Won Flew Over The Carry's Nest

Korea may be the only country on earth able to stand toe-to-toe with Poland in a Bad Choice of Neighbors contest. Poland's history includes multiple partitions, a complete disappearance, and an artificial division between hostile powers, brutal invasions and fighting on its soil, while Korea's history includes...pretty much the exact same list.

The significant and lasting difference between the two countries is Korea had the good sense to be occupied by the United States instead of Russia. It is pointed out often that when Ghana was granted independence from the United Kingdom in 1960, it had the same GDP as Korea, a situation almost incomprehensible today. If you are going to be occupied, make sure the occupying power does everything it can to finance your development and prove a point about the merits of its economic system vis-à-vis a communist alternative.

The largesse, however, has not been in one direction only. The Korean brand of crony capitalism, one involving large conglomerates, or *chaebol*, intertwined with government agencies, provided a model for the evolution of American business during the bailout binge of 2008-2009.

The very same reliance on a small group of large businesses and a small group of large neighbors has made the Korean economy and currency given to spasms, mostly in a negative direction, over the past twenty years. Twice, once during the Asian crisis of 1997-1998 and once during the credit crunch of 2007-2009, Korean financial markets and the won (KRW) have taken a severe beating as the *chaebol* system and the country's large exposure to foreign funding underscored a certain economic inflexibility. The Korean markets proved vulnerable to just a few large enterprises weakening or to a small number of external factors beyond its control.

External Exposure

While the common perception is Korea is a mercantilist economy overweighted toward exports, it might be instructive to note how the monthly balance of trade expressed as a percentage of GDP remained negative for most of the 1990s until the onset of the Asian crisis. The country ran a trade deficit and a capital surplus for most of this period; this combination has characterized the United States for more than thirty years.

It was not until the massive capital outflows induced by the Asian crisis that the KRW and the ability to import goods collapsed and the country shifted into a trade surplus that would endure almost continuously until the end of 2007. The KRW fell once again as capital flowed outwards; however, as the country did not enter a recession immediately, the trade balance remained negative.

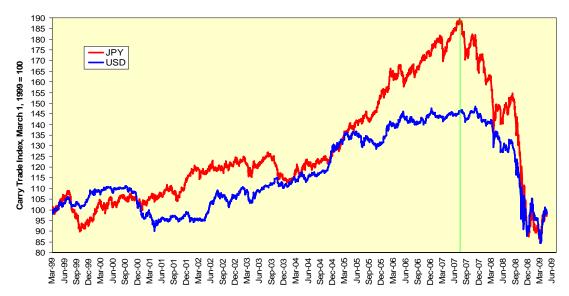
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Won Collapse During Asian Crisis Led To Trade Surplus

It is important to recognize the source of the capital flowing out of Korea. If we compare the Royal Bank of Scotland (formerly ABN-Amro) carry trade indices for borrowing either the Japanese yen or the USD and lending in KRW, we see the JPY has been the more important of the two funding currencies (see "Currency Traders Should Be

Humbler," and "Looking At The Carry Trade," May-June 2007 for the carry indices and the yen carry trade, respectively, and "The Short, Awful Life Of The Dollar Carry Trade," August 2008, on the dollar carry trade).

Carry To The Yen Failed First



A glance at the comparative carry chart should convince traders of the KRW the yen-won cross is the more important rate to keep in mind. It began to move against the KRW in August 2007, marked with the green vertical line, a time when the KRW-USD carry was quiescent.

Indeed, in a perfect world a KRW trader would study the incentives for Japanese lenders to close their carry trades, sell the KRW and repurchase their borrowed JPY. The KRW did not start to weaken precipitously against the USD until February 2008, six months after it started to weaken against the yen. The world is not perfect, however, and while the bulk of the flow into and out of the won in carry trades can be explained in yen terms, the dollar flows at the margin illustrate the links between the KRW, Korean capital markets and global short-term interest rate markets more clearly.

Return On Capital

The link between yen carry trades and the Korean won suggests a currency dependence on returns on Korean capital markets. As funds chase performance, we should expect external capital to come into Korean markets when they are performing strongly and leave when they are performing poorly; this is the time-honored strategy of buying high and selling low.

This appears to be the case with a prominent exception, marked with a green rectangle. If we map the relative total returns of the Korean and American stock markets, both expressed in USD terms, to the USD-KRW exchange rate, we the long period of Korean outperformance from late 2001 through 2007 coincided with a stronger KRW. The opposite occurred with a vengeance after February 2008; as the Korean stock market weakened, money fled and the KRW collapsed. When the U.S. stock market entered its collapse between October 2008 and March 2009, the marked area, the Korean market outperformed as the KRW was allowed to seek a level. Once again, the lesson that a country which "defends" its currency with high short-term interest rates suffers, while a country willing to let its currency float can ride out the storm.

Korean Stock - Won Link Broke During Won Collapse



The Weak Interest Rate Link

While expected interest rate differentials explain major market exchange rates well, especially the USD-EUR and USD-CAD rates, they are less effective in explaining the movements of minor exchange rates. The USD-KRW rate is no exception.

If we first calculate 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, for each currency, we get a measure of expected interest rate changes. The more a FRR_{6,9} exceeds 1.00, the more we expect short-term interest rates to rise. The difference between two FRR_{6,9} measures, here the KRW FRR_{6,9} minus the USD FRR_{6,9}, should give us an idea whether we expect Korean short-term interest rates to rise more – and hence to be supportive of the KRW – than American short-term interest rates.

The connection here is weak, and the lead time involved is irregular. Normally FRR differential lead the currency by the three-month period of a standard non-deliverable forward; here the lead time has been closer to five months. Second, while the sharp drop in the differential during the first half of 2008 led the KRW lower, similar drops in the first halves of 2002 and 2004 did nothing of the sort. Moreover, none of the large spikes in the FRR_{6,9} differential, including those of late 2000, mid-2003 and January 2008, led to a stronger KRW. We have to conclude, therefore, the USD-KRW exchange rate is not driven by expected short-term interest rate differentials.

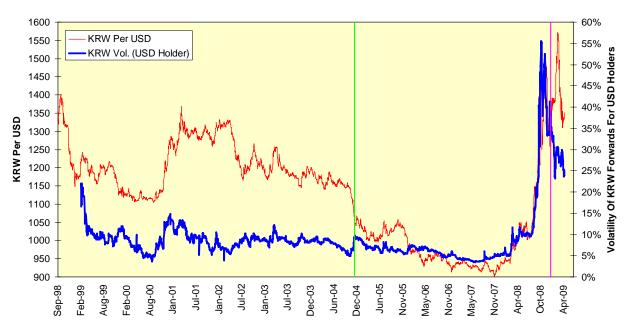
Won-Dollar Rate Not A Strong Function Of Expected Interest Rate Differentials



Volatility

Finally, let's turn to the subject of volatility. If we map the volatility of KRW forwards for a USD holder against the USD-KRW exchange rate, we see two separate and distinct regimes since the volatility data begin in March 1999. Between that date and November 2004, KRW volatility was quiet and virtually unrelated to the USD-KRW rate. After December 2004, the link between volatility and the KRW became quite direct and remained that way into December 2008. During the 2008 selloff in the KRW, volatility jumped as fast as the KRW weakened. Such a link suggests the KRW was part of leveraged hedge fund and commodity trading strategies, one where a general order to reduce risk led to the aforementioned unwinding of carry trades and shedding of Korean assets regardless of their intrinsic worth. Restated, Korean markets, like so many others, were being carried along on a general tide of increased risk acceptance or aversion.

Won-Dollar Rate And Volatility Aligned 2005-2008



The Risk Market

This conclusion is unsatisfying somehow; it says, "Tell me what the world's leverage and risk appetites will be, and I will tell you which range of assets to buy or sell." That has been an increasingly true statement for years, and has operated with a real vengeance during the periodic financial crises we have endured. During a crisis, all correlations move to 1.00 or -1.00, and that is all the information you need to know whether to buy or sell.

The answer for Korea is both direct and conditional: If the world's risk appetite increases, the KRW will strengthen, and if not, the KRW will remain under pressure. And there will be no arguing with reality; that will be the trade. It is not quite a bad choice of neighbors, but a statement on the bad condition financial markets find themselves in after years of self-inflicted abuse.