



Peak Oil Contango?

Posted by [Prof. Goose](#) on March 23, 2006 - 12:22pm

Topic: [Economics/Finance](#)

Tags: [backwardation](#), [contango](#), [oil](#), [oil futures](#), [oil prices](#), [peak oil](#) [[list all tags](#)]

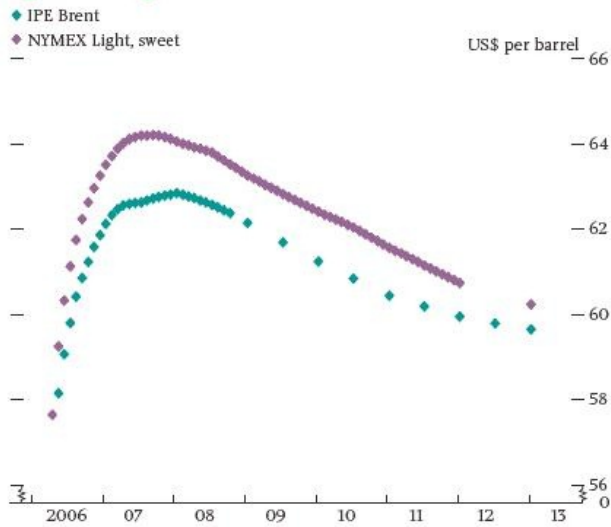
[Jeff Vail](#) asks the question: Is it possible that a shift in the crude futures market from *backwardation* to *contango* indicates that the markets have "tipped" and accepted Peak Oil?

More interesting ideas (and explanations) under the fold.

Contango and backwardation are names for two opposing phenomena in non-perishable futures markets. Contango is the normal state of most markets, and it describes a situation where the price of a commodity gradually gets more expensive as one looks at more and more distant futures contracts compared to today's spot price. In theory at least, the level of increase is determined by today's spot price plus the potential arbitrageur's cost of storage and the time-value of money. Backwardation is the opposite, where the price of a futures contract gets less expensive as one goes farther into the future. According to economic theorists, backwardation is not normal, and is suggestive of supply insufficiency. For some time now, crude oil markets have been in backwardation.

Normally when a market switches from temporary backwardation back to contango, it is a result of the short-term supply problem that caused backwardation being resolved--that is, the spot price decreases. *The interesting point from a Peak Oil perspective is this: a shift in fundamentals, such as a steady decline in world oil production, will make the commodity increasingly expensive in the future and will cause a market in backwardation to shift to contango without a decline in the spot price.* Interestingly, that is exactly what may be unfolding in oil--compare the two graphs below, the first (from Bank of England), showing the crude oil markets in classic backwardation as of Feb. 15th, 2006, and the second showing a potential reversal in backwardation as of Mar. 21st, 2006, especially in the 2009 and 2010 contracts:

Futures prices and contract maturities for crude oil, 15 February 2006(a)



Source: Bloomberg.

(a) On ICE Futures, trading of an oil futures contract normally ends on the business day immediately preceding the 15th day prior to the first day of the contract's delivery month.

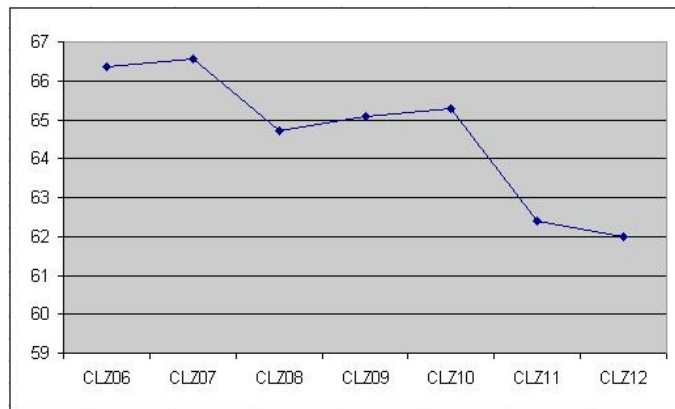


Chart 2: December NYMEX Crude Futures as of market close, March 21st
 Click on a chart to see full size.

While the data presented are inconclusive, I think that this theory warrants further analysis--or outright debunking. Hopefully some TOD readers have access to the kind of economic expertise and historical data to shed some light on the subject...so have at it!

(This is Jeff's condensed version for TOD, if you would like to read a bit more of an in-depth post, [find it here](#)); also find a discussion of the same topic (in the second half of the post, after an interesting discussion of the memetics of peak oil) at [Anthropik](#).



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