

Spreading The Dollar Index And Australian Dollar

One of the enduring puzzles of markets in general and exchange-traded markets in particular is the combination of the first-mover and network effects: For every major market category, one network node or exchange dominates and the first product to claim that node essentially claims it forever. This combination goes a long way toward explaining why successful assaults on a competitor's established contracts tend to have survival rates only slightly greater than those of kamikaze pilots and car-bomb drivers; at least the latter two categories have the excuse of having failure as their established objective.

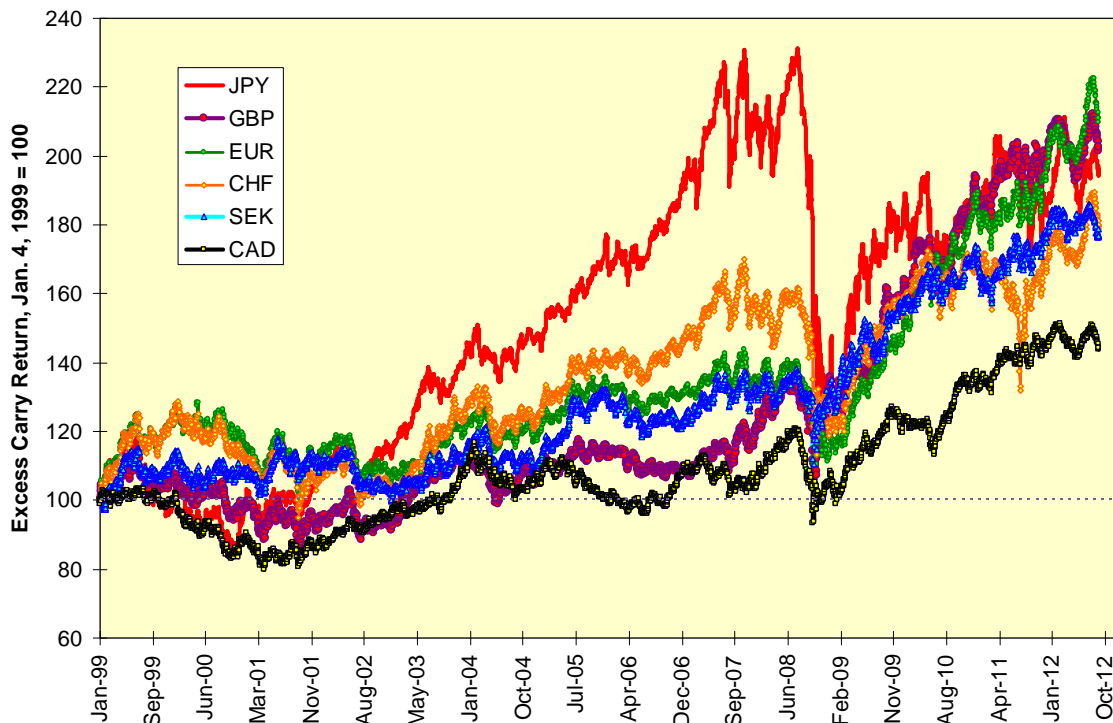
Such is the case with the venerable dollar index (DXY), something we dealt with seven long years ago (see "The Dollar Index and 'Firm' Exchange Rates," December 2005). It has frozen the world of 1973 in time with the sole exception of consolidating the various European currencies into the singular currency of the euro; you are free to express your own opinion on the wisdom of that latter move.

While the composition of the DXY is open to criticism, and arguments as to why the Swedish krona is included while the currencies of important trading partners such as Mexico, Brazil and China are not, the DXY has established itself as the dollar index to trade if you must trade a dollar index. Perhaps it is the index' constancy of composition we should credit; unlike those stock indices whose weights change with rebalancing and corporate actions, the 57.6% weight of the euro is one of the few things we can count on to remain fixed. Moreover, while an argument can be made for a trade-weighted index, such as that maintained by the Federal Reserve, the central bank is not in the licensing business and has to remain above the fray. The conclusion reached in July 2011's *Weighting For Correlation* remains: You do not want to be in the index management business.

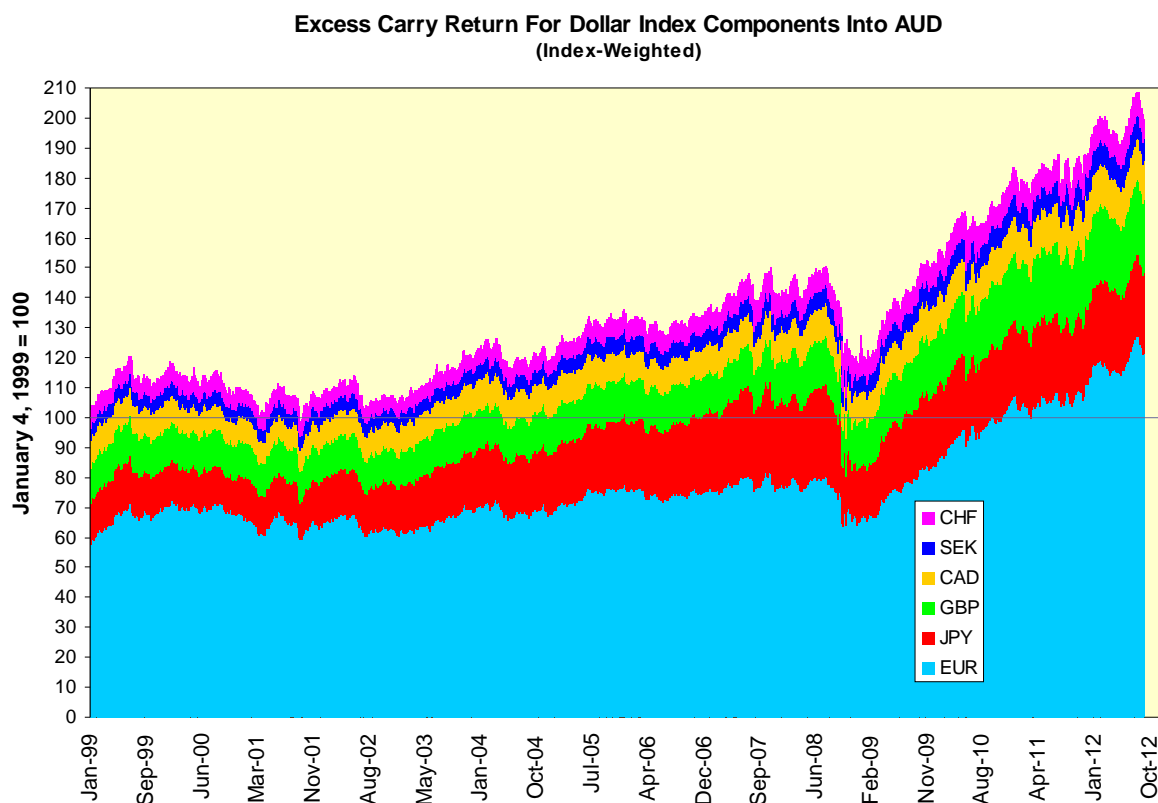
Enter The Aussie

If the DXY and DXY futures are a fact of life, should you look to trade individual currencies against them instead of just the greenback itself? Let's return to a structure introduced a year ago (see "Decomposing The Dollar Index," December 2011) of looking at the dollar index as the weighted sum of its components. First, let's look at the excess carry returns of the six DXY components into the AUD on an unweighted basis since the EUR's January 1999 inception.

Excess Carry Returns For Dollar Index Components Into AUD
(Unweighted)



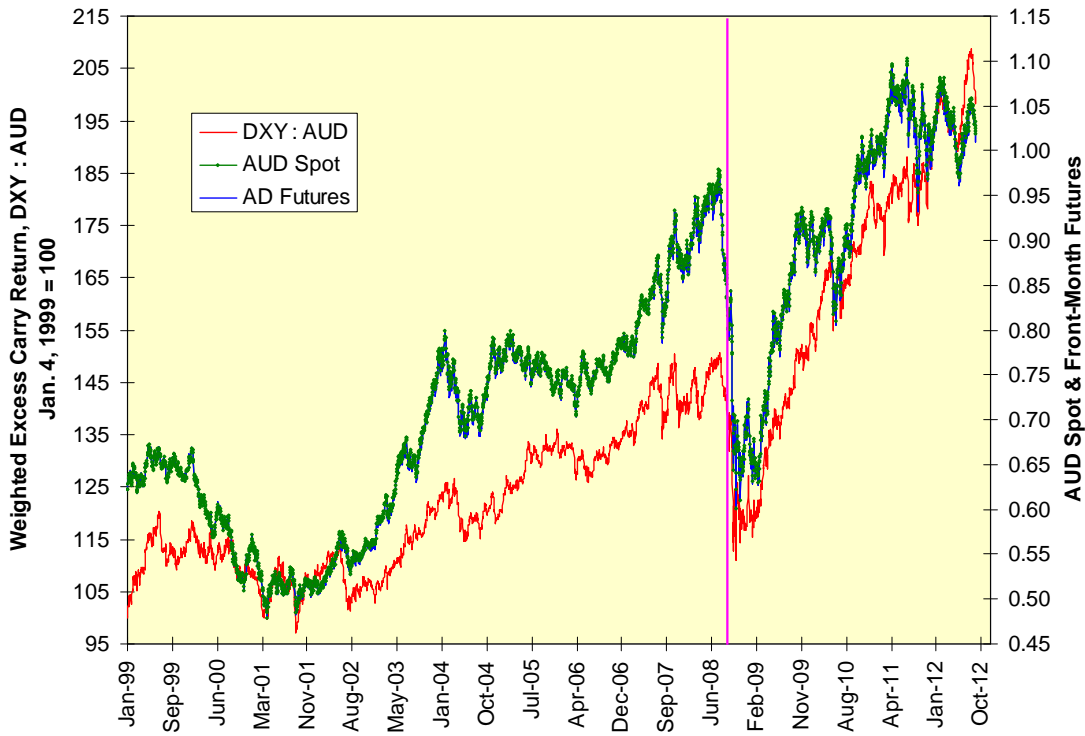
Now let's apply the weights to these excess carry returns and sum them up visually into a short DXY-component / long AUD trade.



Dominance Of Interest Rates

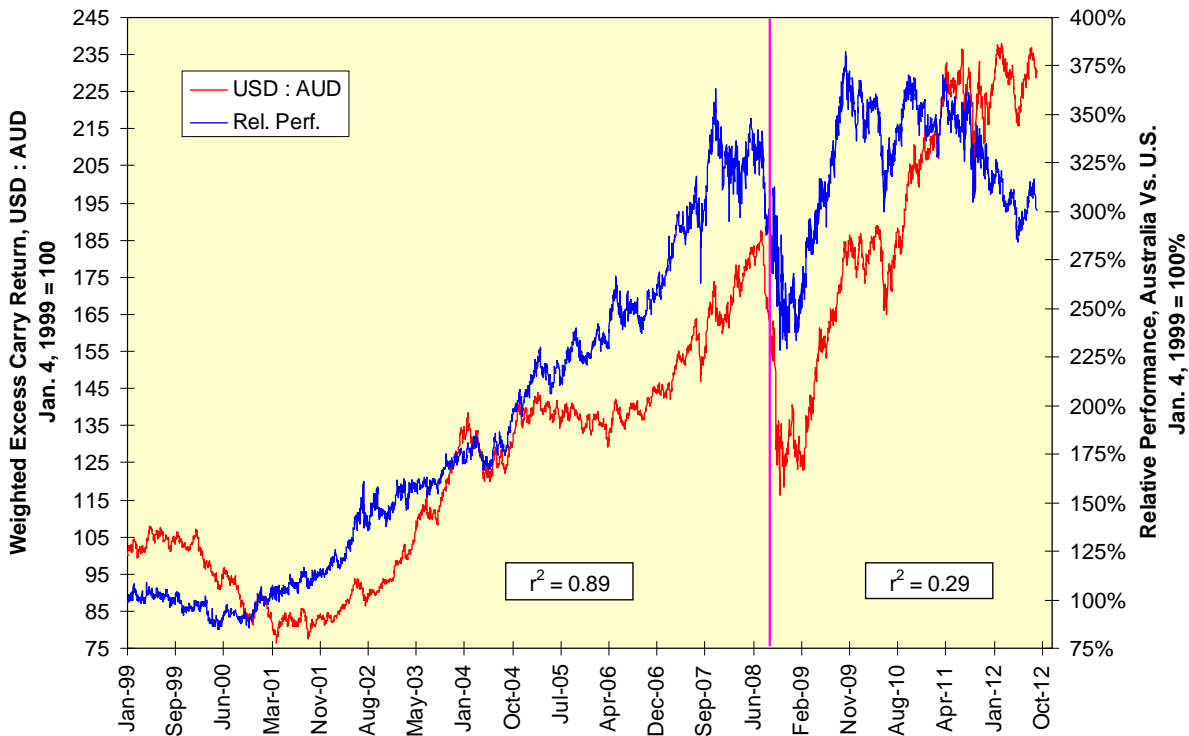
A similar difference in behavior can be observed if we replace the weighted sum of the DXY components' excess carry returns into the AUD with the simple excess carry return from borrowing the USD and lending into the AUD. We can see how all three AUD measures converged after the events of September 2008, marked with a vertical line on the charts below, unfolded and the drive toward zero percent interest rates began. That event reduced non-interest rate factors between the USD and AUD, such as prospective asset returns, to insignificance.

AUD Often Moves Out Of Synchrony With Excess Carry Return (DXY Components)



Indeed, if we map the relative total returns of the Australian stock market vis-à-vis the U.S. stock market, we see a marked deterioration in the quality of fit before and after the Lehman bankruptcy; the r^2 or percentage of variance explained fell from 0.89 to 0.29.

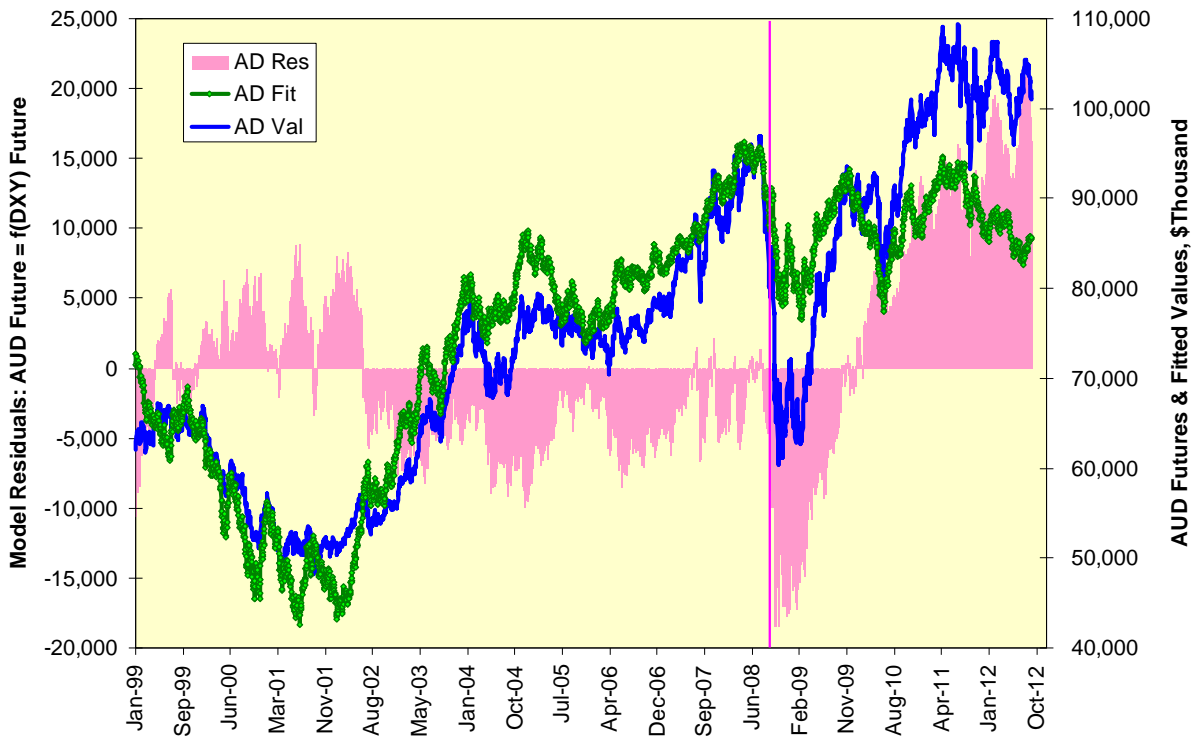
Relative Performance Diverged From Excess Carry Return Afer Lehman Bankruptcy (USD)



A Simple Model

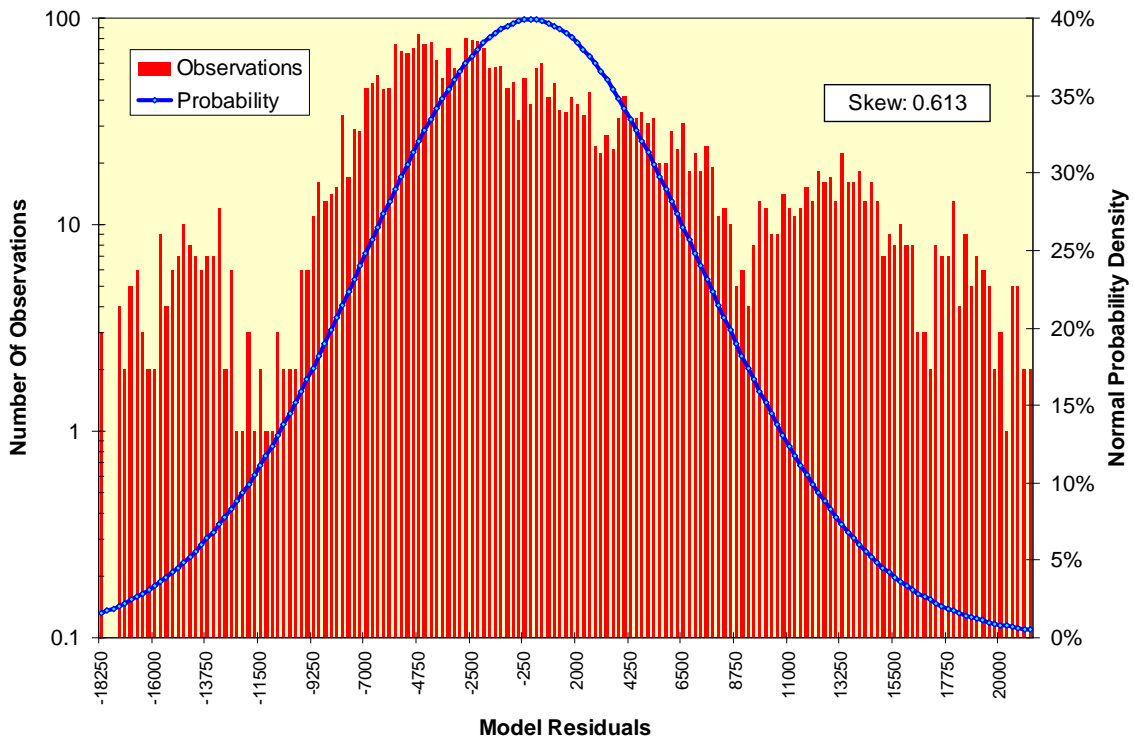
If we convert the DXY and AUD futures into contract values and construct a simple model of the AUD future being a function of the DXY future, we see a marked change in behavior after the September 2008 Lehman Brothers bankruptcy; the probability the relationship before and after this event was different approaches 100%.

Australian Dollar Disconnected From DXY After Lehman Bankruptcy



Please note how the model's residuals, or the difference between the actual and fitted values of AUD futures, balloon in variance after September 2008. If the AUD futures were a direct and stable function of the DXY futures, we should see a normal distribution, the familiar bell-shaped curve, in the residuals. We do not: The distribution is extremely flat and skewed toward positive values. This confirms the AUD is capable of putting in sustained uptrends against the DXY with the sort of abrupt and violent retracements characteristic of a trending market.

AUD Futures Skewed Positively



One day interest rates will rise over the zero percent level they have been pinned to since the 2008 financial crisis. When that day arrives, we will see the carry trade from the DXY's components into the AUD diverge from the straight AUD futures and create a robust and trending trade.