Putting The Euro-Yen Cross-Rate To Work

RealMoney readers, a category that may include you, know how to stalk their prey. Consider the following e-mail sections from a frequent correspondent:

> *It has been about 2 months since your conspiracy thoughts were floated up re: the Yuan and about 5 months since "the new regime" started." During that 5 month period, it would appear we have about 1%-2% movement in the Yuan/$, w/a center of gravity around 6.82 Yuan/$. Out of the 25+ currencies I follow from a distance, I could find no other examples of such calm against the $.*
>
> *Hopefully, the questions are interesting enough to spark a column sometime in the future….?*

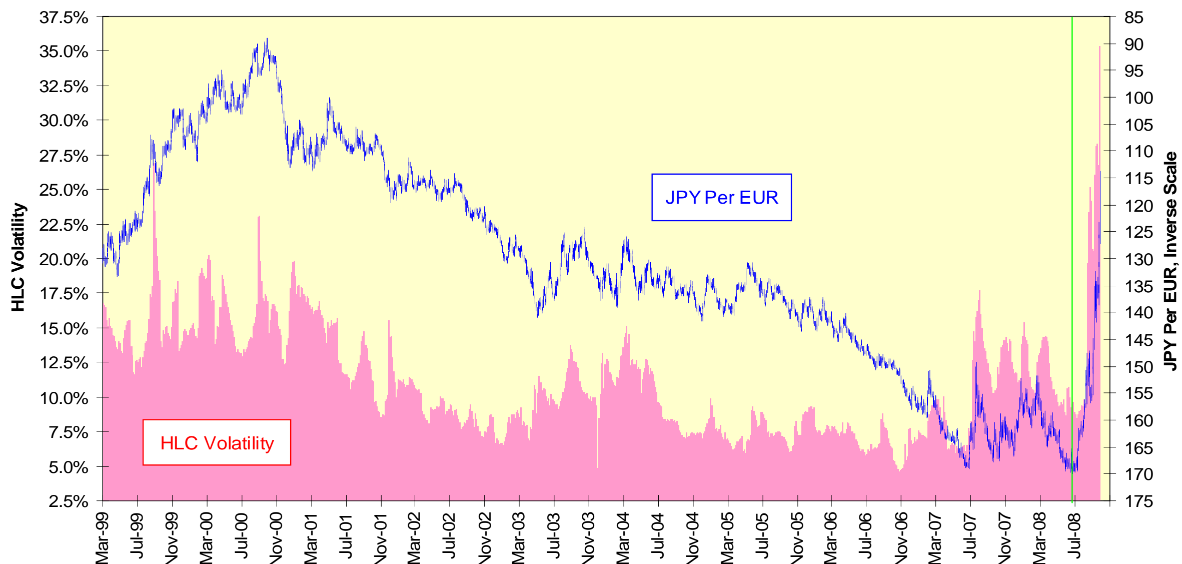
What could I do when faced with such a challenge? Just like former Kansas City Royals third baseman George Brett when accosted by Morganna the Kissing Bandit, I was surrounded. But rather than revisit the exact topic of that September column directly, I thought it would be best to visit a related trade first, the euro-yen cross-rate, and then update a January column on the yuan next week.

The Euro-Yen Cross-Rate

The euro-yen cross, expressed as yen per euro, is an excellent barometer of the world's appetite for risk. When the yen is weakening against the euro, yen carry trades, last visited here in September 2007, are open and money is flowing out of Japan in search of higher returns elsewhere. When the yen is strengthening, as it has been in recent months, the exact opposite situation applies: Risky assets are being sold.

Volatility Indicators

A key date in the history of the euro-yen is July 15, 2008, the date when Fannie Mae and Freddie Mac were de facto nationalized by the U.S. government and the date when the yuan stopped rising; marked with a green vertical line below. Two aspects of the trade changed and changed drastically. First, the yen shot higher. Second, the high-low-close volatility of the cross-rate, a measure which accounts for intraday range as well as interday change, shot higher as well. This was the tipoff the world's risk appetite was disappearing.



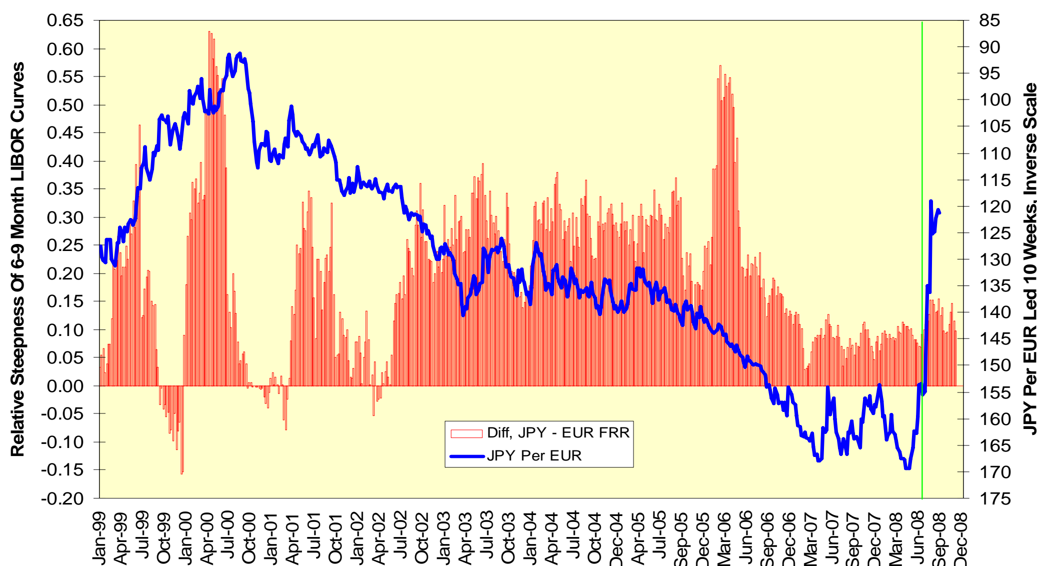
Short-Term Interest Rate Expectations

Now let's turn to the issue of relative short-term interest rate expectations. We will use the forward rate ratio between six- and nine-month LIBOR ($FRR_{6,9}$), the rate at which we can lock in borrowing for three months starting six months from now, divided by the nine-month rate itself as our metric. The more the $FRR_{6,9}$ exceeds 1.00, the higher those three-month rates are expected to be six months from now.

The difference between two $FRR_{6,9}$ numbers gives us the relative rate at which two short-term interest rates are expected to move over that horizon. In a normal relationship, the higher the differential between currencies X and Y, the more currency X is expected to rise relative to currency Y.

Here the relationship is interesting. The JPY has had a persistently high $FRR_{6,9}$ for years as few have believed its minuscule interest rates could persist. The same can be said now for the U.S. dollar. The persistent bias means we have to look more at the trend of any JPY FRR differential as a result.

Two observations are offered. First, the FRR differential leads the movement of the cross-rate by ten weeks on average. Second, nothing in its course during 2008 signaled the explosive increase in the cross-rate. This means the euro-yen cross is being driven by factors other than short-term interest rate expectations.



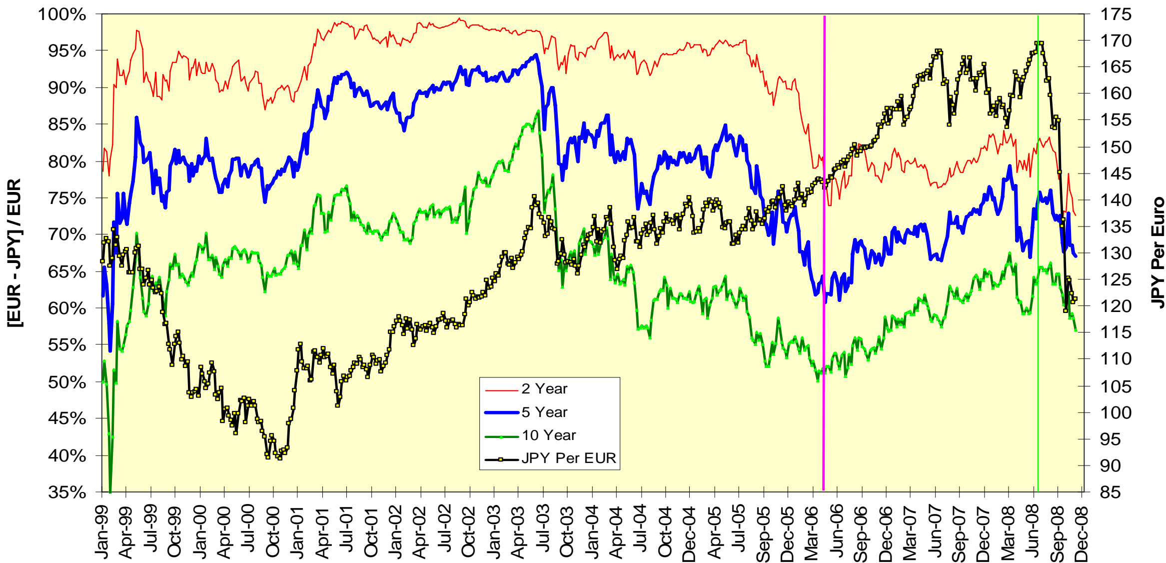
Long-Term Interest Rate Differentials

We have stated in the past currencies are driven by three factors, short-term interest rate expectations, actual trade flows and prospective returns on assets; trade flows are the least important of these three. Investors will shift funds to countries with high expected asset returns and remove them just as quickly; Russia recently found this out the hard way.

If we normalize the rate gaps between the Eurozone and Japan at the two-, five- and ten-year horizons, that is divide the difference between euro and yen rates by the euro rates themselves, we find it has correlated extremely well to the cross-rate since the mid-2006 withdrawal of liquidity by the Bank of Japan, marked with a magenta vertical line.

The reason is simple and straightforward. Euro yields rose in 2006-2007 as the inflation-averse European Central Bank kept credit tight in the Eurozone in the face of strong growth. This strong growth and high return environment made the yen carry trade attractive. The trade reversed with a vengeance over the past four months and economic weakness enshrouded Europe, central bankers began cutting interest rates and the yen carry trade was unwound.

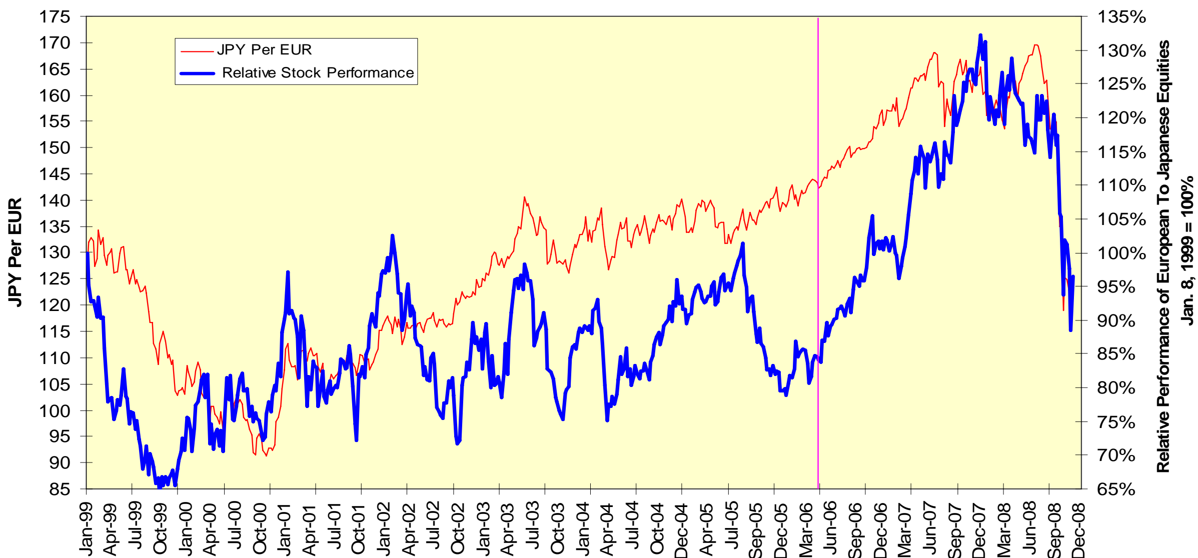
The Cross-Rate And Note-Rate Differentials



Stock Market Confirmation

If the cross-rate is in fact driven by relative asset returns, then European equities should outperform Japanese equities when the cross-rate is weakening and vice-versa. If we compare the total returns on the MSCI Eurozone and Japanese indices, both expressed in USD terms, to the cross-rate, we see this is the case. Once the euro weakened relative to the yen, so did the relative performance of European equities. For all you devotees of international diversification, consider this chart carefully. It says your allocation decision between Europe and Japan is a currency trade, nothing more.

Relative Equities Aligned With Currency In Time



It is difficult to believe Japan outperformed the Eurozone for American investors; we are so used to Japan not outperforming anything. But that is the case. What can you do about it in the stock market? As the cross-rate has bounced off its low of 113.64 yen per euro and can retrace easily to 135.15 from Friday's 121.22, a raid into the market would be the buy Europe and sell Japan using instruments such as the iShares EMU and Japan ETFs, respectively. Two cautions are in order; put it on and take it off as a spread, and when the trade reverses, it reverses. This is a currency trade in disguise, and currency trends have a habit of being here today and gone tomorrow.