Derricks Don't Grow To The Sky

Everyone is familiar with the progressive path of evolution chart, the one showing the path from a diminutive tree-swinging primate through various knuckle-dragging beefcakes and on up to the present-day pinnacle of *Homo Economicus*. My own spot on this continuum is defined by whether I have had my morning coffee yet, an experience now getting more expensive thanks to surging whole-bean prices being passed on by the likes of Procter & Gamble and Kraft Foods (they are sorry, they really are).

Economies evolve as well. If we define wealth as the capacity to consume, we have gone through several distinct phases. The march begins at a subsistence economy, continues through an agricultural and then an industrial economy and is presently evolving into an information and services economy. At each step of the way we increased our capacity to consume, once bounded by the capacity of our stomachs, to include an ever-growing parade of manufactured goods. What is the limit to our capacity to consume information? We do not have a clue, but it is certainly greater than our capacity to consume food, the present epidemic of obesity notwithstanding.

Mutiny Of The Bounty

The energy economy is still in the hunter-gatherer stage. We hunt deposits of petroleum, natural gas, coal and uranium, or to a much-lesser extent, we gather sunshine, wind, hydroelectric and other non-fossil sources. All of the non-nuclear sources can be traced back in one form or anther to the sun, an interesting modern confirmation of the Myth of Prometheus, wherein the gift of fire was stolen from the gods at Mt. Olympus.

One consequence of hunting and gathering, as noted in last week's mention of Hubbert's Curve, is diminishing return on investment. This is the dilemma faced by the current oil and gas industry. Prices are expected to continue to rise by the futures market, and prices must continue to rise if we are to both stimulate new production and increased efficiencies of demand. However, the inescapable consequence of diminishing returns is present high returns for oil companies simply are not sustainable for reasons enumerated last week.

Weyerhauser can plant new trees after chopping down old ones, but ExxonMobil cannot replace nature's bounty once it has been extracted. Once hunted and once gathered, the resource dwindles.

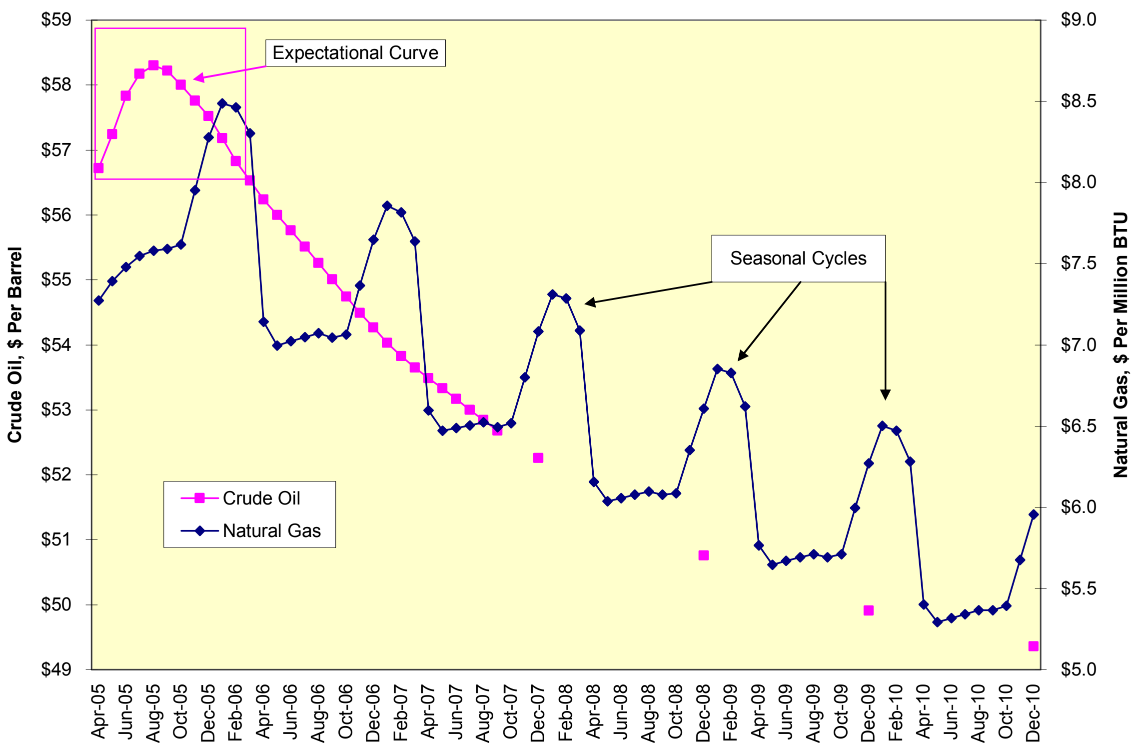
Curves You Can't Ignore

As promised, it is now time to update a column written in July 2000, one whose working title was "So, Where's The Bull Market In Energy Stocks?" Different indices, the S&P 500 ones which divide the energy industry into finer business descriptions than does the AMEX' Oil Services Index or Oil Index, will be used.

A central argument within the July 2000 article was investors were correct in interpreting the then-prevailing backwardation, or declining forward curves of both crude oil and natural gas futures, as skeptical of further price gains. As an aside, futures markets, like the Supreme Court, are not final because they are infallible, but they are infallible because they are final.

While natural gas futures exhibit a declining forward curve through their normal seasonal cycle, crude oil now has a very different structure to its futures market. The forward curve rises into August 2005, and then begins to decline. This pattern reflects both a belief that prices will not fall anytime soon.

Different Commodities, Different Curves



More important, it is also a rational response by sellers of futures to the flood of long-only indexed commodity money. Too many investors now believe everyone can execute the same trade of selling the front-month future and buying the second-month simultaneously and with infinitely elastic liquidity. If, for example, May is trading for less than June, this trade will lose money. Such a development was predicted here last December in a section entitled "The Warning."

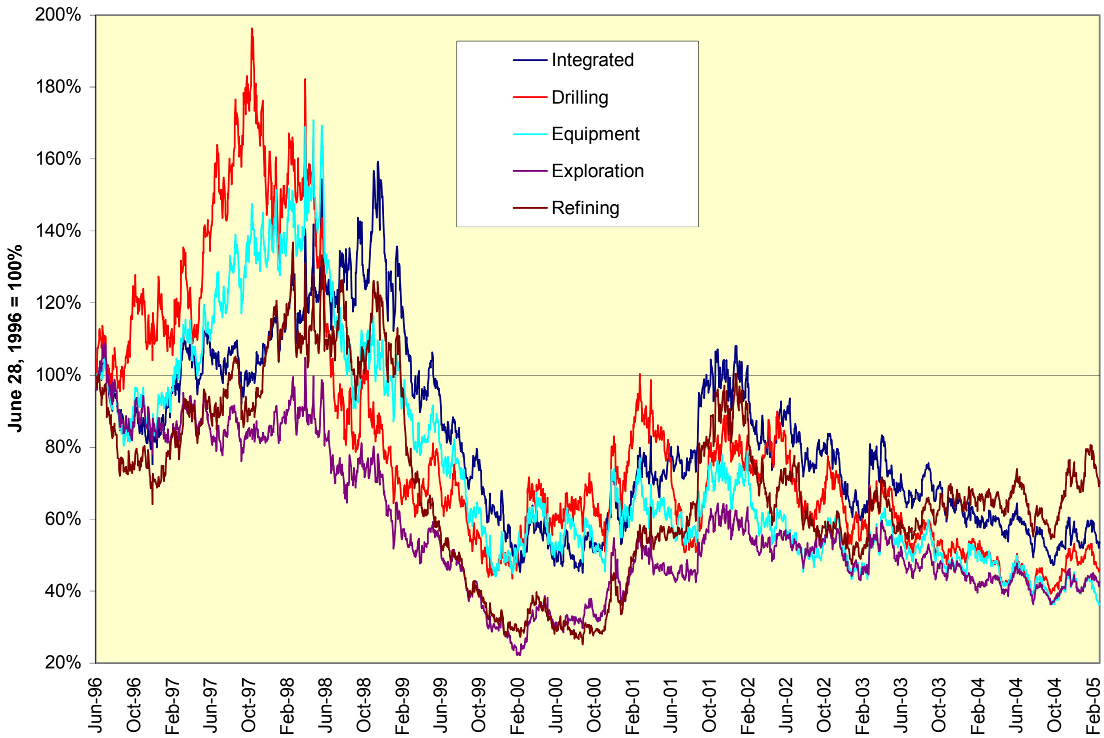
The Bull Market In Energy Stocks

Now which of the various energy-related industry groups tracked by Standard & Poor's have fared best since mid-1996? The groups and their members, listed by ticker-only for the sake of brevity, are:

Integrated	Drilling	Equipment	Exploration	Refining
AHC	NBR	BHI	APC	ASH
CVX	NE	BJS	APA	EP
COP	RDC	HAL	BR	KMI
XOM	RIG	NOV	DVN	SUN
MRO		SLB	EOG	VLO
OXY			KMG	WMB
			UCL	
			XTO	

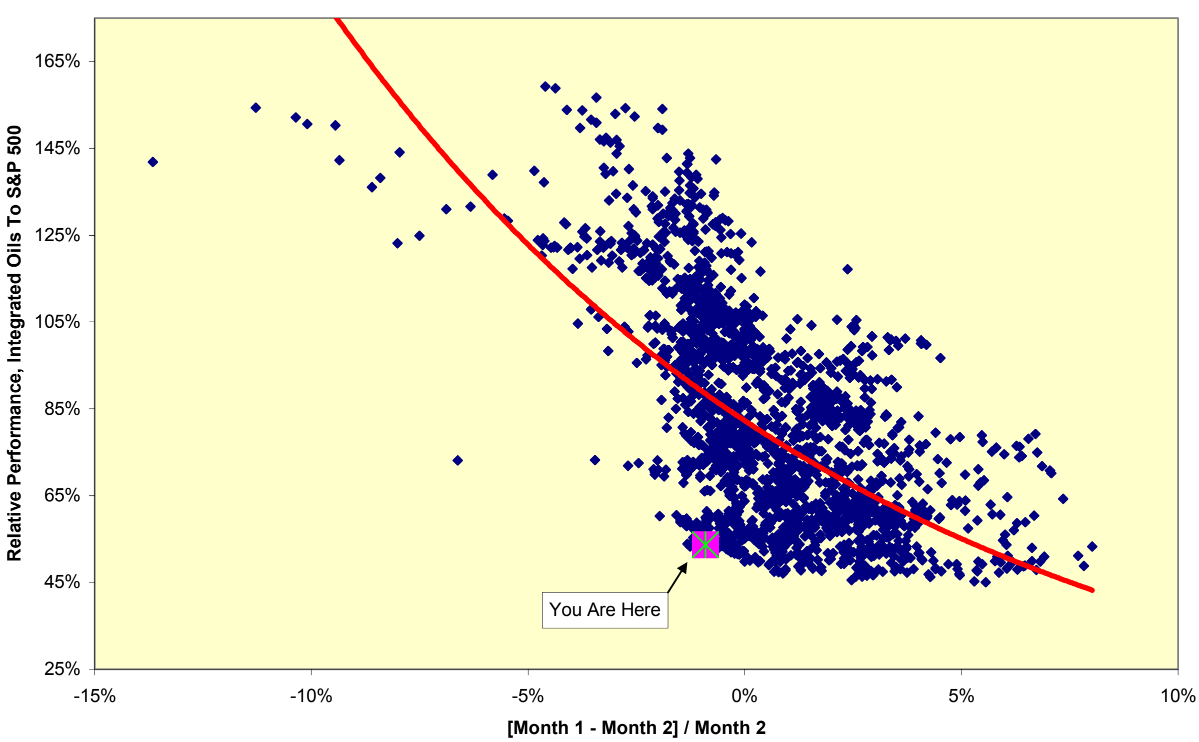
If we take each group's performance relative to the S&P 500 and then divide this relative performance measure further by the cash price of West Texas Intermediate crude oil, an interesting pattern emerges. None of the groups outperformed the S&P 500 at a rate faster than crude oil prices climbed. Restated, the combination of an S&P 500 index fund plus long crude oil futures would have outperformed these indices.

Price-Adjusted Relative Performance Of S&P 500 Energy Groups



Now let's add one final twist, comparing the crude oil price-adjusted relative performance of the Integrated Oils to a simple measure of backwardation, the spread between the first two months of the crude oil futures contract divided by the price of the second-month future.

Backwardation Kills The Tiger In Your Tank



The picture is clear: As backwardation decreases, which it is doing at the moment, we should expect the price-adjusted relative performance of the Integrated Oils to improve. If, however, the price falls and the forward curve of crude oil futures shift into backwardation - the back months collapse - we should expect the entire oil sector to weaken relative to the broad market.

The hump in the forward curve suggests we have at least a couple of more months of high prices ahead of us, but remember how poorly the forward curve predicted the future; as noted here several times before, the futures market's job is not forecasting, but rather the definition of prices at which both buyer and seller can stay in business.

Backwardation is re-emerging in late 2005 and in later years. Given the proclivity of equities to move in advance of their underlying commodities, it might not be a bad idea to let someone else squeeze the last drop of oil off of Wall Street. The capacity of anyone to add value to an extracted resource is limited. Some may argue the topic of evolution, but none should argue the reality of diminishing returns.