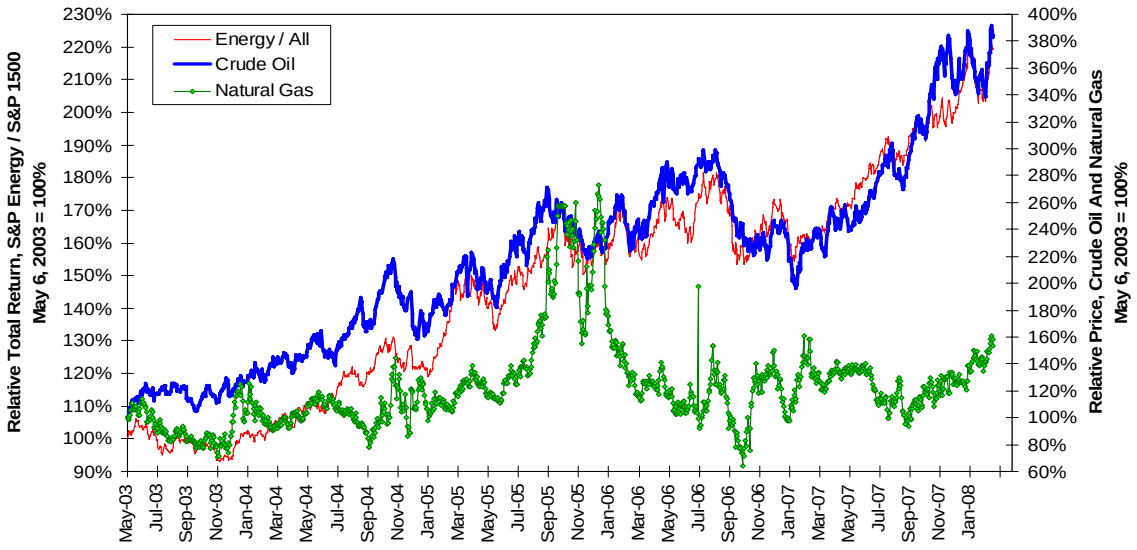
Energy Stock Movers And Shakers

Stocks and commodities are, or at least should be, different. A commodity is a process input; you buy crude oil to refine it into products whose economic value should be greater than the crude oil consumed. A stock, even though some people burst out laughing at the next part of this statement, is the discounted stream of future dividends. Its value reflects the net profitability of the operation, interest rates, the effects of indexation and other factors extrinsic to the firm.

And yet increasing numbers of investors, including institutions, have been trading commodity-linked equities as proxies for the commodities themselves during the post-2002 commodity boom. All of us have heard some variant on, "Crude oil is going higher, so buy ExxonMobil," or some other energy-linked equity. And once the commodity boom kicked into high gear after the Federal Reserve declared war on deflation in May 2003, the performance of the Standard & Poor's Energy sector relative to the S&P 1500 Supercomposite has indeed followed a path similar to that of crude oil, although at a much lower rate of ascent, as seen by the separate scales in the chart below. The link between all energy stocks' relative performance and natural gas prices is practically non-existent, which is surprising considering the U.S. consumption of natural gas is about half of its consumption of petroleum on a BTU basis.

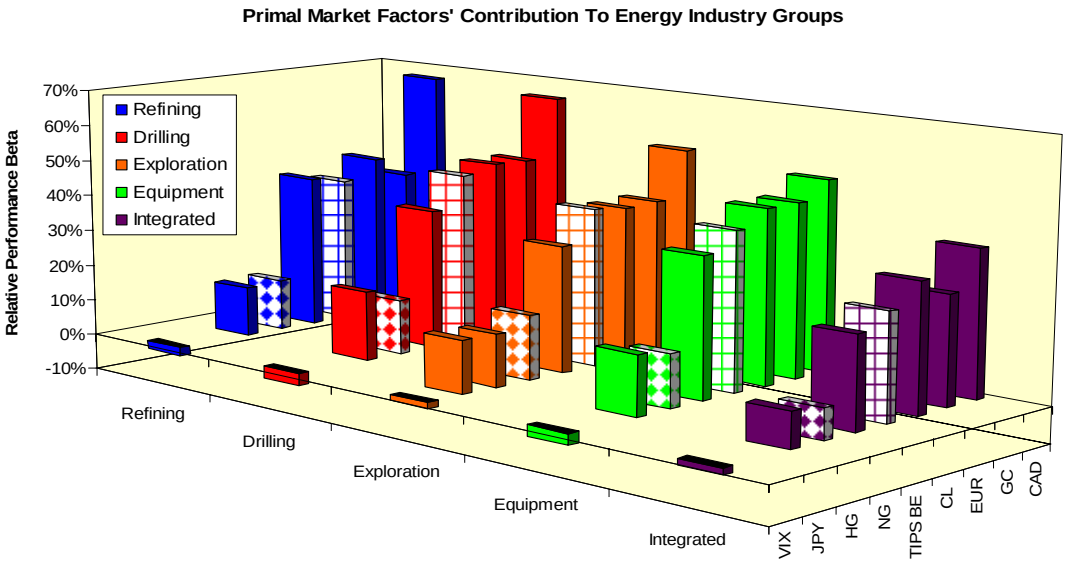
Energy Stocks Linked More To Petroleum Than Natural Gas



Factors And Sectors

S&P divides U.S. stocks into ten economic sectors, including the energy services sector listed above, and into as many as 147 industry groups, of which 130 are active at present. The five principal oil-related groups are drilling, exploration and production, equipment and services, refining and marketing, and integrated oil companies. Two additional groups, coal and consumable fuels and oil and gas storage, will be added to analyses below.

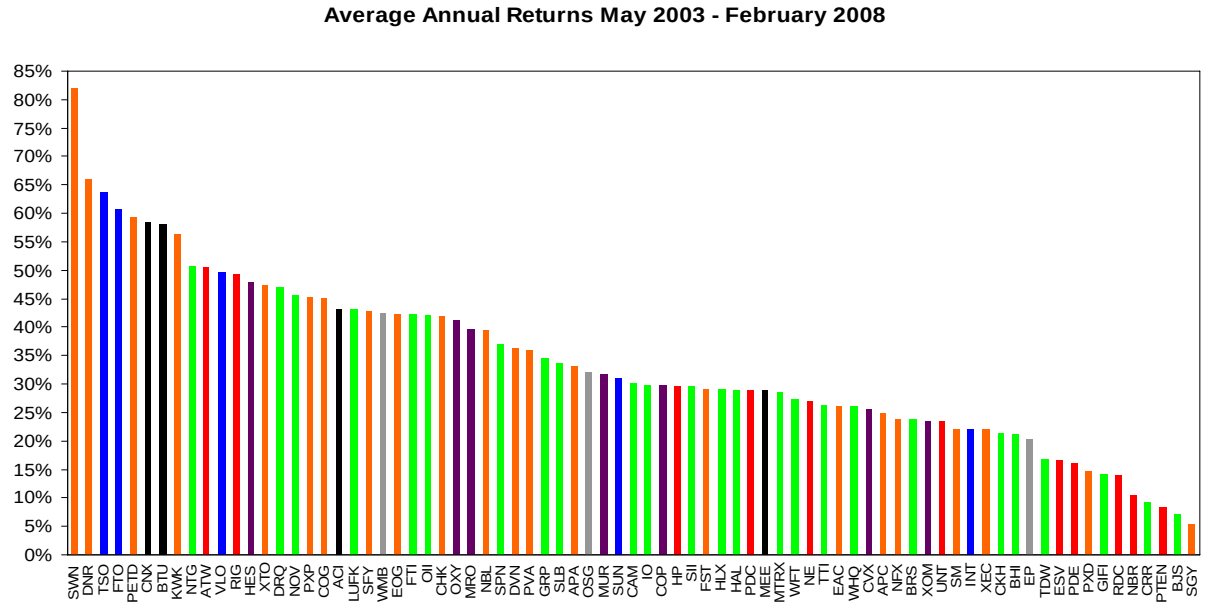
We can assess how various primal market factors affect the relative performance of the five oil-related groups. These factors include the VIX, copper, gold, inflation expectations, crude oil, natural gas, and the yen, euro and Canadian dollar. The chart below depicts the statistically significant regression betas of each group's relative performance to the broad market against these factors. The color-coding scheme will be used in the subsequent charts, with black added for coal and gray for oil and gas storage.



Betas against the VIX are negative; as volatility increases, the energy stocks underperform. The most positive betas are against the Canadian dollar. The betas for crude oil and natural gas are highlighted in cross-hatch and diamond patterns, respectively.

Individual Stocks

Stock market pundits never miss a beat to remind us it is a market of stocks, not a stock market; this passes for wisdom on Wall Street. If we rank the average annual returns on all the stocks in the Supercomposite energy services sectors using the color-coding scheme above, the real surprise is how little one color group stands out from another. The only comment is how exploration and production firms such as Southwestern Energy, Denbury Resources, Petroleum Development occupy four of the top eight slots, along with two coal companies, Peabody Energy and Consolidated Energy. The two super-majors, Chevron and ExxonMobil, are not even in the top half.



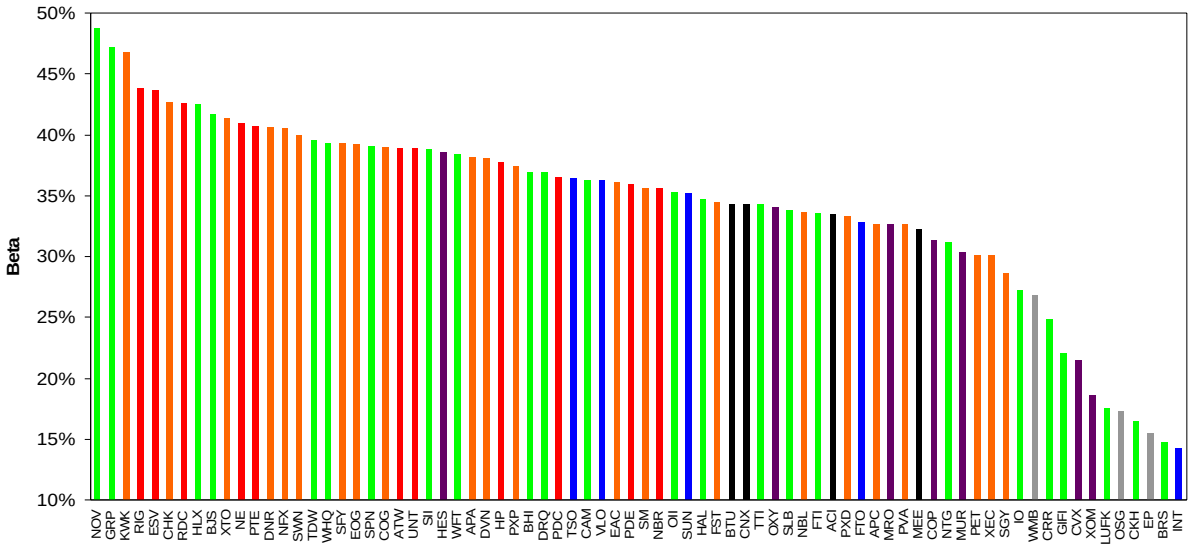
Stocks And Factors

Now let's take one step further and rank each stock by their statistically significant regression betas against three energy market factors, crude oil, natural gas and the 2-1-1 crack spread (two barrels of crude oil into one each of heating oil and gasoline) at the U.S. Gulf Coast. As an aside, the price of West Texas Intermediate at Midland, Texas, as opposed to the NYMEX delivery point at Cushing, Oklahoma, is used to sidestep some of the distortions

that arose at Cushing in the spring of 2007. The 2-1-1 crack spread used is a cash market spread of this crude oil against the cash prices at the Gulf Coast; this avoids some of the problems associated with contract rolls in the futures market.

The picture for crude oil makes the color clusters a little clearer. The left-hand side of the chart is dominated by the green, orange and red, for the equipment and services, exploration and production and drillers, respectively. Both refiners and integrated oil firms, blue and violet, are shifted to the right, with both Chevron and ExxonMobil doing rather poorly. Ask yourself how many times you have heard these two stocks recommended as proxies for crude oil.

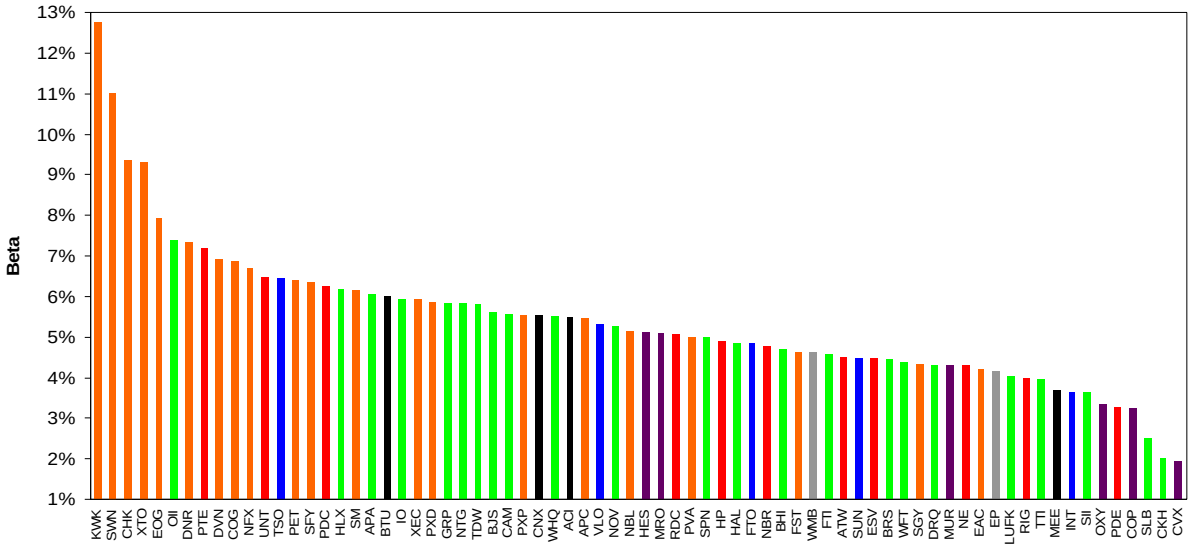
Betas of Energy Stocks Against Crude Oil



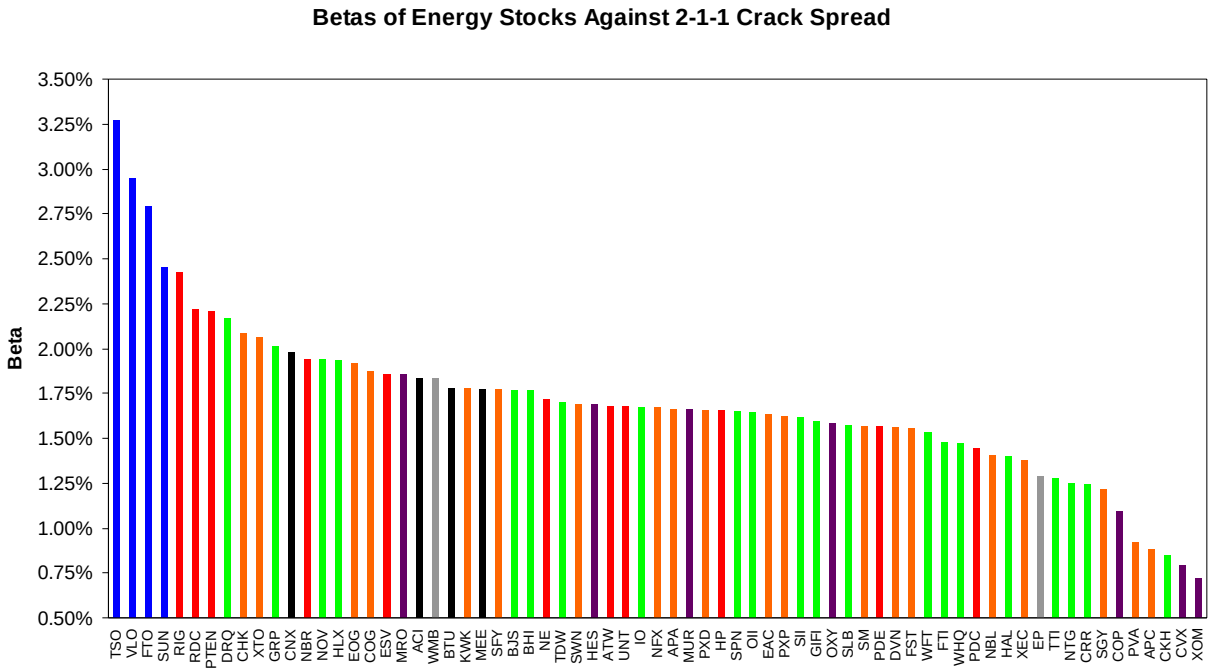
Now let's do the same thing for natural gas. The highest betas are dominated by the exploration group's orange columns. Not only do the integrated firms continue to do poorly - Chevron is dead last in this ranking – but ExxonMobil actually fails the 95 percent statistical significance test.

The dominance of the exploration firms is an economic oddity given the opening comments on the differences between commodities and stocks. The exploration and production side of the business, the "upstream" in oil industry parlance, is involved in long-term projects. If you wildcat a new province today, you may not get any revenue at all for 7-13 years, depending on location. Why these firms react well to short-term increases in highly volatile natural gas prices is not at all clear.

Betas of Energy Stocks Against Natural Gas



Finally, let's take a look at the impact of the 2-1-1 crack spread. The refiners' blue columns dominate the left-hand side of the chart; no surprise there. But the red columns of drillers such as Transocean, Patterson-UTI and Rowan are there as well. Once again, the strong beta of drilling firms to refining spreads defies logic and may simply be a case of spurious correlation. Where are Chevron and ExxonMobil in this ranking? Dead last, and ConocoPhillips is near the bottom as well.



What can we take away from this analysis? First, the rising tide of energy prices did lift all the boats of the sector, its groups and their individual stocks. If you had thrown a dart at the energy board in 2003, you would have made money; the only question would have been how much money.

Going forward, can we expect to see a duplication of crude oil's rise from the $20 range into the $100s, and to witness similarly strong markets for both natural gas and refining margins? Possibly, but rank greed is a character flaw, not a trading strategy. A little more discerning analysis will be rewarded after the easy money of the last few years passes into the history books.