to the financial players/speculators, these contracts may open new opportunities for trading and risk management. But speculative and hedging activity will not be attracted to the market in large volumes without sufficient liquidity. Market participants often prefer to trade only in the most liquid markets. The recent initiative of creating new financially settled contracts may be geared towards attracting financial players and speculators into the market which so far has been dominated by physical traders.

Given that the main parties are adopting a wait-and-see approach, it is difficult to see where the liquidity that is needed to support these contracts would come from. If there is no surge in liquidity very soon, a vicious circle may set in. In the same way that liquidity attracts further liquidity, illiquidity can result in more illiquidity. DME has been trying to boost liquidity through the use of market makers and financial incentives. According to Platts, DME has been offering up to $5 per traded lot to market makers who trade at least 600 lots a day for 15 consecutive days. Allegedly, this is in addition to a big stipend. These incentives might help revitalize the market but their impact would only be short-term.

Conclusion

So far the main success of the DME contract has been in providing a flexible way to access physical Oman crude oil. In terms of providing better tools for risk management, enhancing price transparency and constituting the basis of a new benchmark, the DME's contract has not made any significant breakthroughs. The success of the DME futures contract in performing these tasks requires structural changes in the behaviour of any or all of the above main players. However, it is difficult to foresee in the near future what circumstances could cause this dramatic change in the players' behaviour. As to the issue of pricing, and contrary to what some optimists claim, it is very far from a foregone conclusion that a new benchmark for pricing Middle Eastern crudes based on the DME's contract will eventually emerge.

[6] Reuters, "Qatar Drops Oman Oil Price Link", 27 August 2007

[7] Argus Global Markets, 9 July 2007.