

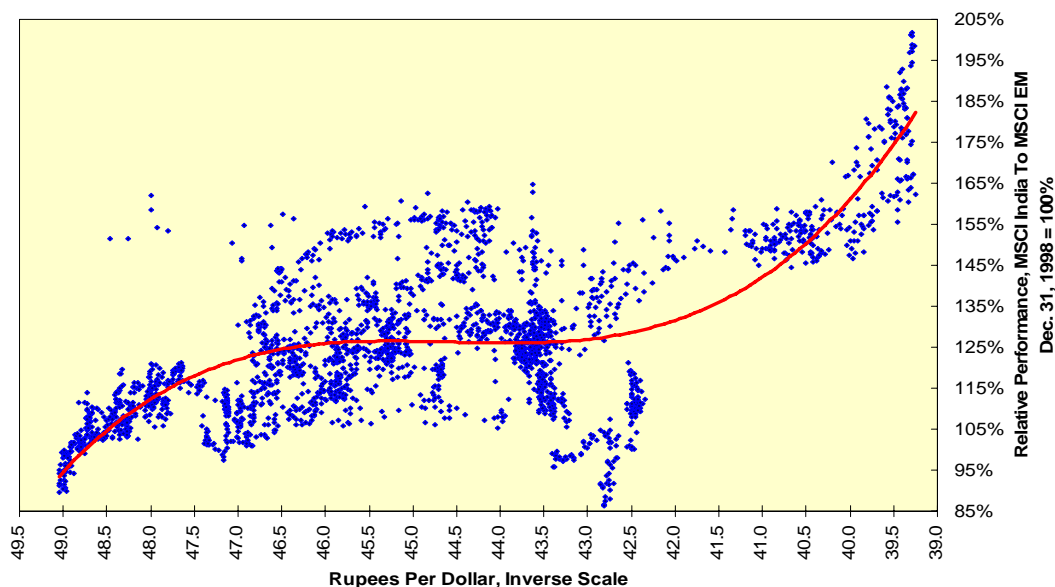
The Rupee And Emerging Markets

Future economic historians will debate whether India in the early 21st century represented an economic miracle or simply an adjustment from the self-inflicted poverty caused by a half-century of failed socialist experiments. The latter would make its development and entry into the first rank of world economic powers parallel to China's explosive growth after they ceased being communist and opted for being a mere corporatist police state. And they call economics the Dismal Science.

One major difference between India and China is their currency policy. China pegged the yuan to the dollar at what many considered to be an artificially low rate through July 2005, and then managed its revaluation thereafter. The dollar peg and the artificial currency rate meant China's monetary policy was set in large part by the Federal Reserve; if they consider this to be an act of overt sabotage, they have remained silent thereon. China's economy has boomed, through mid-2008 at least, on its exports, but as many of its imports are priced in dollars, their inflation has risen apace each and every time the dollar has fallen.

India has opted for greater freedom of movement for the rupee (INR), and it has moved both up and down in response, which makes it an interesting barometer for actual currency conditions in emerging markets. Like many other emerging markets, India has parallel movements between its stock market and its currency (see "Currencies and Stock Index Performance," May 2008). We can create a relative performance index of the total return for the Indian stock market versus that of the Morgan Stanley Capital International index for emerging markets and map it against the INR. The period of strongest relative performance corresponds directly to the period of greatest INR strength; so much (once again) for the notion a weaker currency benefits a stock market.

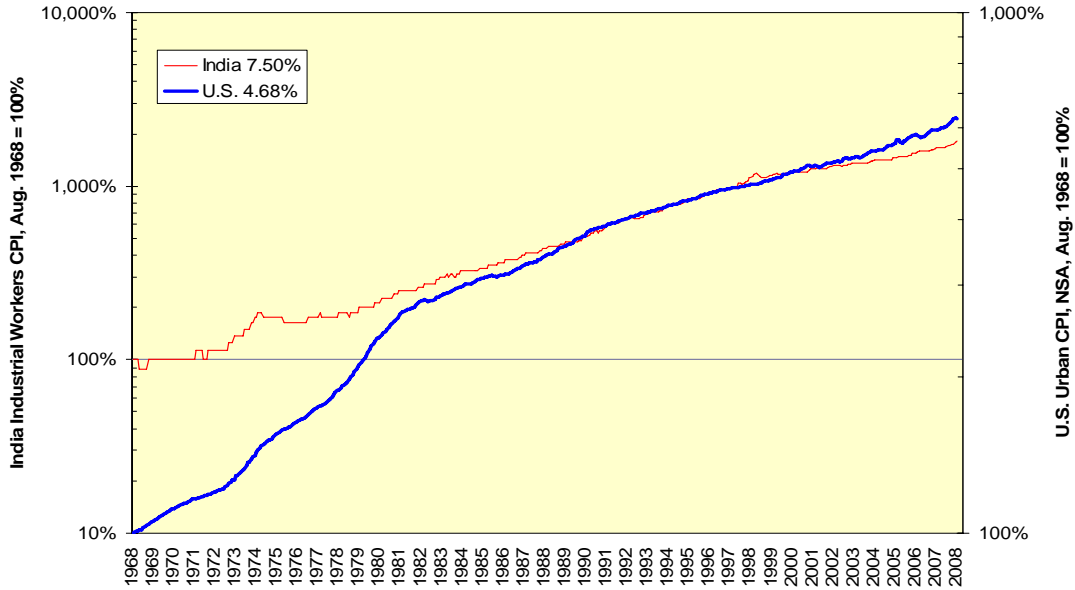
Strong Rupee, Strong Stocks



This dual strength suggests a phenomenon observed in many emerging markets, capital inflows buoying stocks and the currency simultaneously, is at work. Capital flows often are a double-edged sword for emerging markets: They are fun on the way in, hell on the way out and almost certain to cause inflation by virtue of the power of foreign investors to bid away resources from domestic consumers. This has been the experience forever in Mexico, and it was repeated over a wide swath of emerging markets during the September-October 2008 financial crisis.

Of course, inflation has been a problem endemic to India for a long time; recall a half-century of socialism before they decided to try something else. If we re-index the Indian consumer price index for industrial workers, an odd category in a country still largely rural in population, and the U.S. all-urban CPI, not seasonally adjusted, to August 1968, we see how the average annual rate of inflation in India over the past forty years has been much higher than the U.S. rate, 7.50% to 4.68%. High-inflation economies seldom are rewarded with strong currencies; the opposite is a hard claim to verify as the world seems to have run out of low-inflation currencies.

Comparative Consumer Price Inflation In India And U.S.

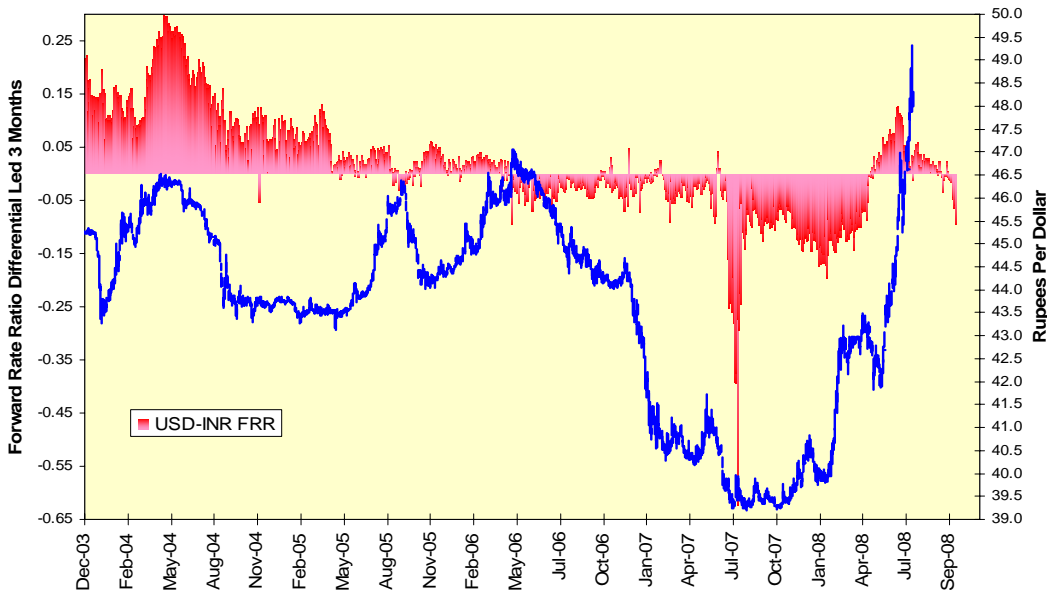


Short-Term Interest Rate Differentials

Inflation, capital flows and long-term interest rates are important in establishing currency movements and will be discussed below, but they are not as important as expectations for short-term interest rates. Let's return to a tool used in previous analyses for measuring these expectations. First we have to take the forward rate ratio between six- and nine-month USD LIBOR, the rate at which we can borrow money for three months starting six months from now, divided by nine-month LIBOR itself. This is the $FRR_{6,9}$ for the dollar. While there is no actively traded equivalent for INR LIBOR, there is an active market for Indian Treasury bills, and it should have parallel trends to offshore INR markets, plus or minus the equivalent of an INR TED spread.

If we subtract the INR $FRR_{6,9}$ from the USD $FRR_{6,9}$, we get a forward-looking measure of whose short-term interest rates are going to rise the fastest. That measure leads the currency by three months on average. It moved substantially in favor of the dollar between July 2007 and June 2008, but started to move in the rupee's favor thereafter.

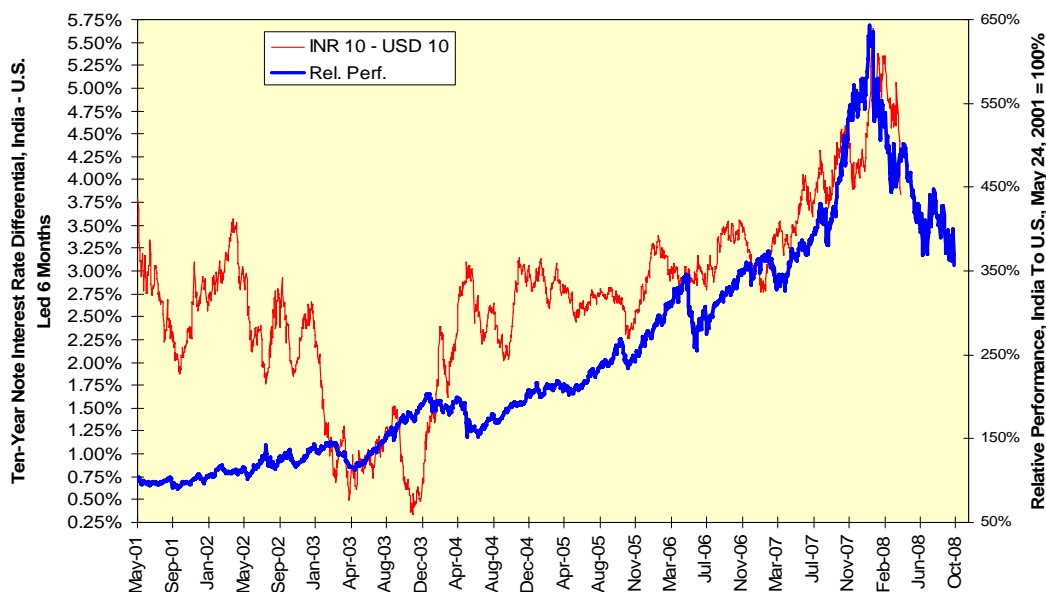
Expectations Slowly Shifting In Rupee's Favor



Capital Market Movements

We introduced the topic of India's strong stock market at the outset. As stocks are discounted at capital market horizons, we should see a relationship between the relative performance of the Indian and U.S. markets as measured by MSCI total returns, the spread between INR and USD ten-year note yields. We do, but only after mid-2004. The relative downturn in Indian stocks led a downturn in the ten-year note differential by six months on average after that point.

Long-Term Interest Rates And Relative Stock Performance

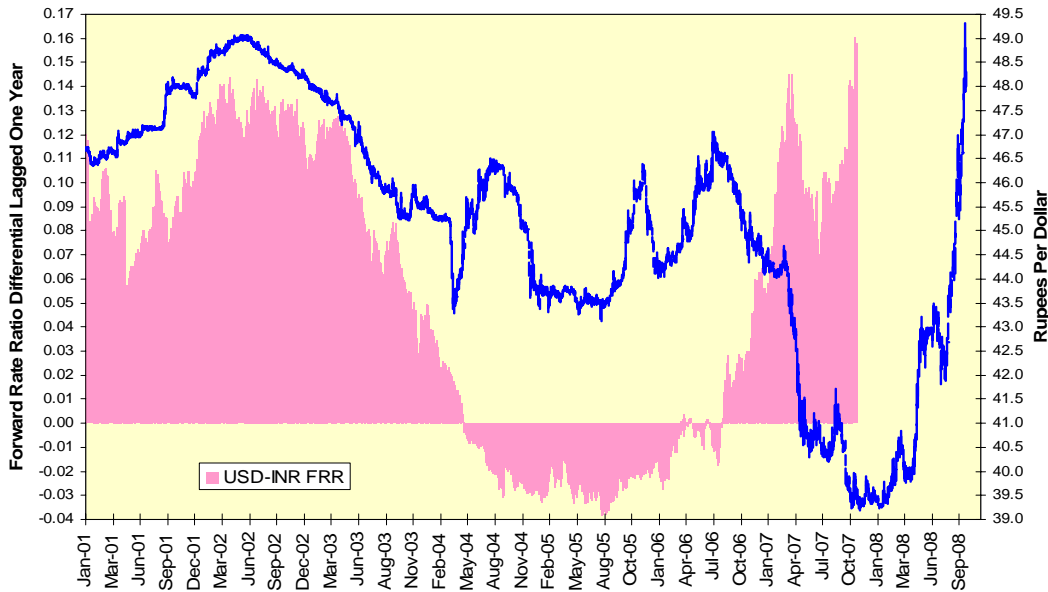


After a brief collapse in the differential between ten-year note yields in early 2004 when it became apparent the Federal Reserve would have to start raising short-term interest rates, long-term Indian yields began a prolonged climb against U.S. yields. With the six-month lag noted above, this was the exact same period when the Indian stock market began its pronounced period of outperformance against the U.S. market. The combination of rising stocks and rising long-term interest rates indicated the Indian economy was overheating at the time; this would lead to the relative tightening of credit seen in the $FRR_{6,9}$ differential and the INR's subsequent rally.

Oddly, the chain of causation, which moves from short-term interest rate differentials to the currency, seems to move the other way at the capital market horizon. If we create forward rate ratios from two to ten years, the rate at which we can lock in borrowing for eight years starting two years from now, divided by the ten-year rate itself, we see the INR leads the $FRR_{2,10}$ differential by one year. Changes in the currency rate affect long-term rate differentials, the exact opposite of what we see for short-term rate differentials.

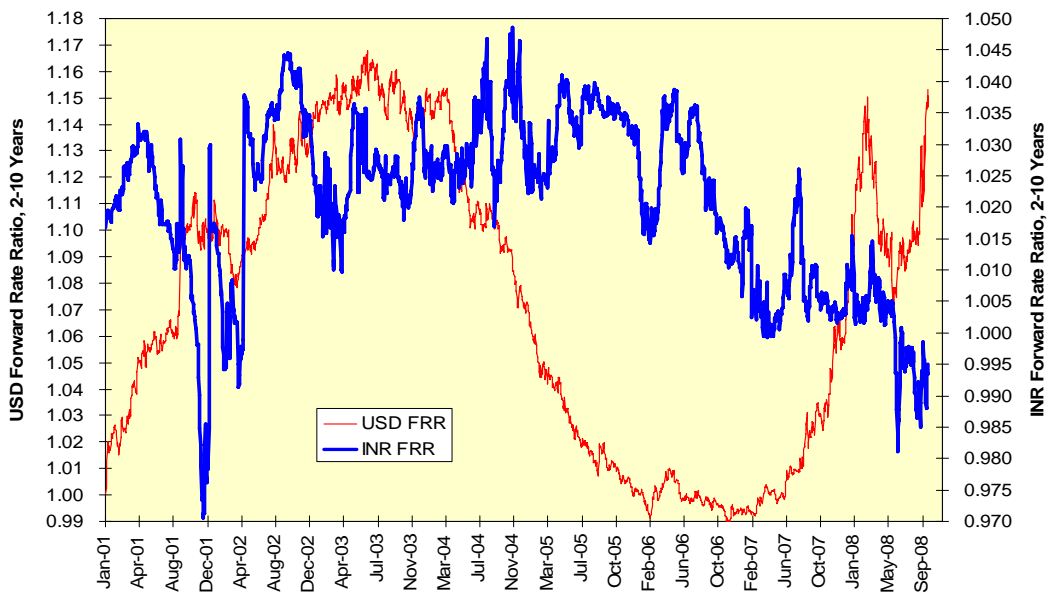
If the pattern observable over the short space of this decade persists, the INR $FRR_{2,10}$ should decrease relative to the USD $FRR_{2,10}$. This could occur via a flatter Indian yield curve, a steeper American yield curve or some combination of both.

Indian Capital Market Yield Curve Expected To Flatten Relative To U.S.



Finally, we can see how the U.S. capital market has been more volatile than its Indian counterpart. Let's plot the two $FRR_{2,10}$ series on separate scales. Note how the USD $FRR_{2,10}$ steepens into 2003, flattens and inverts going into 2006 and then steepens in 2007 before flattening sharply again in 2008. The scale ranges from 0.99 to 1.18. The INR $FRR_{2,10}$ had a sharp flattening and rebound in late 2001-2003, but has remained confined into a very narrow 1.00-1.05 range since that time. If a sign of a mature and well-managed economy is stable expectations in capital markets, the U.S. could learn a little from India. Lower volatility makes assets more attractive, all else held equal.

U.S. Capital Market More Volatile Than Indian Counterpart



We can ask the question, "At what point do emerging markets emerge?" In the case of India and the INR, the answer seems to be, "They have; thanks for asking." Just as the euro and the Canadian dollar tend to trade as a function of short-term interest rate differentials, so, too, does the INR. At present, these differentials point to a post-crisis stabilization in rupee if the U.S. can manage to return to monetary sobriety at some point and the world avoids a repeat of the Great Depression. But a stronger or weaker INR as part of normal fluctuations is not a cause for alarm. In a mature market, it just "is," with no further value judgments attached. That is the best news of all.