Of Commodities And Currencies

The huge commodity rally of the past four years has affected government finances around the world and has led to significant trade surpluses for exporters, particularly the crude oil exporting nations. In one of the many cruel jokes of nature, only a few resource exporters have even modestly deep and liquid markets for their currencies. Nigeria, Venezuela and the United Arab Emirates may be significant crude oil exporters, but do currency traders really wish to dabble in the naira, bolivar and dirham, respectively?

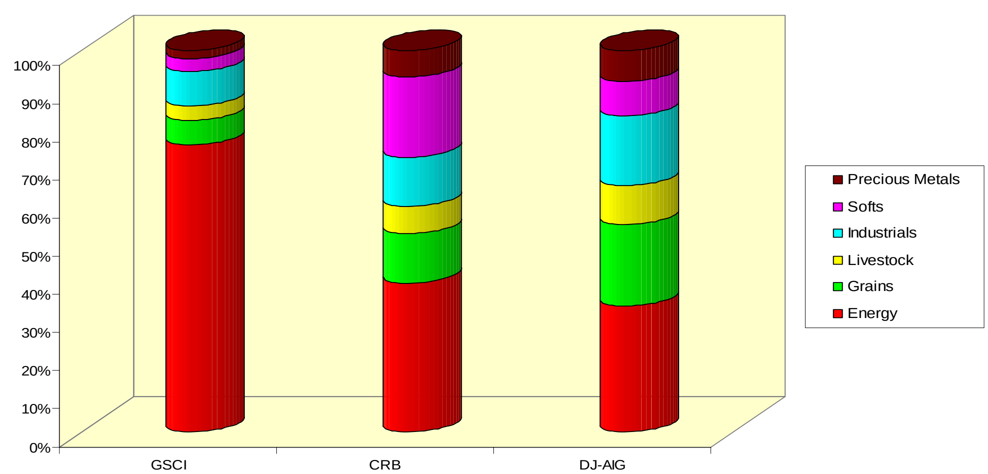
The temptation, then, is to do something functionally equivalent to looking in the well-lit corner of the room, regardless of whether you lost something there or not. Currencies such as the Canadian and Australian dollars (CAD and AUD) and to a lesser extent the South African rand, Russian ruble (RUB) and Chilean peso (CLP) are regarded as commodity proxies by many. As is the case with many generalizations and stereotypes, there is a measure of truth to these characterizations. Let's take a look at some key commodity/currency relationships and see whether these are as significant as tried-and-true valuation techniques for currencies such as interest rate differentials.

The Myth Of The Index

First, a brief note is in order. The author has argued in several conferences on the subject it is improper to place unrelated commodities in an index. Too many commodities have either a near-zero or even a negative correlation with each other, and many commodities have entirely different responses to movements in key factors such as interest rates, the yield curve and inflation expectations. The drive toward indexation, a drive which has attracted more than $100 billion into long-only commodity index funds, represents the reduction ad absurdum of an intellectual revolution born more than three decades ago with the publication of Burton Malkiel's classic *A Random Walk Down Wall Street*. Institutions accept indexation, and if you are in the business of raising funds, that is all you need to know.

However, there is no agreement as to how such an index should be constituted. If there were, we would not see such profound differences in commodity sector composition between the Goldman Sachs, Reuters/Jefferies CRB and Dow Jones-AIG indices as we do below. Bluntly, if we knew what we were doing, we would have converged on a common answer by now.

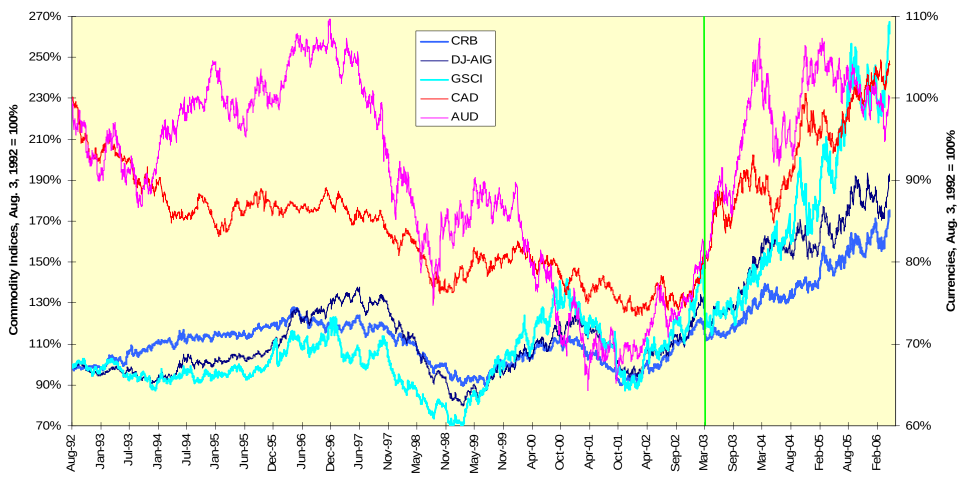
Each Index Is Different



Indices, The CAD And The AUD

The different composition of these three commodity indices affects their relative price performance. The energy-laden Goldman Sachs index pulled ahead of its rivals in late 2004. But regardless of which index, if any, you prefer it is easy to see how both the CAD and the AUD rallied well ahead of the physical commodity indices with the March 2003 start of the Iraq War.

Did Commodities Lead Currencies?

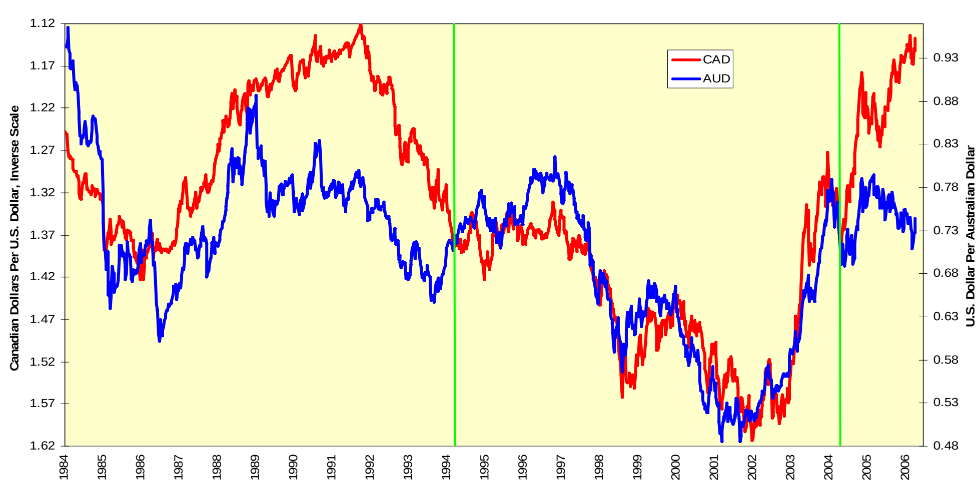


This war has had two major impacts on the linked worlds of financial and physical markets: It injected a risk premium into energy markets and it encouraged the Federal Reserve to keep credit easier than it would have been otherwise to finance it. The Federal Open Market Committee went so far as to talk about preventing deflation in its May 2003 statement of bias; this occurred within one week after President Bush landed on the deck of the *Abraham Lincoln* underneath a "Mission Accomplished" banner.

The rules of causation are straightforward. We can go with the formal statistical definition for which Clive Granger received a Nobel Memorial Prize in Economics in 2003 that X causes Y if lagged values of X improve the forecasting capabilities provided by lagged values of Y. Or we can keep it simple and say for X to cause Y it first and foremost must precede Y in time. If the CAD and AUD strengthened ahead of the big bull run in commodity indices, it is categorically impossible for commodity prices alone to account for the strength of these currencies.

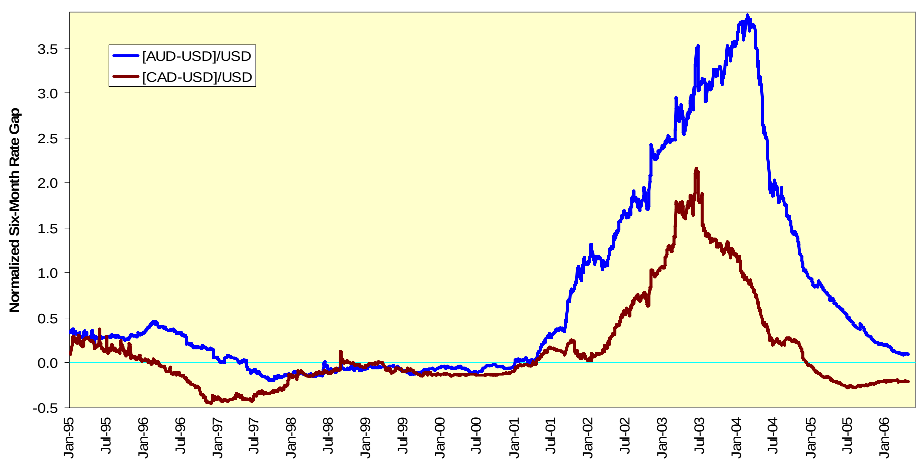
Moreover, lumping the two dollars together as if they were somehow linked by a set of common factors ignores large segments of their dual history. The two traded in parallel between 1994 and 2004, but often diverged prior to that point and certainly have diverged during the large commodity rally since 2004. Something besides commodity prices must be involved.

These Dollars Move Similarly… Sometimes



The answer, unsurprisingly, is interest rate differentials. If we take the difference between six-month LIBOR yields for these two currencies against the U.S. dollar (USD) and divide it by the USD six-month LIBOR rate, we find the interest rate differential between those two currencies and the USD expanded rapidly between 2001 and 2003, the period in which the two currencies' rallies began. Six-month CAD LIBOR has been trading under six-month USD LIBOR since December 2004, and the AUD's gap has nearly disappeared as well. It is fair to say the CAD and AUD rallies were first a function of interest rate differentials and then and only then were a function of commodity prices.

CAD And AUD No Longer High-Yield Currencies

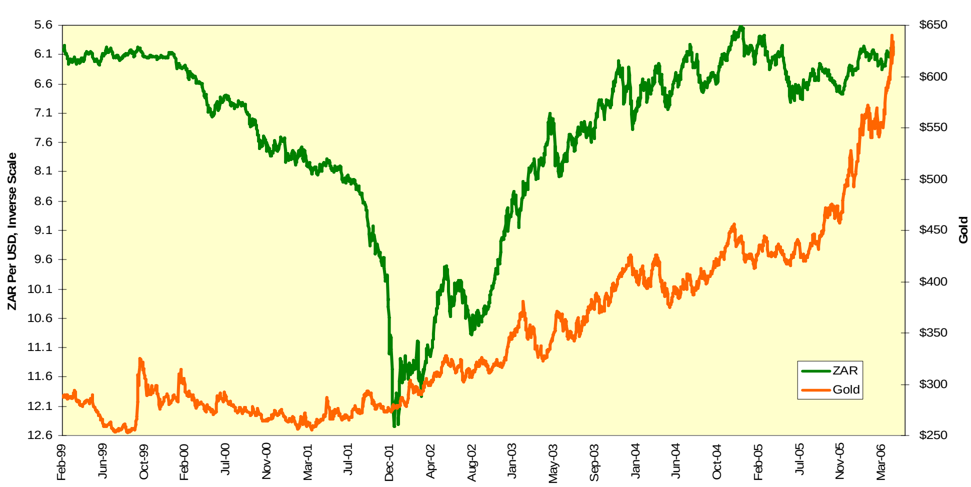


Single-Commodity Examples

Both Canada and Australia are large and diverse economies with liquid and functioning capital markets. Arbitrage between interest rate and currency markets is efficient and low-cost in both cases. Let's take a look now at some smaller, less diverse economies with greater single-commodity linkages to their export revenues.

South Africa is a major producer and exporter of a number of minerals, but it is most famous for its gold production. But if we wish to attribute the movements of the ZAR to gold prices, we have the same causation problem noted above. It is very difficult indeed to cause something in the past. The ZAR plunged in 1999-2001 and then rallied most sharply into the end of 2004. It has been range-bound since, and has virtually ignored the largest part of the gold rally.

Did Gold Prices Lead The Rand?

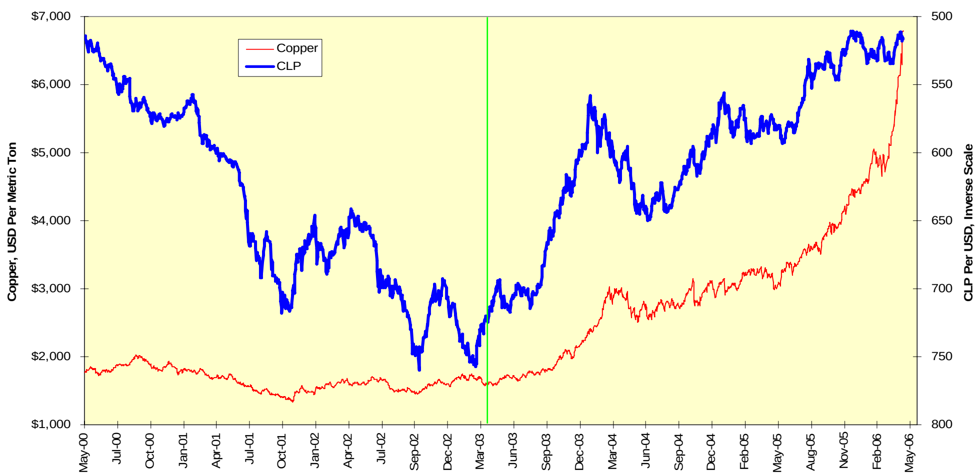


Is a better linkage available via the interest rate comparison? Yes: The spot rate of the ZAR lagged nine months leads the six-month normalized rate gap between the ZAR and the USD. Rate differentials for six months are set, and when the standard three-month non-deliverable forward is unwound, it corresponds closely to the interest rate differential. We have to conclude it is a misnomer to call the ZAR a commodity currency.

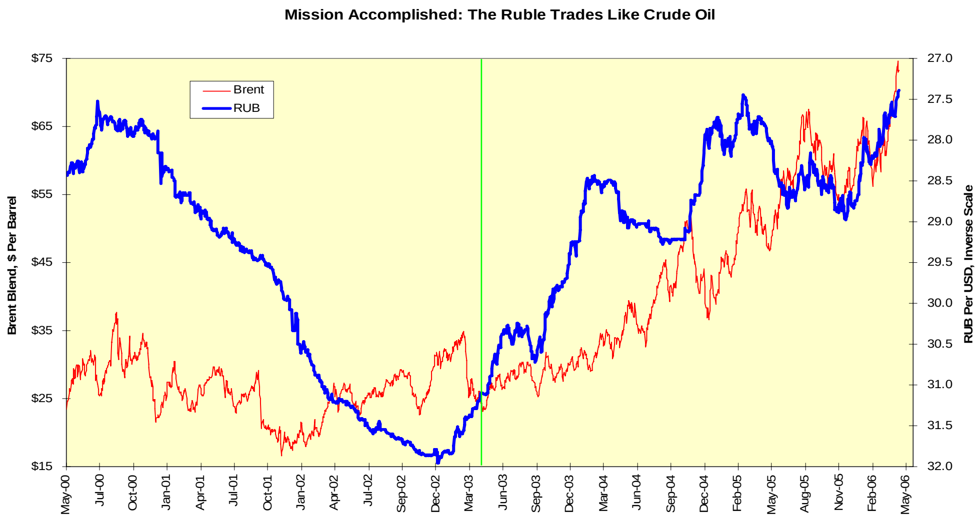
The Rand Still Driven By Rate Differentials

What about the relationship between the CLP and copper? We see that exact same non-causal relationship as we did with the ZAR and gold. The CLP took off in the aforementioned May 2003 timeframe. This was well in advance of copper prices and especially well in advance of copper's huge run in March-April 2006. While the Chilean money markets do not lend themselves to a direct interest rate comparison and therefore preclude the direct conclusion made for the ZAR, the pattern is similar. We should hesitate to call the CLP a commodity currency.

Chilean Peso Firmed Well Ahead Of Copper



Finally, we come to the most interesting case of all. Perhaps no country has benefited more from the surge in crude oil prices than Russia. This is a country that defaulted on its debt in 1998. If we compare the course of the RUB to the price of North Sea Brent crude oil after May 2003, we find a linkage that is getting tighter with time. As the Russian money markets do not lend themselves to the LIBOR comparison, we cannot make it. We can offer by visual inspection the conclusion the RUB is as close to a major petro-currency as we are going to find.



We are left with one overarching theme: No matter the structure of a country's economy or the source of its export revenue, we should expect its currency to trade not as a function of commodity prices but rather as a function of interest rate differentials. In other words, there really are no currency proxies for commodities, and those who trade the CAD or AUD off the day's movements in commodities are unlikely to profit by doing so.