Currency Harvest, Asset Returns

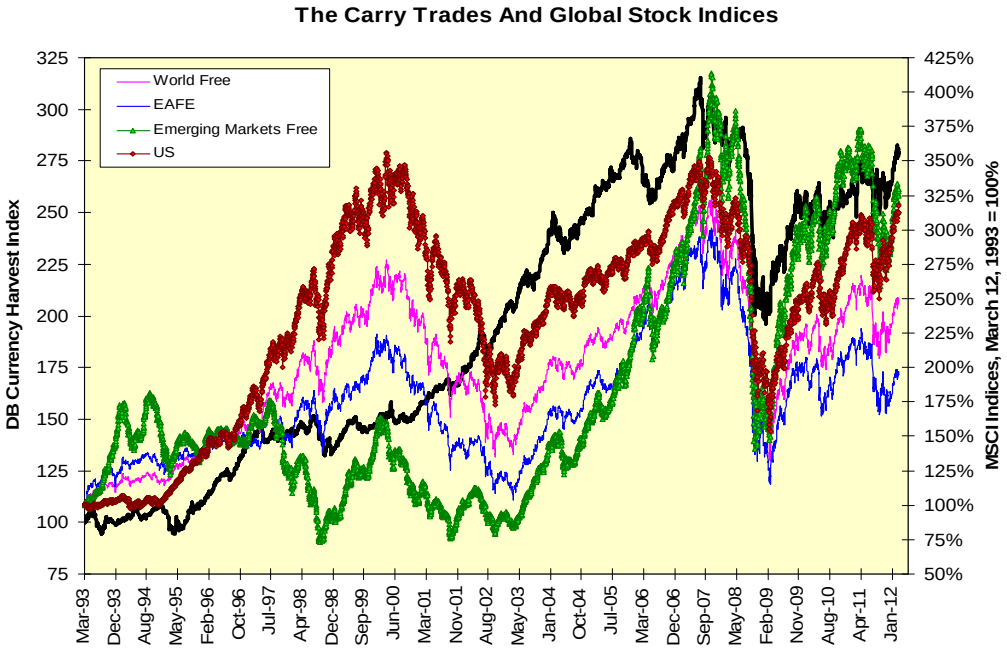
One of the more tried and true currency trading strategies is the carry trade of borrowing a low-yielding currency to lend in a high-yielding currency. Indeed, the occasional blow-up aside when a high-yielding currency is broken by action such as George Soros' famous bet against the British pound in 1992, carry trading has been the most profitable strategy employed over time by currency-oriented CTAs (see "Currency Traders Should Be Humbler," May 2007).

The financial services industry, like Hollywood, always takes a good idea and either beats it to death or seeks out greater and more innovative uses for it, depending on your point of view. One example of such product expansion is the Deutsche Bank Currency Harvest index, an easy-to-understand strategy of going long a basket of five high-yielding currency futures and short a basket of five low-yielding currency futures; the composition of the two baskets can change over time.

Let's take a look at this index against a set of global equity market and higher-risk bond indices to see whether this particular twist on the currency carry trade is linked to returns on assets. The prior supposition is it should be given the role monetary stimulus has played in each global financial bull market since the mid-1990s. The equity indices involved are the MSCI total return indices for the U.S., for the Emerging Markets Free, for the EAFE (Europe, Australasia, Far East) and for the World Free markets. The higher-risk bond indices involved are the Merrill Lynch total return measures for U.S. high-yield, for European high-yield and for emerging markets. All indices involved are measured in U.S. dollars.

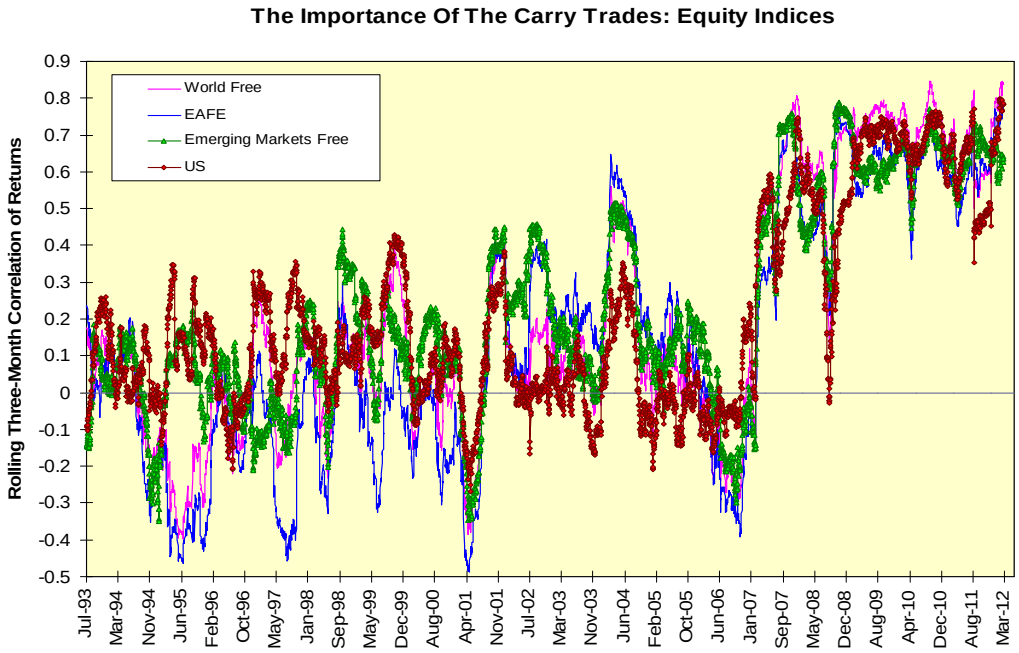
The Equity Index Picture

If we map the equity indices re-indexed to the March 12, 1993 start-date for the data against the DB Currency Harvest index, we see a rather striking evolution. Prior to the Federal Reserve's first declaration of war on deflation in May 2003, the relationship between this measure of currency carry scarcely had a relationship with any of the equity indices. That started to change going into the global equity peak of October 2007; by the financial crisis and its aftermath, the relationship was quite striking.



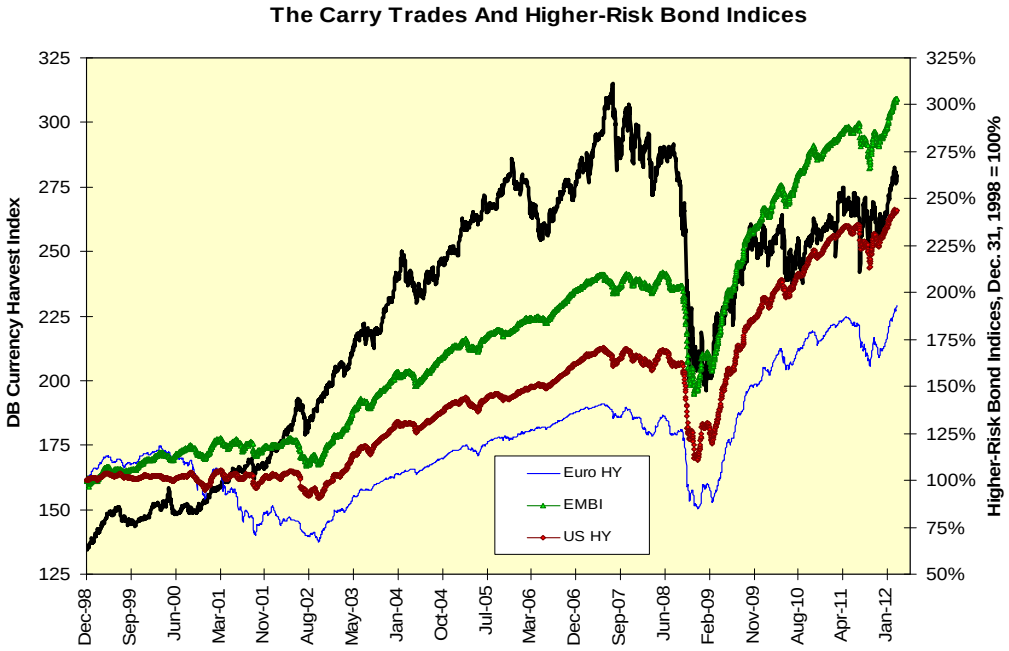
If we convert the index data to a set of rolling 90-day correlations of returns of the four stock indices against the DB index, a second relationship emerges. The large jump in correlation of returns in late 2007 broke only during the very depths of the financial crisis and then stayed at near-record levels during the liquidity-fueled global equity rallies post-March 2009. Two exceptions occurred; the first during May-June 2010, a period following the "flash

crash" and the Greek sovereign credit crisis, and the second during the August 2011 revival of that very same sovereign debt crisis. Overall, the correlation of returns has been a global barometer of risk.

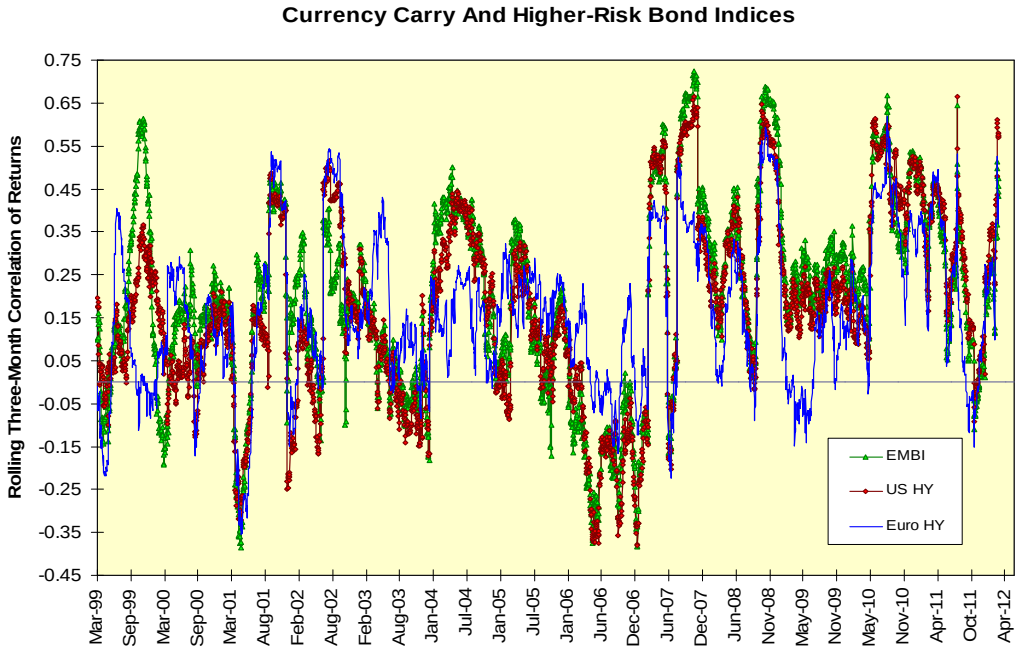


The Higher-Risk Bond Picture

Now let's look at the fixed-income indices. We should expect the DB Currency Harvest index to have had a more consistent long-term relationship with higher-risk bond indices as both are carry trades (see "Currency Carry And Yield Curve Trading," January 2010). This does in fact appear to be the case.



However, if we rearrange the data in the chart above and display the rolling three-month correlation of returns, we do not see the consistently high correlations of returns in excess of 0.70. This would seem to suggest global equity trading is fueled more by currency differentials than is global higher-risk bond trading. Restated, global hot money chases stocks, not higher-risk bonds.



Prospective Returns

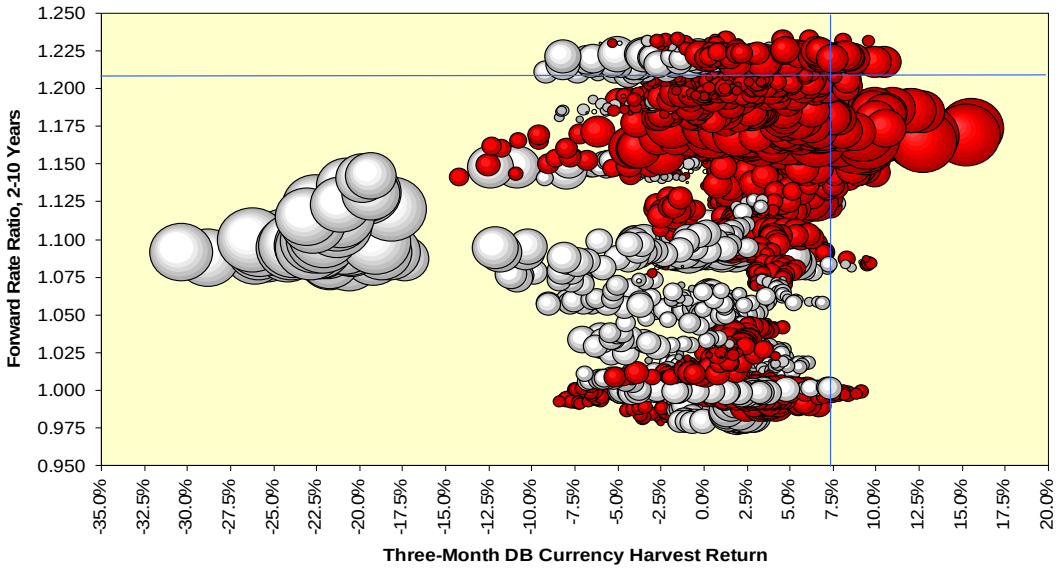
However, we do know the credit spreads in high-yield bonds globally came in after the peak of the financial crisis; indeed, this may be by definition as the end of a financial crisis can be defined by the retraction of credit spreads. As the end of the crisis was induced in part by the very steep yield curve in the U.S. and the open invitation by the Federal Reserve to buy all manner of risky assets, we should be able to associate prospective returns on higher-risk bonds with a steep yield curve and with the currency carry trade.

We can map the three month-ahead total returns on each of these bond indices as a function of the DB Currency Harvest's return over the past three months and the U.S. forward rate ratio between two and ten years ($FRR_{2,10}$). This is the rate at which we can lock in borrowing for eight years starting two years from now, divided by the ten-year rate itself. The more the $FRR_{2,10}$ exceeds 1.00, the steeper the yield curve is.

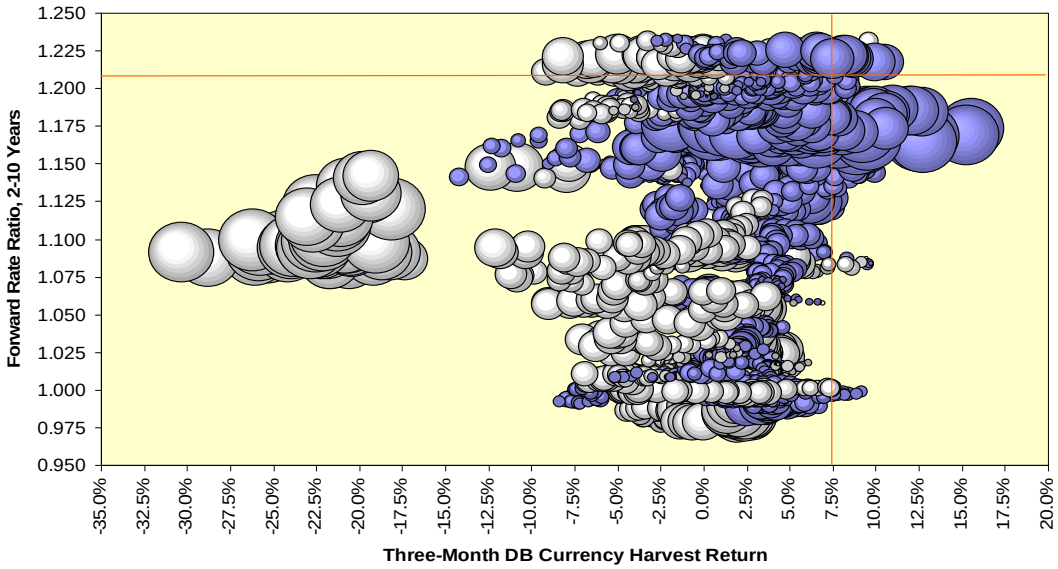
In the charts below, positive prospective returns are depicted with colored bubbles, negative returns with white bubbles; the bubbles' diameters correspond to the absolute magnitude of the bond index' total return. The last values are marked with a bombsight on the charts.

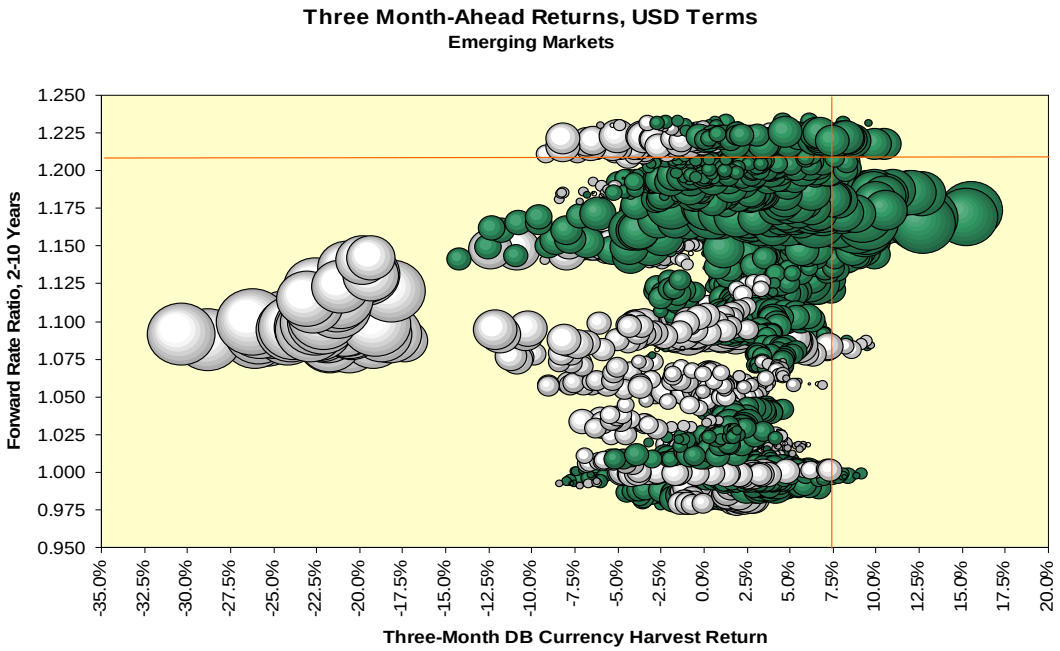
If higher-risk bonds' prospective total returns are in fact a function of both a steep yield curve and currency carry, we should see a concentration of large colored bubbles in the northeasterly section of the chart and large white bubbles in the southwesterly section of the chart. This is exactly what we do see in all three cases.

Three Month-Ahead Returns, USD Terms
U.S. High-Yield



Three Month-Ahead Returns, USD Terms
Euro High-Yield





The conclusion seems strikingly clear for both global equity indices and for higher-risk bond indices: When the "harvest" or gap between the forward curves of high- and low-yielding currencies opens up, both equities and higher risk bonds will do well, especially if the yield curve in the funding currency, here the U.S. dollar, is steep.

Are successful traders born or made? The answer seems to be, "made, but by central banks on a mission."