Blame Crude Oil Carefully

Chicagoans love to joke about their awful weather. Springtime can be lovely, though, especially on those years when it falls on a Tuesday.

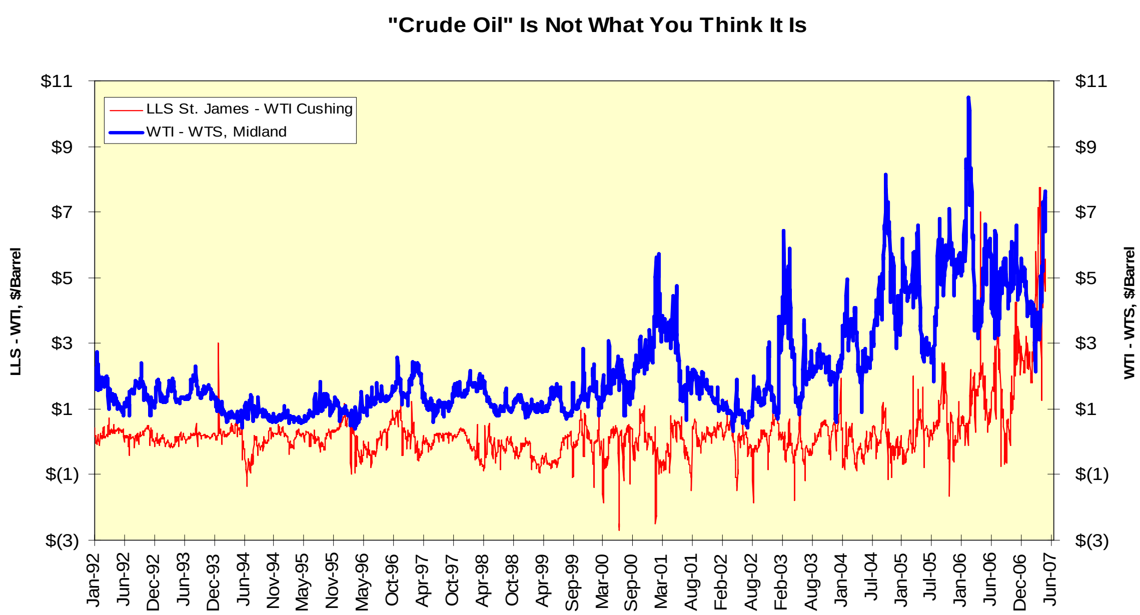
Knee-slappers such as this have had their parallel in the stock market of late. Last week's bear market, which came on a Thursday, ruined both the morning *and* the afternoon for those reprobates who flinch at the sight of any red on their quote screens. The proffered cause of this entire-day catastrophe was a sharp downturn in same-store retail sales.

Well, it is not good enough simply to connect the dots between retail sales and stock prices; we must search for causes for those weak retail sales. Soon we heard about the early Easter, about bad weather, about residential real estate and about today's subject, about high and rising gasoline prices.

What Is Crude Oil?
Let's first take a little detour into the crude oil market. Once upon a time crude oil was considered a process input into refineries, not as an "investable financial asset" for long-only commodity index funds. Not only did this investment process totally mess up the crude oil market's forward curve and inventory incentives, a topic last addressed in March 2006, it placed an inordinate emphasis on the NYMEX delivery point for West Texas Intermediate crude oil at Cushing, Oklahoma.

Now Cushing may be a fine place, but it is an inland pipeline market designed to serve the mid-continent refineries of what is called Petroleum Administration District for Defense- 2, not the Gulf Coast refineries of what is called PADD 3 (click here for PADD map). The persistent contango in the crude oil forward curve already had led to high levels of inventory storage this past year, and once a few refineries supplied through the Cushing-dependent pipeline network went down, the crude oil had nowhere to go.

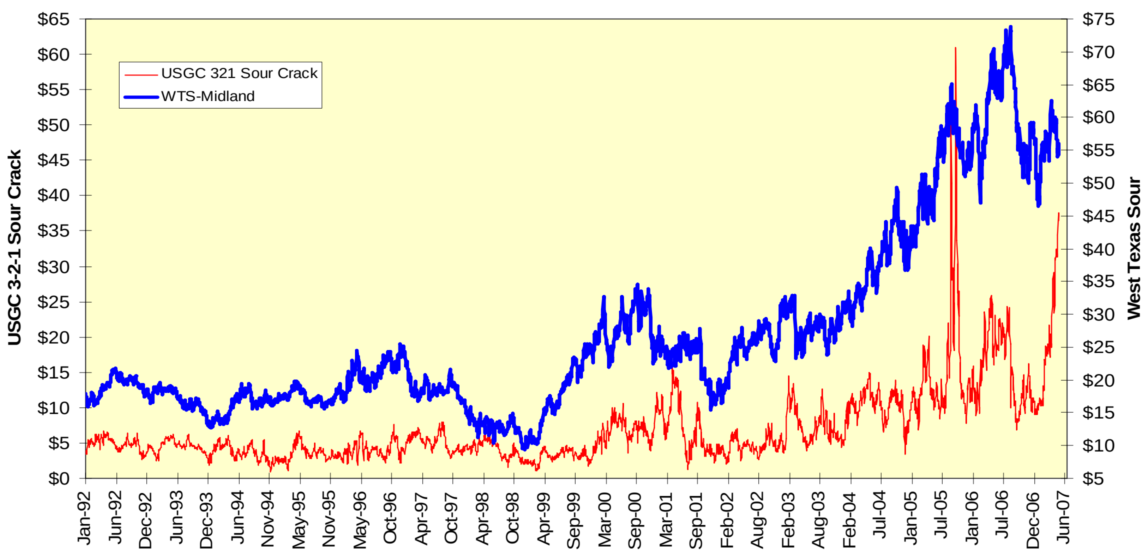
The result was a massive dislocation in the U.S. crude oil market. Let's take a look at two key spreads, the one between low-sulfur Louisiana Light Sweet at St. James, LA, and WTI at Cushing, and the one between WTI and high-sulfur West Texas Sour and WTI, both at Midland, TX. The LLS-WTI spread widened to record levels last month as the Gulf Coast market remained strong and the Cushing market collapsed under the weight of inventories. The WTI-WTS, or sweet-sour, spread moved up to levels normally associated with peak refinery capacity utilization.



The net result of all this is business reporting of WTI-based crude oil futures was pointed in the wrong direction. On days when inventory-glutted Cushing was falling in price, the price of crude oil at critical refining centers was holding steady or rising.

Crack Crisis
The refinery outages did have a very real economic effect, though. Let's look at the relationship between WTS at Midland and the Gulf Coast 3-2-1 refining margin or "crack spread." A 3-2-1 crack spread is the per-barrel margin for converting three barrels of crude oil into two of gasoline and one of heating oil. This spread has jumped to levels exceeded only once before, during the obvious crisis of Hurricane Katrina in September 2005. You and I do not buy crude oil, but we do buy refined products. As you have noticed at the pump, those prices are back near record highs even though the price of WTS is almost $10 per barrel lower than last summer's peak levels.

Record Refining Margins Ex-Katrina

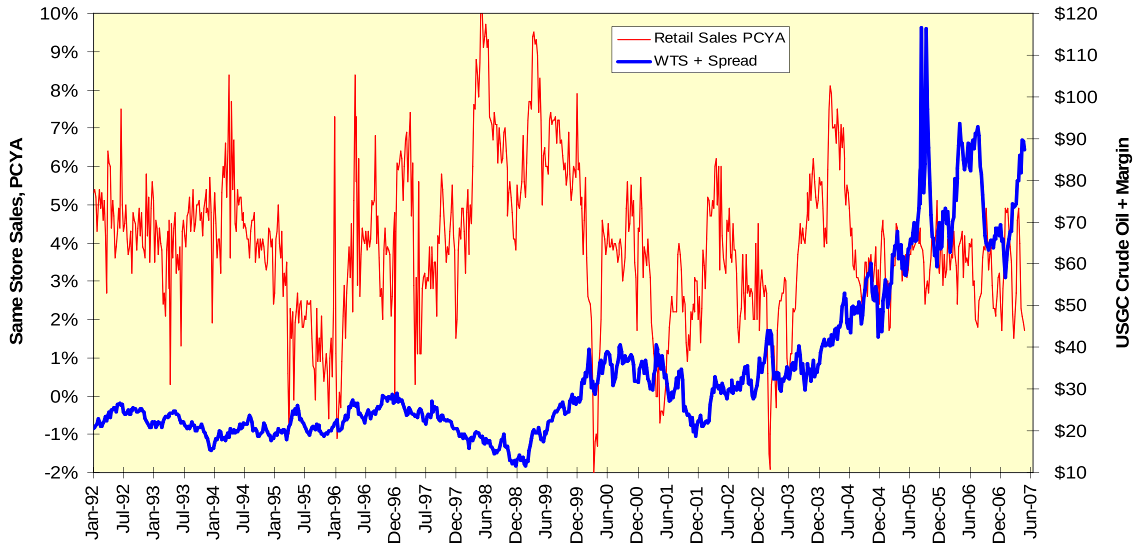


Enter The Consumer
If anything in the petroleum world is going to affect consumer spending and retail sales, it is going to be the output prices of refined products. Those are competing for the consumers' wallets.

Now let's add the refining margin to the cost of sour crude oil and compare it to the year-over-year changes in same-store retail sales that caused so much indigestion last Thursday. The refinery output price rose from early 1999 all the way into August 2006 even ignoring Katrina with no visible effect on retail sales. The two biggest year-over-year declines in retail sales occurred during the first break of the stock market bubble in 2000 and in the immediate prelude to the Iraq War; neither was associated with higher petroleum prices.

To claim, as some have done, that all of the sudden the current prices of refined products are killing the consumer is both lazy and disingenuous.

Refinery Output Prices Does Not Drive Retail Sales



Stock Market Impact

Are consumer-dependent S&P 500 industry groups exposed to WTI prices, and if so, which ones? Let's return to an analysis first introduced in February 2005 on assessing the impact of factor prices on S&P industry groups, and add the twist introduced in November 2006 on weighting these factors by the groups' representation in the index, we can construct a table of groups both helped and hurt by rising long-term interest rates at a 90% confidence interval.

There are 57 industry groups accounting for 70.6% of the S&P 500's market capitalization with statistically significant negative relationships to WTI prices. Consumer-related groups in this selection, highlighted with shading in the left-hand cells of the table, account for 13.11% of market capitalization. Restated, while a number of consumer groups are hurt by rising WTI prices, the overall negative effect on the market as a whole is not major.

In fact, once we add the groups related positively to WTI prices into the equation, we find a net weighted beta of 0.60%. The counterintuitive conclusion is the partial contribution of higher crude oil prices to the S&P 500 is a weakly positive, not negative one.

Crude Oil Beta-Weighted Impact On S&P 500

	SPX Weight	CL Beta	Weighted Beta		SPX Weight	CL Beta	Weighted Beta
Pharmaceuticals	6.47%	0.046	-0.30%	Integrated Oil & Gas	6.37%	0.281	1.79%
Industrial Conglomerates	3.86%	0.042	-0.16%	Oil & Gas Equipment	1.47%	0.426	0.63%
Other Diversified Financial Services	4.97%	0.032	-0.16%	Oil & Gas Exploration	0.98%	0.424	0.42%
Computer Hardware	3.42%	0.043	-0.15%	Oil & Gas Drilling	0.45%	0.463	0.21%
Systems Software	2.83%	0.048	-0.14%	Oil & Gas Refining	0.40%	0.409	0.16%
Communications Equipment	2.59%	0.051	-0.13%	Steel	0.33%	0.167	0.06%
Integrated Telecommunications	3.05%	0.043	-0.13%	Diversified Metals & Mining	0.20%	0.246	0.05%
Semiconductors	2.20%	0.052	-0.12%	Multiline Utilities	1.22%	0.037	0.05%
Multiline Insurers	1.98%	0.047	-0.09%	Electric Utilities	1.93%	0.022	0.04%
Diversified Banks	2.22%	0.039	-0.09%	Construction & Farm Machinery	0.86%	0.039	0.03%
Investment Banking & Brokerage	2.64%	0.030	-0.08%	Gold	0.14%	0.239	0.03%
Household Products	2.02%	0.039	-0.08%	Aluminum	0.25%	0.091	0.02%
Hypercenters & Superstores	1.06%	0.071	-0.08%	Agricultural Products	0.17%	0.091	0.02%
Tobacco	1.22%	0.056	-0.07%	Homebuilding	0.20%	0.056	0.01%
Regional Banks	1.72%	0.040	-0.07%	Construction & Engineering	0.07%	0.092	0.01%
Home Improvement Retailers	0.99%	0.065	-0.06%	Gas Utilities	0.08%	0.068	0.01%
Aerospace & Defense	2.50%	0.024	-0.06%	Construction Materials	0.08%	0.054	0.00%
Drug Retailers	0.76%	0.076	-0.06%				
Air Freight & Logistics	0.88%	0.061	-0.05%				
General Merchandise Retailers	0.49%	0.105	-0.05%				
Thrifts & Mortgages	1.41%	0.035	-0.05%				
Healthcare Equipment	1.66%	0.030	-0.05%				
Movies & Entertainment	1.75%	0.028	-0.05%				
Data Processing & Outsourcing	0.98%	0.049	-0.05%				
Property & Casualty Insurers	1.39%	0.034	-0.05%				
Biotech	1.30%	0.035	-0.05%				
Asset Management & Custodial Banks	1.16%	0.035	-0.04%				
Department Stores	0.66%	0.058	-0.04%				
Healthcare Distributors	0.44%	0.082	-0.04%				
Consumer Finance	0.96%	0.033	-0.03%				
Soft Drinks	1.68%	0.017	-0.03%				
Life & Health Insurers	1.32%	0.022	-0.03%				
Diversified Chemicals	0.85%	0.030	-0.03%				
Wireless Services	0.62%	0.040	-0.02%				
Restaurants	0.82%	0.029	-0.02%				
Packaged Foods	1.27%	0.018	-0.02%				
Semiconductor Equipment	0.34%	0.056	-0.02%				
Food Retailers	0.38%	0.046	-0.02%				
Application Software	0.39%	0.044	-0.02%				
Automobile Manufacturers	0.24%	0.073	-0.02%				
Airlines	0.08%	0.207	-0.02%				
Apparel Retailers	0.29%	0.055	-0.02%				
Hotels	0.53%	0.029	-0.02%				
Computers & Electronics Retailers	0.19%	0.069	-0.01%				
Specialty Stores	0.28%	0.045	-0.01%				
Environmental Services	0.18%	0.058	-0.01%				
Casinos & Gaming	0.22%	0.042	-0.01%				
Auto Parts & Equipment	0.16%	0.056	-0.01%				
Household Appliances	0.17%	0.042	-0.01%				
Personal Products	0.17%	0.043	-0.01%				
Leisure Products	0.15%	0.042	-0.01%				
Office Electronics	0.13%	0.044	-0.01%				
Electrical Equipment Manufacturing	0.13%	0.042	-0.01%				
Specialty Chemicals	0.18%	0.025	0.00%				
Diversified Commercial Services	0.08%	0.041	0.00%				
Distributors	0.06%	0.046	0.00%				
Office Services & Supplies	0.12%	0.023	0.00%				
Subtotal:	70.60%		-2.92%	Subtotal:	15.20%		3.53%
Consumer-Related Subtotal:	13.11%		-0.62%	**Total:**	**85.80%**		**0.60%**

Will a downturn in consumer spending wreck the bull market eventually? It could, but if it does the origins will be income-related or interest rate-related, not gasoline-related. Those who seek a simple connection between gasoline prices and retail sales, and a second simple connection to daily stock prices will be as disappointed in their efforts as those seeking decent spring weather on the shores of Lake Michigan.