Hong Kong Dollar Still Made In Japan

One of the reasons we should run the numbers on each and every currency we find is data analysis is the best and indeed the only way of correcting all of those suppositions and misconceptions we have otherwise. Moreover, the very act of running the numbers and getting your hands dirty with the data, inasmuch as anything digital can get your hands dirty, occasionally reveals one of those little gems that make an economist's life worth living.

Let's take the Hong Kong dollar. This is a currency that should have disappeared but for some obvious political reasons did not after the British returned the former crown colony to China in 1997. The mainland was smart enough to, bluntly, know when to keep its mitts off as the booming city-state provided real value in terms of commercial contacts, financial expertise and a guide for how to manage a boisterous free market economy in a very crowded place. China's financial center has been shifting slowly and surely to Shanghai, but Hong Kong still plays a role. Ironically, the biggest threat to Hong Kong comes not from any political repression or an economic squeeze, but rather from clouds of pollution streaming southward from Guangzhou's industries. It is just a tough place for those who like to breathe.

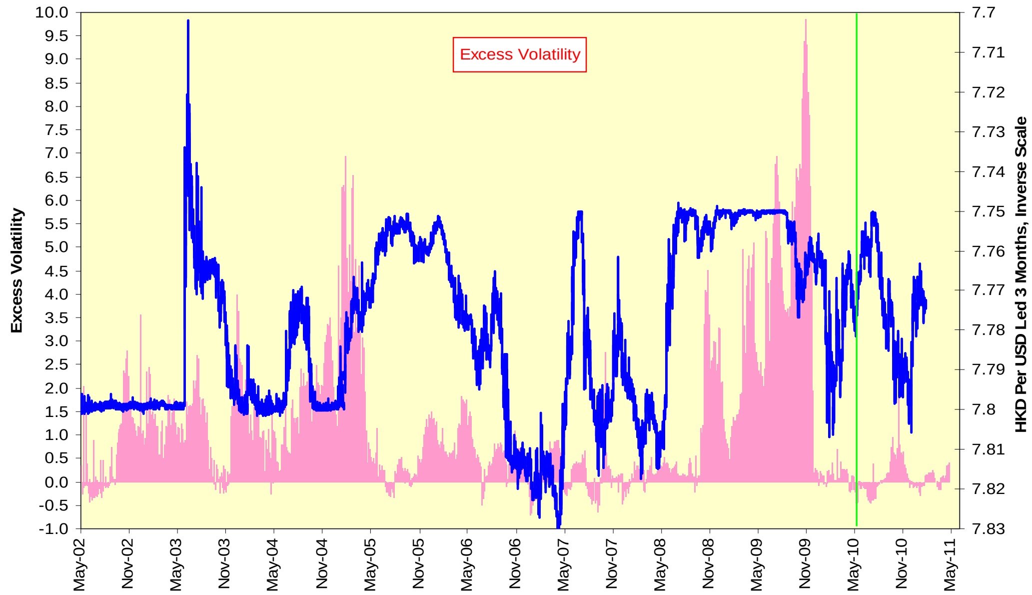
The HKD has been managed within a very tight band against the U.S. dollar; as the Chinese yuan has been either pegged or managed against the USD since the Return, the cross-rate between the CNY and HKD is a matter of little interest. However, as we shall see, the long-term banking relationships between Hong Kong and Japan, some of which are a remnant of Japan's glory days, make the cross-rate between the HKD and JPY far more critical than recognized commonly.

Volatility

As a simple truism, a country can fix its exchange rate or it can fix its short-term interest rates, but it cannot fix both simultaneously. Hong Kong can chose to fix its exchange rate, which means it either has to let its short-term interest rates swing about or it has to engage in frequent purchases or sales of USD to maintain the peg. The Hong Kong Monetary Authority certainly has its hands full in this regard given the very large swings in the exchange value of the USD and the small returns on holding short-term USD deposits in recent years. It also must contend with the large-scale inflows of capital from external sources, much of which goes to pay exporters, and to the outflow of capital from the mainland from those, um, seeking to diversify their holdings. Finally, the on-again / off-again nature of China's willingness to let the CNY revalue, in the "on" state since June 2010, has created a great deal of volatility as traders speculate on the magnitude and timing of that revaluation and to what extent, if any, the HKMA will shift its target band against the USD.

We can measure the insurance dimension of this market by comparing the implied volatility of three-month HKD forwards for a USD holder to the HKD's high-low-close volatility, a measure that incorporates intraday price range as well as interday price change. This ratio, minus 1.00, is the excess volatility for the HKD. As the currency itself is pegged, we should expect its realized high-low-close volatility to be artificially low, and it is. The resulting excess volatility readings thus are quite high at times and they lead the very small movements allowed in the exchange rate by three months on average. No one should be surprised the excess volatility readings spike whenever speculation increases regarding a revaluation of the CNY and falls otherwise. The June 2010 revaluation is marked with a green vertical line.

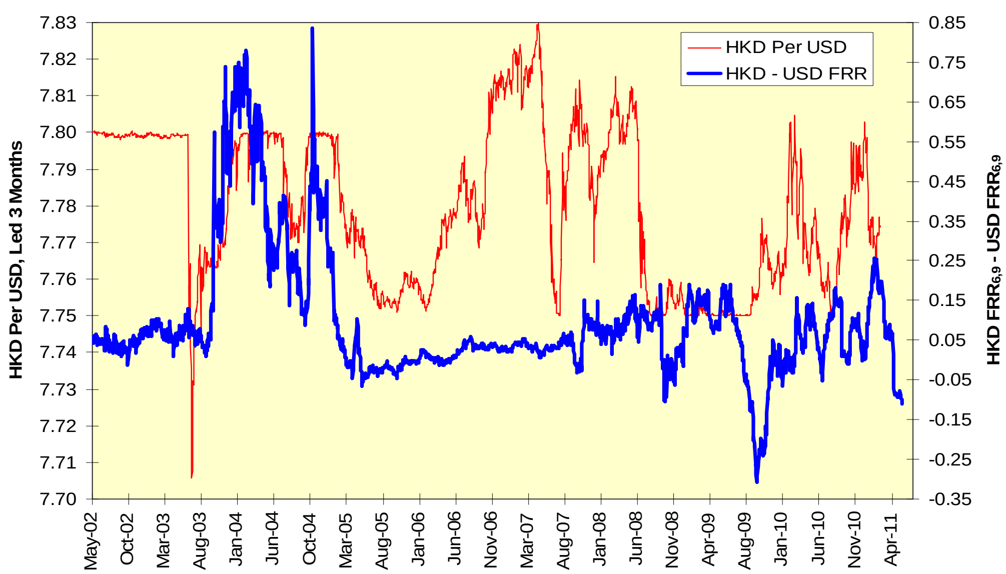
Excess Volatility Leads HKD's Small Changes



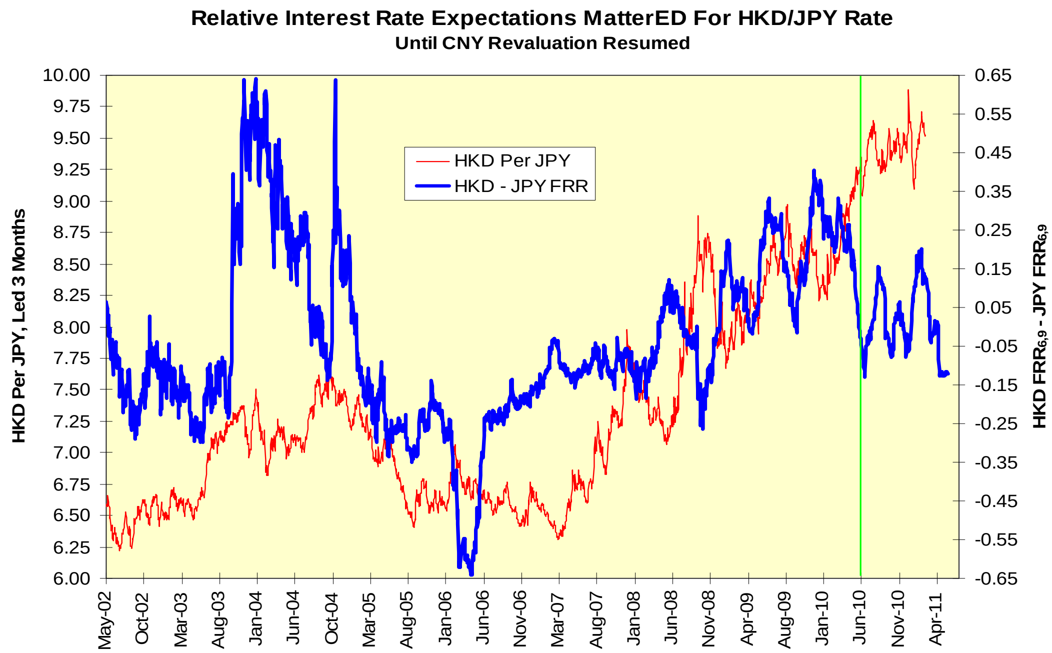
Interest Rate Expectations

One consequence of Hong Kong's unusual situation is relative interest rate expectations between the U.S. and Hong Kong play only a minor role in the exchange rate. We can measure the forward rate ratio between six and nine months for each currency; this is the rate at which we can lock in borrowing for three months starting six months from now, divided by the nine-month rate itself. The more this $FRR_{6,9}$ exceeds 1.00, the steeper the money market yield curve is and the more the market expects short-term interest rates to rise. The difference between the HKD $FRR_{6,9}$ and USD $FRR_{6,9}$ has led the exchange rate only modestly since May 2002.

Relative Interest Rate Expectations Not Very Important For HKD/USD Rate

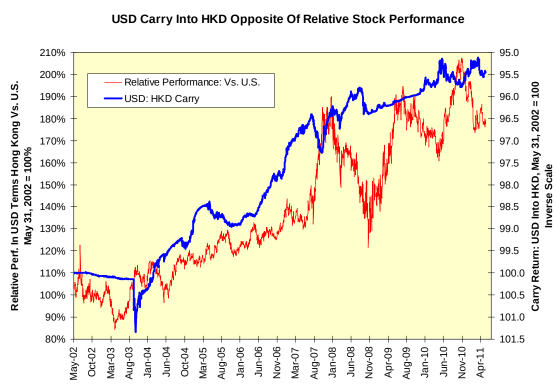


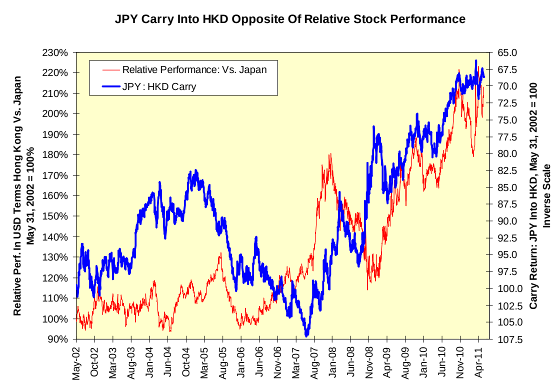
What do we see if we shift the basis of comparison from the USD $FRR_{6,9}$ to the JPY $FRR_{6,9}$? The weak and meandering relationship seen for the USD now becomes a much closer and more direct one. As the interest rate expectations gap steepens in favor of the HKD, the HKD weakens against the JPY and vice-versa. This is our first clue the proper relationship to focus on is the one between Japan and Hong Kong as opposed to Hong Kong versus the U.S.



Asset Carries

As we have seen in so many cases, prospective returns on assets often drive the flow of speculative funds into and out of an economy and therefore affect the currency. If we compare the carry return on borrowing USD and lending HKD to the relative performance of Hong Kong equities against American equities, we see a weak, irregular and inverse relationship. A similar comparison between Hong Kong and Japan, one involving the carry from JPY into HKD and the relative performance of Hong Kong equities against American equities reveals a much stronger inverse relationship.



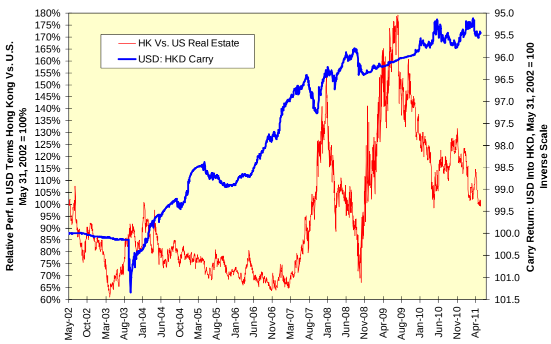


What can we infer? It appears the more short-term interest rates rise outside of Hong Kong from carry-trade funding sources or the more either the USD or JPY rise against the HKD, the more we should expect Hong Kong equities to outperform. Each episode of USD or JPY carry trade unwinding appears to be met with a flow of funds back into Hong Kong and each re-starting of these carry trades appears to be involve funds flowing out of Hong Kong. Restated, Hong Kong markets are behaving as if the city-state is one of the funding sources of global carry trades and not one of its beneficiaries.

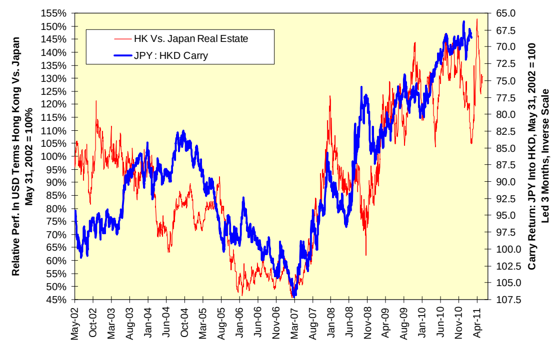
Can we confirm this by taking a look at the relative performance of commercial property markets in the U.S., Japan and Hong Kong? Real estate is less liquid than equities almost by definition, but it is one of the few places where pension funds, life insurance firms and other investors who need long-maturity assets can place a great deal of money. As an aside, the argument that you can make more people but you cannot make more real estate does not hold particularly well, even though both halves of the statement are largely true ("largely" because Hong Kong has engaged in some landfill projects in the harbor over the years to create more real estate). One observer recalls making such a statement about Japan during its real estate bubble of the 1980s, and while there are more Japanese and no more Japan today, real estate has been a moribund investment in Japan over both of its Lost Decades.

Once again, we can compare the performance of the currency carries to the relative performance of Hong Kong real estate to both U.S. and Japanese real estate. The U.S. case is as disjointed in real estate as it was in equities. The Japanese case presents an interesting difference: Not only is the relationship much stronger, just as it was in equities, but the relative performance of Hong Kong real estate vis-à-vis Japanese real estate actually leads the currency carry trade by three months on average. We must note a major exception for the late-2008 global financial crisis, however, in making this statement.

USD Carry Into HKD Unrelated To Relative Real Estate Performance



Relative Real Estate Performance Leads JPY Carry Into HKD

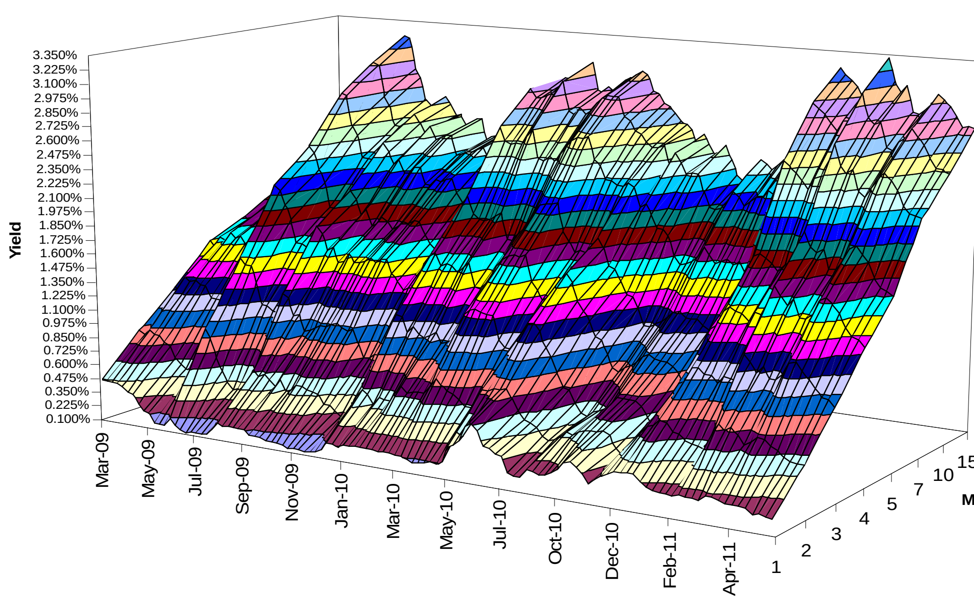


This stands as a confirmation to the observation made in the equity cases. As property prices decline, yen are repatriated and the carry return from the yen into the Hong Kong dollar is pressured. Call it the inverse, reverse carry trade if you will, but the facts are what they are.

A Note On The Yield Curve

If short-term interest rate movements are limited by the willingness of the HKMA to wreak havoc on those markets simply to maintain the HKD band, then the adjustment burden tends to get shifted to long-term instruments as funds flow into and out of capital assets as opposed to short-term deposits. This can be seen quite readily in the fluctuations of the Hong Kong coupon yield curve since the global market low of March 2009. The shorter maturities are anchored, but the longer maturities tend to rise and fall quite a bit and make the Hong Kong bond market prone to bearish steepening plays.

Hong Kong Yield Curve Prone To Bearish Steepening



The Hong Kong dollar is full of exceptions: It is a managed currency where the peg is set to the U.S. and not to the Chinese yuan and where the principal financial links appear to be more a function of trades against the Japanese yen as a legacy of Japan's glory-days expansion into Asian banking. No one would design it this way, and that is exactly how the famously free-market residents of Hong Kong would have it.