

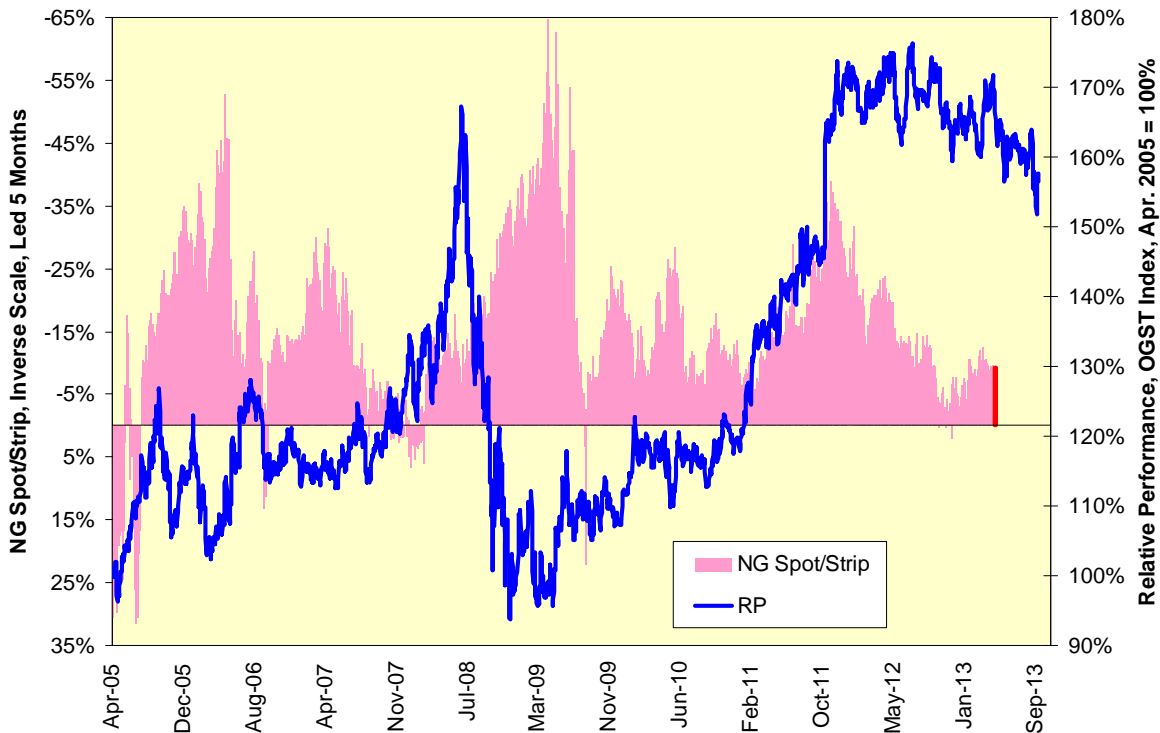
Oil & Gas Storage Operators And Forward Curves

One of the toughest concepts for traders in conventional financial assets, including equity options, to absorb if they wander into physical commodities is deformations of the forward curve. These both reflect price expectations and inventory levels and produce changes in inventory storage and withdrawal cycles themselves. Whenever the forward curve of these commodity futures is backwardated (inverted) as in the case for crude oil at present, cash-and-carry storage is unprofitable and we should expect inventories to decline. The opposite held true between 2009 and 2011 when a glut of supply at Cushing, Oklahoma, pulled the forward curve into a contango that made storage profitable.

If the stock market is in fact a forward-looking indicator, we should expect the profitability of storage firms to rise in expectation of a contango and to fall in expectation of backwardation. Do the performances of the stocks in the S&P oil & gas storage index, Kinder Morgan (KMI), Spectra Energy (SE) and Williams Companies (WMB) relative to the S&P 1500 Supercomposite itself give us some warning about changes in the forward curves for both crude oil and natural gas?

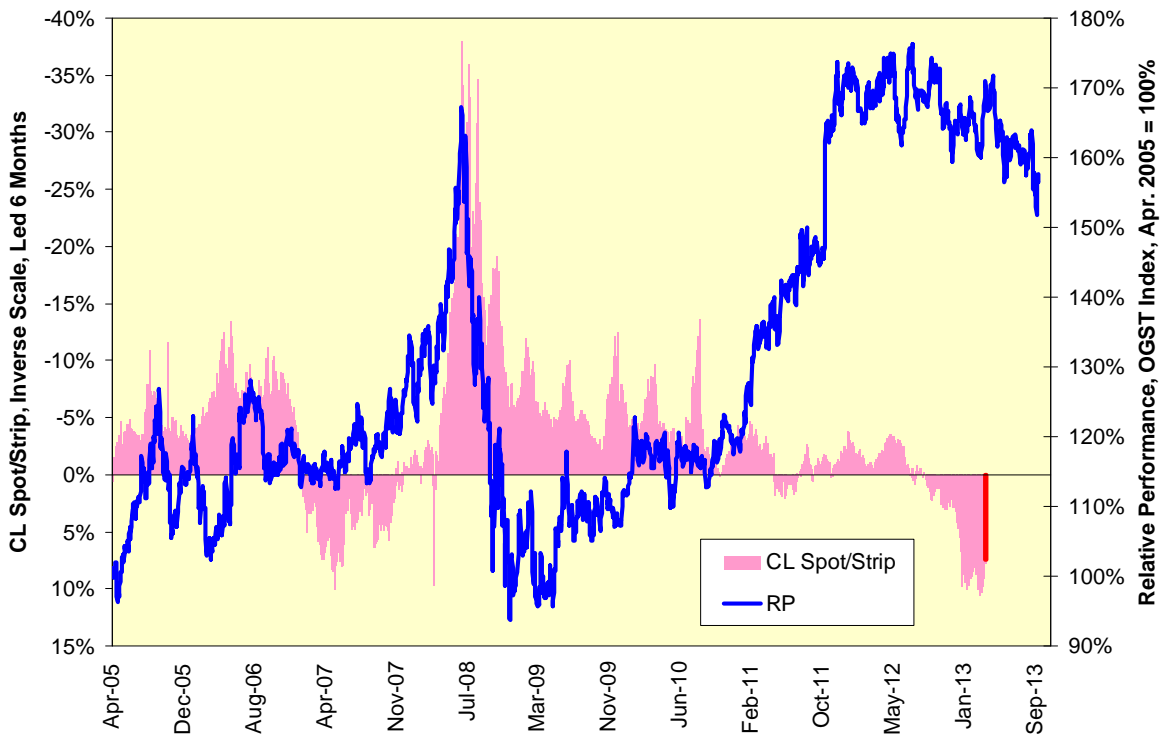
Let's map relative total returns for this index against the premium/discount of spot prices for both crude oil and natural gas relative to their respective 18-month strip prices. In the case of natural gas, the lead-time is approximately five months. The downturn in storage stocks' relative performance since August 2012 has led the narrowing of natural gas' spot-price discount to its strip price.

Storage Operators And Natural Gas Term Structure



What about crude oil? Here the lead-time is approximately six months; the spot price at Cushing has been trading over the strip price since early March.

Storage Operators And Crude Oil Term Structure



Cyclical Markets

The loss of contango in the crude oil market and the resulting downturns in inventories over the past quarter is going to reduce the supply cushion that has kept crude oil prices in a sideways range over the past two years. Moreover, it will make these prices more volatile as storage reduces price volatility. The effect will not be as strong for natural gas. The difficulty of storing natural gas in commercial quantities assures the storage and terminal operators along with the pipelines and local distribution companies of a continuing market for natural gas storage.

In both cases, lower surplus inventories are going to lead to higher and more volatile prices and to a demand by users for price insurance. That will lead in turn to a greater demand for storage and to an end of the storage index' current cycle of underperformance.

As an aside, not only is too much attention is made to weekly changes in inventories for both commodities, the attention gets focused on prices and not on the forward curve. Investment decisions are not made on day-to-day changes in price; they are made on longer-term changes in industry economics reflected in the futures markets.