

The Sweet Taste Of Success

“Damn sugar, damn coffee, damn colonies!” – Napoleon Bonaparte

You cannot write the history of the world after the European discovery of the Americas without mentioning sugar. The Portuguese turned Brazil into what we today would consider a sugar plantation and death camp for slaves, although not necessarily in that order. The Greater Antilles became a series of sugar-exporting colonies, and even today sugar is the major legal cash crop in Cuba, Jamaica, Puerto Rico and Hispaniola.

Napoleon’s frustration over the Haitian Rebellion led him to sell Louisiana to the U.S. Moreover, the fearsome nature of the Haitian Rebellion (fun fact: Haiti is the second-oldest republic in the New World) led to a hardening of racial attitudes in the slaveholding South. Our Civil War has roots in sugar as much as it does in cotton.

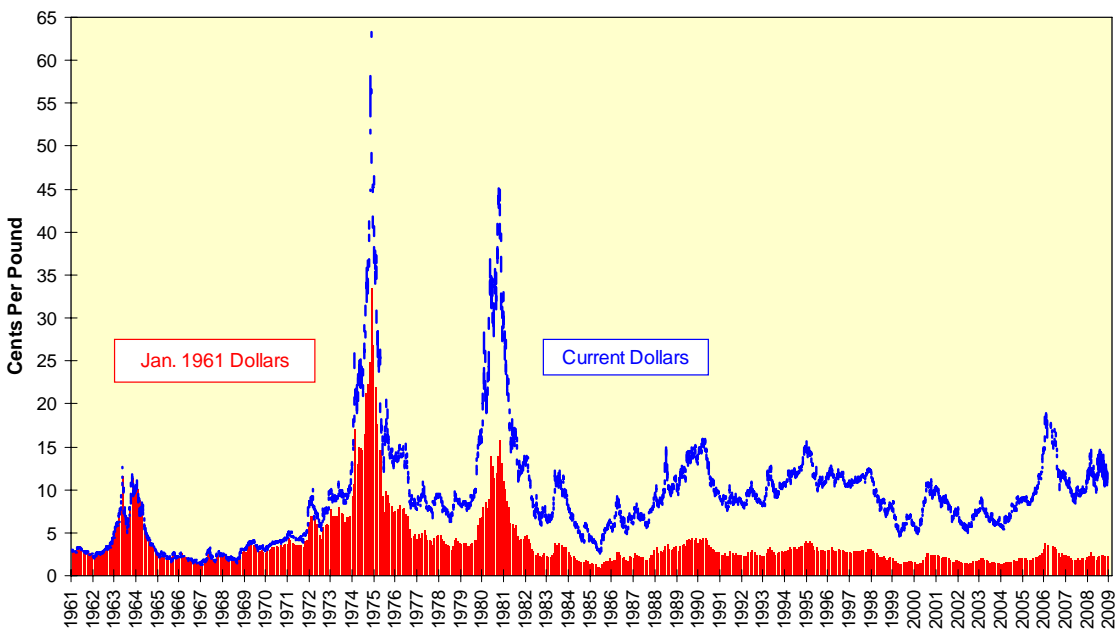
Unbeknownst to the colonists who valued sugar both as a foodstuff and as the raw material for rum, the sugar cane plant is off the top of the charts in photosynthetic efficiency. As any real-life pirate of the Caribbean would have told you, the plant processes four carbon atoms at a time instead of the usual three and converts about 8% of the available sunlight into carbohydrates. Corn, by contrast, does just over 1%. So the real-life Captain Morgan and Calico Jack were into solar energy and carbon capture and sequestration well before their time; they would have worn their “green” label with pride, no doubt.

We should add for the sake of completeness the sugar derived from beets is identical to cane sugar. However, it is grown in places like Germany and North Dakota. Anyone who treats the romance of such places as equivalent to Jamaica has not traveled very much.

Sugar Prices And Trade

Regardless of the sugar’s source and its growing use as a biofuel, discussed more below, one thing is true beyond dispute and that is the remarkable efficiency of the global sugar industry. Anyone who experienced the commodity markets of the 1970s remembers the two gigantic price spikes in Chart 1. Those spikes changed traders’ perceptions of sugar; it was always going to be the next bull market. And yet if we deflate sugar by the Producer Price index, we see just how stable the price has been for more than a quarter-century.

Chart 1: Constant-Dollar Sugar Price Remarkably Stable After 1981



Part of this efficiency is a reflection on another one of sugar’s darker sides, and that is various government subsidies. The U.S. has kept domestic prices over world prices for years, with deleterious consequences for confectioners,

bakers and soft drink manufacturers. Winners include the sugar growers of Florida, Louisiana and the Northern Plains and manufacturers of high-fructose corn syrup used as a sugar substitute.

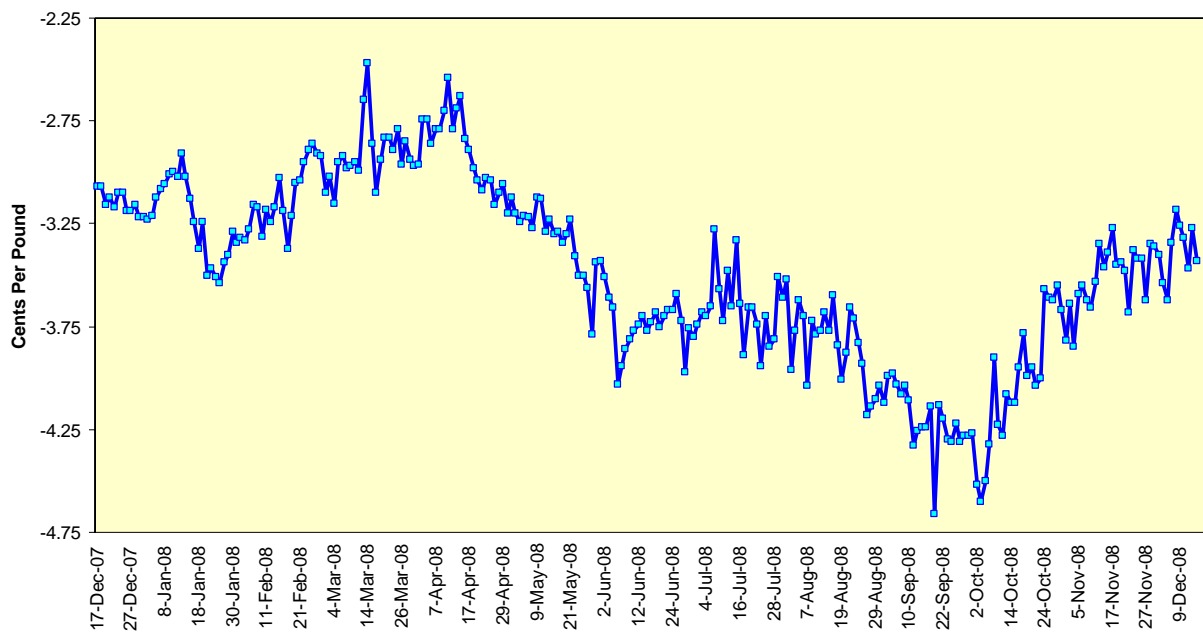
Interestingly, the most commonly traded sugar contract for years has been the Intercontinental Exchange’s Sugar No. 11 contract; its volume dwarfed that of the domestic Sugar No. 14 contract. A new contract launched after the expiration of September 2008 Sugar No. 14 futures, the Sugar No. 16 contract, is too new to pass any judgments on its trading acceptance.

On an international scale the subsidies and quotas in the U.S. and European Union priced a good deal of sugar grown in poorer countries out of wealthier markets. That has changed somewhat with the U.S. Caribbean Basin Initiative and the European Sugar Regime. The ESR is designed to lower EU sugar prices, reduce EU sugar production and exports, reduce import quotas and limits the re-export of sugar from African, Caribbean and Pacific (ACP) countries.

Raw And Refined

A safe bet is many American commodity traders have gone through life unaware the Sugar No. 11 contract was for raw sugar, not the refined sugar you might find on the table. Much of this refining used to be done near the production source or in a developed country; increasingly it is being done at the destination. This creates a lively arbitrage between raw and refined sugar, as represented by the ICE and Euronext.liffe contracts, respectively. The predictable consequence of increased destination refining of raw sugar has been to pull the raw sugar price higher and lead to apparent negative economics for buy raw sugar and selling refined sugar. We can illustrate this in Chart 2 with the trade of buying March 2009 ICE No. 11 futures and selling May 2009 white sugar futures in London

Chart 2: The Raw-White Arbitrage



The Booze Cruise

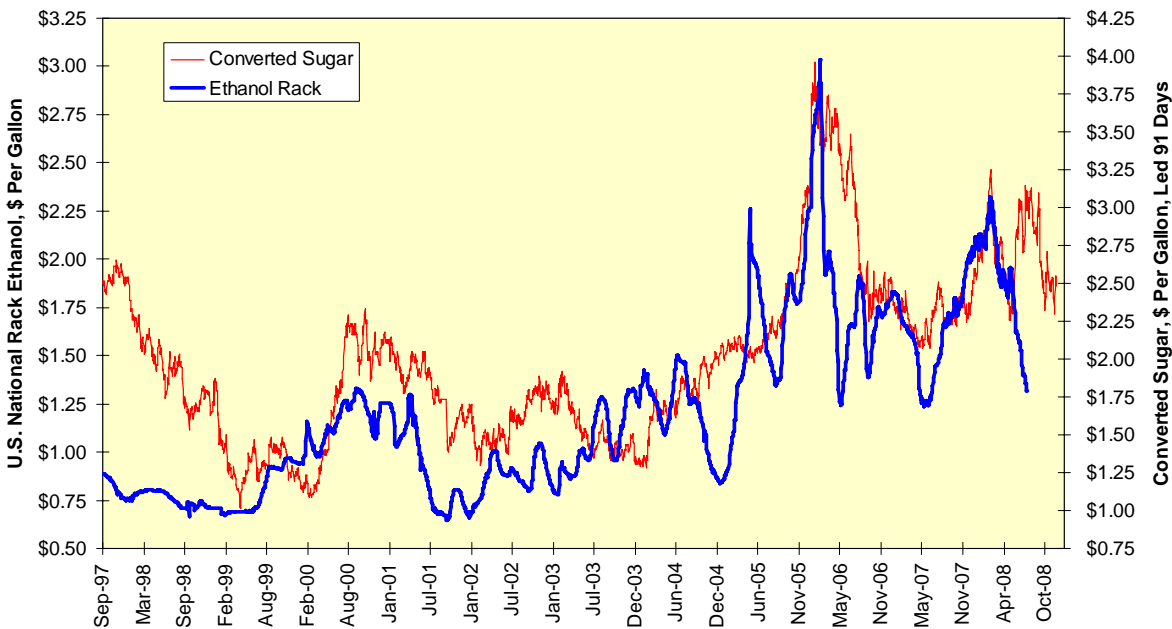
While the conversion of sugar cane into rum was a natural industrial progression, the only thing early distillers thought of fueling with ethanol was themselves and their customers. They might be horrified at the notion of putting perfectly good ethanol into a car’s fuel tank, but we digress.

While the U.S. imposes a 54¢ per gallon tariff on ethanol imports from non-favored trading partners – the ethanol from Caribbean Basin Initiative countries can come in without the tariff – and while most U.S. ethanol is derived from corn, the two forms of ethanol are equivalent and therefore subject to arbitrage. Markets are cruelly efficient in this regard.

Chart 3 depicts the comparison between the U.S. national rack price of ethanol and “synthetic ethanol,” which is simply sugar in cents per pound multiplied by a .1477 conversion factor. This “synthetic ethanol” has led the U.S. rack price of corn-derived ethanol by 91 days on average since mid-1999. If you are looking for evidence ethanol

importers have figured out a way to take unfinished Brazilian ethanol to a Caribbean finishing plant for re-export to the U.S., look no further.

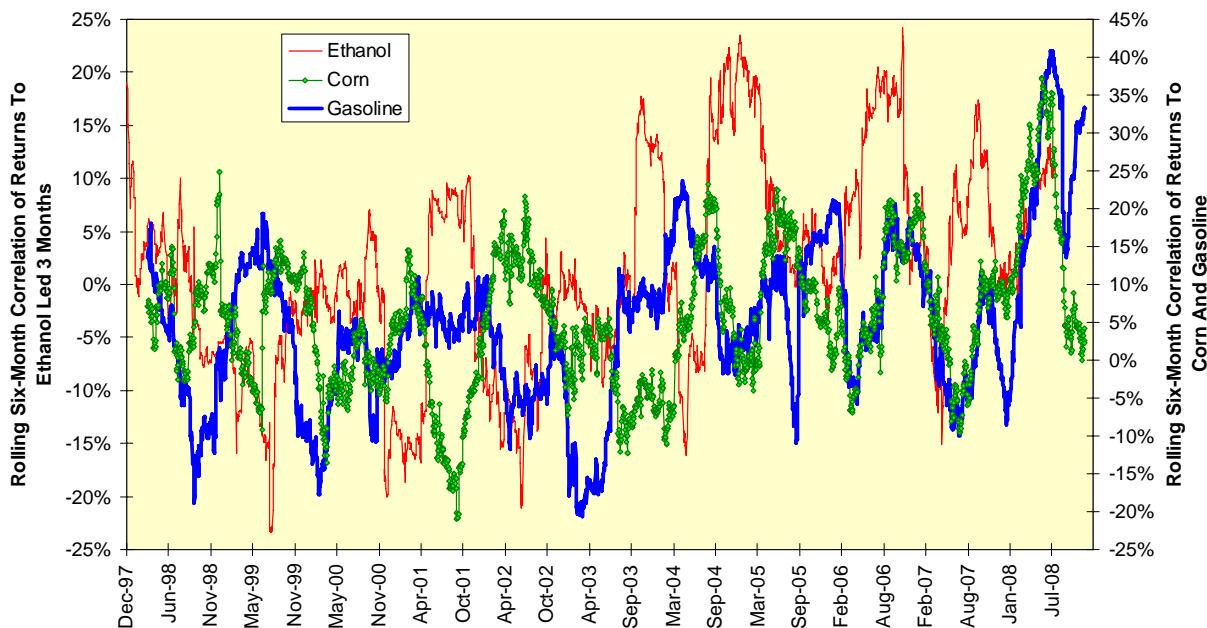
Chart 3: World Sugar Leads Domestic Ethanol



If sugar is linked to ethanol, and ethanol is linked to both corn and gasoline, then it stands to reason sugar is linked to both corn and gasoline as well. Furthermore, as the U.S. gets deeper and deeper into corn-derived ethanol production, the link between sugar and both corn and gasoline should be growing over time.

That growing link is clearly visible in Chart 4. The rolling six-month correlation of returns between sugar and corn and gasoline moved to all-time highs in July 2008. Restated, the link between the fuel in your car and the soda in the machine is at or near the highest it has ever been.

Chart 4: Sugar's Correlation Against Selection Markets



Students of commodities learn to appreciate the divine wit. Why is something as useful as platinum so rare and something as useful as silicon so abundant? Why did the reserves of crude oil get distributed as they did, and so on? In the case of sugar, we have to appreciate the basis of all photosynthetic life on earth is a process that turns

sunlight, water and carbon dioxide into glucose, a simple sugar. That glucose then combines with fructose to form sucrose, the sugar we trade, and a host of other carbohydrates. All animal life depends on this process going on in green plants.

All fossil fuels, which include crude oil, natural gas and coal, trace back to this process, which means we are burning millions of years of stored sugar, and now we are trying to replace it with an artificial sugar derivative, ethanol, using one crop year at a time. Until there are technological breakthroughs, this is probably a fool's errand, but the world has sufficient fools, does it not?

And then there is the irony of the crop that created wealth in the New World – we will leave all that plundered gold and silver out of the discussion for now – coming back to create another round of wealth. The sugar market is changing, too. It used to be you traded the supply and demand of the commodity. Now every sugar trader has to keep one eye on the corn market and another eye on the energy market. Those who say you cannot teach an old dog new tricks should look at the 21st Century sugar market.