Oil Futures: How to Predict Oil Prices - Using Crack Spreads

by Dr. Kent Moors, Editor, Oil & Energy Investor

Dear Reader,

By next year, you could be paying $5 for a gallon of gas.

Ignore whatever the mainstream media is telling you about oil and gas prices.

The dollar and “market sentiment” don’t mean a thing when it comes to oil prices. And the frenzied traders on Wall Street have no idea where oil will go in 2011.

The real secret to predicting where oil is headed is in the futures market. Using futures contracts and the “crack spread”, I can tell you exactly where oil will move at any given time.

And in 2011, oil is going up. It will break through 2008 highs like they were cotton candy. It could even reach as high as $150 per barrel by this summer.

Don’t believe me? It’s all in the numbers.

$5 Gasoline in 2012

John Hofmeister heads up Citizens for Affordable Energy. But before he founded the group in 2008, he used to be president of Shell Oil Co., the American affiliate of Royal Dutch Shell (NYSE:RDS).

So when Hofmeister says that gasoline could reach $5 a gallon by 2012, a lot of people sit up and take notice.

The markets responded, however, by moving in the opposite direction…

A retreat in crude oil prices actually tells us less about oil and more about the tight correlation the market has crafted between the level of the dollar and perceptions about economic recovery.

For example, a 3.3% decline in the NYMEX futures contract one week can follow an almost 9% gain the week before. In explanation, pundits point to two overall factors as being primarily responsible for these moves.
The first – a rising dollar – is true, but hardly sufficient to explain that 3% decline in trading prices.

The second tells us that concerns over market growth are depressing prices. This second rationale has always been a generic rule of thumb. But it really does not tell us anything beyond somebody’s view of a broad market direction.

Oil does trade in dollars, and (absent any other considerations) a strengthening dollar will mean fewer are needed to obtain a barrel of crude. A U.S. currency weakening against others – especially the euro – will mean it takes more greenbacks to make the same purchase, thereby increasing the price.

Yet the exchange value of the dollar is only one aspect of our approach to analyze where oil is going.

**Volatility Is the New Force to Be Reckoned With**

In addition to a range of geopolitical and short-term issues that tend to affect oil pricing, I follow five separate conventional influences:

- The currency exchange (or forex) consideration providing the relative strength of the dollar
- Constraints in availability and quality of supply
- Stockpile and refinery inventories
- Mergers and acquisitions (limiting competition)
- Demand – specifically industrial usage, the last holdout from the demand destruction cycle of the financial meltdown of 2008 to 2010.

The preferred sound bite these days to “explain” a decline in oil prices is a concern over market growth, while higher prices are often regarded as the result of a weakened currency.

Neither factor tells us very much… and they certainly do not reflect what is really happening in the trade of futures contracts – the real mover of pricing for actual oil.

But there is one new factor. The market price for oil moving forward will not simply be a result of my five “traditional” indicators. A pronounced wave of uncertainty in setting prices for trade will reflect the new force requiring adjustment – volatility.

Now, it is this volatility that will present the single greatest obstacle to stable pricing in the oil market. Some of the instability may result from the way my five indicators relate to each other and to events. But most of it comes from the oil trading system itself.

Both traders and those actually producing or consuming a product need to protect their investment returns or cost margins by hedging contracts. These companies buy futures contracts to balance out any losses they may see from higher or lower oil prices. But volatility makes that more difficult.

**The Crack Spread Solution**

However, there is one way to follow how the buyers and sellers of oil actually view what the market is doing. It is how both the traders in paper barrels (the future contracts) and wet barrels (the actual underlying crude or oil products) attempt to wrestle with the market’s new, less predictable moves up and down in price.
It’s called a “crack spread.” This is the term for the difference in the profit margin of crude versus the profit margin of the various petroleum products that can be extracted from it. In other words, it’s how much a refinery can expect to make from “cracking” the petroleum.

Finding crack spreads involves playing futures contracts in crude oil against contracts in the products made from crude.

While any oil products can be used to determine the spread, low-sulfur-content heating oil and reformulated gasoline are the ones most analysts rely on.

Crack spreads tell us what all of the buyers and sellers actually think about where pricing is going. That is because using futures contracts in this way comprises a major approach to hedge against pricing changes in the actual products bought and sold.

Let’s take a recent example:

The heating oil crack spread (heating oil versus same-duration crude oil contracts) is widened to $17.09 a barrel, the highest level in a year. Meanwhile, the February gasoline crack spread (once again, priced against crude) has risen to over $14 a barrel.

Some of this results from the impact of perceived inventory levels at refineries of both crude for processing and finished product. But the primary explanation is pointing in a very different direction…

To hedge their contracts, both buyers and sellers need to factor in higher forward prices. Further, these crack spreads are widening during the same period in which oil prices are declining.

**What Crack Spreads Are Telling Us Now**

The talking heads may fret about economic recovery or express the opinion that credit problems in the Eurozone will lead to a strengthening dollar. Both are certainly valid concerns, as far as they go.

But the crack spreads are telling us that traders, producers, and refineries have already made two overarching conclusions.

First, demand is moving back into the market and has been in developing sectors of the global economy for some time.

Second, there is a basic reason why oil companies have committed more money to 2011 drilling than any other single year in history: Crude oil prices are heading north. And that will result in higher retail prices for oil products, regardless of current inventories.

Hofmeister may not be correct in predicting near-term prices of $5 a gallon. But he is certainly right about the direction.

**Action to Take:**

For a clear vision of oil prices in coming months, don’t look to the mainstream media or “investor sentiment” to guide your energy portfolio decisions.

Keep an eye on crack spreads between the futures for heating oil and gasoline and those for crude oil. If the
crack spread grows, prepare for higher oil prices going forward. That means, right now, you should be preparing for just that, higher oil prices.

Sincerely,

Dr. Kent Moors

Dr. Kent Moors has been advising the world’s largest and most active energy producers and buyers for 31 years, including six of the world’s top 10 oil companies and high-level government officials from the U.S., Russia, Kazakhstan, the Bahamas, Iraq, and Kurdistan. Business clients include the Bank of England, Citicorp, AT&T, Deutsche Bank, the European Bank for Reconstruction and Development, the Russian Central Bank, and Westinghouse.