

### Naked Oil

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This is a guest post by Chris Cook, former compliance and market supervision director of the International Petroleum Exchange.

All is not as it appears in the global oil markets, which have become entirely dysfunctional and no longer fit for its purpose, in my view. I believe that the market price is about to collapse as it did in 2008, and that this will mark the end of an era in which the market has been run by and on behalf of trading and financial intermediaries.

In this post I forecast the imminent death of the crude oil market and I identify the killers; the re-birth of the global market in crude oil in new form will be the subject of another post.

# **Global Oil Pricing**

The "Brent Complex" is aptly named, being an increasingly baroque collection of contracts relating to North Sea crude oil, originally based upon the Shell "Brent" quality crude oil contract that originated in the 1980s.

It now consists of physical and forward BFOE (the Brent, Forties, Oseberg and Ekofisk fields) contracts in North Sea crude oil; and the key ICE Europe BFOE futures contract, which is not a deliverable contract and is purely a financial bet based upon the price in the BFOE forward market.

There is also a whole plethora of other 'over the counter' (OTC) contracts involving not only BFOE, but also a huge transatlantic "arbitrage" market between the BFOE contract and the US West Texas Intermediate (WTI) contract originated by NYMEX, but cloned by ICE Europe.

North Sea crude oil production has been in secular decline for many years, and even though the North Sea crude oil benchmark contract was extended from the Brent quality to become BFOE, there are now only about 60 cargoes each of 600,000 barrels of BFOE quality crude oil (and as low as 50 when maintenance is under way) delivered out of the North Sea each month, worth at current prices about \$4 billion.

It is the 'Dated' or spot price of these cargoes – as reported by the oil price reporting service Platts in the 'Platts Window' – that is the benchmark for global oil prices either directly (about 60%) or indirectly, through BFOE/WTI arbitrage for most of the rest.

It will be seen that traders of the scale of the oil majors and sovereign oil companies do not really have to put much money at risk by their standards in order to acquire enough cargoes to move or support the global market price via the BFOE market.

Indeed, the evolution of the BFOE market has been a response to declining production and the

fact that traders could not resist manipulating the market by buying up contracts and "squeezing" those who had sold forward oil they did not have, causing them very substantial losses. The fewer cargoes produced, the easier the underlying market is to manipulate.

As a very knowledgeable insider puts it....

The Platts window is the most abused market mechanism in the world.

But since all of this short term 'micro' manipulation or trading (choose your language) has been going on among consenting adults in a wholesale market inaccessible to the man in the street, it is pretty much a zero sum game, and for many years the UK regulators responsible for it – ie the Financial Services Authority and its predecessor - have essentially ignored it, with a "light touch" wholesale market regime.

If the history of commodity markets shows us anything, it is that if producers can manipulate or support prices then they will, and there are many examples of which the classic cases are the 1985 tin crisis, and Yasuo Hamanaka's 10-year manipulation of the copper market on behalf of Sumitomo Corporation.

When I gave evidence to the UK Parliament's Treasury Select Committee three years ago at the time of the last crude oil bubble, I recommended a major transatlantic regulatory investigation into the operation of the Brent Complex and in particular in respect of the relationship between financial investors and producers, and the role of intermediaries in that relationship.

I also proposed root and branch reform of global energy market architecture, which in my view can only come from producer nations and consumer nations collectively, because intermediary turkeys will not vote for Christmas.

#### A Meme is Born

In the early 1990s, Goldman Sachs created a new way of investing in commodities. The Goldman Sachs Commodity Index (GSCI) enabled investment in a basket of commodities – of which oil and oil products was the greatest component – and the new GSCI fund invested by buying futures contracts in the relevant commodity markets which were 'rolled over' from month to month.

The genius dash of marketing fairy dust that was sprinkled on this concept was to call investment in the fund a 'hedge against inflation'. Investors in the fund were able to offload the perceived risk of holding dollars and instead take on the risk of holding commodities.

The smartest kids on the block were not slow to realise that the GSCI – which was structurally 'long' of commodity markets – was taking a long term position which was precisely the opposite of a commodity producer who is structurally 'short' of commodities because they routinely sell futures contracts in order to insure themselves against a fall in the dollar price; ie commodity producers are offloading the risk of owning commodities, and taking on the risk of holding dollars.

So, in 1995 a marriage was arranged.

# **BP and Goldman Sachs get Married**

From 1995 to 2007 BP and Goldman Sachs were joined at the head, having the same chairman — the Irish former head of the World Trade Organisation, Peter Sutherland. From 1999 until he fell from grace in 2007 through revelations about his private life, BP's CEO Lord Browne was also on

the Goldman Sachs board.

The outcome of the relationship was that BP were in a position, if they were so minded, to obtain interest-free funding via Goldman Sachs, from GSCI investors through the simple expedient of a sale and repurchase agreement - ie BP could sell title to oil with an agreement to buy back the oil later at an agreed price.

The outcome would be a financial 'lease' of oil by BP to GSCI investors and the monetisation of part of BP's oil inventory. Such agreements in relation to bilateral physical oil transactions are typically concluded privately, and are invisible to the organised markets. However, any risk management contracts which an intermediary such as Goldman Sachs may enter into as a counter-party to both a fund and a producer are visible on the futures exchanges.

Due to the invisibility of the change of ownership of inventory 'information asymmetry' is created where some market participants are in possession of key market information which others do not have. This ownership by investors of inventory in the custody of a producer has been termed 'Dark Inventory'

I must make quite clear at this point that only BP and Goldman Sachs know whether they actually did create Dark Inventory by leasing oil in this way, and readers must make up their own minds on that. But I do know that in their shoes, what I would have done, particularly bearing in mind that such commodity leasing is a perfectly legitimate financing stratagem that has been in routine use in the precious metals and base metal markets for a very long time indeed.

## **Planet Hype**

The 'inflation hedging' meme gradually gained traction and a new breed of Exchange Traded Funds (ETFs) and structured investment products were created to invest in commodities. In 2005, Shell entered quite transparently into a relationship with ETF Securities which enabled them to cut out as middlemen both investment banks and the futures market casinos, and with them the substantial rent both collect.

Other investment banks also started to offer similar products and a bandwagon began to roll. From 2005 to 2008, we therefore saw an increasing flood of dollars into the oil market, and this was accompanied by the most shameless and often completely misleading hype, and led to a bubble in the price.

There was (and still is) no piece of news which cannot be interpreted as a reason to buy crude oil. The classic case was US environmental restrictions on oil products, which led to restricted supply, and to price increases in oil products. Now, anyone would think that reduced refinery throughput will reduce the demand for crude oil and should logically lead to a fall in crude oil prices.

But on Planet Hype faulty economic logic – the view that higher product prices are necessarily associated with higher crude oil prices – was instead used as justification for the higher crude oil prices which resulted from the financial buying of crude oil attracted by the hype.

You couldn't make it up: but unfortunately, they could, and they did.

More worrying than mere hype was that a very significant amount of oil inventory had actually changed hands from producers to investors. Only those directly involved were aware that below the visible part of the oil market iceberg lurked massive unseen 'Dark Inventory'.

# **Greedy Speculators and Hoarding**

The pervasive narrative among people and politicians, and which is spread by a campaigning

press, is of 'greedy speculators' who are 'hoarding' commodities and 'gouging' consumers in search of a transaction profit.

There is no better example of this meme than the UK's <u>Daily Mail scoop on 20th November 2009</u>.

Here we saw pictures of shoals of some 54 shark-like tankers loaded with oil and lurking off the UK coast with millions of barrels of 'hoarded' crude oil, some of them having been there since April 2009. The Mail's story was that these tankers were full of hoarded oil whose greedy owners were waiting for prices to rise before gouging the public.

The reality was rather different.

The motivation of the investors involved was not greed but fear. The Fed had been busily printing another trillion in QE dollars to buy securities and the sellers, and other investors aimed not to make a dollar profit but rather to avoid a dollar loss.

So they poured \$ billions into oil index funds and similar products and the oil leases/loans which accommodated these funds' financial purchases of oil had the effect of raising forward prices and of depressing the spot price, thereby creating what is known as a market 'in contango'.

When the forward price is high enough in a contango market, what happens is that traders will borrow money to buy crude oil now, and sell the oil at the higher price in the future. Provided the contango is high enough, they will cover interest costs and the cost of chartering and insuring the vessel and its cargo, and lock in a profit for the trader at the end.

This is exactly what traders did through the summer of 2009, until the winter demand by refineries for crude oil and a reduction in the flow of QE dollars into the market combined to see the stored oil gradually delivered to refineries and the sharks depart the UK shores.

The point is that the widely held perception of high oil prices being the fault of hoarders and greedy speculators is – apart from very short term 'spikes' in the price - entirely misconceived. And even when speculators do dabble in oil markets, they are almost always pillaged by traders and investment banks with much better market information, which is probably what is happening right now.

### The Bubble Bursts

In 2008 there was an influx of genuine speculators in search of short term transaction profit. The motivation of inflation hedgers, on the other hand, is the avoidance of loss, which leads to different market behaviour and the perverse outcome that they have been responsible for causing the very inflation they sought to avoid.

The price eventually reached levels at which demand for products began to be affected and shrewd market observers began to position themselves for the inevitable bursting of the obvious bubble. But those market traders and speculators who correctly diagnosed that the price would collapse were unaware of the existence of the Dark Inventory of pre-sold oil sitting invisibly like an iceberg under the water.

Traders who had sold off-exchange Brent/BFOE contracts or deliverable WTI contracts found themselves 'squeezed' because title to the crude oil which they thought would be available at a cheaper price to fulfil their contractual commitment had been 'pre-sold' to financial investors. This meant that they had to scramble to buy oil at a higher price than they had expected.

The price spiked to \$147 per barrel, and then declined over several months all the way to \$35 per

barrel or so, as many of the index fund investors pulled their money out of the market in late 2008 and joined a stampede to the safety of US Treasury Bills. What was happening here was that the Dark Inventory which had been created flooded back into the market, and overwhelmed the market's capacity to absorb it.

## **Convergence and Futures Pricing**

The oil market price is – by definition – the price at which title to dollars is exchanged for title to crude oil.

But there is very considerable debate among economists about the effect of derivative contracts on this spot market price, and whether it is the case that the futures market converges on the physical market price or vice versa.

Now, in the case of a deliverable exchange futures contract, a price is set for delivery of a standardised quantity of a particular specification of a commodity at a particular location within a specified period of time. If that contract is held open until the expiry date and time then there will indeed be a spot delivery and payment against documents at the original price. in accordance with the exchange's contractual terms.

But the key point is that this futures contract will **not** be held open to the expiry date at the original price unless the physical market price – which is set by physical supply and demand – is actually at that price at that specific point in time. If the physical price is lower or higher, then the futures contract will be closed out through a matching purchase or sale and a profit or loss will be taken.

I managed the International Petroleum Exchange's Gas Oil contract for six years, which was deliverable in North West Europe, and the final minutes of trading before contract expiry were Europe's greatest game of 'chicken'.

Moreover, no IPE broker in his right mind would dream (because the broker was responsible to the London Clearing House for defaults) of letting a financial investor with no capability of making or taking delivery hold a position into the last month before delivery. And if a broker was not in his right mind, it was my job to act under the exchange rules to ensure such positions were liquidated.

In other markets, the ability to own physical commodities – eg through ownership of warehouse warrants – is much more straightforward for investors. But the logistics of oil and oil products are such that financial investors are simply incapable of participating in the physical market. In my view, the use of position limits for financial investors in crude oil and oil products is of little or no use if the clearing house, exchange, and brokers are doing their job.

Finally, now that the US WTI contract is just the tail on the Brent/BFOE physical market dog, this discussion has moved on, since the ICE Brent/BFOE futures contract is in fact settled in cash against an index based on trading in the BFOE forward market, with no physical delivery. It is simply a straightforward financial bet in relation to the routinely manipulated underlying BFOE physical market price - ie, the question of convergence does not arise.

# **Anything but Dollars**

With interest rates at zero per cent, and with the Federal Reserve Bank printing dollars through QE, a tidal wave of money flowed into equity and commodity markets purely as an alternative to the dollar, and they did so through a proliferation of funds set up by banks.

Note here that the beauty of such funds for the banks is that it is the investors who take the

market risk, not the banks, and the marketing and operation of funds has become a very profitable use of scarce bank capital.

So a flood of financial purchasers of oil were looking for producers willing and able to sell or lease oil to them.

#### **Producers in Pain**

Producing nations who had massively expanded their spending in line with a perceived 'sellers' market' paradigm where they had the whip hand, were badly hurt by the 2008 price collapse and OPEC took action to restrict production.

But might some OPEC members or other producing nations have gone further than this?

What is clear is that the price rose swiftly in 2009 and then remained roughly in a range between \$70 and \$90 per barrel until early 2011 when twin shocks hit the oil market. Firstly, there was the supply shock in Libya which saw 1.5m bbl per day of top quality crude oil leave the market, and secondly, the demand shock of Fukushima, which saw a dramatic switch from nuclear to carbon-fuelled energy.

My thesis is that Shell directly, and others indirectly, were not the only ones leasing oil to funds. I believe that it is probable that the US and Saudis/GCC reached – with the help of the best financial brains money can rent – a geo-political understanding with the aim that the oil price is firstly capped at an upper level which does not lead to politically embarrassing high US gasoline prices; and secondly, collared at a level which provides a satisfactory level of Saudi/GCC oil revenues.

# The QE Pump Stops

In June 2011, the QE pump which had been keeping commodity and equity markets inflated and correlated stopped, and price levels began to decline. Consumer demand – as opposed to financial demand – for commodities had also been affected not only by high prices, but by reduced demand from developed nations for finished goods. In September 2011, more than \$9bn of index fund money pulled out of the markets for the safe haven of T-bills.

What happened as a result was that the regular rolling over of oil leases, and the free dollar funding for producers of their oil inventory ceased. So the leased oil returned to the ownership of the producers, while the dollars returned to the ownership of the funds.

Since the 'repurchases' were no longer occurring, the forward oil price fell below the current price, and this 'backwardation' was misinterpreted by market traders and speculators. They believed that the backwardation was – as it usually is - a sign that current demand was high and increasing relative to forward demand, whereas in this false market the current demand is unchanged but the forward demand is **decreasing**.

As in 2008, speculators and traders were again suckered too soon into the market, and this led to profits at their expense to those with asymmetric information, and a 'pop' upwards in the price as they were forced to close speculative short positions. My information is that a major oil market trader was successfully able to 'squeeze' the Brent/BFOE market on at least two occasions in late 2011 precisely because they were aware of the true situation of inventory ownership, and the rest of the market was not.

As an insider puts it......

You can't have proper price discovery when half of the inventory is being sold elsewhere at a different price. On exchange physical doesn't even exist. Futures are converging to physical, but only the physical which is visible for Platts assessment.

....pointing out that transactions in respect of physical ownership of oil do not take place on an exchange, and that there is effectively a 'two tier' market. Only a proportion of spot or physical Brent/BFOE transactions therefore actually form the basis of the Platts assessment of the global benchmark oil price.

### **Enter Iran**

In my view, there is little or no chance of military action against Iran, and having been to Iran five times in recent years, and as recently as two months ago, there is much I could write on this subject.

While financial sanctions have been pretty smart, and increasingly effective so far, the medium and long term effect of the proposed EU oil embargo – which will in fact affect only a pretty minimal and easily accommodated amount of demand which is evaporating anyway – is more apparent than real.

While there would undoubtedly be a short term price rise – cheered on by the usual suspects – in the medium and long term the embargo will act to reduce oil prices. This is because Iran will necessarily have to sell oil at below market price to China and others, and since the market is over-supplied, particularly in Europe, this will undercut market prices generally.

Mexico has routinely hedged oil production for years, and Qatar – who are very shrewd operators – began to do the same in November 2011 since they expect the price to fall this year. In the short term the Iran 'crisis' is in my view being hyped for all it is worth to entice yet more unwary speculators into the oil market so that other producers may sell their production forward at high prices while they last before the inevitable and imminent collapse.

#### **Current Position**

If you believe the investment banks – who all have oil funds to sell to the credulous – Far Eastern demand is holding up, supplies are tight, and stocks are low, so prices are set to rise to maybe \$120 or above in 2012, even in the absence of fisticuffs involving Iran.

I take a different view. I see real demand – as opposed to financial demand and stock-piling, such as in the copper market – declining in 2012 as the financial crisis continues at best, and deepens at worst, particularly in the EU. Stocks are low because bank financing of stock is disappearing as banks retrench, and it makes no sense for traders to hold stocks if forward prices are lower than today's price.

As for supplies, US crude oil production is probably higher, and consumption lower, than widely appreciated. Elsewhere, there is plenty of oil available now that much of the Dark Inventory has been liquidated, and this liquidation was probably why in November 2011 we saw the highest Saudi monthly deliveries in 30 years.

Finally, we see North Sea oil being shipped – for the first time since 2008 – half way around the world to find Far East buyers. We also see Petroplus, a major independent Swiss refiner, crippled by inflated crude oil prices, and shutting down three refineries because demand for its products has disappeared, and it can no longer finance crude oil purchases now that banks have pulled its credit lines.

In my world, refineries closed due to reduced demand for their products imply a reduction in demand for crude oil: but not, apparently, on the Planet Hype of investment banks with funds to sell.

History does not repeat itself, but it does rhyme, and my forecast is that the crude oil price will fall dramatically during the first half of 2012, possibly as low as \$45 to \$55 per barrel.

### Then What?

As the price collapses we will see producer nations generally and OPEC in particular once again going into panic mode, and *genuinely* cutting production. We will also see the next great regulatory scandal where a legion of risk-averse retail investors who have lost most or all of their investment will not be pleased to hear that they were warned on Page 5, paragraph (b); clause (iv) of their customer agreement that markets could go down as well as up.

At this point, I hope and expect that consumer and producer nations might finally get their heads together and agree that whereas the former seeks a stable low price, and the latter a stable high price, they actually have an interest – even if intermediaries do not – in agreeing a formula for a stable fair price.

We can't solve 21st century problems with 20th century solutions and I shall address the subject of a resilient global energy market architecture in my next post.

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