Oil Market Fun With Fundamentals

It is a moment dreaded by technicians and those who love them: Someone in the room (never the one who agrees with your conclusions) will ask, "What do the fundamentals say?" These smugly delivered queries presume, of course, the existence of an unambiguous and forward-looking answer derived from historic data of various qualities and vintages. Surely, most technicians would agree, the ethylene-besotted priestesses at the Oracle of Delphi never had to endure such insolence during the course of their working day. But that was a different showtime for a different Apollo.

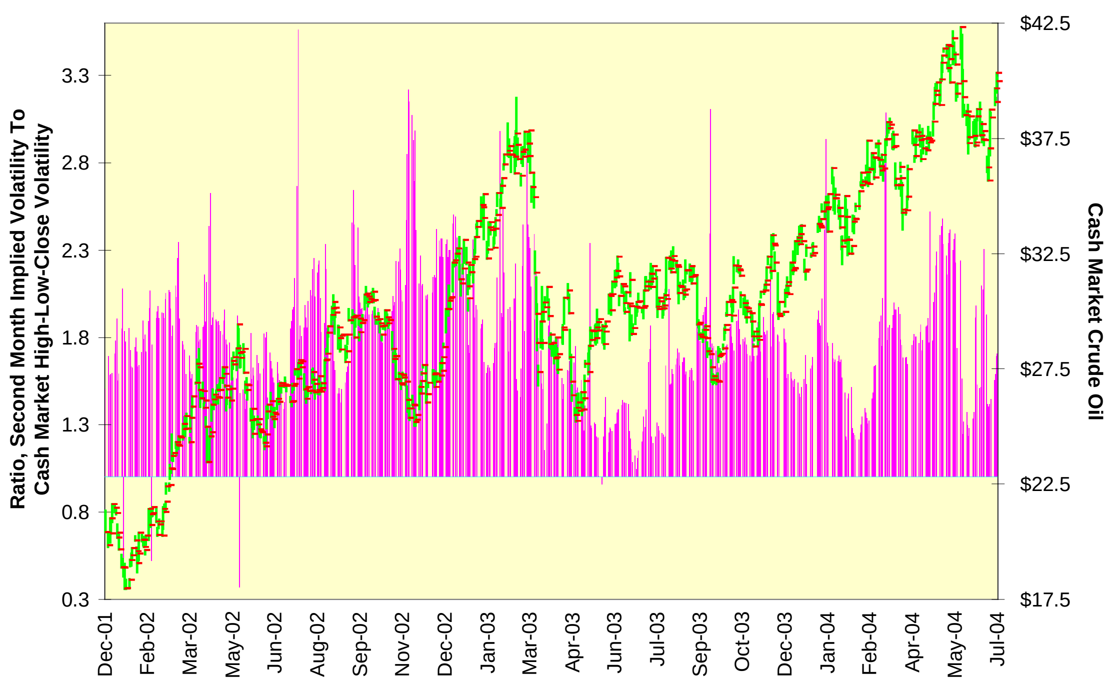
Crude oil's brief foray back over $40 last week was propelled, in part, by the combination of terror warnings from Homeland Security Secretary Tom Ridge and by financial and legal stresses in Russia that one day may present a threat to their exports. Neither of these factors has yet to affect actual supply/demand balances; both, however, contribute to an insurance premium in crude oil prices, one that we can infer. Let's update a correctly bullish analysis done last August of both this measure and several others directly related to the economics of the oil industry to see where prices might be headed.

No Fearful Need Apply

The crude oil market, much like the stock market, exhibits an investor skew in its implied volatility: Option volatility tends to rise when prices fall, and vice-versa. Producers and holders of inventories purchased at higher prices rush to establish price floors on the way down. The opposite, however, is true for heating oil. Here buyers are the more anxious party; they rush in to cap their costs when prices rise.

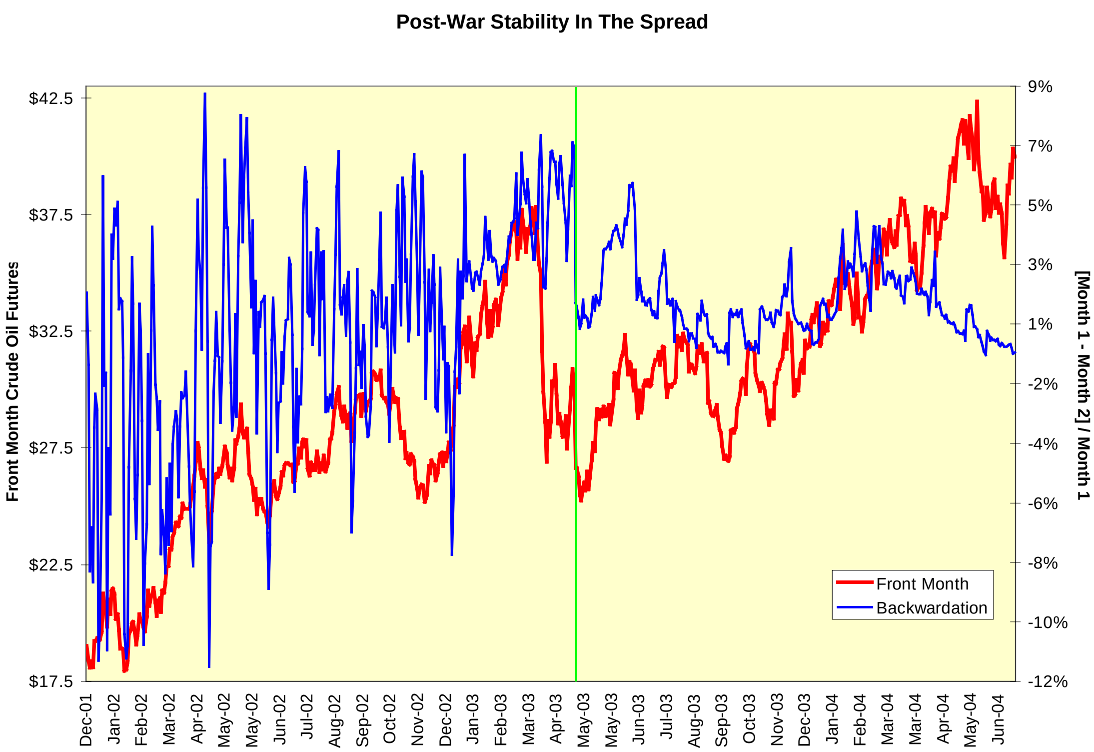
The ratio of implied volatility to high-low-close volatility in the cash market provides a glimpse into the crude oil market's state of comfort with current price trends. The pattern in recent weeks has been for this ratio to rise and fall along with prices, a sign the market is more comfortable with lower prices and regards price surges as unsustainable. However, the pattern also has exhibited a series of lower highs, which indicates increasing acceptance of the high-price regime over time. Chalk this indicator up to the weakly bearish side of the ledger.

Lower Highs In The Option Fear Market



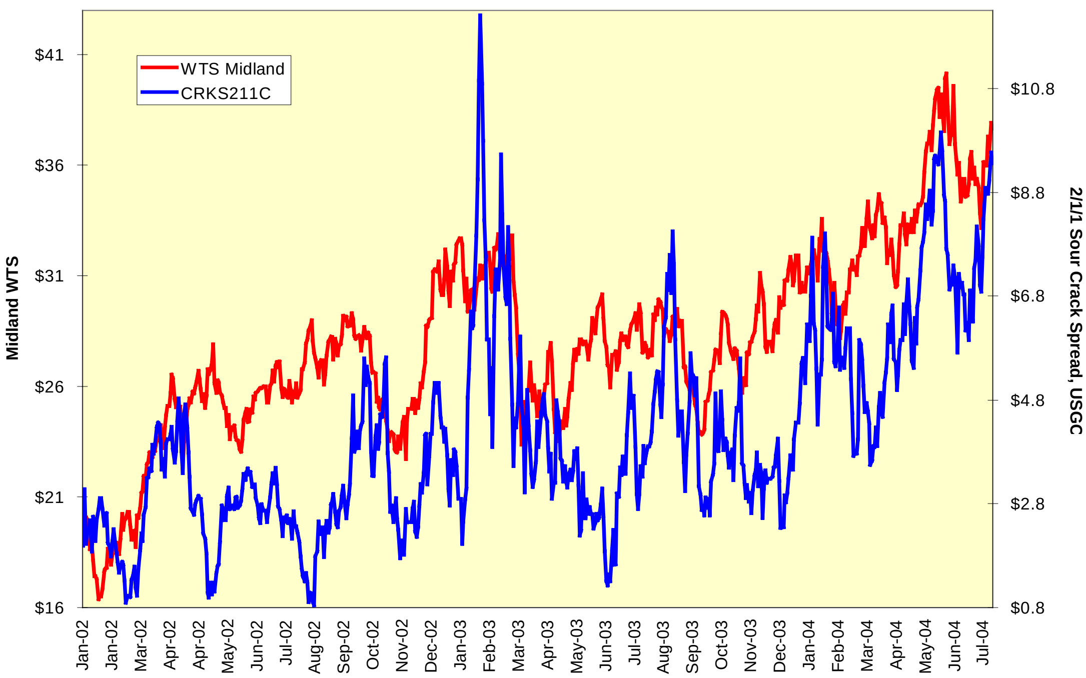
Back(wardation) To The Future
A second measure of anxiety in the market is backwardation, or the premium buyers are willing to pay for prompt delivery relative to deferred delivery. If both buyers and sellers are convinced prices will be headed lower, both will act to increase this premium: Buyers will defer purchases to the last minute, while sellers will hedge by selling deferred-month futures.

Backwardation has been stable to declining over the course of 2004. Interestingly, the spread between the first and second month futures contracts stabilized almost immediately in the aftermath of the Iraq War. The low and stable levels of backwardation in the face of rising prices indicate a comfort level we must consider moderately bullish.



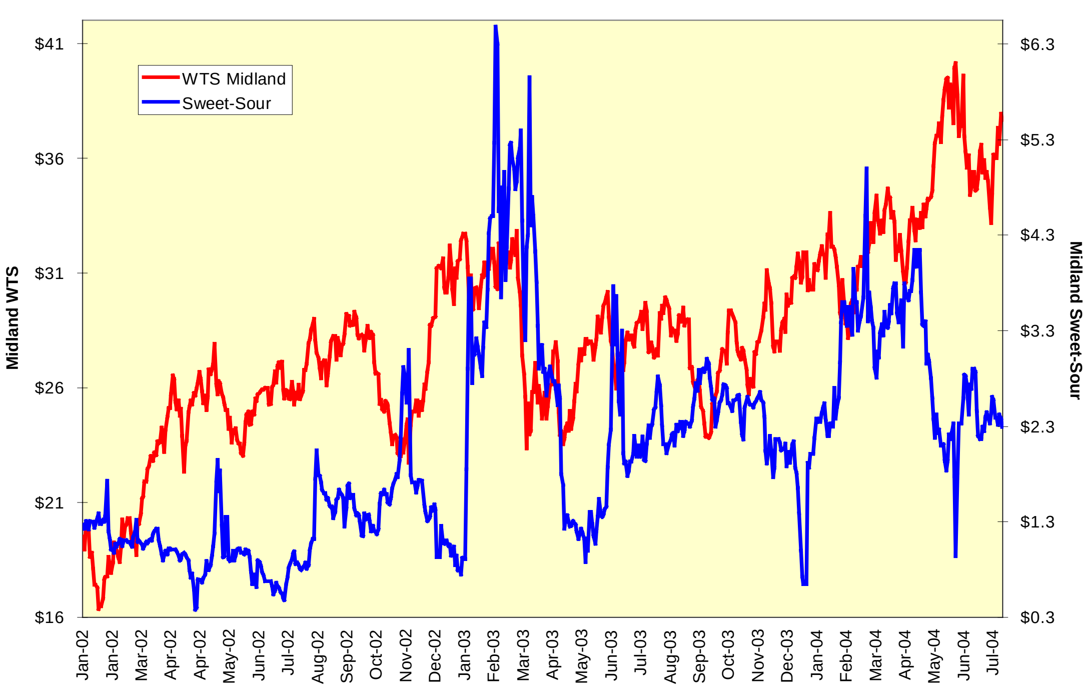
A More Refined View
Crude oil by itself is almost worthless; its economic value lies in the demand for the products refined therefrom. So long as refiners can make money by buying incremental barrels of crude and turning them into useful products, they will do so. Refining margins, including the baseload 2/1/1 crack spread (two barrels of crude oil into one each of gasoline and heating oil) shown below, have been on a steady upward climb. This reflects both a strong demand for refined products and a scarcity of refining capacity. This measure has to be considered solidly bullish.

Refinery Crack Addicts



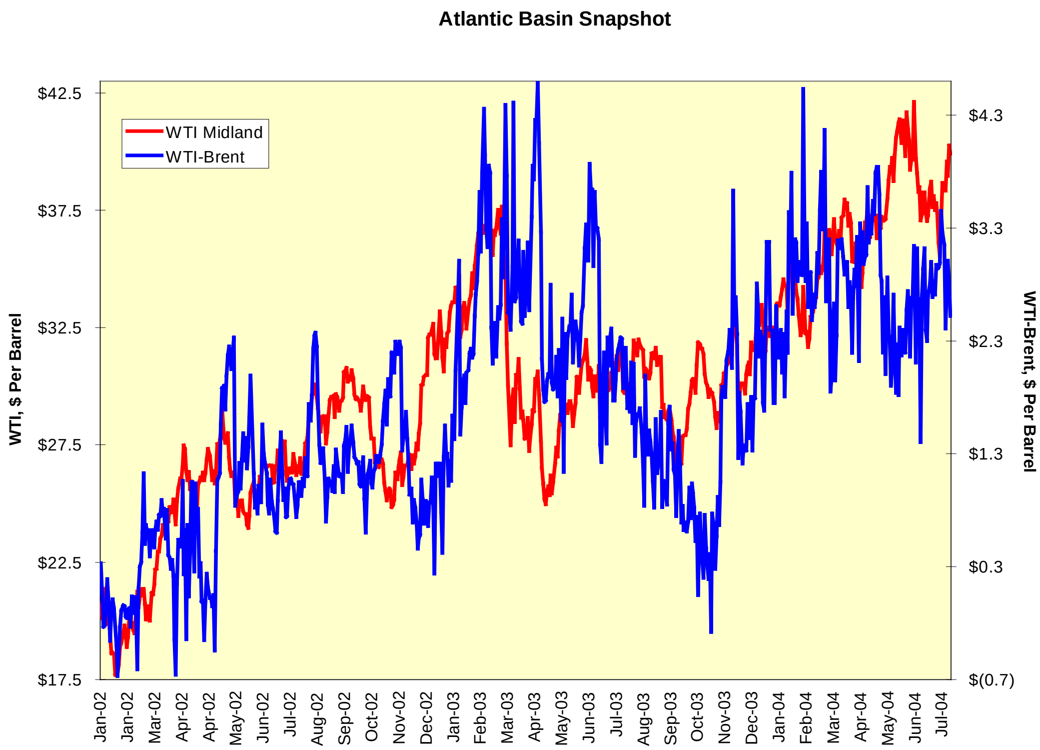
Another aspect of refinery economics affecting crude oil markets is the spread between sweet (low sulfur) and sour (high sulfur) crude oil. As the refining capacity utilization gets pushed toward its maximum, refiners place less-efficient units on-line that only can process the more expensive sweet crude. This is not taking place right now, which indicates refiners have the wherewithal to buy additional crude oil if the demand justifies doing so; this indicator is bullish as well.

No Panic To Buy Sweet Crude Yet



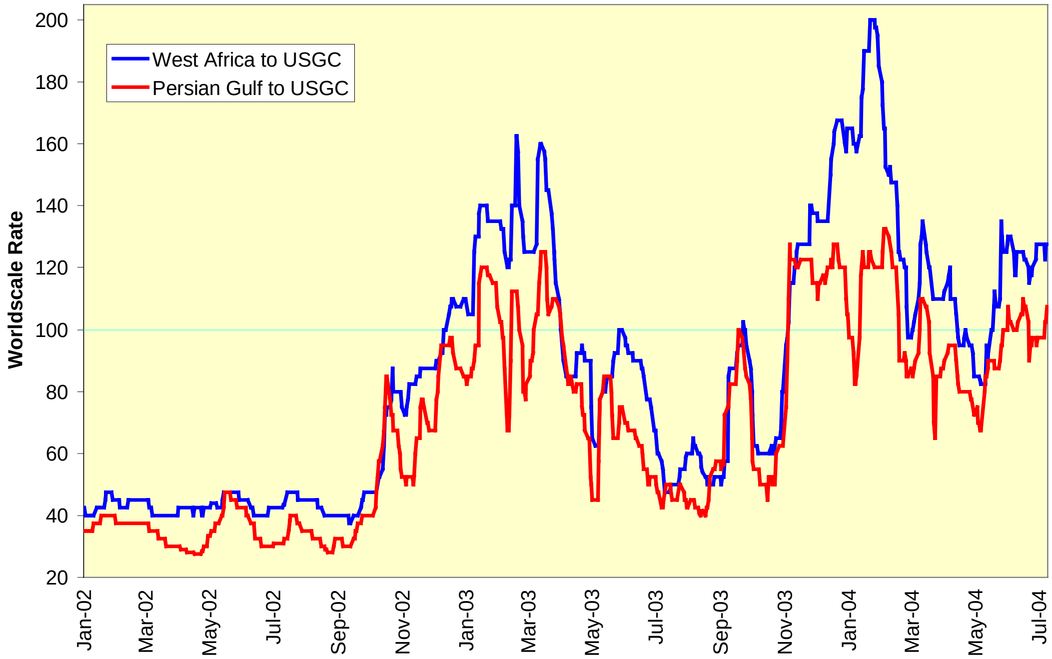
A Global Market

The infamous dependence of the U.S. on imported oil means we have to watch some global indicators as well. American refiners compete with European refiners for West African crude oil cargoes priced off the marker crude of the North Sea, Brent. As U.S. demand increases, the spread between our marker West Texas Intermediate and Brent expands until demand eventually gets reduced. The Brent-WTI spread is at a high level now, but nowhere as high as it was early in the year. Once again, this is a bullish indication of available purchasing power for U.S. refiners.



Finally, if you buy it overseas, you must ship it over a sea. Surges in tanker rates, expressed as Worldscale, or percentage of normal shipping tariff, generally precede accumulations of inventories and lower prices. The opposite holds true as well: Low tanker rates precede inventory drawdowns and higher prices. The present upturns in some key rates to the U.S. Gulf Coast indicate a move by refiners to start building inventories. This is bullish in the short-term, and bearish after about six months.

Hold On, I'm Coming



The Verdict

The key to oil prices lies with you and me. Seriously: The strongest indications of rising prices are from refining margins and both the sweet-sour and Brent-WTI spreads. A reduction in U.S. gasoline demand will prevent refiners from justifiably buying more crude oil at higher prices. The other indicators, such as the option market, the forward curve of the crude oil futures market and shipping rates could go either way on a ledger.

So, if you want to see lower gasoline prices, use less gasoline. This may be good advice, but in a nation that makes multimillionaires out of diet book authors who say everything but "eat less and exercise more, lardbag," it is likely to go unheeded.