

A Futures Contract We All Can Drink To

A guy walks into a bar. The bartender says, "Hey, you can't bring 7,750 gallons of ethanol in here!" The guy says, "Why not? I'm going to deliver them against my short June futures position on ethanol at the New York Board of Trade."

Ethanol always has played a prominent role in human society and commerce, primarily as a libation and source of tax revenue for governments at all levels, but also as an industrial commodity and a solvent. The first oil shock, now more than thirty years in our rearview mirrors, prompted oil-poor and sugar-rich Brazil to start using ethanol as a motor fuel.

The wisdom of this is debatable, as I noted here [nearly a year ago](#), as the energy content of ethanol is lower than that of gasoline's hydrocarbon components and as its environmental lifecycle costs are surprisingly high. But the first rule of political discourse is to know when you have lost, in this case to a potent mix of agribusiness interests, energy nationalists, seekers of farm state votes and other assorted troglodytes, not that I would ever harbor a grudge.

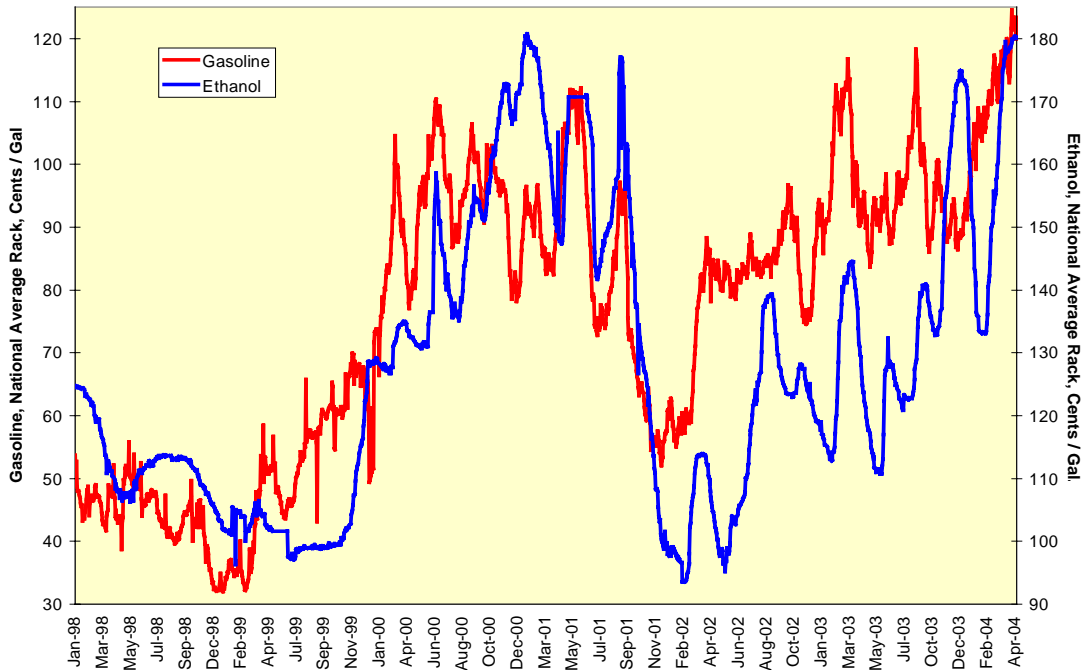
The Future Is Now

If you cannot beat them, you can try to make a buck or two off of them, and the new NYBOT contract is as good of a place as any to start. As noted above, the contract will be for 7,750 gallons of biomass-derived anhydrous ethanol at 60° Fahrenheit delivered FOB a vessel in one of nine countries of origin, including Brazil and the U.S. Brazil dominates global ethanol production, with more than 50% of output, and its export price effectively will underlie the NYBOT future. The other seven countries are in the Caribbean basin, which makes the export of ethanol into the U.S. a way of circumventing our sugar import quotas.

As both the principal current use and projected source of demand growth for ethanol will be as an additive to gasoline, it might be logical to look for evidence of a tradable spread or at least a growing correlation between gasoline and ethanol. Logical in impulse, but incorrect in fact: The two fuels have different production sources and their markets have different geographic centers. And, critically, gasoline demand is a fairly predictable vector, leaving its price variance a function of swings in supply from current refinery production, imports, and existing inventories. The relative volatilities of gasoline and ethanol are out of scale to each other, with the standard deviation of returns for gasoline being nearly three times as great as that for ethanol. Finally, gasoline blends change with the season, with the low Reid vapor pressure summer blends being more expensive than winter blends.

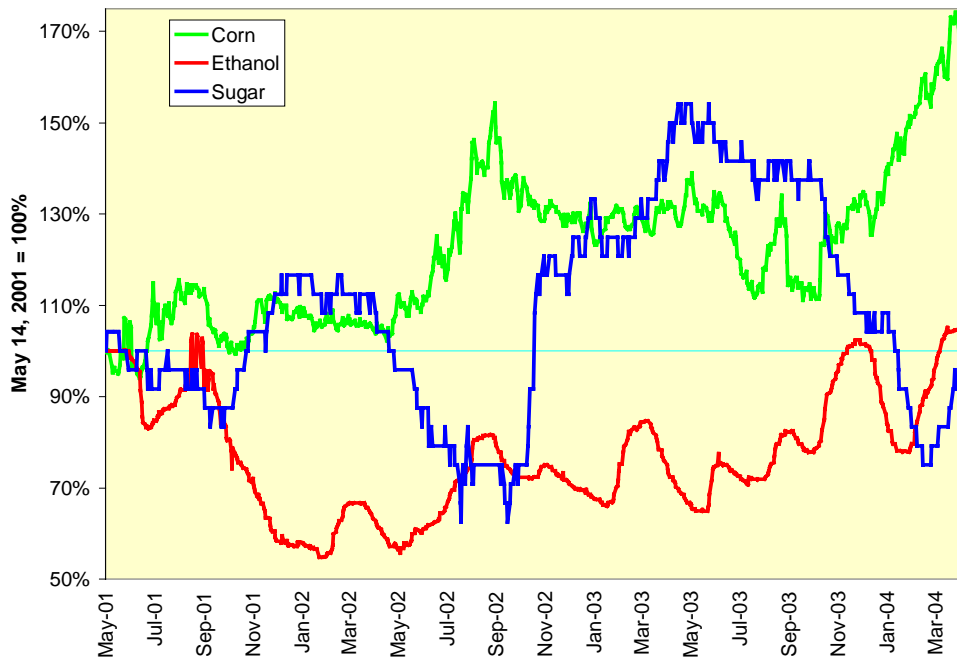
The end result is poor correlation between gasoline and ethanol, even when we use national average rack prices for both fuels to achieve some measure of comparability in trends between the two fuels.

Drinking And Driving Really Don't Mix



The data suggest that hedging or trading ethanol by using gasoline would be a highly ineffective strategy, which should bode well for the success of the contract. A [study](#) done at the University of Missouri in 2002 reached a similar conclusion. In addition, ethanol prices correlate poorly with those of its two principal raw material sources, corn and sugar. If domestic ethanol producers such as Archer-Daniels-Midland chose to hedge their output prices by their input prices, they would be in for a rude awakening. Over the past three years, corn prices in southern Illinois have rebounded sharply, Brazilian sugar prices have taken a ride both higher and lower, and ethanol prices have been absolutely unrelated to either.

Input Unimportant To Output

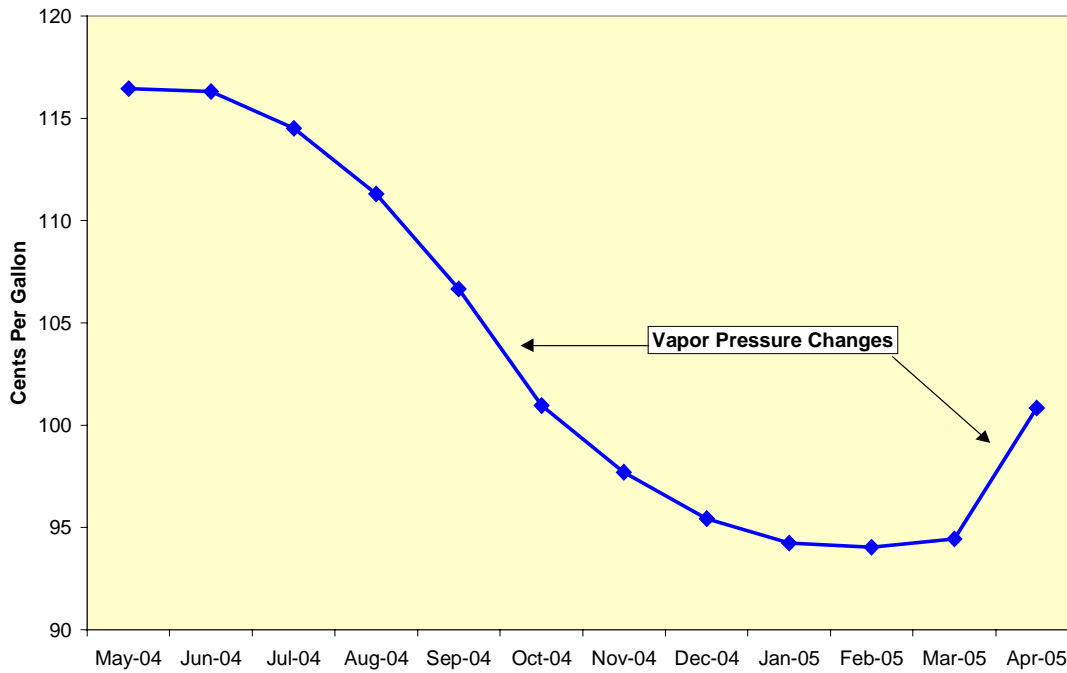


A Commodity Product

Traders need information in order to ply their craft, and the state of affairs for ethanol supply/demand balance information is dismal at present. Prices are learned by cash market survey, which will be corrected soon enough by the NYBOT contracts, but prices alone without an understanding of what is moving them cannot maintain a healthy market. The usual sources for fuel supply information, the Department of Energy and the American Petroleum Institute, are literally months behind on any supply information from domestic sources and are even worse on import data. These deficiencies will need to be corrected, and soon, for ethanol trading to succeed.

The forward curve of ethanol futures prices should follow many of the same patterns seen for gasoline. The commodity is storable, which by itself promotes a carry curve, or pattern of rising prices over time. However, the industry operates on low inventories - stored anhydrous alcohol tends to draw in moisture out of the air - and ethanol demand follows the seasonal structure of gasoline demand. The net result for gasoline futures' forward curve after vapor pressure changes are accounted for in April and September is low information content as to whether supplies are adequate or not.

Low Information Content In Forward Curve



As ethanol is an undifferentiated commodity difficult to add value to in the production side, we should look to the domestic refiners who have built ethanol blending businesses to capture the gains from distribution. These firms include Valero, Tosco, Tesoro, Shell, ConocoPhillips, ExxonMobil, Equilon, Duke and ChevronTexaco. The privately held Koch Industries is a major player in ethanol as well.

The U.S. futures industry has had a difficult time in launching successful contracts on physical commodities over the past few decades; the last true success in a tangible market was natural gas in 1991. The ethanol contract has the potential to join what has been a very exclusive club, and to that I do propose a toast.