

## Physical Commodities Are Not An Inflation Hedge

No trader ever makes a mistake just once, an observation scalable to markets and economies themselves. All the ever-increasing level of automation in trading via algorithms will do is eliminate predictable human emotions and open the door for an exponentially expanding series of new and different errors in lieu of the same errors repeated ad nauseam.

Let's take the simple notion physical commodities are a good hedge against inflation. The logic is if we debase money, and the principal complaint of central banks in recent years is we are not debasing it quickly enough for their tastes, then the money price of stuff has to rise. All hail stuff. The only problem with this construct is a higher price for any commodity induces both new supply and slows the growth in demand. Over time, this leads to declining real prices for physical commodities.

Please consider the following passage published here in July 2001, almost fifteen years ago (see "Next Civilization, No Commodities!"):

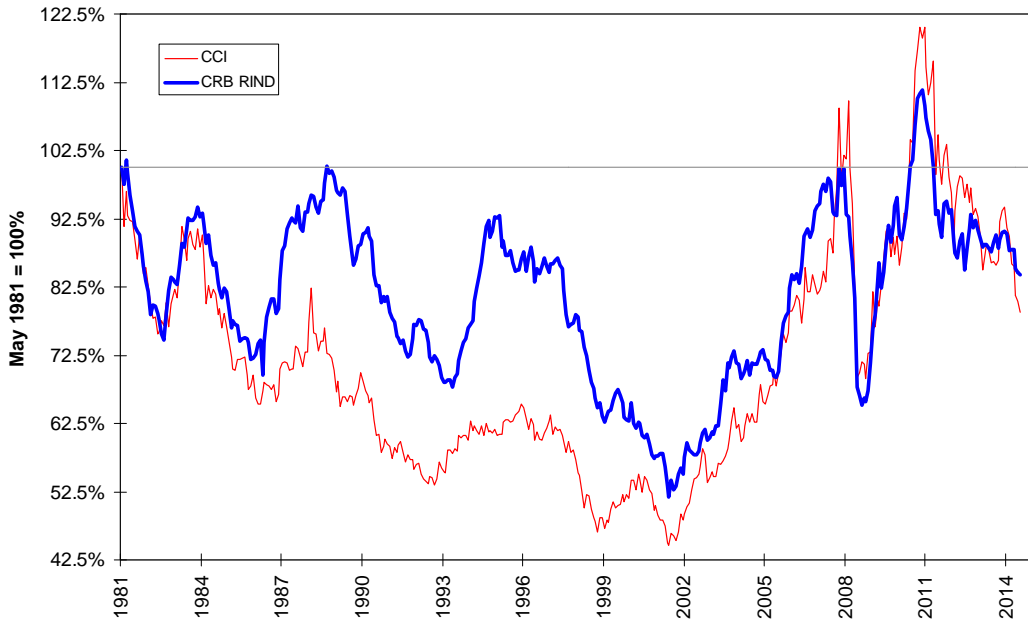
Of course, real commodity prices *should* fall over time. Not only does each mouth come with a pair of hands; those hands come equipped with a brain. Productivity increases allow us to feed more people with a better diet. If real prices didn't fall, the forces of competition would ensure the obsolescence of that given commodity: Who still uses whale oil for illumination? For this reason, the Malthusians and their tiresome arguments starting with "the world's running out of..." are, have been, and always will be wrong. More than 60 percent of all crude oil ever consumed has been consumed since the first oil shock of 1973, and yet proven reserves of petroleum stand higher today. If it seems we create resources by consuming them, that's correct. Markets do wonderful things when given the chance.

### Index Trends

Let's start with an observation intended to make commodity devotees' heads explode: Financial assets have outperformed commodity index investments over time and therefore have offered greater protection against inflation and currency debasement by definition.

First, let's take two spot commodity indices, the Continuous Commodity index (CCI), a successor to the venerable CRB index, and the CRB's Spot Raw Materials index (RIND). If we go back to the May 1981 inception of the RIND and deflate these indices by the producer price index, we see neither index has been able to hold its own against the PPI. The RIND has been below 100 percent of its deflated May 1981 value since August 2011; the CCI last saw the 100 percent mark in January 2012.

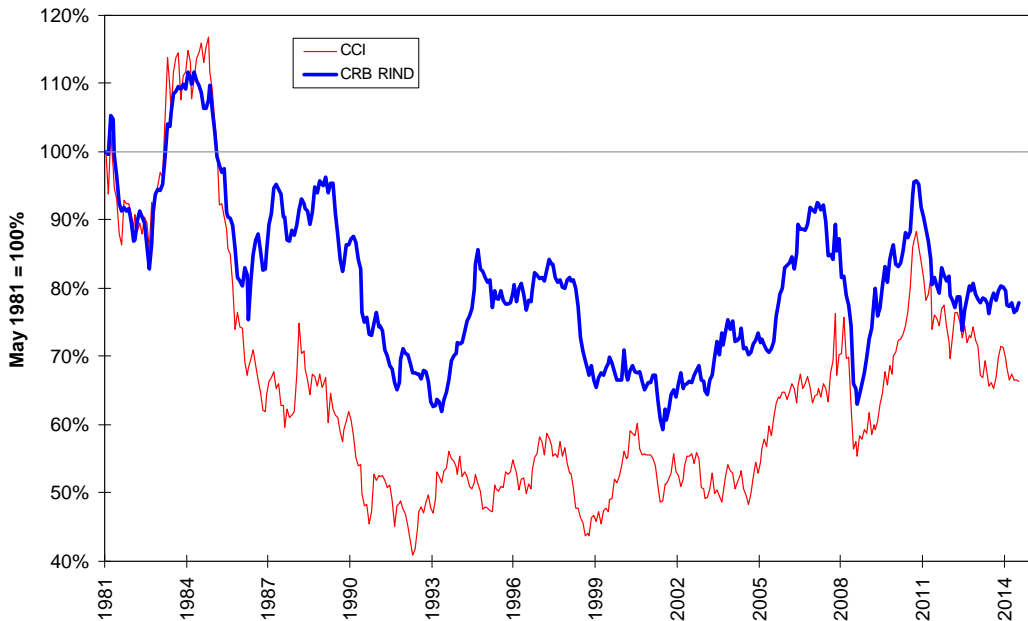
**Constant Dollar Commodity Indices  
Deflated By PPI**



Source: Bloomberg

In addition to producer price inflation, physical commodities are faced with currency devaluation as well. The Federal Reserve's broad trade-weighted dollar declined 7.65 percent between May 1981 and November 2014. If we add this currency depreciation into the mix, how well did these spot commodity indices do? The answer in a word is "badly." You would have to go back almost thirty years to the period just before the U.S. government embarked on a weak-dollar policy as part of the September 1985 Plaza Agreement to find a period when spot commodity indices offset both forms of monetary debasement combined.

**Constant Dollar Commodity Indices  
Deflated By PPI & Adjusted For Trade-Weighted Dollar**



Source: Bloomberg

## Investable Indices

At this point, commodity investment advocates point out, correctly, you are not investing in spot commodity indices but rather in commodity futures where the roll yield from one contract to another, the return on collateral and the rebalancing yield on the index have to be added to the return on the spot indices.

Fine; let's switch the basis of comparison from spot commodity indices to the Bloomberg and S&P-GSCI total return indices and re-index the start date of the analysis to the January 1991 inception of the Bloomberg total return indices. The S&P-GSCI adjusted for the PPI alone and with the dual adjustment has gained 0.14 percent and 0.19 percent per annum, respectively. Comparable figures for the less energy-intensive Bloomberg indices are 1.60 percent and 1.65 percent, respectively.

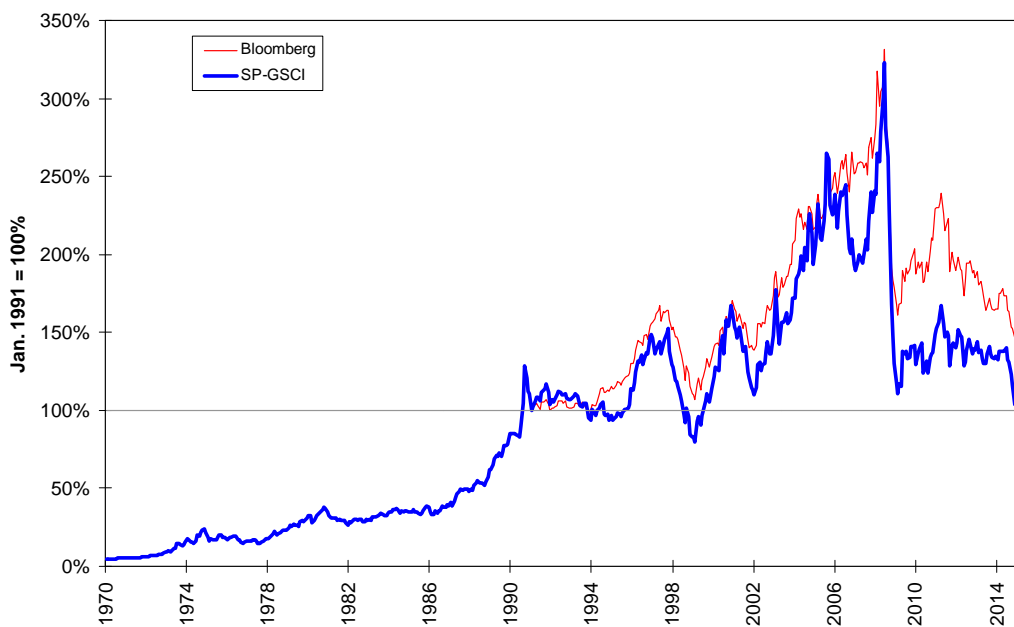
For purposes of comparison, the average annual PPI- and PPI/USD-adjusted rates of return for the Russell 3000 index have been 7.71 percent and 7.67 percent since January 1991. If we move to the Treasury market, the average annual returns for 7-10 year notes have been 4.68 percent and 4.63 percent for the notes after adjustment. The average annual increase for the PPI since January 1991 has been 2.10 percent; the Federal Reserve's trade-weighted dollar has gained 0.05 percent per annum.

## Past Performance, Future Results

The data over the past quarter-century are irrefutable: After three stock market rallies and two hellacious busts, after the most disbelieved bull market of all time, long-term Treasuries and after a huge commodity rally produced by China's integration into the global economy intersecting with long years of underinvestment, financial assets outperformed the PPI and the PPI outperformed commodity indices. Everything commodity bulls could have hoped for in terms of monetary debasement happened. The one thing they never counted on was the ability of markets to increase supply and reduce demand growth while finding ways to add value to non-commodity enterprises.

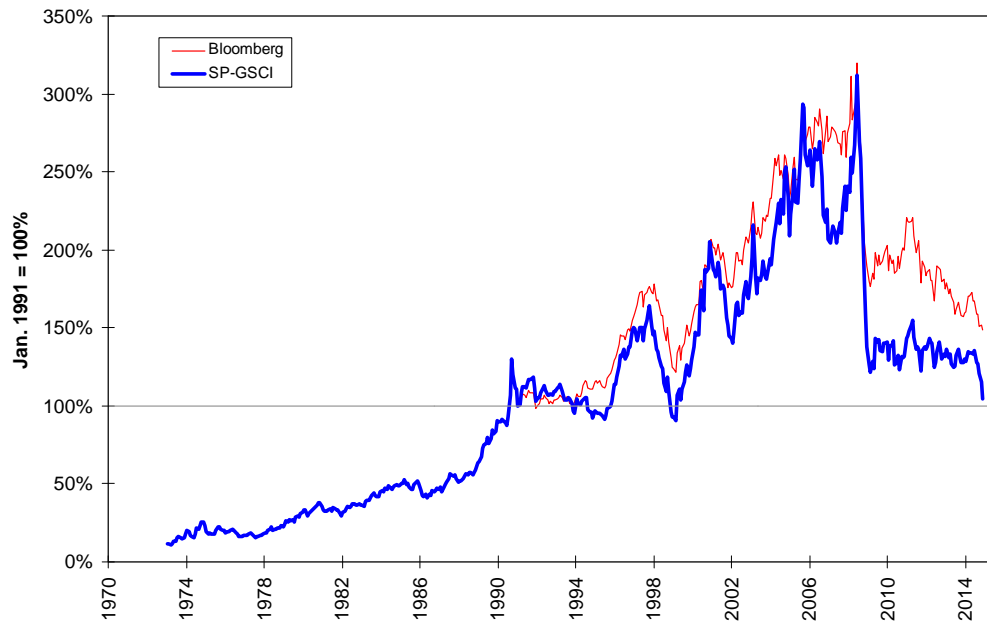
No one can predict the next quarter-century, and it seems highly unlikely from a mathematical viewpoint if nothing else the fixed-income rally will be duplicated. But no one will repeal the laws of supply and demand between now and 2040, meaning we should expect real physical commodity prices to continue their long-term declines.

**Constant Dollar Commodity Total Return Indices**  
Deflated By PPI



Source: Bloomberg

**Constant Dollar Commodity Total Return Indices**  
Deflated By PPI & Adjusted For Trade-Weighted Dollar



Source: Bloomberg