Major Currencies And The Great LIBOR Kerfuffle

There are times to be shocked; this, however, is not one of them. The revelations reporting members of the British Bankers' Association were making up LIBOR as they were going along were reported in April 2008 in *The Wall Street Journal*. The effects these made-up rates and illiquidity had on currency markets were discussed here in March 2009 (see "The Hidden Cost Of Illiquidity"). The maxim, "You cannot cheat an honest man" certainly applies when members of a trade association are given the green light by the governments and regulators who have made those members wards of the state and who were more than willing to look the other way.

The author has observed, with a heavy heart, how government statistics mills tend to operate without the convenience of economists, financial writers, analysts and other worthy members of society in mind. The problem here is what early computer jocks used to call GIGO: Garbage-in, garbage-out. If you suppress or misreport enough data or you engage in conduct that makes the veracity of those data questionable, sooner or later you will 1) make a policy error based on bad information or 2) lose all credibility. Financial writers arguably are facile enough to find something else to write about and sidestep the bad data; those in positions of power lack such a luxury.

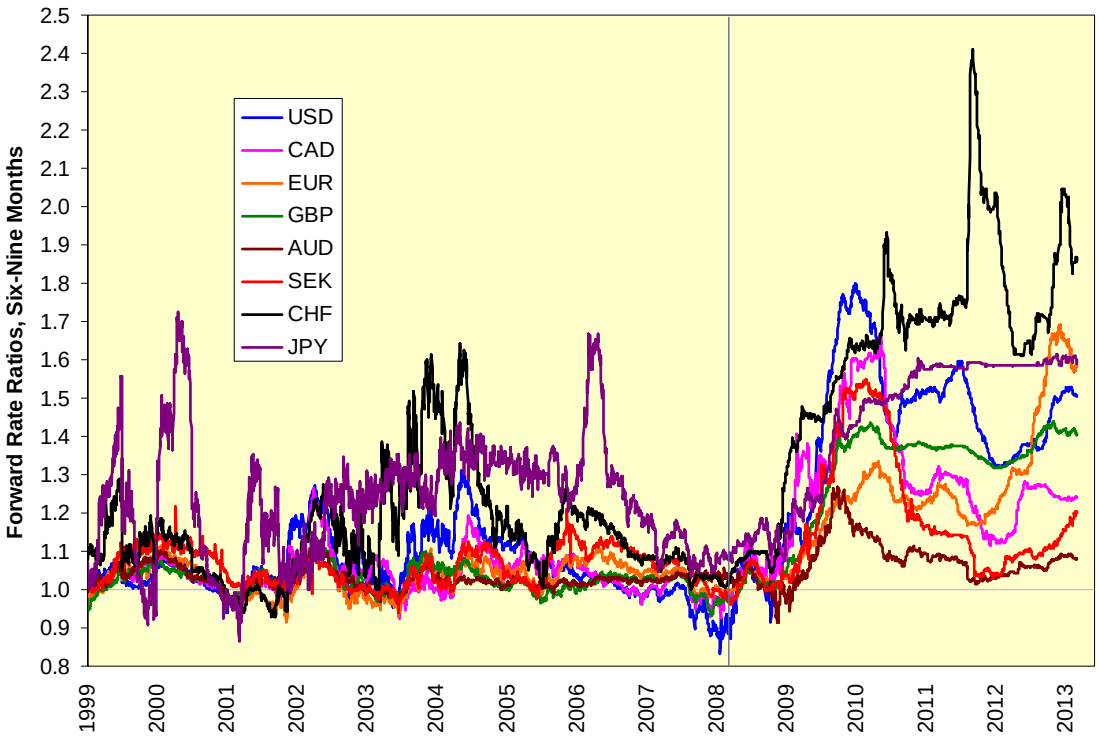
Bear Stearns, Bear Markets

Bear Stearns was one of the first casualties of the great financial crisis of 2008 and one of the more egregious entries in the annals of the crony capitalism to follow. The firm was rescued by the Federal Reserve in a questionable extension of its bank-regulation authority as Bear Stearns was not a commercial bank but rather an investment bank. It was offered $2 per share by J.P. Morgan Chase on the Sunday evening of March 16, 2008; this buyout offer later was raised to $10.

The extension of commercial banks' balance sheets to rescue their foolish investment-banking cousins raised interbank credit risk considerably. The so-called TED spread, or difference between three-month LIBOR and three-month Treasury bills, rose from 78.5 basis points in mid-February 2008 to almost 204 basis points just after Bear Stearns' failure. Everyone wanted to get the crisis then thought containable behind them. All wanted to get LIBOR under control by any means necessary. Banks did not want to show their risk; governments did not want those risks to be shown. When the cops and the robbers find themselves on the same side of the equation, what can go wrong?

While LIBOR blew out further in September-October 2008 and the aforementioned TED got to over 460 basis points in October, the real damage to LIBOR integrity occurred in March 2008. This can be demonstrated by mapping the money-market yield curves as measured by the forward rate ratios between six and nine months ($FRR_{6,9}$) for major currencies. This is the rate at which borrowing can be locked in for three months starting six months from now, divided by the nine-month rate itself. The more this ratio exceeds 1.00, the steeper the yield curve is.

The more various central banks forced their very shortest interest rates toward zero percent, the steeper the $FRR_{6,9}$ levels became. The Swiss led the way with their drive to and through zero percent in an effort to cap the franc at 1.20 CHF/EUR (see "The Paradox Of Negative Interest Rates," January 2013). Just as notable, though, is the extreme quiescence of the JPY $FRR_{6,9}$: It remained essentially unchanged from the beginning of 2011 onwards.



Currencies Before And After

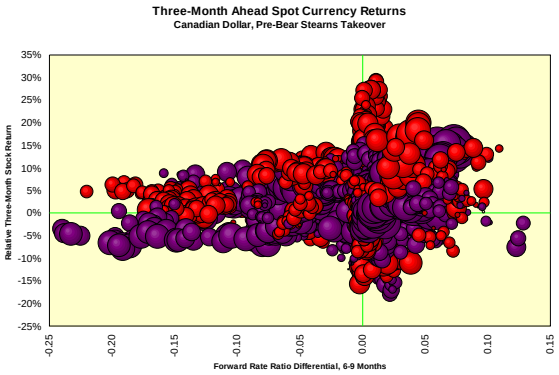
Currencies can trade off of purchasing power parity or relative inflation, (see "A Parody Of Purchasing Power," December 2009) off of underlying physical trade flows, (you are welcome to try to demonstrate this one) off of expected interest rate differentials or off of relative asset returns. As the PPP model is laughably inaccurate and trade flows scarcely scratch the finish on observed currency movements, let's focus on the interest rate parity model and on relative asset returns.

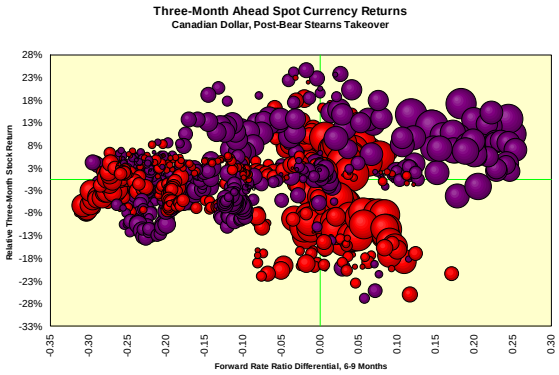
In a normal world, something we have not encountered in a few years, a country whose $FRR_{6,9}$ steepens relative to the USD $FRR_{6,9}$ should see its currency rise relative to the USD unless – and this is a very important "unless" – the non-USD $FRR_{6,9}$ is steepening bearishly and the prospect of higher short-term interest rates is leading a capital outflow out of the country. This last effect is why the Indian rupee was under pressure in 2012.

As most investors are trend-followers and chase performance, higher stock market returns relative to U.S. stock market returns tend to lead capital inflows and push the currency higher unless those inflows are forestalled by runaway money-printing, as in the Swiss case or in the Japanese case after November 2012.

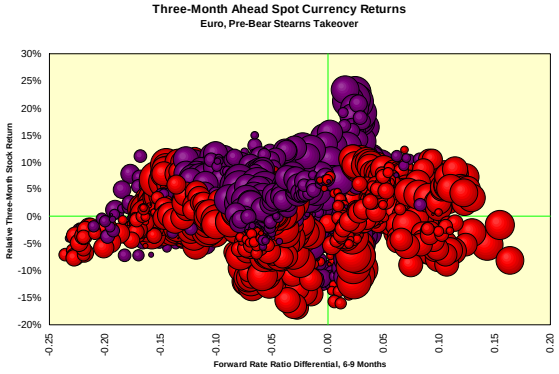
With these two preambles in mind, let's map three month-ahead spot currency returns for a set of major currencies as a function of $[FRR_{6,9}^{Foreign} - FRR_{6,9}^{USD}]$ and of the trailing relative stock market returns as measured by the MSCI index return in USD terms between the non-U.S. and U.S. markets. The maps for the January 1999 – March 2008 and post-March 2008 periods will be displayed side-by-side. In all cases a positive three month-ahead spot currency return will be depicted with a red bubble and a negative return with a purple bubble; the diameter of the bubbles corresponds to the absolute magnitude of the currency's return.

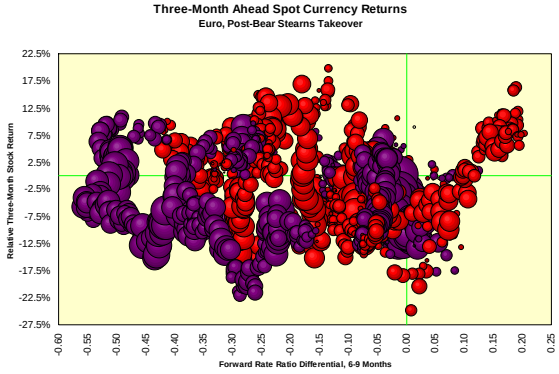
In the case of the CAD, behavior changed significantly before and after March 2008. Prior to the Bear Stearns takeover, the CAD lost when its $FRR_{6,9}$ was flatter than the USD $FRR_{6,9}$ and demonstrated relatively little stock market linkage. After March 2008, the CAD lost after its stock market outperformed and with a pronounced tilt toward situations where its $FRR_{6,9}$ was steeper than the USD $FRR_{6,9}$.



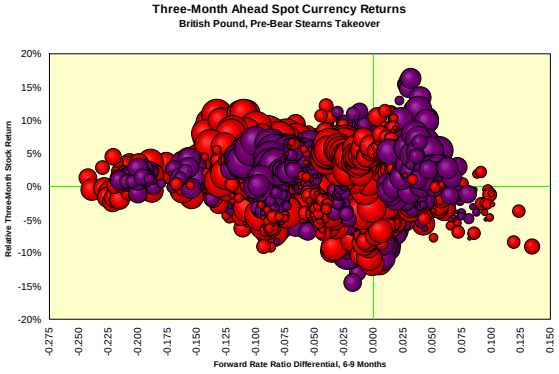


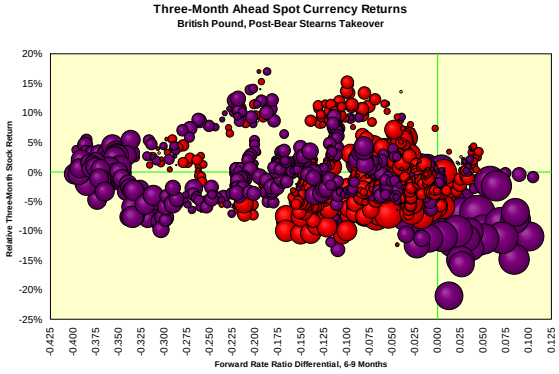
Now let's turn to the EUR. Prior to March 2008, the EUR tended to gain when its $FRR_{6,9}$ was steeper than the USD $FRR_{6,9}$ and with a tilt toward those periods when U.S. equities outperformed. After March 2008, the situation became quite episodic as both currencies were buffeted about by erratic monetary policies and rolling crises. Relative stock market returns were unimportant; relative money-market yield curves moved into and out of zones of alternating future currency return.



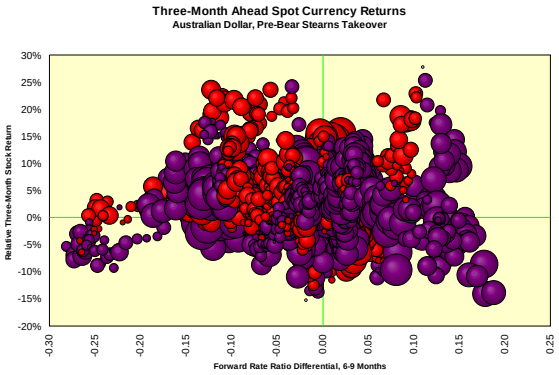


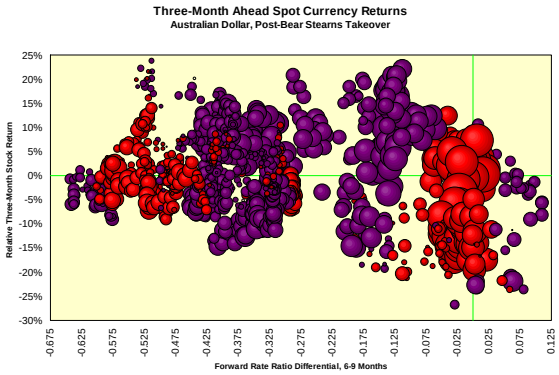
The pattern for the GBP is different still. Prior to March 2008 the pound had a very strong bias to gain after the GBP $FRR_{6,9}$ was flatter than its U.S. counterpart. Afterwards the GBP demonstrates the same regime-dependent pattern seen for the EUR: Regardless of the stock market differentials, the GBP alternates between bands of gain and loss as a state-dependent function of the $FRR_{6,9}$ differential.



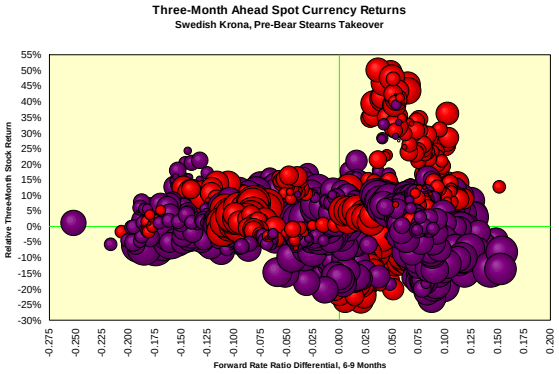


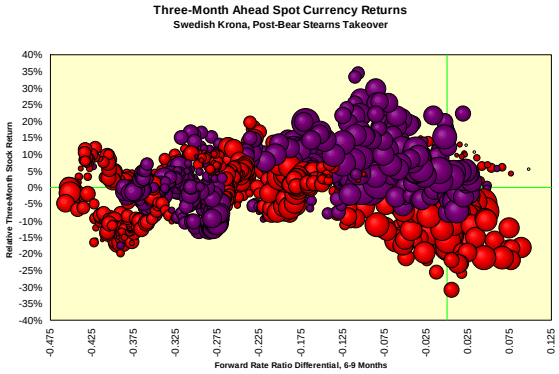
The AUD demonstrates a different pattern still. The pattern of three-month ahead returns bears little in the way of systematic dependence on either the dimension of yield curve or of asset-return differentials, prior to March 2008. Afterwards, the pattern looks as state-dependent as those seen for the EUR and GBP.



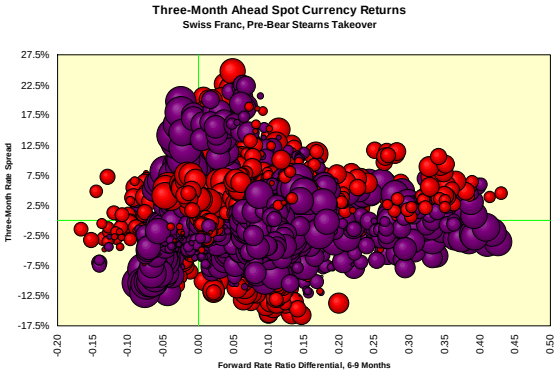


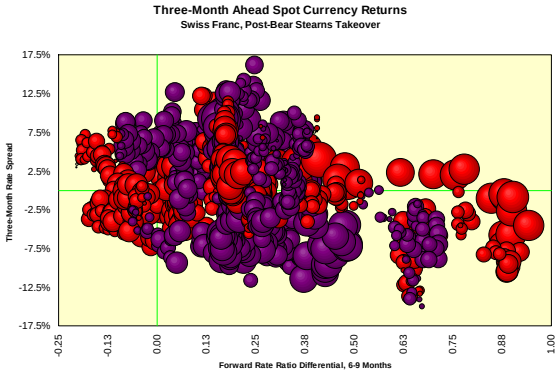
If we shift to the SEK, we see another and even more unique set of patterns. Prior to March 2008, the distribution of returns was random except for an odd cluster of very positive three month-ahead returns for the SEK during a period of high relative Swedish stock market returns. This cluster occurred in the final phase of the dotcom bubble of late 1999-early 2000. The Swedish stock market returned 91.5 percent in USD terms between mid-October 1999 and the beginning of March 2000; if investors in Swedish equities sold at the peak – and they most likely did not – they captured gains in the krona as well. The one period after March 2008 with significant SEK weakness occurred during a period of strong relative Swedish stock market returns; so much for the Swedish stock market driving SEK rates.



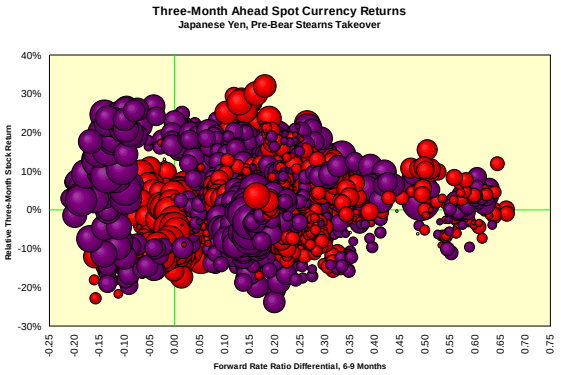


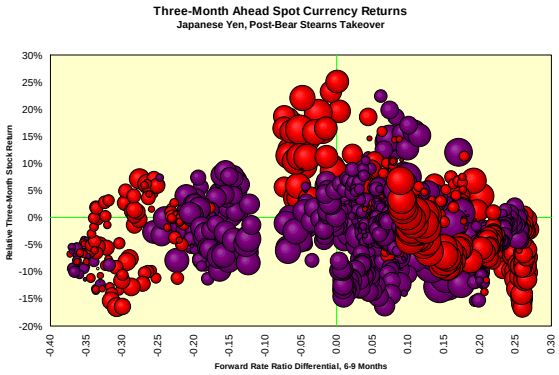
The CHF, for all of its ceiling-associated drama, has been one of the least interesting currencies as a function of the two independent variable involved. Three month-ahead returns were a state-dependent function of relative stock market performance prior to March 2008, a turnabout from the EUR and GBP. Afterwards, the return patterns shifted to random even dismissing the cluster of positive returns preceding the imposition of the franc ceiling in September 2011.





Finally, we come to the JPY. As this country's interest rates have been near zero percent since February 1999 and its stock market has been stuck in neutral since March 2008, we should expect no visible patterns and we are not disappointed. The JPY has moved both higher and lower since January 1999 in response to developments such as the unwinding of the yen carry trade, attempts to re-inflate and even capital inflows associated with the 2011 earthquake and tsunami. This is a currency that defies normal analysis.





Conclusion

While the suppression of short-term interest rates and skullduggery in their reporting certainly changed patterns in key currencies such as the EUR, CAD and GBP after March 2008, we should not romanticize the period before. The so-called “currency wars” are nothing new: All of the major countries have engaged in currency manipulation, interest rate manipulation and even outright stock market manipulation since 1999. All the 2008 LIBOR reporting shift did was inject another element of bad data into the equation.

No one knows when the era of zero interest rates will end, how it will end and what the eventual market structure will look like when it does. What will remain constant, though, is the inability of generalized and simplified rules about what drives currencies over time. Perhaps we should be grateful: Just as a messy election is the sign of a functioning democracy, a messy market is one people want to trade.

A set of minor currencies will be examined using the same construct next month.