Taiwan: The Cold War Fiction That Worked

Whenever a diplomatic agreement or political compromise seems too cute by half, it usually is. Take a look at the U.S. Constitution's punting of the slavery issue: Slaves would be counted as three-fifths of a person and the slave trade could last another twenty years. It took a very bloody civil war and three amendments to the Constitution to settle those issues.

But the 1972 Shanghai Communiqué signed between the United States and what was then a very desperately poor and politically unsettled Peoples' Republic of China declaring there was one China and Taiwan was part of that China has stood the test of time, or at least four decades. The implicit understanding was the Taiwan issue either would be resolved to the mainland's satisfaction or that all parties would agree to ignore the inconvenience of an independent Republic of China parked off China's coast. Never mind Taiwan was under a mainland-based government for all of four years during the entire Twentieth Century and those years, 1946-1949, were the civil war between the Communists and the Nationalists. Once the Nationalists were exiled to Taiwan, a situation made tenable only by the overwhelming U.S. naval and air superiority in the region, they set about building one of the few Cold War fictions that worked: Where are East Germany, East Pakistan and South Vietnam today? Korea remains divided, but that division is between a successful country and a basket case.

Taiwan would go on after 1972 to become an economic powerhouse and to have by the mid-1980s the world's largest reserves of foreign exchange. The island is still prosperous, is still chafing under its Asian-style combination of economic freedom without what Americans would consider full political freedom, but it has lost many of its export markets, particularly in high-end electronics, to the mainland.

The Cross-Rates

As we have done several times when discussing Asian currencies (see "No Whacks At The Philippines," April 2011, "The Baht And I," May 2011, "Malaysia On The Jagged Edge," June 2001 or "Hong Kong Dollar Still Made In Japan," August 2011), we will look at the cross-rate of the Taiwan dollar to the Japanese yen as well as to the U.S. dollar. Not only has Japan been an important commercial trading partner and financing source for Taiwan over the years, but Japan occupied Taiwan for much of the Twentieth Century prior to 1945.

First, let's take a look at the TWD against the USD overlaid with its excess volatility, the ratio of the implied volatility for three-month non-deliverable forwards to high-low-close (HLC) volatility, minus 1.00, as a measure of the market's demand for insurance.

HLC volatility is defined as:

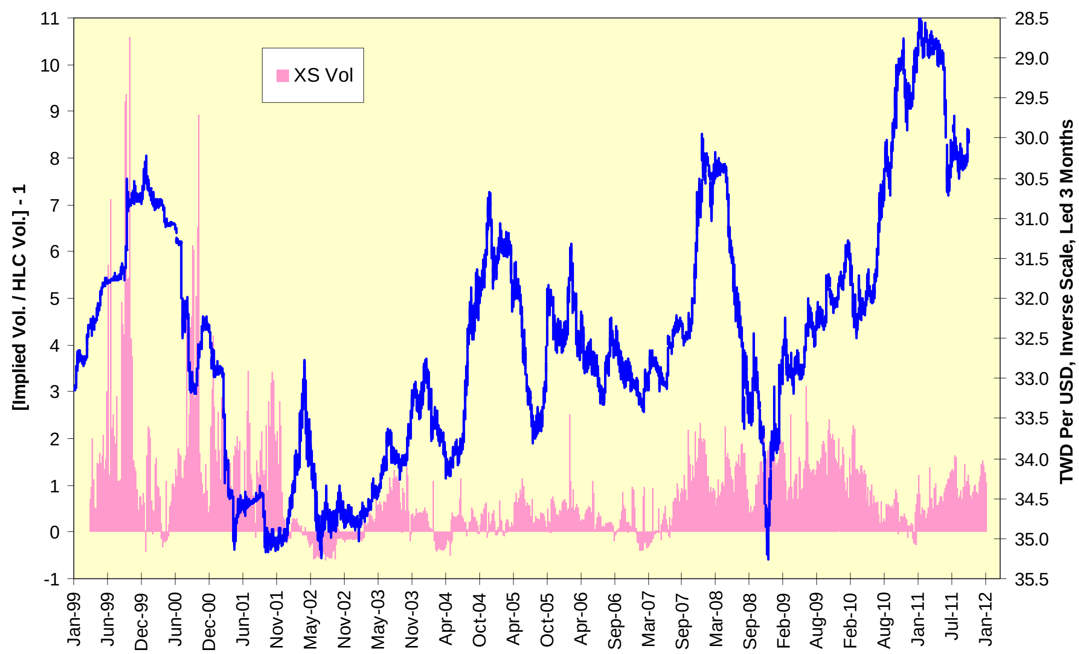
$$\sum_{i=1}^{N}\left[\frac{\left[.5*\left(\ln\left(\frac{\max(H,C_{t-1})}{\min(L,C_{t-1})}\right)\right)^2-.39*\left(\ln\left(\frac{C}{C_{t-1}}\right)\right)^2\right]*260}{N}\right]^{1/2}$$

Where N is the number of days between 4 and 29 that minimizes the function:

$$\frac{1}{N}*\sum_{i=1}^{N}\frac{N}{Vol^2}*|(P-MA)|*|\Delta MA|$$

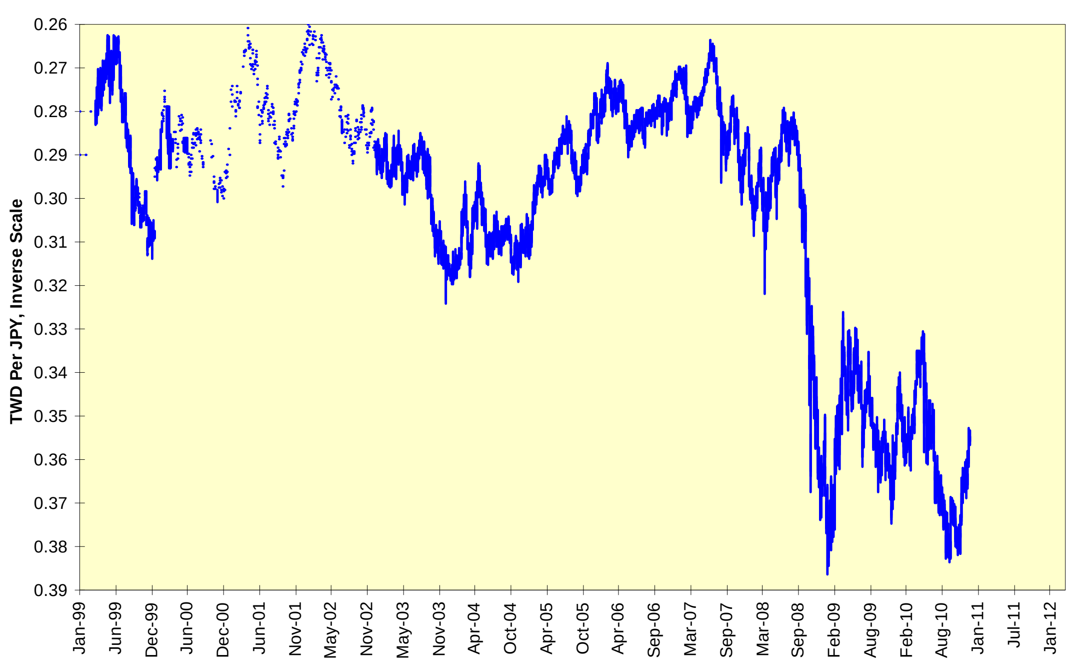
The options market appears comfortable with a stronger TWD; we did not see any significant jumps in excess volatility in 2010 as the TWD firmed as part of that year's general emerging market rally. Interestingly, some of the highest readings for excess volatility occurred during the tech boom-and-bust of 1999-2001 as many of the capital inflows to Taiwan were seen as unstable and the dotcom implosion wreaked havoc on the island's export industries.

Options Market Comfortable With Stronger TWD



As the market for options on the JPY-TWD rate is quite new, we will simply display the cross-rate below. The dominant feature of the past five years has been the TWD's drop against the JPY once the credit crisis started to grow in mid-2007. The unwinding of yen carry trades into the TWD certainly accelerated this process. A brief stabilization in 2010 ended with the massive repatriation of JPY following the March 2011 earthquake and tsunami.

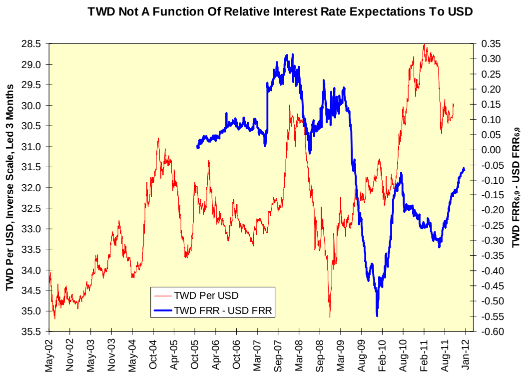
TWD Rebounding Against Yen

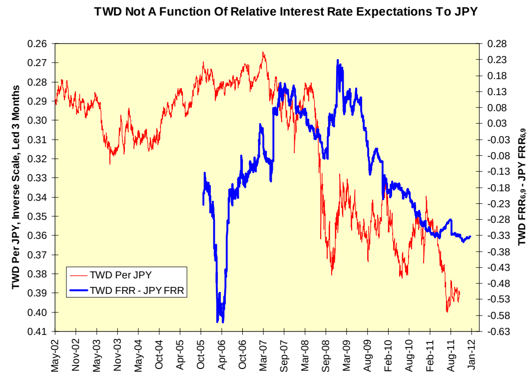


Interest Rates

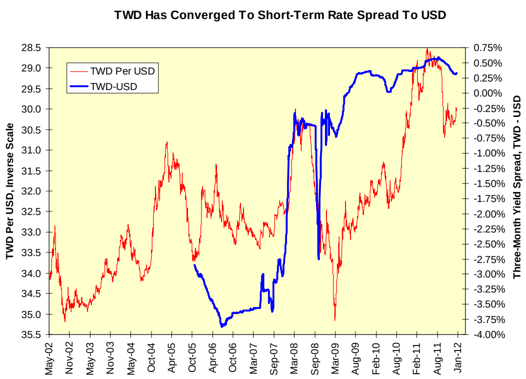
The unwinding of carry trades is linked to one of the key variables we have used to analyze nearly all currencies, the interest rate expectation differential as measure the forward rate ratios between six and nine months ($FRR_{6,9}$). This is the rate at which we can lock in borrowing for three months 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.

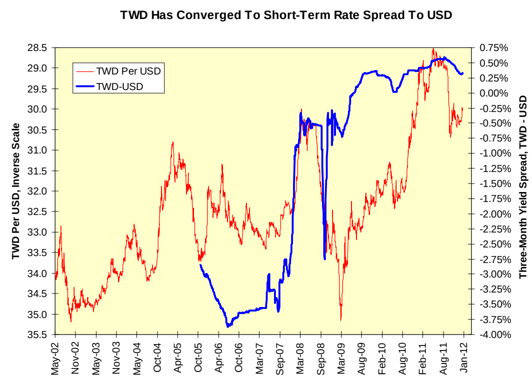
We should expect the differential between the TWD $FRR_{6,9}$ and those of both the USD $FRR_{6,9}$ and the JPY $FRR_{6,9}$ to lead the TWD by three months, with the normal effect being a greater differential leading to a stronger TWD. This does not appear to be a strong relationship for either currency with the exception of the late 2007 period. As the Taipei Interbank Offered Rate (TAIBOR) market did not develop until September 2005, it is impossible to determine whether the TWD ever was a function of expected interest rate differentials or whether it has been mostly a function of asset-linked financial flows.





We can observe, however, a simple interest rate link more common to less-developed markets and economies than those on Taiwan, and that is the interest rate spread at the three-month horizon. In both the USD and JPY cases, the currency exchange rate and the three-month interest rate spread move in a parallel but not particularly statistically significant manner.



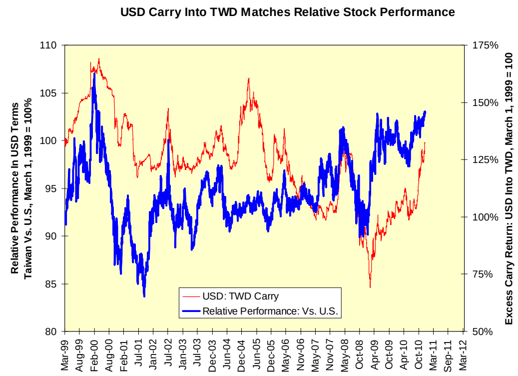


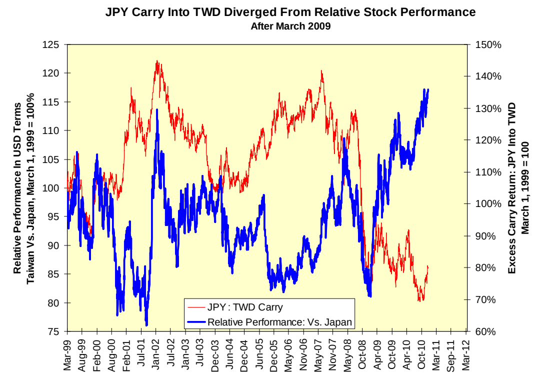
Should either the U.S. or Japan ever find a way to get themselves out of their respective near-zero percent interest rate worlds, we should expect to see downward pressure on the TWD.

Stock Markets And Carry Trades

The most powerful determinant of the TWD, especially against the USD, appears to be carry trade-induced flows into Taiwanese assets, represented here by the relative performance of the Taiwanese stock market against both the U.S. and Japan in USD terms.

If we map the excess carry return of borrowing either the USD or the JPY and lending into the TWD against the relative performance of the Taiwanese stock market as measured by MSCI, we see an extremely strong linkage in the U.S. case from 1999 forward. The yen carry trade, as noted above, lapsed in importance after the U.S. went to quantitative easing in March 2009.





This self-reinforcing cycle of funds chasing stock market performance and pushing the carry trade recipient's currency higher has been seen around the world with increasing intensity since 2007 when central banks decided the answer to every question was more money. As "self-reinforcing behavior" simply is a synonym for "bubble," we know it will end and end badly at some point. Until then, a firmer TWD and greater returns on Taiwanese assets are there, courtesy of both the Federal Reserve and the Bank of Japan.