

## Energy Stocks Ignore Energy Prices

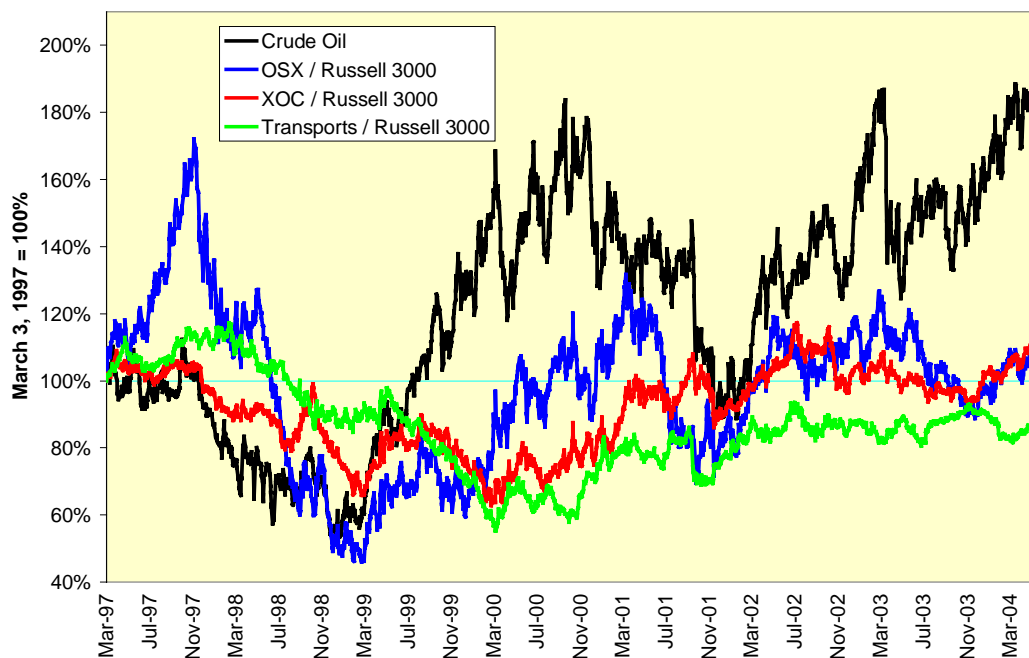
If I may inject a bit of the Fourth of July into Memorial Day, sometimes the truths we hold to be self-evident lack evidence on their behalf. Blind faith is fine and even necessary for religious purposes, but myths are going to take you only so far in markets. Sooner or later, you have to look at the facts.

The recent spasms in the crude oil market certainly qualify as a major financial and macroeconomic development, and the temptation to link the surge in prices to current-dollar records to petroleum-related equities is understandable. If the stocks of gold producers such as Newmont Mining rise in a strong gold market, and if Phelps Dodge and Alcoa are linked to the respective fortunes of copper and aluminum, then why shouldn't we expect energy-related equities to reflect developments in oil prices?

### It Should Be, But It Is Not

January 1999 in crude oil was the equivalent of December 1974 in stocks or October 1981 in Treasury bonds, a long-term low from which subsequent recoveries could be dated. With the exception of the post-September 2001 shock, we have been in a long-term bull market in crude oil prices ever since this date. Yet if we measure the performance of three energy-related indices to the broad Russell 3000, we would almost have to rule out oil prices as an explanatory variable. The oil-consuming Dow Jones Transports reached a relative low to the broad market in March 2000, and have essentially been hanging around at a mediocre performance level since that date. Neither the Amex Oil Service index (OSX) nor the Amex Oil Index (XOC) have been able to capture anything but a trivial portion of crude oil's price gains since the end of 2001.

### A Good Way To Play Rising Oil Prices?



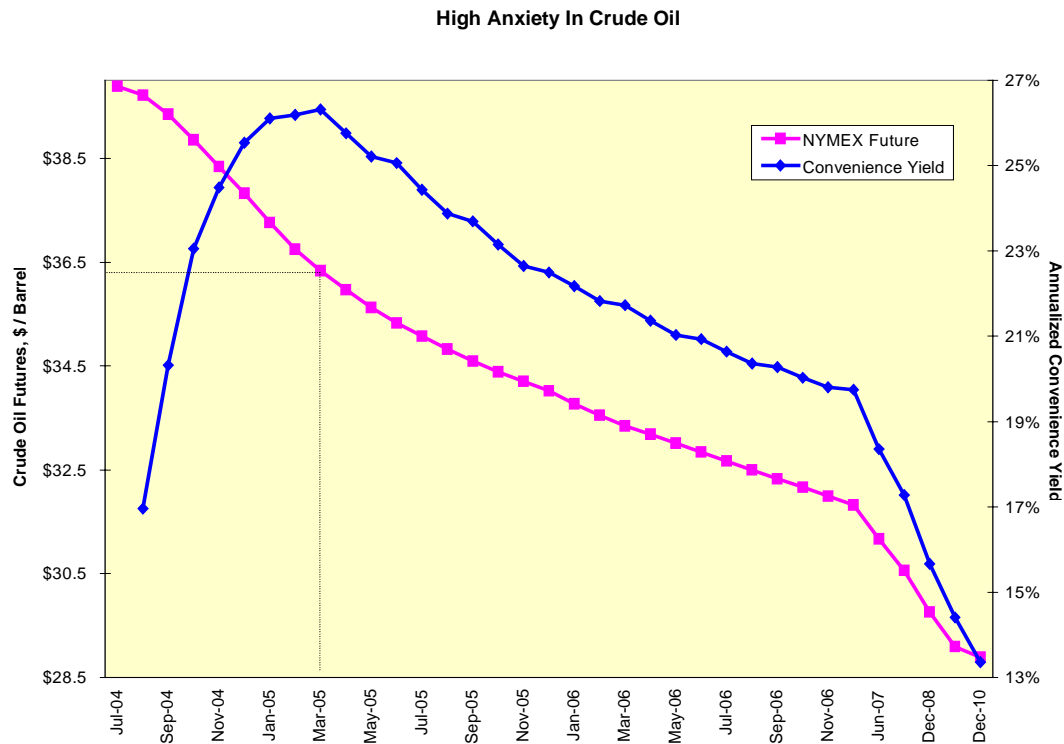
### Believe In Disbelief

In fairness, the inability of these stocks to reflect the gains in oil prices is not a new phenomenon; [four years ago](#) I cautioned against using the OSX to play oil prices. The reason offered then, that the forward curve of the crude oil futures market reflected anxiety about the sustainability of high prices and therefore of oil industry capital expenditures, still holds true today.

A quick detour into the meaning of a forward curve in futures markets may be in order. The market, contrary to popular and wholly understandable belief, is not making a forecast of where it thinks crude oil prices are going to be a year or two years from now. These prices are, in economic terms, reservation prices, ones at which the least creditworthy and most desperate buyers and sellers can transact and guarantee at least one side of their operating margins. So, if the May 28th closing price for December 2005 crude oil is \$34.02 a barrel, all that is telling you is that a marginal producer can sell at this price and stay in business, and vice-versa for the marginal refiner.

So, why is this price so much lower than the July 2004 price of \$39.88 on the same day? The answer lies in the shared belief by both buyers and sellers in the market that the current price is unsustainably high and is likely to come down. Producers are willing to accept a lower price, here a whopping \$5.86 per barrel, as a form of insurance that the future price they will receive will not be even lower. Refiners are willing to pay the high current price as a form of insurance that they will not have to shut down operations due to lack of supply.

The cost of this insurance can be quantified into a measure called the convenience yield, so named for the "convenience" of having available supplies. A market at theoretic fair value, a number you often see for stock index futures in relation to program trading and index arbitrage, has a convenience yield of 0%. The higher it gets - and it can keep going higher until a refiner decides in fact to go out of business and return crude oil to the market - the more anxious both buyers and sellers are about current prices. A snapshot of the May 28 forward curve of NYMEX crude oil futures and the associated convenience yields is presented below.

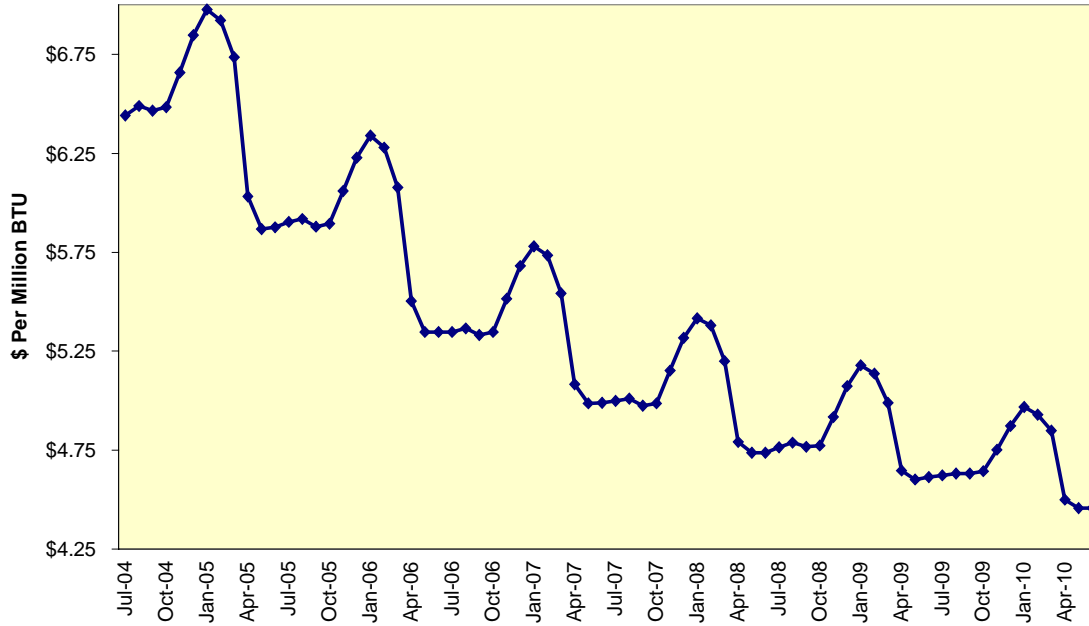


The convenience yield for crude oil futures is rising into March 2005, another nine months from today; the associated futures price for this contract is \$36.33 per barrel. Even though the cost of insurance in the futures market falls thereafter, it is still quite high: How many insurance policies with a 20% annual premium against the risk insured would you buy?

### Natural Gas Parallels

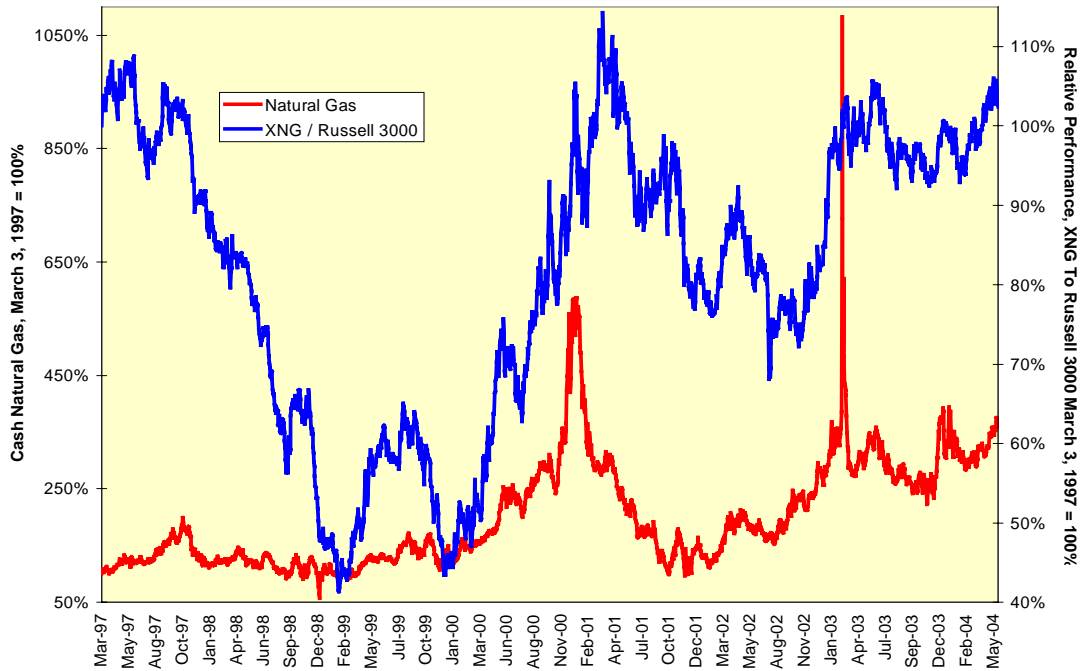
While natural gas is nowhere as related to crude oil in its economics as one might believe, the same phenomenon of a backwardated, or declining, forward curve affects the stocks of the Amex Natural Gas index (XNG). As we should expect, the forward curve for natural gas exhibits a highly seasonal structure, but it, too, is declining over time.

**Natural Gas Futures Forward Curve  
May 28, 2004**



The relative performance of the XNG to the Russell 3000 is, statistically speaking, a Rorschach test. These issues plunged relative to the market in the late 1990s, surged as gas prices recovered, and then continued surging well past the 2000-2001 winter peak in natural gas prices. The relative performance then fell into a long-term gas rally in 2002-2003. If you believe at all in the discounting power of markets, you may want to keep this whole thing to yourself.

### Natural Gas Pains



As stated often in this space, commodity rallies originating in supply-demand imbalances tend to be self-correcting. The equity market accepts this by seeing the present high prices for energy as a short-lived, non-secular development.

If you want to trade crude oil or natural gas, trade crude oil or natural gas, not their related equities. And perhaps most important for purposes of analysis and the clarity of your own thought processes, declare some independence and do not seek hints about energy prices from stocks or hints about energy stock prices from oil and gas prices. That may not be self-evident, but it should be.