Indonesian Rupiah: River Deep, Bali High

Indonesia is at once fascinating and easily ignored. The archipelago has 17,000 islands – go ahead, name them – three of which (Borneo, New Guinea and Sumatra) are among the ten largest islands in the world. It is the largest Muslim country and has the fourth largest population in the world. The island arc, formed by the movement of the Indo-Australian plate northward into the Eurasian landmass, has produced some of the largest and deadliest volcanoes such as Krakatau, Tambora and Toba; the latter's caldera explosion nearly 75,000 years ago is thought by some to have reduced the humanoid population of the time to as few as 5-10,000 individuals. We all remember the catastrophic Sumatran earthquake and tsunami of 2004. It is a strange bargain with Mother Nature: The volcanic ash combines with Indonesia's tropical climate to allow for triple-cropping and the ability to support such a large population.

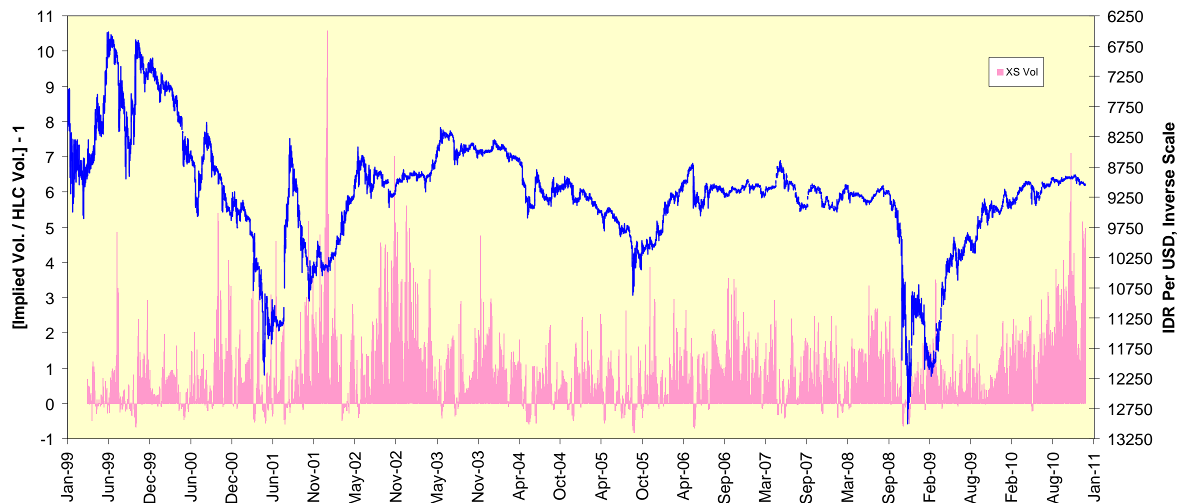
Indonesia is remembered for human catastrophes as well, such as the longtime strongman rule of President Suharto and a culture of corruption that made Indonesia vulnerable to the Asian crisis of 1997-1998. The rupiah (IDR) went from 2,432 against the dollar at the end of June 1997 to a low of 16,000 in January 1998. Just like earthquakes, financial shocks often have aftershocks for years; in the IDR case, the currency suffered significantly during the first half of 2001 and during the financial panic of late 2008 – early 2009.

However, Indonesia managed to recover from the shocks, clean up its politics to a degree and get on with its affairs. Let's take a look at how the IDR has fared not only against the dollar but against the currency of its neighbor and major trading partner, Australia (AUD).

Thinking About The Thinkable

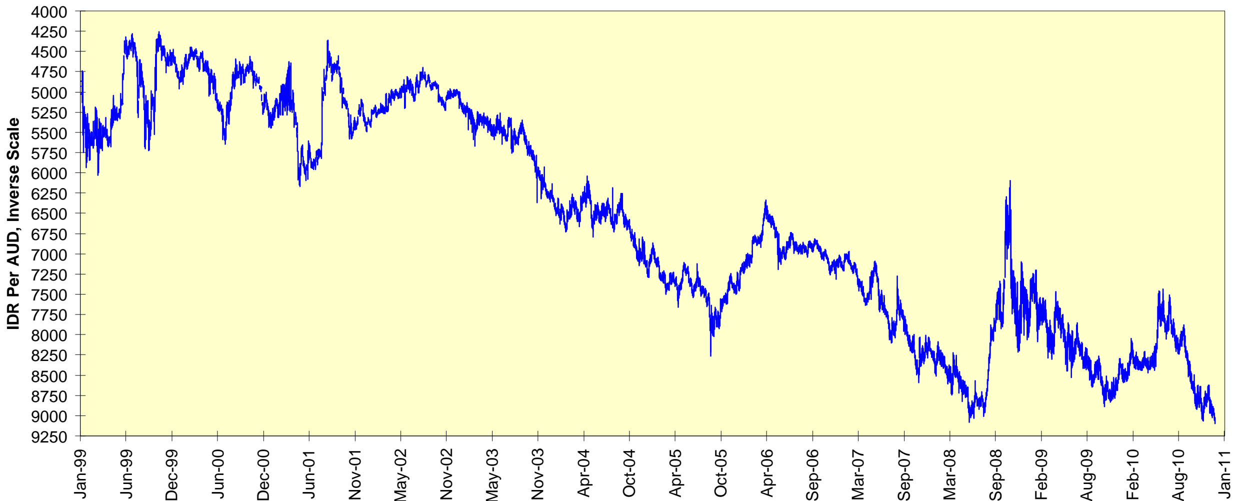
The various crises faced by the IDR since 1997 have led to the same asymmetry of risk seen in many emerging market currencies. The underlying fear is the currency can weaken catastrophically without a balancing risk of strengthening catastrophically; this asymmetric risk in turn forces Indonesian interest rates to remain higher than they would be otherwise.

If we map the course of the IDR against its excess volatility, here defined as the ratio of the implied volatility of three-month forwards to high-low-close volatility, minus 1.00, we see how the options market remains in a permanent state of "buying protection" against a declining rupiah. Indeed, excess volatility only declines toward or below zero when the rupiah is confirming traders' fears and falling. This is a case of mass neurosis as well as a currency market.



Unfortunately, there is no comparable options market for IDR forwards for AUD holders. This is unfortunate as the history of the cross-rate is substantially different; the IDR has been in a steady long-term downtrend against the AUD since mid-2002 punctuated by a massive retracement during the 2008-2009 financial crisis. We should expect far lower levels of excess volatility for these forwards, but we cannot say for sure.

Rupiah In A Long-Term Downtrend Against the Australian Dollar

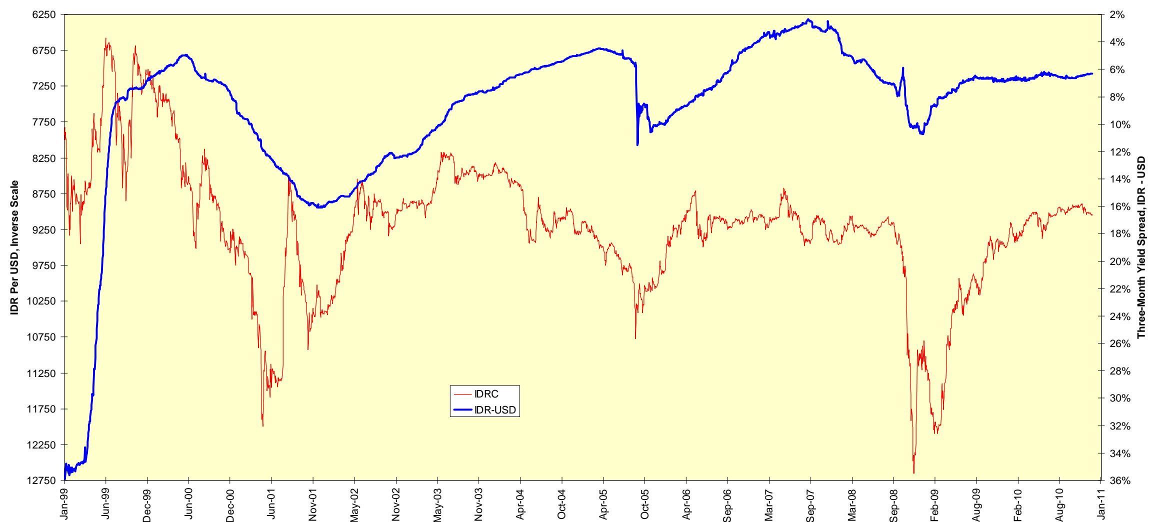


Interest Rate Differentials

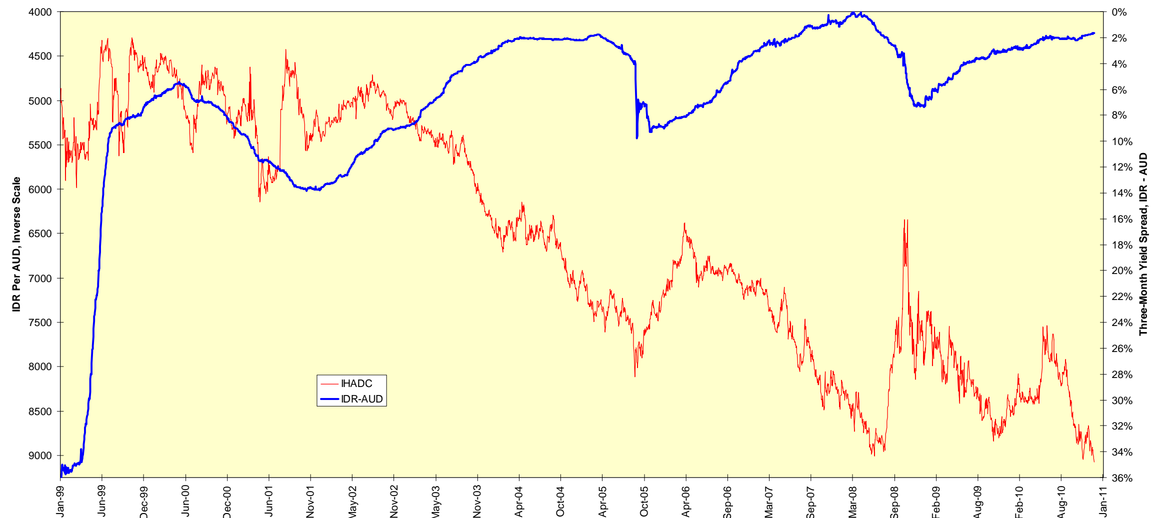
Another common attribute of the minor currencies is they lack the raw materials for us to construct forward rate ratios between six and nine-month deposits. These forward rate ratios, the rate at which we can lock in borrowing for three months starting six months from now divided by the nine-month rate itself, can be subtracted from one another to derive relative interest rate expectations.

However, the exchange rate for minor currencies often follows, at least weakly, the contemporaneous spread between three-month deposits. This has been the case for the IDR's rate against the USD.

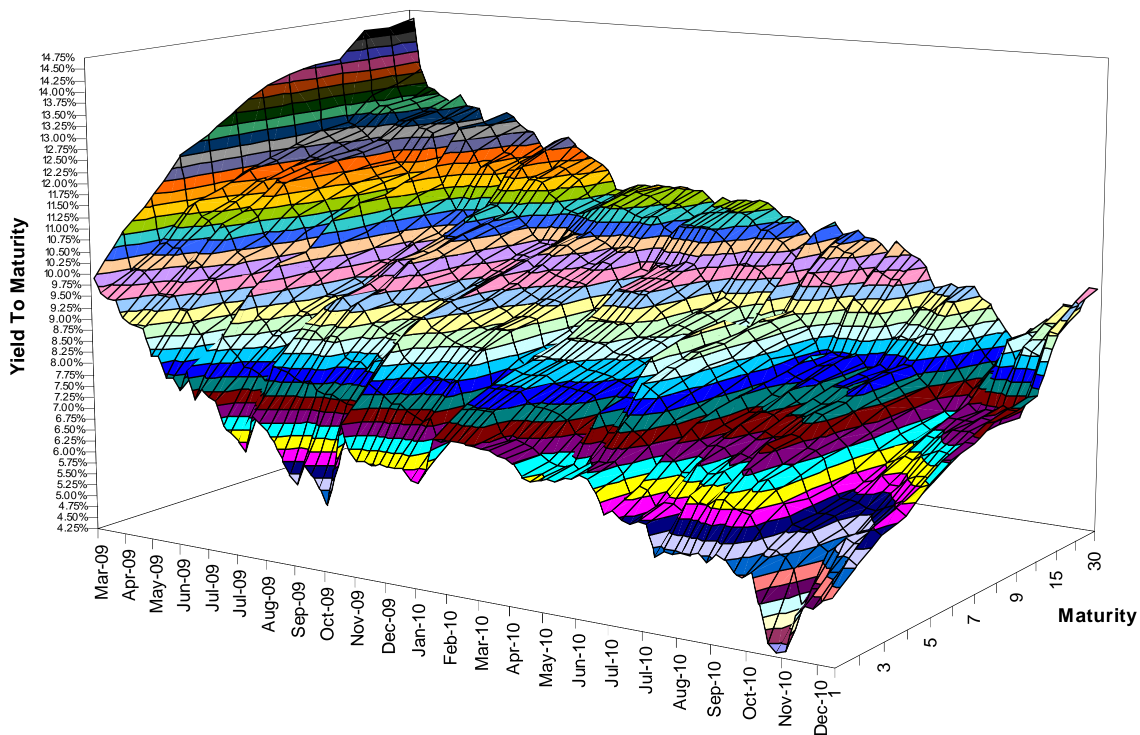
Rupiah A Weak Function Of Short-Term Rate Spread To USD



Interestingly, the cross-rate between the IDR and the AUD is not at all a function of their relative three-month interest rates. Indonesian rates have been consistently higher than Australian rates, but the trend, as noted above, has been for a steadily weaker IDR.



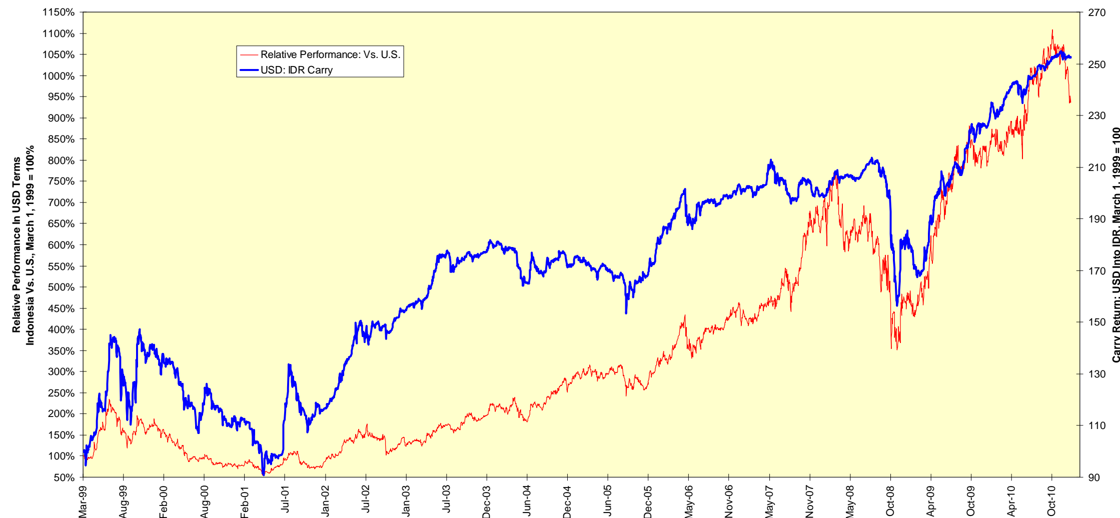
Deformations in the yield curve at note and bond horizons often provide us with clues as to whether a country is trying to bribe foreign investors into holding funds there via excessively high interest rates. This has not been the case at all for Indonesia, at least since the March 2009 global financial market low. The Indonesian government debt's yield curve had been stable to the point of being dull between March 2009 and hints of the restarting of quantitative ease in the U.S. in September 2010. That led to an abrupt steepening of the Indonesian yield curve, first bullishly and then bearishly. Its modestly positive slope stands as evidence Indonesia is not trying to pull funds into the country via high and by definition unstable short-term rates or yield curve inversions.



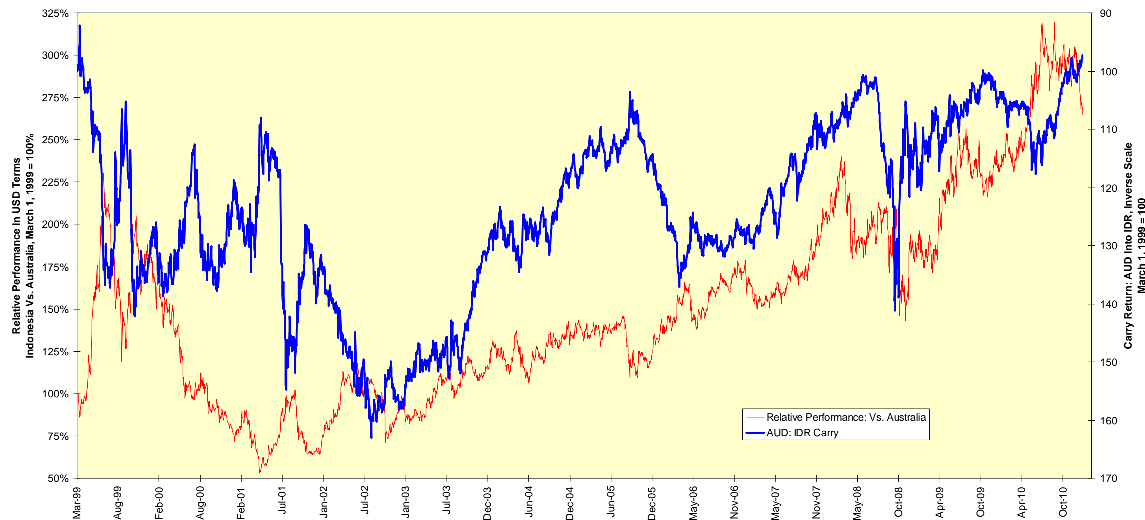
A Tale Of Two Carries

Currency rates often follow relative asset returns. As emerging markets in general have outperformed so-called senior or developed markets for the past decade, and by wide margins in many cases, we should expect the exchange rates to follow asset flows. This has been the case for the comparative total returns of the Indonesian and American stock markets. The relative performance of Indonesian stocks and the carry trade return for borrowing USD and lending IDR have been rising in parallel to one another. Global investors had been content to swap dollars into

rupiah to invest in Indonesian equities through October 2010, at which point some of the enthusiasm started to wane as fears of an emerging markets bubble arose.



The case for Indonesia and Australia is a little different. Here the relative performance of the Indonesian market to the Australian market, both expressed in USD terms, has not been as strong as Australia has been one of the chief beneficiaries of the Asian economic boom and the China growth story. While the general trends remain parallel over the long-term, they can and do oscillate in the short-term. Australian investors in Indonesian stocks have to endure the steady downtrend in the currency and require compensation from the interest rate differential. When Indonesian rates rise sufficiently in relation to Australian rates, the carry trade re-opens and the two markets resume rising in parallel.



We have noted previously (see "Currencies And Relative Stock Market Performance," March 2008 or "No Man Is An Island, But The U.K. Is," August 2010) how countries such as Japan, the U.K. and the U.S. who try to devalue their way to prosperity simply finance others' well-being via carry trades.

The three-way case between Indonesia, Australia and the U.S. illustrates this perfectly. If you want to chase emerging market performance with the USD, you generally pay no penalty for borrowing it. If you want to chase emerging market performance with the AUD, you pay a penalty. This open-ended invitation to borrow and sell the U.S. dollar is not how the world's reserve currency should be managed.