Carry Trades And Global Returns

Central bankers, our own beloved Federal Reserve officials included, look in the mirror and see a combination of:

- Zeus hurling thunderbolts hither and yon; and
- Some kindly superannuated professor of economics or finance who has to explain everything one more time to the students and is delighted to do so.

Others look at that crowd and see a combination of the Keystone Kops and Dr. Frankenstein, with a good measure of Wrong Way Corrigan added to the stew. While you are free to guess the author's opinions (Hint: The second set of descriptors) consider the central problem central bankers face. In Milton Friedman's famous phrase, monetary policy operates with long and variable lags, which is nothing more than a fancy way of saying you do not know what is going to happen and when. Another way of stating the problem is monetary policy is not deterministic; this is akin to saying if you turn your car's steering wheel clockwise, it may go to the right but could also go to the left, backwards or do nothing at all. While quantum physicists may accept this strangeness, the rest of us do not and quite rightly would not drive that car.

The principal reason monetary policy is not deterministic is financial markets are very good at defeating static policies via changes in the yield curve and changes in currency rates. If, for example, the Federal Reserve decided it wanted to drive long-term rates lower via a campaign of money-printing, markets might defeat that intention by embedding higher inflation expectations into the long end of the yield curve and raising capital costs. In the currency arena, an obvious intention of driving the dollar weaker might result in a policy of competitive devaluation around the globe. Other effects, such as shifts in relative asset gains or economic growth rates could intervene as well and render the whole affair a colossal failure. This is why the hundred-year history of the Federal Reserve has been marked by money-induced booms and busts.

The Carry Trades

If we combine the effects of yield curves and currencies into a cross-asset trade of borrowing short-term funds in a low-rate country, lending those funds in a higher-rate country and then swapping those funds further into stocks, we have global carry trades. In practice, the money created in a low-rate country such as Japan or the U.S. does not stay in Japanese or American assets when there are better returns elsewhere. Japan has been fueling these carry trades since 1995, and kicked them into a higher gear (per *Spinal Tap*, they went to 11) in March 2001 when it first adopted quantitative easing. The U.S. has been fueling global carry trades since the Bernanke rate cuts first began in August 2007.

What has this meant in practice for the relative performance of global equity markets? As a matter of principle, we can state unequivocally and categorically countries that fund carry trades, such as Japan and the U.S., finance the growth of others. If we map the relative performances in USD terms since the Bernanke rate cuts began in August 2007 for a set of 40 different equity markets as measured by MSCI-Barra to the MSCI World index, a clear picture of winners and losers emerges.

We can summarize the picture below and indeed of the previous decade as "emerging markets emerged;" this of course begs the question, "Isn't that what they were supposed to do?" The big winners relative to the World index have been the Philippines, Colombia, Thailand, Indonesia and Sri Lanka, and this is after a prolonged period of lackluster performance by emerging markets in general commencing in October 2010. One wonders what sort of a reception a presentation to an institutional pension fund investment committee recommending this quintet would have received at the start of 2001. The laggards are an equally revealing list: Austria, Jordan, Argentina, Hungary and Egypt. Carry trade-funding countries such as the U.S., Japan and Switzerland have had rather middling relative performance.

Differentiation Of Returns Since August 2007



Five Different Carry Trades

Now let's calculate the elasticities, or relative percentage changes, of each country's relative performance index against the returns on the following five carry trades:

- 1. The Japanese domestic yield curve from three months to ten years;
- 2. The U.S. carry trade into the euro at the three-month horizon;
- 3. The U.S. domestic yield curve trade from three months to ten years;
- 4. The Japanese carry trade into the euro at the three-month horizon; and
- 5. The Japanese carry trade into the U.S. from three months to ten years

As these elasticities are the result of a regression process we can calculate levels of statistical significance. If we use a 90% confidence level for the elasticities' betas and an r^2 , or percentage of variance explained, of 80%, we find only a small number of countries have any sort of positive elasticity to any of these carry trades; these include the aforementioned Colombia, Malaysia and the Philippines. The Eurozone has negative elasticities.

Had this chart been calculated at the start of QE2 in November 2010, almost half of the countries involved would have had statistically significant elasticities against most of the five carry trades. What happened? The answer is shockingly simple: Downward convergence of interest rates globally. As yield curves were compressed by central bank policies and as a large number of interest rates fell, the capacity of carry trades to influence relative equity behavior fell as well. Restated, you might as well finance yourself in your own currency and sidestep whatever currency risks or yield curve risks you would have incurred in a carry trade.



Isolating Which Carries Drive Incremental Performance: Post-August 2007

Simple Currency Carries Matter

If the carry trades listed above are losing their power to drive relative equity market performance, two simple currency carry trades, those from the three-month dollar and the yen into other short-term interest rate instruments retain importance.

If we map average annual relative performance, outperformance in green bubbles and underperformance in red with the diameter of the bubbles corresponding to the absolute magnitude of relative performance, we see a generally direct relationship between relative equity returns and the two currency carry returns.

Relative Equity Returns Affected By Currency Carry Returns After August 2007



Argentina is an outlier; here very high interest rate spread returns on the Argentine peso have led to a positive carry against both the JPY and USD. However, this has not been sufficient to offset the gross mismanagement of the Argentine economy.

What has been the net result of more than a decade of fighting every previous bubble with money-printing and low interest rates? Money has fled from what used to be condescendingly called the developed markets and into the emerging markets. Very good; the United States in the 19th century was the greatest emerging market of all time, and the emerging markets had to emerge at some point, no?

However, as an increasing percentage of the world's population is nearing the age of pension eligibility (not the same thing as retiring or even receiving that pension; the choice of words here was quite deliberate), the demand for conservative investing will or should increase. As fixed-income markets are unlikely to provide the desired returns going forward, this leaves equities and real estate as the other two major classes with the potential to step into the breach.

Will the retirees of the Baby Boom be comfortable chasing returns in Colombia, Malaysia, the Philippines and Indonesia? If the answer is "no," then perhaps it is time to rethink the vast consequences of printing money to solve every problem.