

Importance of maintaining robust commodity markets

The world's major commodity markets are well established and robust. They have continued to function effectively even in the face of swings in price and huge shifts in demand from the OECD to the developing world, most notably Asia. Bubbles and temporarily inflated

prices are as much a part of commodity markets as 'irrational exuberance' is a human weakness, but eventually, as recent months have shown, the fundamentals of supply and demand take over. As I began by saying, commodity markets exist to continuously facilitate the movement of goods around the world. This is their primary and essential purpose and it is imperative that rules and

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regulations are designed to protect the interests of the real economy and consumers by enhancing this function, above all others. Otherwise Europe will be the poorer.



Are regulators right to worry about the oil benchmarks?

Peter Stewart

The three most widely used crude oil benchmarks are North Sea Brent, West Texas Intermediate (WTI) from the USA, and Oman crude from the Middle East. As is well known, the bulk of the 92 million barrels of crude oil sold each day is priced based on published assessments or daily averages of deals done in these three grades of oil, known as benchmarks. The assessed value of physical or 'dated' Brent published by Platts, a leading price-reporting agency (PRA), is the most widely used benchmark. Billions of dollars worth of oil and significant volumes of gas and LNG change hands each day based on Platts' dated Brent assessment. Other benchmarks published by companies such as Petroleum Argus and ICIS are also used by the industry.

The Brent market has evolved over the years and it is now one of the most complex of commodity markets. From experience, it takes one full day on a training course to explain comprehensively from scratch how Platts makes its daily assessment of dated Brent. It is usually the most difficult day of such a course. People from outside the oil industry generally expect that oil is sold at a fixed price in dollars per barrel, which is how they

hear the price of oil on the television. They are baffled and often astonished when they find out the reality.

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'ASSESSING THE VALUE OF BRENT CRUDE OIL IS ANYTHING BUT SIMPLE.'

The scientist Isaac Newton said: 'Truth is ever to be found in simplicity, and not in the multiplicity and confusion of things.' Assessing the value of Brent crude oil is anything but simple. Brent crude oil is currently most frequently sold based on a value that Platts will in the future publish for the lowest in price of four not very similar grades of crude oils (Brent, Forties, Oseberg, and Ekofisk, also referred to as BFOE) on the days around or shortly after the cargo is loaded. That is usually 2-4 weeks after the deal between a seller and a buyer is concluded. The value that Platts publishes on the bill of lading date is itself not based on a transaction that is concluded at a fixed price. The calculation that Platts makes each day of the fixed price value for each of the four grades is usually derived from at least two, and arguably three, separate financial instruments: the Brent forward price and the Contract for Difference between the physical cargo and forward Brent. (The

forward Brent price is itself derived from the Brent futures price and the Exchange for Physical differential). Moreover the values are not the result of a survey or an average of deals; buyers and sellers meet and transact their deals on the Platts screens – in what has become known as the Platts 'window' – bids and offers are posted and may or may not result in actual transactions, and only the market price at a particular moment in time (4:30 London time) is reflected in the daily assessment. These assessments and the real-time flow of bids and offers can be seen by anyone who wants to pay a hefty subscription fee. Although Brent is generally regarded as the market with the most complex structure, similar mechanisms of varying degrees of complexity are used in assessing the value of other benchmarks.

Platts' methodology and those of its competitors – Petroleum Argus, ICIS, and others – have evolved over time, and the assessment systems have been adapted as the market itself has changed. So the fact that the assessment methodologies used are sometimes convoluted cannot be laid solely at the doors of the PRAs (Platts took a more active role in defining the



standards for trades that it will consider in its assessment when it set up the BFOE system, and with the subsequent introduction of quality escalators and alternative delivery procedures). Nevertheless, it seems evident that there has been a growing lack of trust between the regulatory community, the price-reporting agencies, and the trading community in recent years, particularly in Europe. The IOSCO (International Organization of Securities Commissions) principles were developed to ensure best practices in assessments were followed; but some groups within the European Union now want to go far beyond these principles, in a way that many in the industry believe would add to the cost of transactions and would ultimately hurt the consumer. Whether that will happen depends on decisions that will be taken in the coming weeks and months.

Rather than take sides in this debate, this analysis seeks to characterize the agendas that motivate the three groups (traders, regulators, and PRAs); it then examines the evolution of the benchmarks; and then tentatively suggests some ways that regulators, the industry, and the PRAs might find common ground in which trade continues, while not being perceived as a threat by regulators.

The benchmark system, transparency and liquidity

For a *trader*, the virtue of the benchmark system is that it allows market participants to easily see the relative value of different grades of oil. Using a single reference grade, and

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expressing the value of the several hundred different grades of oil that are actively traded as a differential to it, allows market participants to discern quality trends more readily, as well as the time structure of the market. There is more ‘information’ in the prices and spreads than if everything traded at a fixed price, like electrical goods in a department store. Traders can make more money in a system that is non-transparent, so their heyday was arguably in the highly secretive early days of oil trading when the likes of Marc Rich dominated the image of an oil trader in the public’s imagination. But as the market became more transparent, traders needed liquidity more than anything else; as arbitrage becomes more efficient, margins become increasingly thin, so the frequency and size of transaction – the liquidity of the market – speeds up. Traders see a valuable role for their trading activities in ironing out temporary imbalances of supply and demand. This involves risk, so it is natural that they should seek to make money from these activities.

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The *public and the regulator* have zero interest in the minutiae of details that are the lifeblood of traders; they do not care about small or even big changes in grade spreads, backwardation and contango, arbitrage openings, location spreads etc. What they want is a clear explanation of the fixed price of the commodity, because business and the public are exposed to the retail price of the fuels derived from crude oil, and it is their interests that regulators typically seek to protect. High liquidity may in itself be suspicious; the gut feeling is that if traders are trading so much, they must be making pots of money. Despite that, regulators like replicability

and so mathematical systems that give predictable results, such as taking averages of large numbers of trades, give them a sense of comfort. As for transparency, the lack of a reliable fixed price number that represents the ‘real’ value of physical oil is a huge concern. Regulators may look askance at the pea soup of spreads and ratios that allows traders to trade so creatively and which makes the market so efficient. They may well ask, is all of this just smoke and mirrors, a way of obfuscating the fixed price of the commodity?

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‘FOR THE PRICE-REPORTING AGENCY, THE AGENDA IS TO REPORT THE TRUTH AS ACCURATELY AND TRANSPARENTLY AS POSSIBLE.’

For the *price-reporting agency*, the agenda is to report the truth as accurately and transparently as possible. The PRA has to make an assessment each day, whether or not the market is transparent or liquid. The badge of honour of the PRA is to publish more accurate information. From my experience, the PRAs do not care much about liquidity. Platts was certainly suspicious of replicable systems, such as averages based on large numbers of deals, as these are easier to game. But the PRAs care a lot about transparency and the accuracy of their assessments. For example, Platts took a decision in the early 2000s to start publishing the names of companies involved in physical oil transactions; it was a very unpopular decision with the industry who for decades had reported deals to Platts on the assumption of anonymity along the lines of: ‘Brent reported sold at Sep minus 20 cts, ARA trader to US major’. Likewise, the ‘window’ system was unpopular when it was first put in place in the European products market; traders were vociferous in denouncing it.

Ironically, while Platts put more and more effort into opening up Pandora's Box by making the physical market fully transparent, regulators received mixed messages – even from some of the large oil companies – about whether the assessment system could be trusted.

Historical evolution of benchmarks

When the benchmark system was set up in the mid 1980s, the futures markets were still in their infancy, there was no developed swaps market, and the physical market was shrouded in secrecy. The evolution of the benchmarks, including Brent, is described in Bassam Fattouh's study 'An Anatomy of the Crude Oil Pricing System' (Oxford Institute for Energy Studies, WPM40, January 2011). The price-reporting agencies at the time were among the only sources of price discovery, so it made sense to use their daily assessments of the key marker crude grades as a barometer of overall market value.

Platts' daily assessments for individual crude oils were already widely used in term contracts and in settlement of spot transactions, particularly in the USA. Although a relative latecomer to international crude oil assessment, Platts' forward assessments of Oman and Dubai, Brent, ANS (Alaskan North Slope), and WTI were quickly incorporated in term contracts with OPEC members.

Platts published daily assessments of the fixed price value of the oil, which didn't involve any complex sums because, at the time, crude oil was generally traded at a fixed price. As the market evolved, and risk management structures became more sophisticated, the market structures also became more complex. Whereas in the past traders had tended to tie contracts to Platts' assessments of individual crude oil grades, the benchmark system

focused liquidity on the key benchmark grades. Forward contracts for Dubai and Brent became more liquid, frequently with 60–80 full cargoes of Brent changing hands in so-called 'daisy chains' in what at the time was the 15-day Brent market. The liquidity on futures markets, although initially lagging that of the 15-day market, saw an even more impressive growth trajectory. The NYMEX light sweet crude contract was set up in 1983 and the IPE's Brent contract followed in 1988; both became dominant markers for the outright market value by the end of the decade. The New York Mercantile Exchange (NYMEX) is now part of Chicago Mercantile Exchange (CME); and the International Petroleum Exchange (IPE) is now owned by the Intercontinental Exchange (ICE).

This evolution resulted in a dichotomy that characterizes the benchmarks today, and still troubles regulators. While pricing remains tied to the assessments published by the reporting agencies, the outright price transparency through the day is from the futures screen. Because the market's trading structures evolved before the futures markets took off, the legacy pricing mechanisms did not adjust to the new reality. Even in the early 1990s, many crude oil traders (fantastical as it may now seem) believed that the futures markets were a passing fad.

Physical Brent deals at this time were often concluded at differentials to the 15-day price, so a dated cargo would change hands at (for example) 'January 15-day Brent less 20 cts/barrel'. As more pricing converged on the Platts physical Brent assessment, so risk management instruments evolved that bridged the gap between the futures and the physical, and the forward and the physical. The Dated to Frontline Swap allowed traders to fix the spread between the first month future and Platts dated Brent assessment, while

the Brent weekly CFDs allowed the gap between the forward 15-day (or later 21-day and 25-day) market and the physical price. These instruments allowed traders over time to sell physical cargoes of oil on a Dated Brent-related price plus a differential. Using risk management instruments, traders could lock in a fixed price on the day a trade was concluded, despite the deal being invoiced based on the Platts average Dated Brent price on/around bill of lading plus the differential.

Indeed, there was no reason at all why Dated Brent should not itself trade at a differential to its own value in this system. Rather than physical Brent trading at a fixed price, it traded against Platts dated Brent, which itself was set by the Brent future, plus an EFP (exchange for physical) differential, plus a CFD (contract for difference) differential. The Brent future, while very liquid, did not result in physical delivery, except by the bilateral mechanism of the EFP. So the value of the most influential physical benchmark moved from being a negotiated fixed price, to an assessed number determined by the value of a suite of financial instruments which did not involve physical delivery, plus a negotiated differential. For oil traders, the system worked well. It was highly flexible, it allowed the price to be set when the cargo loaded, and it preserved the time gradient of the market and the quality differentials between crude oils. But to regulators, it was 'anything but transparent'.

A series of changes followed which established Platts as a determiner of market structure, rather than simply an observer of the market. The evolution of Dated Brent into dated BFO and then dated BFOE is well known; subsequently, the Forties assessment was subject to a quality penalty based on its sulphur; and more recently prices were adjusted to avoid an options



value for grades such as Oseberg and Ekofisk from affecting the Brent price. No doubt further changes will be made as markets evolve. A reporting agency such as Platts probably sees this as sensible due diligence in the quest for an ever more precise assessment, a fine tuning of the basic steps put in place through the BFOE mechanism to avoid the manipulation of assessments. To a regulator, the mechanism may well look like an evolutionary accident, similar to those birds whose tail gets so long that they become incapable of movement; a case of the survival of the weird, rather than the survival of the fit.

Moving forward

The irony of the benchmark system and the use of published assessments is that it was supposed to simplify and clarify the market by making its structure more transparent. In fact it has resulted in a system in which the value of 'real oil' is discovered through a set of spreads. The fixed price is that on the futures exchange, a contract which converges on settlement with the second forward 'cash' BFOE month. Although cash BFOE trades in the 'window' at a fixed price, this is for relatively brief periods during the assessment process. Trading volumes have anyway declined as the swaps market has grown.

The futures price is clearly not the physical price; but because it can be seen on a screen through the day, is readily available without a subscription fee, and is a fixed price rather than a price set through a differential, it is widely quoted in the media as the 'real' price of oil. Conversely, knowledge of the physical price is only available for a hefty subscription fee; it is increasingly an abstraction that is dependent on a methodology, and is usually set as a differential to another instrument;

and finally the fixed price assessment cannot be seen through the day in real time, but only after the window is closed and the price assessors have done their arcane and sometimes complex calculations.

To those who have grown up in the quotes-related system, it often seems inconceivable that things could be done differently. The reality is that there are many ways in which the market could restructure itself to give more robust price discovery, as well as being simpler and more intuitive to comprehend.

A switch to fixed price trading is one possibility; it happened in the US market in the days after 9/11 when the NYMEX was shut. Other oil markets trade at fixed prices; hedging is still possible through swaps that are settled against values published by the PRAs. Deals could also be done at Brent futures-related prices in much the same way as in the good old days, when physical Brent was traded at a differential to the 15-day forward. There is also no reason why market participants should put all their eggs in the Brent basket price; a trend towards more diverse regional benchmarks is arguably already underway.

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Meanwhile, regulators should listen to the market. Financial market regulators were alarmed at the manipulation of the LIBOR benchmark. Even before that hot potato exploded, the PRAs knew of the weaknesses of such subjective mechanisms, and had developed systems to make their own oil price assessments more objective and robust than the weak

systems that were used in financial markets. Regulators should resist the urge to teleport financial market solutions to a commodity market that is fundamentally different in its operation.

The market structure is not something that can be decided by a committee. It is the job of each member of the trading community to decide individually. A regulator cannot make such decisions; nor can a price-reporting agency. But it is important that there is a forum for discussion among the three groups, because better decisions will result from a fuller understanding of the priorities of each. The current situation in which (apparently) the regulators trust neither the trading community nor price-reporting agencies is undesirable. European regulators appear intent on rushing through new rules no matter what they are told by professionals with years of experience in the business.

Unfortunately, this provokes what is often a lightly concealed disdain among the industry for the regulatory effort, because the regulator is perceived to be anti-market and to not understand how markets work. Even when the three groups – traders, regulators, and PRAs – use the same words, they do not necessarily have a common language, because the words have different meanings for each of them. Words such as 'transparency' are brandished – like light sabres in a Star Wars battle – by all three of the groups trying to claim the moral high ground, but with no attempt to sit down and really understand what the concept of transparency means for each of the individual entities.

What is needed is not just a three-way discussion between the industry, regulators, and PRAs, but a genuine attempt to mutually understand the others' language.

