What's Down With The Australian Dollar?

Few places in the world are more unique than Australia. Not only is it an island continent – OK, so is Antarctica, but until global warming really kicks into high gear, only a handful of scientists will ever know for sure – but its economy is as singular as its geography.

Think back to the glory days of the Cold War. We had identifiable enemies then, concentrated in regional blocs. The industrial democracies referred to themselves as the First World, and then there was that menacing swath of red across the map called the Second World. Everything else got lumped into the category of Third World, and in homage to Groucho Marx, this was one club in which you would not want to be a member. Interestingly, the sobriquet Third World is still used today, with many of the same negative connotations, and its overlap with what we call emerging markets is high.

But we digress. Even though Australia was accorded First World status, primarily on the basis of its inhabitants speaking a form of English, its economy had and has a very striking Third World-like dependency on resource exports and thus is subject to the vagaries of commodity prices.

The Land Down Under has been making a pretty good living in recent years as a resource supplier to its Asian neighbors, China in particular but also Japan, Taiwan and Korea. Let's take a look at the Australian dollar (AUD) in relation to two of the three primary drivers of currency movements, short-term interest rate expectations and prospective returns on assets. We will use an iShares ETF on the Morgan Stanley Capital International Australia index (EWA), for the latter purpose.

The Canadian Connection

One of the interesting sidelights for the AUD is its strange connection in traders' minds to the Canadian dollar (CAD). Yes, both countries speak English, are thinly populated and have strong resource sectors, but the two dollars' connections to each other are surprisingly weak. Over the entirety of the floating exchange-rate era going back to late 1971, the AUD has underperformed the CAD significantly and has done so with greater volatility.

If we were to view the two dollars as investment assets, the CAD would be selected on both a risk and a return basis, making it "stochastically superior." The average daily return since the end of 1971 of the CAD has been .0001% with a standard deviation of .3095%; comparable figures for the AUD are -.0032% and .6257%. The r-squared, or percentage of variance explained, for their two return series is only 7.27%. These data alone should prevent the financial commentariat from treating the two dollars as equivalent, but one suspects this will not be the case.



Canadian And Australian Dollars Not The Same

Relative Interest Rate Expectations

Now let's turn to relative expectations for short-term interest rates. The tool for this analysis is the forward rate ratios between six and nine months ($FRR_{6,9}$). This is the rate at which you can lock in borrowing for three months

starting six months from now divided by the nine-month rate. The more this ratio exceeds 1.00, the steeper the money-market yield curve and the stronger the expectation for higher short-term interest rates in the future. A wider $FRR_{6,9}$ differential in favor of a given currency indicates traders expect interest rates for that currency to begin rising faster in that currency. Whenever the $FRR_{6,9}$ differential between the AUD and the USD exceeds zero, the AUD should be supported thereby as its holders are expected to receive higher interest rates in the future.

The difference between the AUD and USD FRRs leads the movements in the AUD by three months on average. It peaked in early December 2007, which suggests the AUD is struggling to maintain its interest rate expectation advantage. The period coincided with the last of the Federal Reserve's rate cuts for 2007. Unless the Federal Reserve is prepared to mimic the Bank of Japan's zero interest rate policy, we should expect the AUD's interest rate expectation advantage to disappear in 2008.



Australian Dollar Losing Its Interest Rate Expectation Advantage Vs. USD

What did the cross-rate between the AUD and the JPY look like during the BOJ's long period of easy credit? This is a critical question given the importance of Japanese financing for Australia and the role of the yen carry trade (see "Looking At The Carry Trade," June 2007) in supporting risky assets around the world we should duplicate the analysis in the chart above for the yen.

Australian Dollar Losing Its Interest Rate Expectation Advantage Vs. JPY



While the same relationship holds, one fascinating aspect of trader expectations for Japanese interest rates emerges, and that is the continued belief that Japanese rates will rise faster than other countries' rates. This has been true for the relationship between Japan and Australia since late 2002. Please note how the FRR_{6,9} differential plunged after Japan began withdrawing excess yen from its banking system in May 2006; at that point, traders believed the increase in Japanese rates was over (see "Japanese Inflation And The Yen," November 2007).

Relative Stock Performance

Now let's turn to prospective returns on assets, which we can measure by the relative total returns for the U.S. S&P 500 and the Australian S&P/ASX 200. As noted earlier, we can use the USD-denominated EWA to facilitate comparison.

Australian outperformance was a recent and short-lived affair. It began shortly after the Federal Reserve's May 2003 declaration of war on deflation, marked with a green vertical line. This should trigger immediate recognition of the effect lower U.S. short-term interest rates had not only on the U.S. dollar in general but on commodity prices. It is fair to say the Federal Reserve targeted the U.S. consumer but hit the Chinese producer who in turn began driving global commodity prices higher.

Australia's Performance Surge A Recent Affair



In

addition, please note how the EWA pulled back sharply relative to the S&P 500 during the two yen carry trade unwinding scares of recent years, those in May-June 2006 and July-August 2007. Finally, the relative strength of the Australian market peaked once the extent of the credit crunch's damage to global growth became apparent in early November 2007. While these pullbacks do not prove AUD strength and a relatively strong Australian stock market are linked, the circumstantial evidence for such a link is strong and will be revisited shortly.

The Commodity Connection

Where there's liquidity smoke, there's commodity fire, and this is certainly the case with the Australian market. If we map the relative performance of the Australian and American markets pre- and post-May 2003, against the Dow Jones-AIG commodity index, we see an accelerating outperformance after May 2003. The huge East Asian demand for raw materials has turned the Australian economy into a commodity boom town.



Australia's Outperformance Commodity-Dependent

This is certainly obvious in the relative economic sector performances between the S&P Australian Stock Exchange 200 and the S&P 500 indices for calendar year 2007. The Australian market's Basic Materials and Energy sectors returned 41.18% and 28.18% in AUD terms and 57.02% and 42.56% in USD terms. The only sectors where the American market outperformed in local currency terms were Energy, Information Technology and Utilities.

Comparative Economic Sector Performance For 2007



Does the combination of strong stock market performance and a strong connection between commodity prices and the Australian stock market have an effect on the AUD? Absolutely. We can see this by depicting how the Australian stock market's relative performance has moved as a linear function of the AUD both pre- and post-May 2003. The linear relationship is stronger after May 2003, which indicates a chain of causality between the higher commodity prices of that period through a stronger Australian stock market and into a stronger AUD.

140% 130% Relative Performance, EWA And S&P 500 120% Pre-May 2003 110% 1.3889x - 0.221 100% $R^2 = 0.572$ 90% Post-May 2003 80% v = 2.3971x - 0.8453 70% $R^2 = 0.7594$ 60% 50% 40% 0.55 0.75 0.80 0.45 0.50 0.60 0.65 0.70 0.85 0.90 0.95 USD Per AUD

Australia's Outperformance Currency-Dependent

This makes the risk of being aggressively long the AUD easy to spot. The present commodity boom is unlikely to last forever – they never do – and the interest rate differential between both the AUD and JPY began eroding by late 2007.

This makes the AUD as close to a multi-commodity proxy as any major currency, certainly more so than the Russian ruble, Chilean peso or South African rand (see "Of Commodities And Currencies," July 2006). When a diversified commodity index such as the Dow Jones-AIG starts to slide, the AUD is going to go along for the ride.