

Ethanol Must Be Destroyed

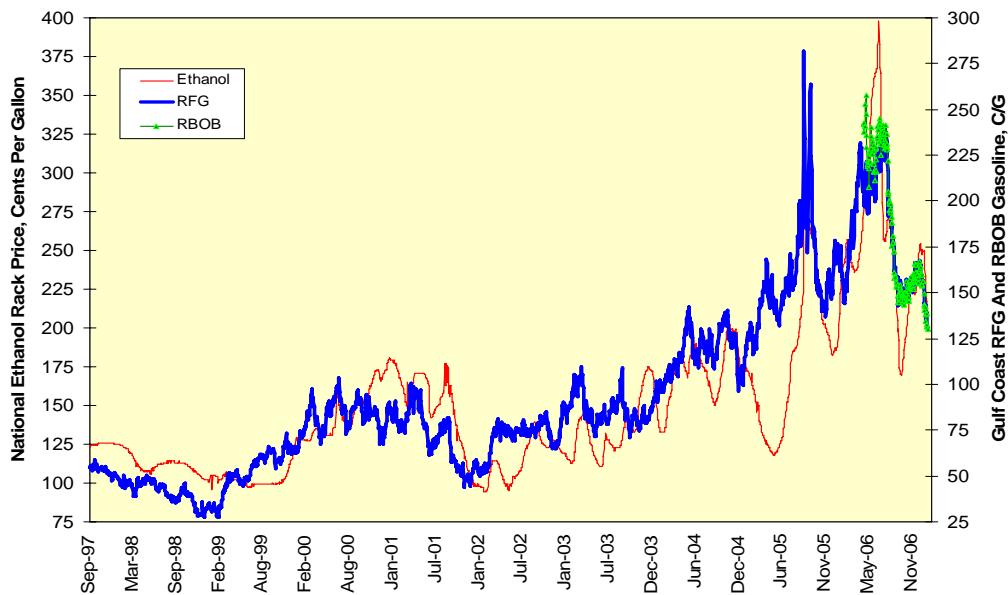
“Ceterum censeo Carthaginem esse delendam (Furthermore, it is my opinion Carthage must be destroyed)” – Cato

The Roman senator Cato ended every speech, no matter what the topic, with the words above. Today we might classify him as an obsessive-compulsive, but no matter: History does show he got his way. Anyone who took Carthage and the points in the Third Punic War (149-146 B.C.) lost as the city-state was crushed in the worst urban warfare prior to Stalingrad in World War II.

Enough of the history lesson; let's get to the point. Ethanol must be destroyed. The unintended consequences of replacing energy with food were not unpredictable. I wrote about them last [March](#). The continued construction of ethanol plants has increased the output of the fuel additive just as the price of gasoline itself is falling.

Ironically, the highest prices seen to-date for ethanol came last July, just when the prices for 87-octane reformulated gasoline at the U.S. Gulf Coast (RFG) and the new reformulated blendstock for oxygenate blending (RBOB, the basis for the new gasoline futures contracts) were at their non-Katrina peaks. That ethanol shortage contributed to the record pump prices for gasoline seen in 2006 and made new ethanol investments seem profitable.

Ethanol And Gasoline Prices

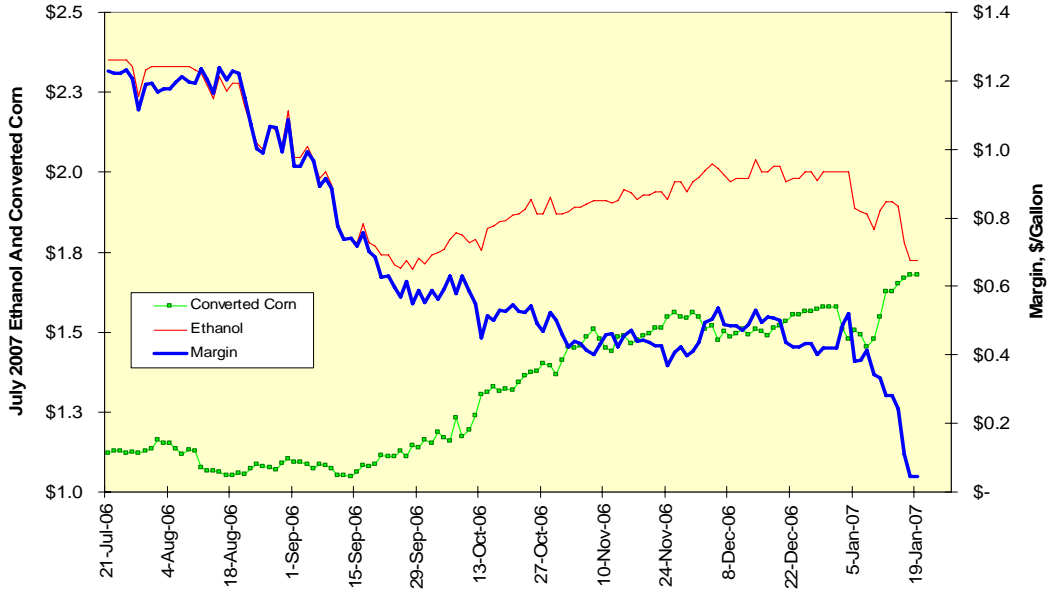


Impact on Corn

It should be obvious if you keep throwing corn into distillation plants, you will increase the demand therefor and in the absence of new supply, you will increase the price as well. The corn harvested in 2006 now sits in storage; in industry parlance, it is called “old crop.” The futures contracts out to July 2007 represent both this old crop and, to a far lesser extent, some of the Southern hemisphere new crop. The corn to be planted and harvested this year, “new crop,” is represented by the December 2007-July 2008 futures contracts. September futures sit in the middle, and old-timers at the Chicago Board of Trade regularly engage in manhood rituals involving how much they disdain the September contract.

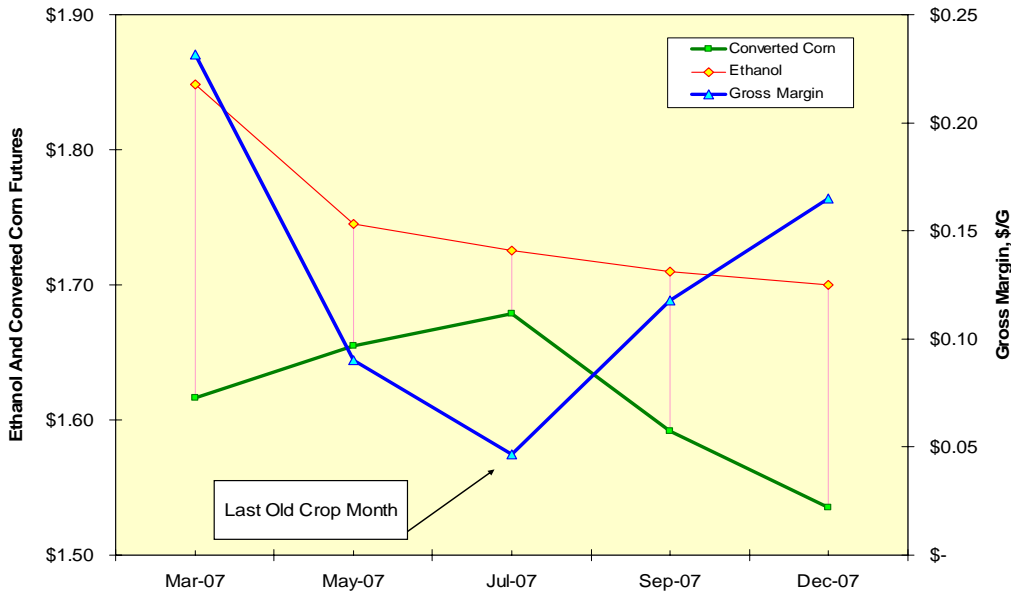
If we map the July 2007 futures contracts for ethanol and for corn using a 2.55 bushel per gallon rate, we can see just how much this board margin for ethanol has deteriorated under the combination of higher corn prices and lower ethanol prices. It's called supply and demand, and if you fight this law, the law will win... in the absence of political intervention, which we are sure to get in the imbecilic cause of “energy independence” or some such.

It's Called Supply And Demand



Now, to be fair, the market works in the other direction, too. If we take a snapshot of the forward curves for both corn and ethanol futures, converted as above, we see how gross margins bottom in July and then recover rapidly into December. The corn market is responding by raising its estimate of corn acreage to be planted in 2007 and no doubt lowering its estimate of livestock feed use. Watch forward livestock prices rise as herds are liquidated in response to higher feeding costs.

Gross Ethanol Distillation Under Old Crop Pressure



As an aside, I used to be involved in corn hedging for a number of Mexican grain buyers, including one firm that made 17 million tortillas per day. If you think Americans consider cheap gasoline a birthright, you should see how Mexicans regard cheap tortillas. The new Calderon administration just announced a price cap on tortillas; this will work in the same disastrous manner as do all price controls. The Mexican government will be forced to divert more and more resources into tortilla subsidies and other cost-hiding measures. I asked a Mexican host once about these policies, to which he replied, "Tortillas are cheaper than tanks."

Winners And Losers

How can we net the impact of higher corn prices on the S&P 500? If we 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 corn prices at a 90% confidence interval.

Beneficiaries of higher corn prices include Construction & Farm Machinery, Construction & Engineering and Agricultural Products along with the oil-related groups. The connection here to rising farm incomes is obvious. In total, these groups represent 9.95% of the S&P 500 and have a net weighted beta of 0.55%

Losers include Soft Drinks, which are large buyers of high-fructose corn syrup. In total, these groups represent 11.18% of the S&P 500 and have a net weighted beta of -0.33%.

The net result is a positive beta of the S&P 500 to corn of 0.21%. In other words, higher corn prices by themselves present no threat to your portfolio.

Corn Beta-Weighted Impact On S&P 500							
	SPX Weight	C Beta	Weighted Beta		SPX Weight	C Beta	Weighted Beta
Systems Software	2.91%	0.050	-0.15%	Integrated Oil & Gas	6.10%	0.049	0.30%
Industrial Conglomerates	3.99%	0.018	-0.07%	Oil & Gas Equipment	1.26%	0.062	0.08%
Soft Drinks	1.67%	0.028	-0.05%	Oil & Gas Exploration	0.91%	0.066	0.06%
Regional Banks	1.75%	0.017	-0.03%	Diversified Metals & Mining	0.27%	0.108	0.03%
Drug Retailers	0.57%	0.049	-0.03%	Construction & Farm Machinery	0.71%	0.035	0.02%
Environmental Services	0.18%	0.047	-0.01%	Oil & Gas Refining	0.30%	0.075	0.02%
Paper Packaging	0.11%	0.031	0.00%	Agricultural Products	0.16%	0.083	0.01%
				Gold	0.15%	0.071	0.01%
				Construction & Engineering	0.05%	0.067	0.00%
				Trading Companies	0.04%	0.054	0.00%
				Subtotal:	9.95%		0.55%
Subtotal:	11.18%		-0.33%	Total:	21.13%		0.21%