

## Candy Makes Cupid Stupid

The world can be divided into chocoholics and those who should be; I proudly include myself in the former category. Small wonder, then, we celebrate St. Valentine's Day with boxes of bon-bons and other cocoa-crammed confections.

The cocoa tree is native to the Americas. The Aztecs made a surely unpalatable drink from unsweetened cocoa and chili peppers. Chocolate candy really did not take off as an item of global commerce until cocoa trees were transplanted to African plantations. By the mid-nineteenth century the ever-enterprising Swiss softened the taste and the consistency by adding milk, sugar and extra cocoa butter. There you go, history in a heart-shaped box.

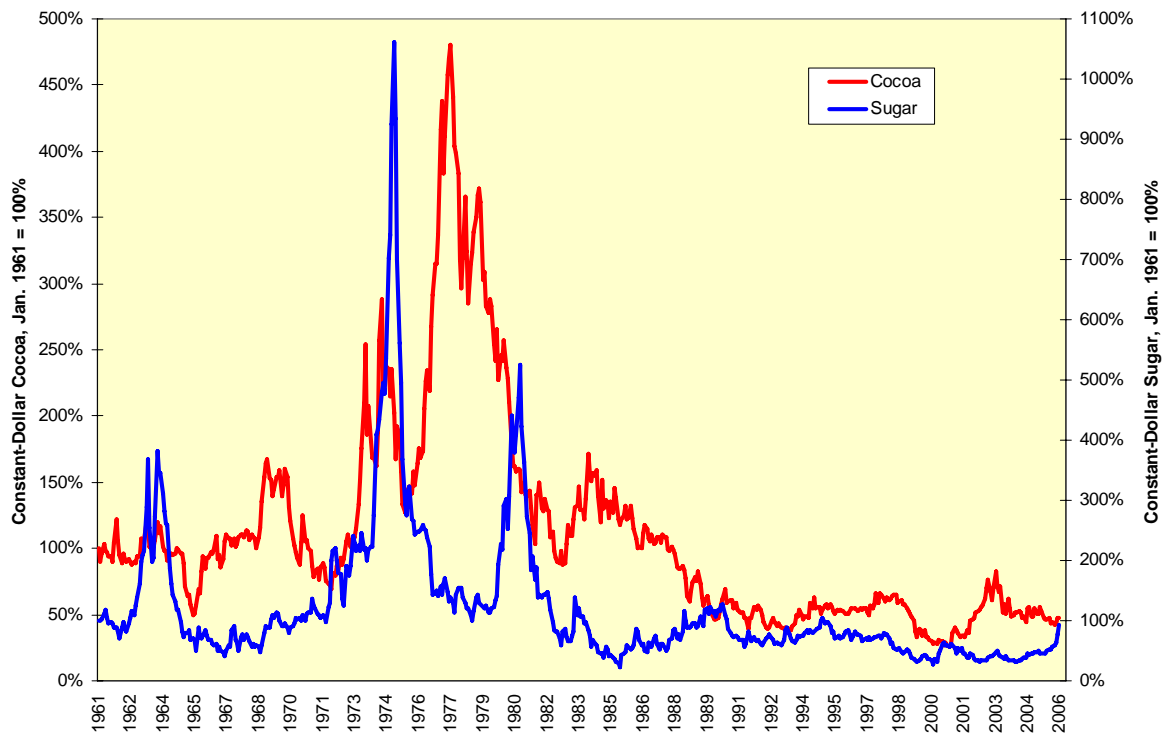
Incidentally and quite seriously, those African cocoa plantations of yesteryear have not been exemplars of enlightened labor relations. Child abuse, forced labor and even slavery have been alleged. There is now an [International Cocoa Initiative](#) to improve working conditions.

### Cocoa And Sugar

A recurring theme in these parts is there really is no singular entity called "commodities," the best efforts of latecomers to the party notwithstanding. Just because a commodity is both tangible and exchange-traded does not put it on a bullish track. Perhaps no commodity illustrates this better than cocoa. Its constant-dollar price is only 47.1% of its January 1961 level. The constant-dollar price of sugar, cocoa's confectionary soulmate and recent favorite of the biofuels crowd, is 93.5% of the level when John Kennedy took the oath of office. Ask not what commodities can do for you; ask what you can do for commodities.

By the way, cocoa and sugar do not benefit as much as other commodities from long-only index funds. Their weights in the Goldman Sachs Commodity index are .19% and 2.29%, respectively. In the Dow Jones-AIG index, they account for 0% and 2.967351% - I don't make this up, I just report it - respectively. In other words, if they are going to go higher in price, they are going to have to do it on their own fundamental power. All's fair in love and war; no one said a thing about commodities.

### Candy Is Dandy. And Cheaper



## Thoughts on Biofuels

The huge price spikes for both of these “soft” commodities in the 1970s and the long periods of torpor thereafter illustrate once again why you do not want to be a primary commodity producer in the grand scheme of things. Someone else can come along and plant more cocoa trees or sugar cane or sugar beets, use improved fertilizers, pesticides and herbicides and toss in a little genetic modification here and there, and supply will come out of the woodwork, literally and figuratively.

Even with all the hoopla about sugar being an energy commodity, this will remain true. It is hard to conjure an industry more ripe for technological improvements than the conversion of sunlight into ethanol. The simple thermodynamics of photosynthesis mandate significant net energy losses every step of the way. Crops such as corn or rice manage to convert 1-2% of the energy received in sunlight into biomass; sugarcane is a major outlier, able to convert nearly 8% of sunlight into biomass. But then this sugar has to go to feed the yeast which produce ethanol and carbon dioxide (think beer) as waste products. The theoretical maximum conversion of sugar into ethanol is 51.4%; practical conversion rates are around 35%.

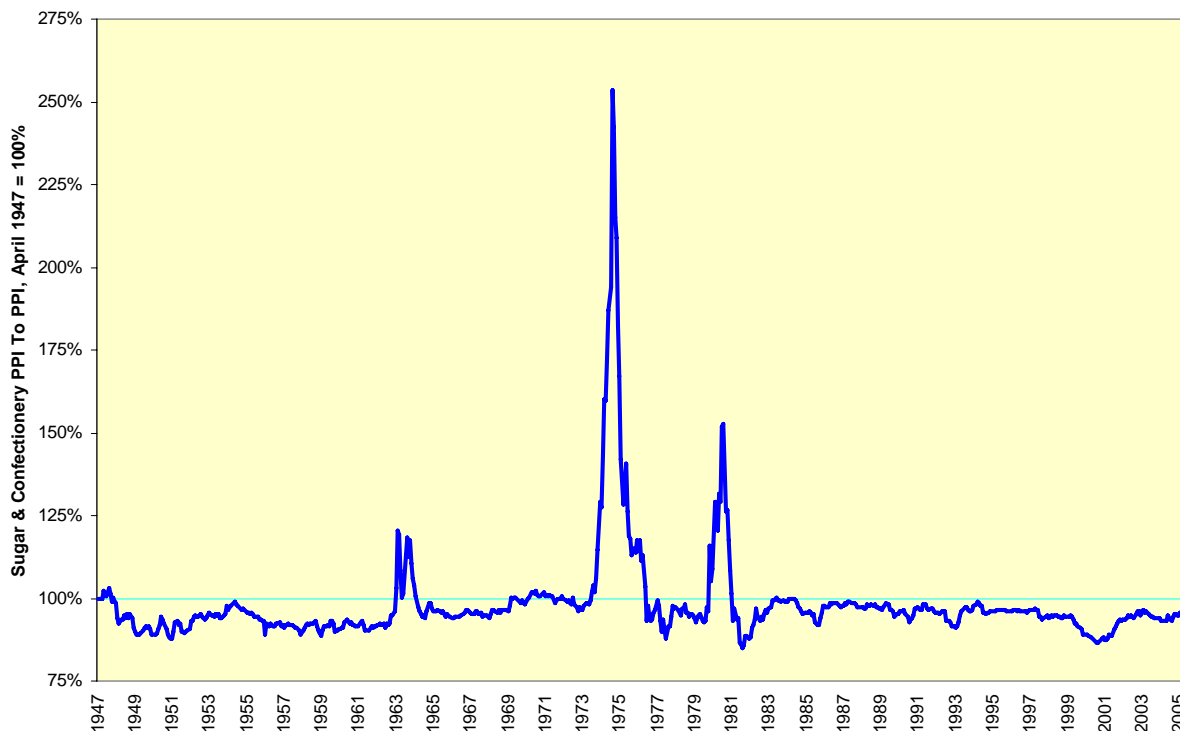
Once you start accounting for all the energy and capital inputs into farming, harvesting, producing, fermenting and distilling, transporting and distributing ethanol, you may be at a net energy loss. It does not take much of a leap of imagination to say there is vast room for technological improvement in converting sunlight into useable fuel. And when that happens, the real price of sugar will plunge.

Here’s some advice to save you a few bucks: If you had not heard of switch grass prior to last week’s State of The Union address, do not invest in it now.

## Back To Candy

The Producer Price index for sugar and confectioneries reflects the inability of sugar and confectionery suppliers to gain any sort of pricing advantage over time. It has captured only 94% of the total PPI gain since 1947; the huge disruptions of the 1970s are easy to spot on the chart.

### One Brief Shining Moment



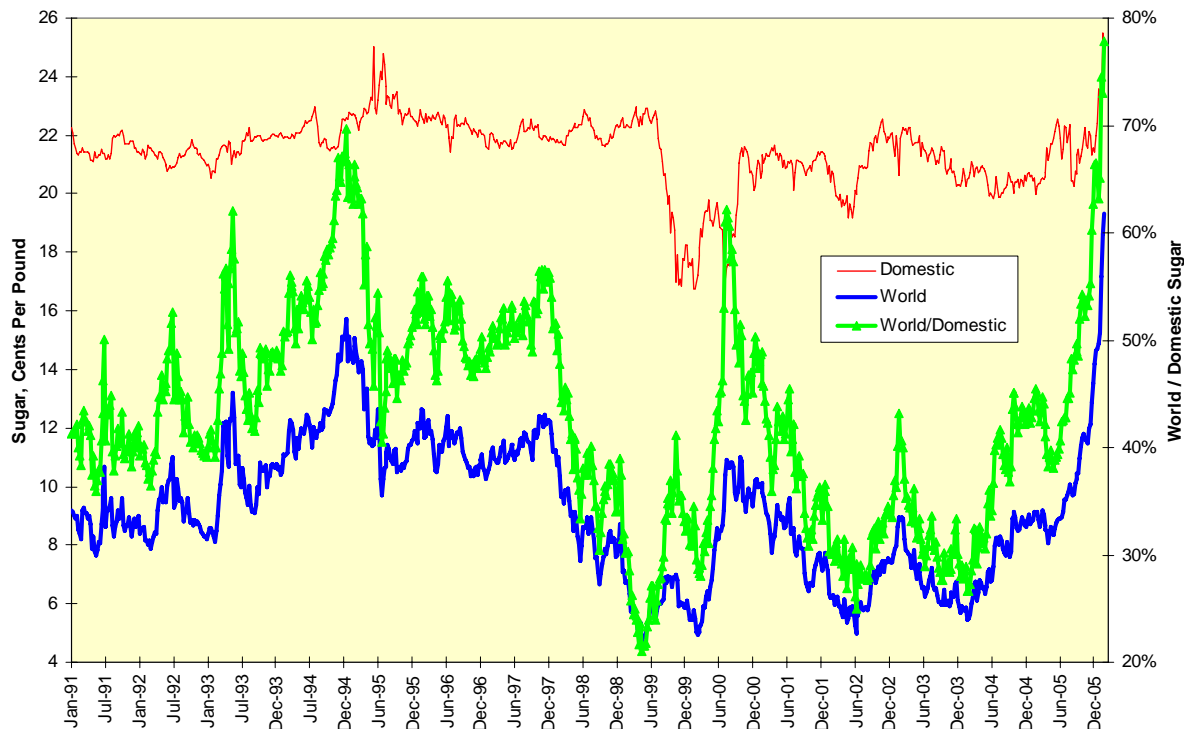
How have individual firms’ performances relative to their benchmarks fared as a function of cocoa and sugar prices? First, let’s keep in mind that sugar and cocoa constitute only a small portion of the cost mix for most integrated food firms such as Kraft, Kellogg Foods, ConAgra and General Mills. Second, the production side of the world sugar and cocoa industries are dominated by either state marketing boards or by privately held firms such as the Fanjul family’s Florida Crystals, Inc. Some of the largest confectioners, such as M&M/Mars, are privately held.

The dominance of private firms, state firms and widely diversified food firms should not surprise you. This industry structure is one way of managing commodity price risk.

Finally, sugar is one of those commodities politicians of all stripes cannot resist. We protect beet growers in the Dakotas and cane growers in Florida and Louisiana, and we almost let their opposition derail passage of the Central American Free Trade Agreement. The European Union's technocrats in Brussels have a similar soft spot for sugar beets. As a result of our protections, sugar prices to the consumer have been kept well over the world price for sugar for years.

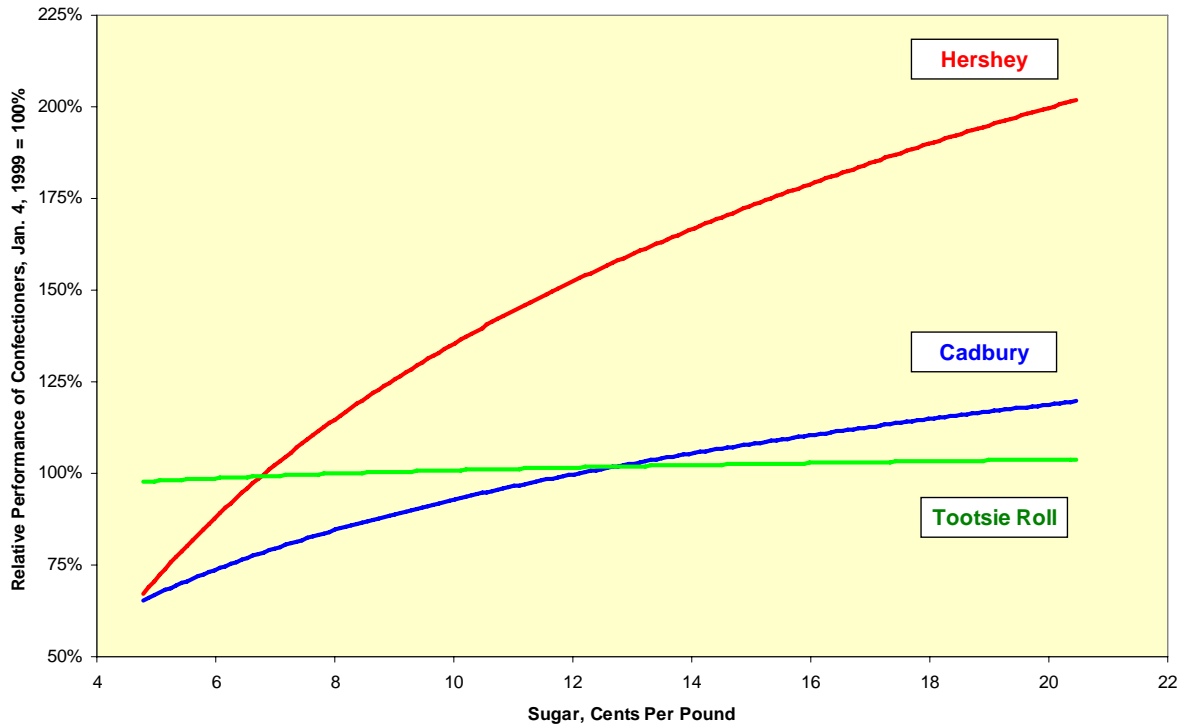
The recent rally in world sugar prices, or No. 11 sugar, still has kept prices lower than the domestic, or No. 14 sugar, contracts traded on the New York Board of Trade. Don't tell the "hot commodities" crowd, but you have been paying the high domestic price for years. The rest of the world is just catching up to our prices.

### You Have Been Paying The High Price For Years



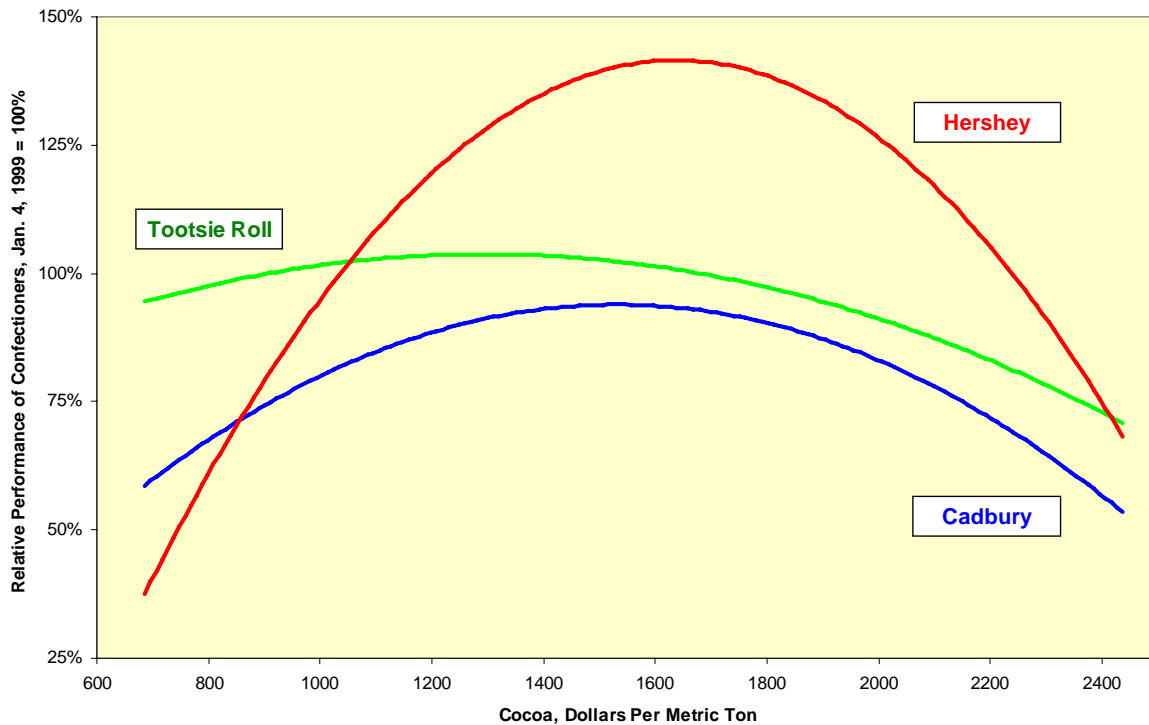
Given this insulation from world sugar reality, how do the performances of three confectioners, Hershey Foods, Tootsie Roll and Cadbury Schweppes relative to the Russell 3000 index change with world sugar prices? We should not expect a negative impact at all, and indeed the trend curves of all three confirm they simply do not care about higher world sugar prices.

### Higher World Sugar Does Not Affect Confectioners



However, we should expect higher cocoa prices to affect confectioners' margins, and this does seem to be the case. The relative performance of all three confectioners declines as cocoa prices rise.

### Higher Cocoa Prices Do Affect Confectioners



So when you present your sweet offerings to that special someone next week, be rest assured the confectioner cares not a whit about No. 11 sugar. Cocoa, well, that's another story. Buy the bon-bons, sell the stock.

