Commodity-Currency Correlations Unstable

Here is a question for those into penitence: Does confessing a sin and cautioning others not to follow you down the wayward path toward perdition, or Poughkeepsie, count towards remission and expiation? The sinner-in-distress is none other than your humble correspondent; the sin is using the words, "dollar" and "commodities" to confer a commonality of behavior on what are otherwise disparate markets.

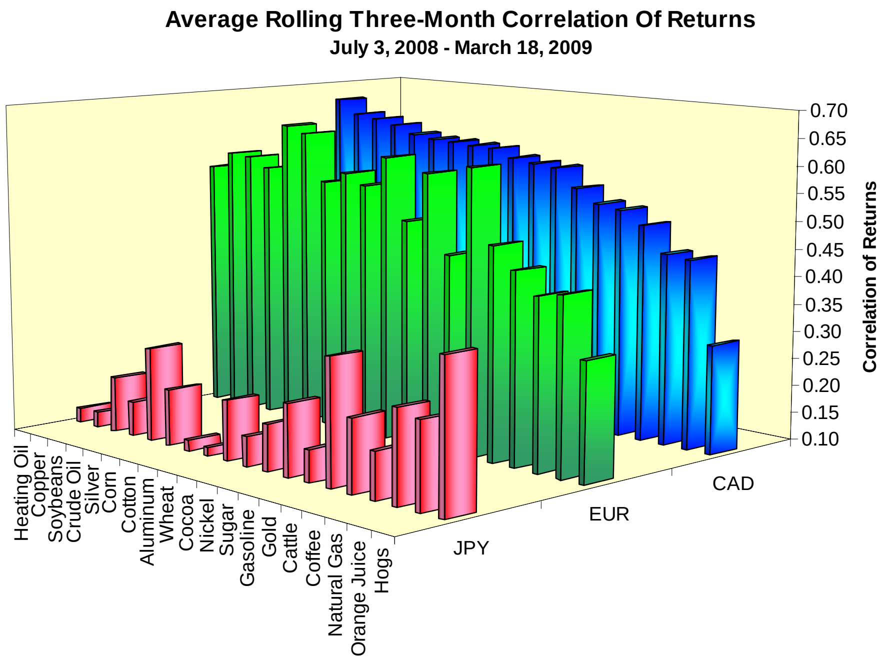
At my age, that is as good as the sins get.

I have contended over the years we lump all manner of physical commodities together by virtue of 1) they are tangible and 2) they are exchange-traded. We also lump a number of different currencies together in the dollar index, which is 57.6% the euro. Not only does this give an outsized weight to a currency whose home is not the marginal buyer of most physical commodities and is a minor producer of even fewer, but it ignores the contributions of other currencies of significance. Brazil and Australia, to name just two, are quite important in the world of physical commodities but too little attention gets paid to the Brazilian real or Australian dollar in these discussions. China is the marginal buyer of most physical commodities, but as the yuan remains in close alignment to the dollar, why bother dealing with it separately?

Different Markets, Different Times

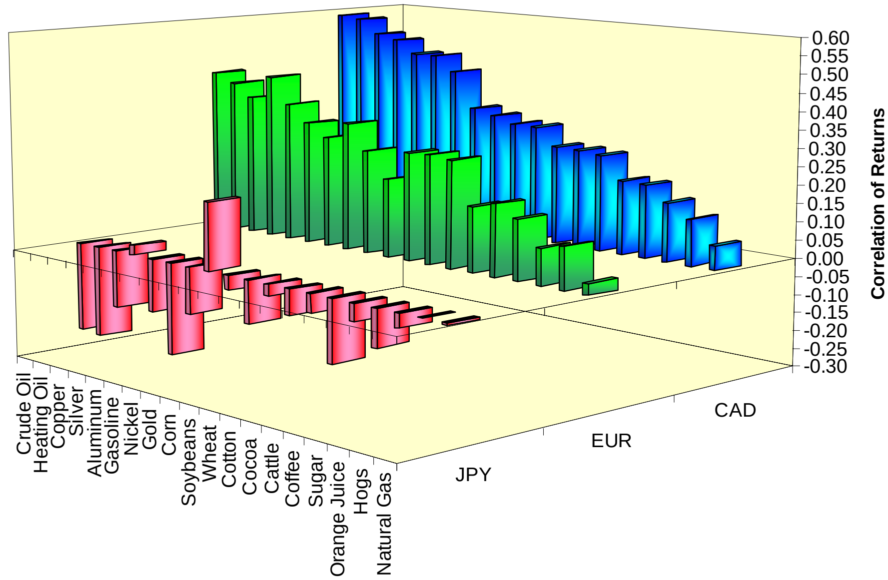
If it is a market of stocks and not a stock market – OK; that is insipid – let us declare they are markets of commodities and currencies and not "commodities" and "the dollar." To illustrate, let's take the correlations of returns for nineteen different commodities and three major currencies, the euro, yen and Canadian dollar, over two different time periods. The first will extend from the July 2008 peak in commodities – oops, I did it again! – through the day QE1 was announced in March 2009. The second period is from QE1 through the end of QE1 and into the present QE2.

Both charts depict the average rolling three-month correlation of returns between the individual commodities and the individual currencies. They are sorted along the dimension of the Canadian dollar. Please note the rather striking differences between the two.



Average Rolling Three-Month Correlation Of Returns

March 19, 2009 - December 7, 2010



Both the magnitudes and the ranks of the correlations are different, and significantly so, between the two periods. First, all of the correlations against the yen were positive during the first period, and nine different commodities' correlations of returns vis-à-vis the Canadian dollar exceeded 0.60. In the second period, 16 of the 19 correlations of the yen against individual commodities are negative. Please note how the levels of correlation for the euro, the dollar's main sparring partner, have declined.

The story does not end here, of course. These comparisons can be extended back in time and expanded across other currencies, but the conclusion would not change: You have to look at individual markets and eschew broad conclusions on the order of, "When the dollar declines, commodities rise." In addition, do not assume commodities – I have sinned again! – link more closely to currency movements during bull markets. After all, the first period noted above was notable for a crash in nearly all commodity prices and for a dollar stronger by default during the financial crisis.