Had Enough Of The Dollar And Stuff?

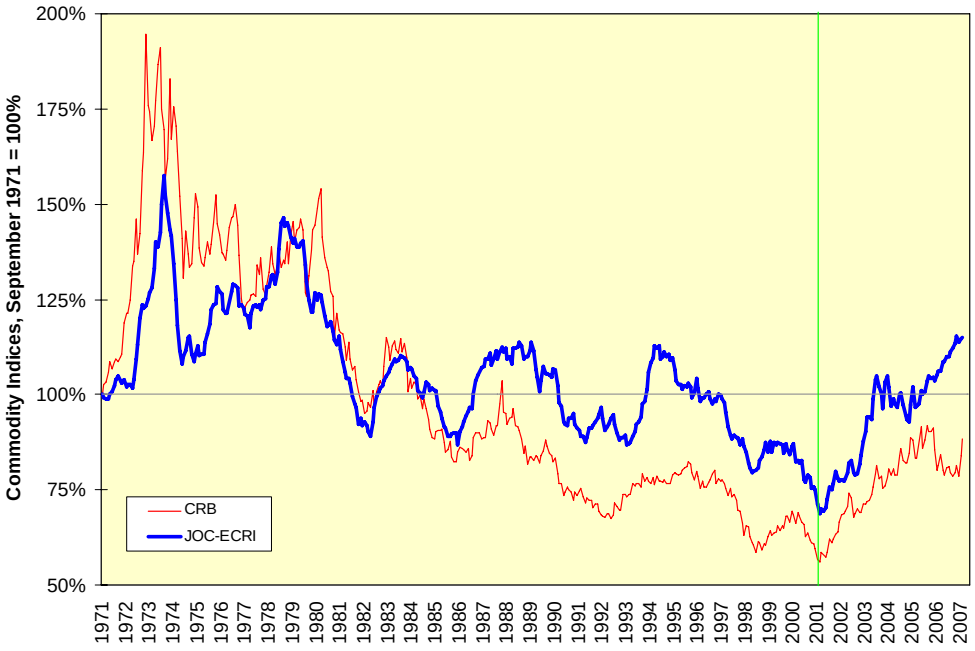
"For every complex problem there is an answer that is clear, simple and wrong." – H.L. Mencken

Very few concepts in finance are simpler than the money-stuff relationship, where "stuff" is physical commodities and "money" can be adjusted by either the relative strength of a currency or by its purchasing power. The simple relationship is when money becomes worth less, as it has an annoying habit of doing, the money price of stuff must rise in recompense therefor. However, there is a reason we call those who think simply, "simpletons," and that is they seldom look beyond the obvious.

Commodities And Producer Inflation

Commodities, whether represented by exchange-traded instruments or by industrial commodities traded largely in industrial markets, offer far less protection against either inflation, the loss of purchasing power in a single currency, or against a weaker currency, the loss of relative purchasing power on a global basis. Let's take two commodity indices, the Reuters/Jefferies CRB index of exchange-traded commodities, and the Journal of Commerce/Economic Cycle Research Institute's industrial commodity price index and trace their movements back to 1971. This startdate not only corresponds to the introduction of the JOC-ECRI index, but it approximately coincides with the unraveling of the fixed exchange-rate system.

Constant Dollar Commodity Indices Deflated By PPI

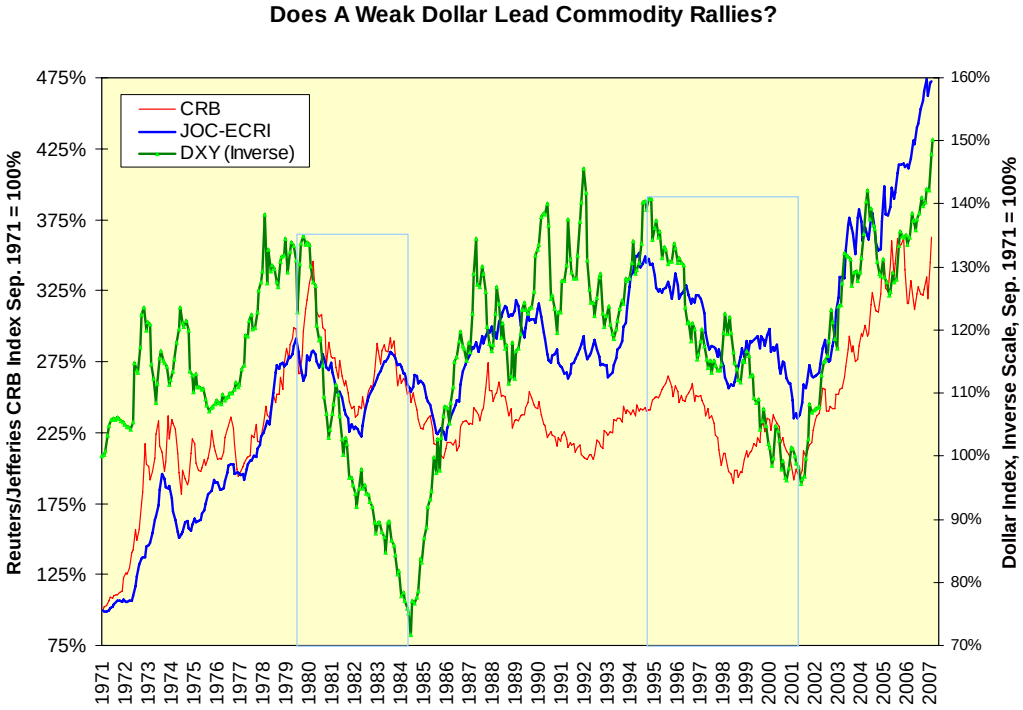


The present commodity boom did not take off until the end of 2001, marked with a green line. This is when the Federal Reserve's aggressive interest-rate stimulus of the American consumer turned into an aggressive interest-rate stimulus of the Chinese producer, who needed in turn to develop infrastructure in China.

Even after six years of a commodity boom, the inflation-adjusted CRB is still at 88 percent of its September 1971 level, and the JOC-ECRI index, which is designed to match the producer price index, is at 115% of its September 1971 level. Both indices spent years trailing the PPI and for good reason: Commodity producers often need to sell below the marginal cost of their production to meet their fixed costs of operation. When commodity prices fall, as they did from the early 1980s onwards into 2001, these producers had to sell more and more to maintain their total revenue needs.

What about the dollar? While it may seem as if the dollar's decline has been a fixed and permanent part of the financial landscape since the early 1970s, the greenback bas put in some ferocious rallies. It was in a strong bull market from September 1980 to February 1985 and April 1995 to January 2002.

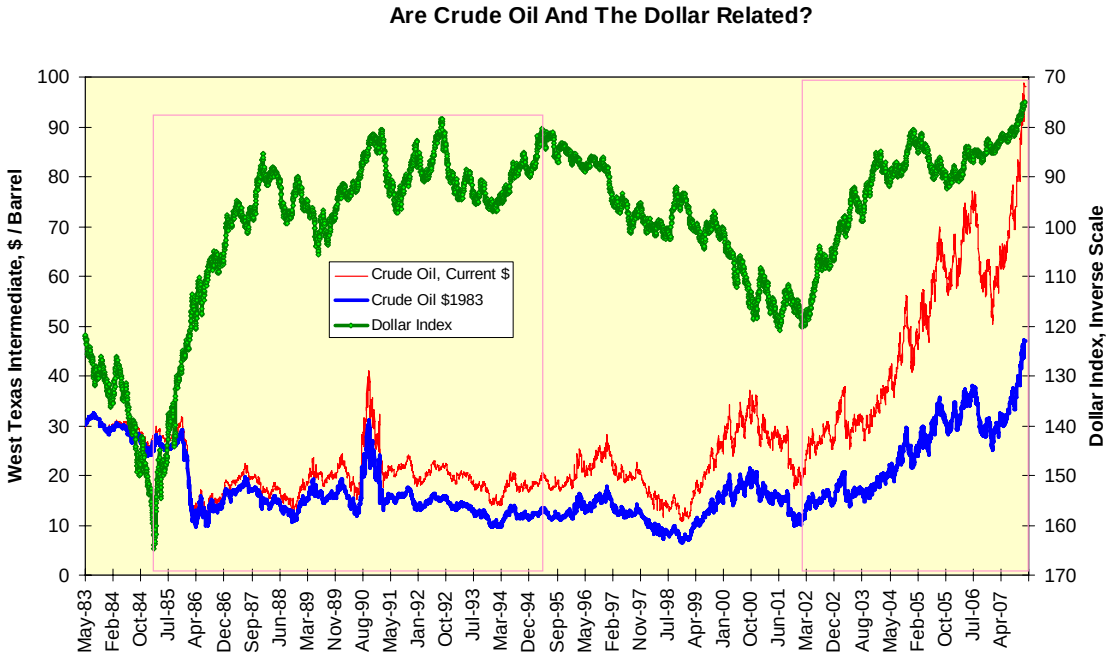
Did commodity prices stop and flop during those periods, marked with the blue rectangles? Only modestly, and we can make the same assessment in an opposite direction for the 1985-1995 decade of dollar weakness. The post-2001 dollar bear market stands as a glaring exception in this history, which suggests that while the dollar may be a factor in commodity prices, it is only a single factor and a very asymmetric one at that.



The Case Of Crude Oil

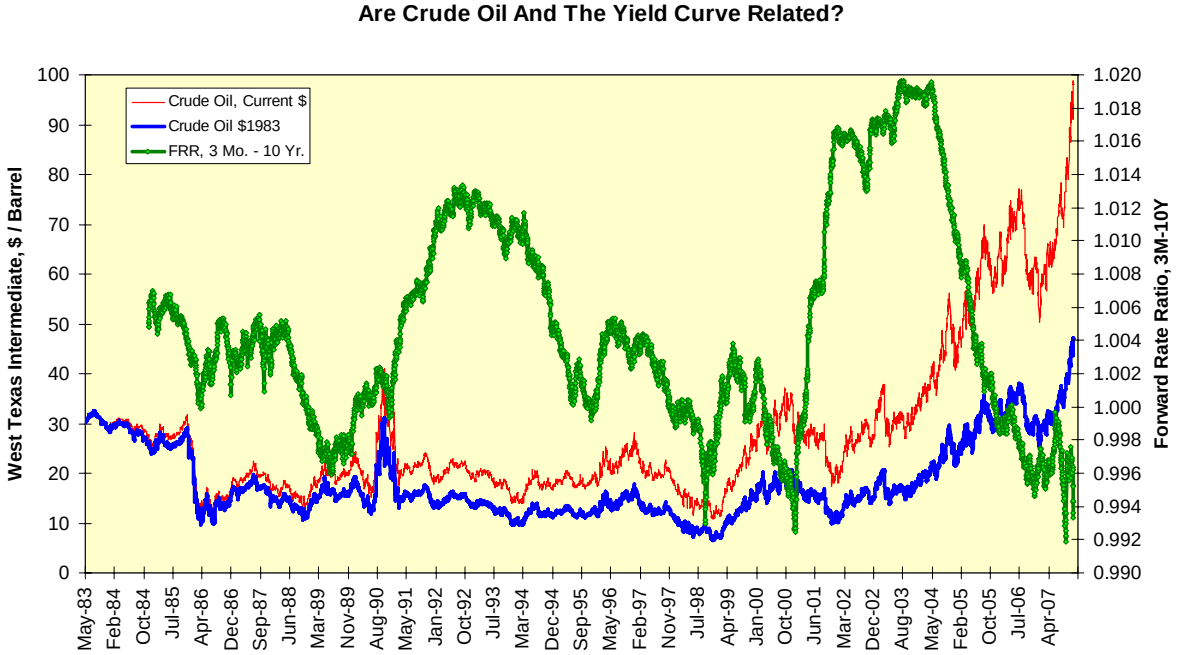
One of the great fallacies of commodities is there is such a thing as "commodities." In an argument too long to detail here, the near-zero and even negative correlations of returns between various individual commodities over time argue for their treatment as separate assets, not as a collective entity. Let's isolate crude oil and its relationship to monetary factors as, incredibly, many commentators were attributing its late-2007 charge toward $100 per barrel to dollar weakness.

Crude oil, both in current and in constant 1983 dollars, languished in a long trading range during the 1985-1995 bear market in the dollar, marked with a roseate rectangle. That most certainly has not been the case since 2001; this dollar bear market has coincided with the largest rally in crude oil's history. Crude oil prices, both in current- and constant-dollar terms remained unaffected by the dollar's 1995-2000 bull market. Once again, a relationship has to work at all times and in all market conditions to be considered a primal market factor; you should not be able to pick and choose the data sample most likely to support your prior conclusions.



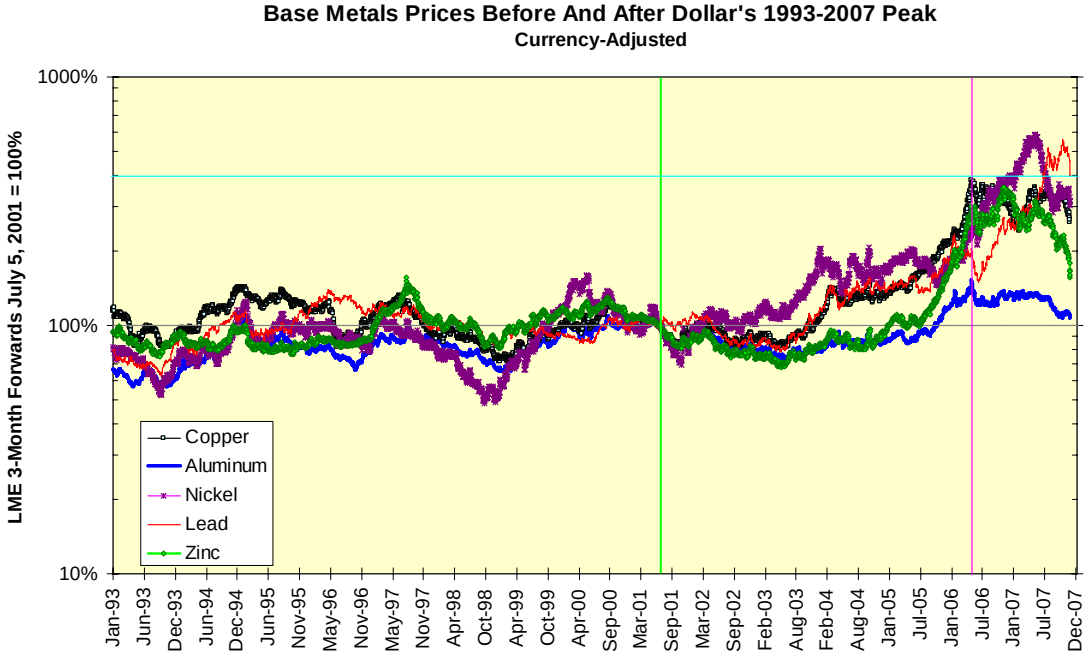
And while we are at it, what about crude oil prices jumping as an artifact of the Federal Reserve's monetary policies? Let's use the forward rate ratio between three months and ten years to assess whether the Federal Reserve has been tightening or loosening. This is the rate at which we can lock in borrowing for 9.75 years starting three months from now, divided by the ten-year rate itself. The more this ratio exceeds 1.00, the looser the monetary policy.

Two huge periods of loosening stand out in the chart below. The first was during the early 1990s and the second was between 2001 and 2004. Crude oil prices did not react to the first loosening at all, and they continued their surge during the 2004-2006 flattening and inversion of the yield curve. The same conclusion applies as before: A relationship must work at all times and in all market conditions to be causal.



Base Metals

Now let's turn to a set of commodities that collectively are good coincident indicators of global industrial activity, the base metals traded on the London Metals Exchange. If we index the prices of copper, aluminum, nickel, lead and zinc to the July 5, 2001 peak of the dollar index after 1993, marked with a green vertical line, we find that behavior changes in May 2006, marked with a magenta vertical line.



Given that the dollar index declined more than 10 percent after May 2006 and the prices of the industrial metals stalled, can we link the dollar and the metals? After all, if people are willing to link crude oil and commodity indices to the dollar without demonstrable evidence therefor, shouldn't they be willing to link the base metals to the dollar with an equal absence of evidence?

No, and here is a statistical reason why. If we classify the January 1993 period as Period 1, the July 2001-May 2006 period as Period 2 and the time since May 2006 as Period 3, we can run regressions of these metals prices as a function of the dollar index and run what are called F-tests to determine whether the relationships are equal. The answers are presented below. They are not.

Probability Regressions Are Equal

	Copper	Aluminum	Nickel	Lead	Zinc
Period 1 To All	0.00%	0.00%	0.00%	0.00%	0.00%
Period 2 To All	0.00%	0.00%	0.00%	0.00%	0.00%
Period 3 To All	0.00%	0.00%	**12.10%**	0.00%	0.00%
Period 1 To Period 2	0.00%	0.00%	0.00%	0.00%	0.00%
Period 1 To Period 3	0.00%	0.00%	0.00%	0.00%	0.00%
Period 2 To Period 3	0.00%	0.00%	0.00%	0.00%	0.00%

What did happen after May 2006 was a reaction to the first credit tightening by the Bank of Japan and a modest unwind of the yen carry trade. Speculators who had been financing risky assets by borrowing cheap yen reversed the trade then, and even though the music had stopped, some of them kept on dancing in other markets. The credit crunch of 2007 was underway even though no one recognized it at the time.

Regardless of what the near-term future brings for commodity prices, inflation and the dollar, we should recognize they are not equivalent markets. If you are afraid of dollar weakness, buy other currencies. If you are afraid of inflation…tough: Very few markets provide an adequate hedge against inflation. And if you are bullish on the global economy, a combination of commodities and equities can do the trick.