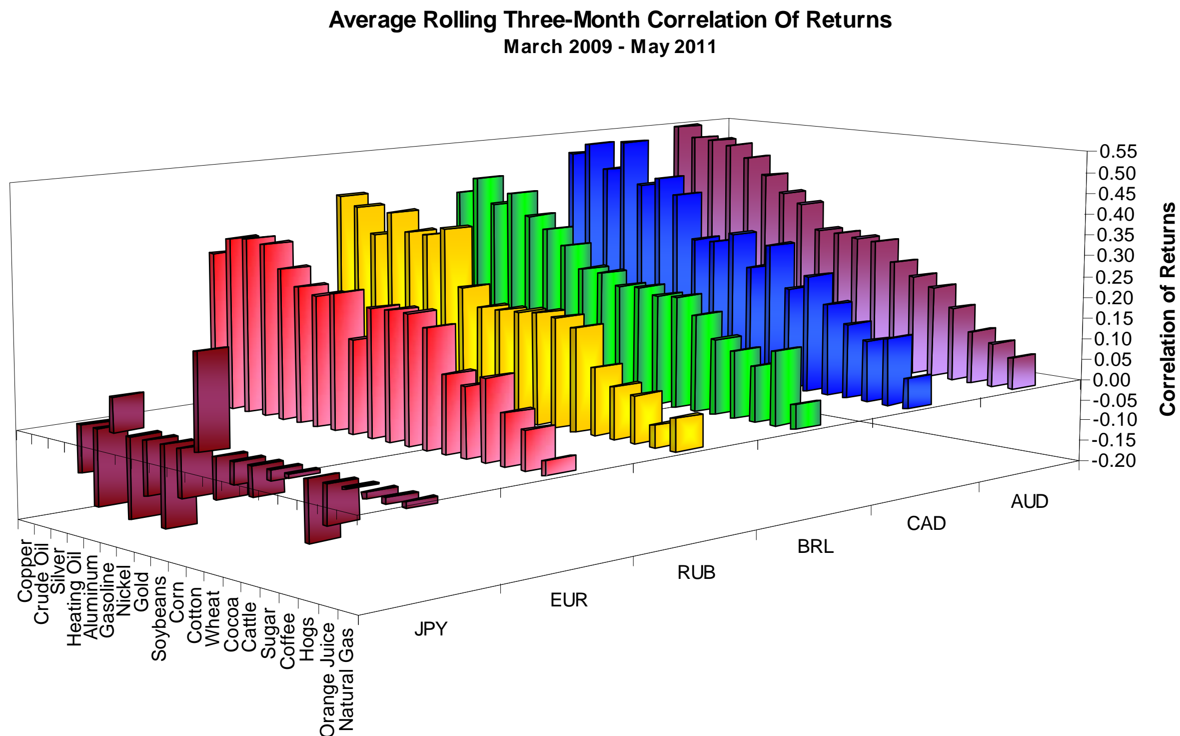
Revisiting Commodities And Currencies

Last Thursday provided us with one of the more interesting excursions into the world of price discovery I have witnessed, especially in the energy markets. When the front-month crude oil contract is down $11 per barrel at its low and there have been no fundamental developments of significance, you know extraneous factors are involved. All of this is an embarrassment to the efficient market hypothesis and its central tenet prices represent all available information. No; this was a speculative liquidation and a technical rout unrelated to supply/demand balances, risk assessments, market spreads, etc.

One of the factors cited was a selloff in the euro triggered by dovish comments from ECB president Jean-Claude Trichet. The argument was made immediately that "commodities" were getting trashed by a stronger "dollar." That, as I discussed on two separate occasions in December 2010, the first time with the euro/yen/Canadian dollar and the second time with the Australian dollar/Brazilian real/Russian ruble, just does not pass muster. What it does pass shall be left unstated.

Let's combine the two comparisons into a singular display of six currencies and 19 commodities. Cash market prices are used whenever possible for the commodities to avoid the problems associated with contract rolls. The chart below depicts the average rolling three-month correlation of returns across these 114 currency/commodity pairs across the entirety of the money-printing era from March 19, 2009 through May 5, 2011.



What do we see? First, the woebegone Japanese yen can be tossed from the analysis with no loss whatsoever. With the exception of gold and silver, the correlations are negative. Second, the classification of the Australian and Canadian dollars as "commodity-linked" currencies is reasonably accurate, at least on a relative basis. Third, even though the euro dominates the dollar index and is the only currency really capable of being a counterpart to the dollar for reserve purposes, it has the weakest correlation of returns outside of the yen in this sextet.

Only seven of the 114 pairs, just over 6%, have an average correlation greater than 0.50. These are the AUD against copper, crude oil, silver and heating oil and the CAD against copper, crude oil and heating oil. That is it. If we square the correlation coefficient to get the r^2, or percentage of variance explained, that means only seven pairs have an r^2 over 0.25. That is far less robust that most people imagine.

Can we get fancier statistically and start searching for what is called Granger Causation or looking for longer lead-times than the contemporaneous correlations displayed above? In the spirit of the times, yes, we can. But what we should really do is remind ourselves that in a monetary environment characterized by excess liquidity bordering on legalized counterfeiting where reasonable people are seeking ways to protect themselves against dollar debasement, the links between individual currencies and individual commodities are nowhere near as strong as assumed commonly.

Do I buy the ECB "caused" the commodity plunge? No, not really. There are reasons and there are excuses. That is an excuse. The reason, seen over the eons, is speculators can push a market beyond value but they cannot keep it there.