

## Transparency Is Gone With The Wind

*"Tuesday's gone with the wind."* -- Lynyrd Skynyrd

*"Don't it always seem to go / That you don't know what you've got till it's gone."* – Joni Mitchell

Inevitability is the essence of classic tragedy. The flawed protagonist is condemned to his fate; the gods get their way no matter how long it takes or how convoluted the path.

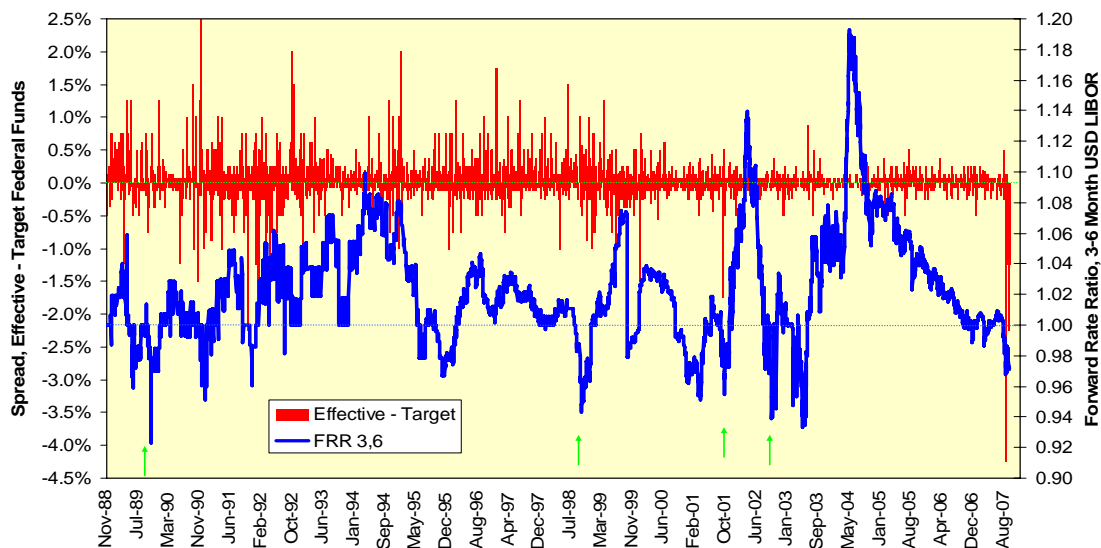
So it is with the Federal Reserve and the late, great era of Transparency, defined here as the Federal Reserve telling you when and how it was going to manage monetary policy. It began in February 1994 with the bond market's bad reaction to the first of seven consecutive rate hikes between then and February 1995. It reached its full flower in 2003 with the forward-looking statement following the lowering of the target federal funds rate to 1.00% in May; the FOMC knew the importance of precisely understood communications to its inevitable series of rate hikes.

Regardless of what you think of the Federal Reserve's policies – and the older I get, the more I agree with Milton Friedman's comment he would replace the FOMC with a computer – give them their due in being able to hike the target federal funds rate seventeen meetings in succession without triggering any panic. The markets were able to price the schedule of rate hikes into forward rate structures and then get about with their daily business. The same held true for the pause in the rate hike campaign that began in the summer of 2006.

### The Great Calm

The Federal Reserve's transparency campaign did not receive full credibility in the markets at first. We can illustrate this with the history of implied volatility on the federal funds futures from the May 2004 period when the first rate hike became apparent onwards.

**Federal Funds Gap And Short-Term Interest Rate Expectations**



Implied volatility is the price of insuring against future uncertainty; as uncertainty is eliminated, we should expect to see implied volatility drive toward zero percent, and it did by February 2005. It remained at low levels until the credit crunch arrived in July 2007.

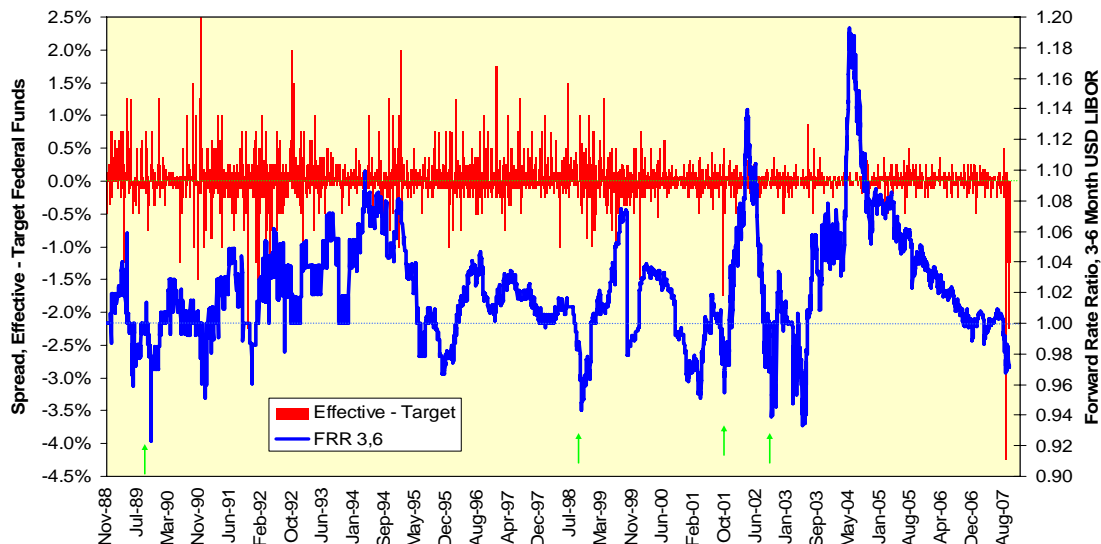
The Federal Reserve's understandable reticence at cutting the target federal funds rate and being perceived as reviving the "Greenspan put" raised policy uncertainty enormously. They eschewed the opportunity to cut rates or even modify their post-meeting statement on August 7, 2007, and it was not until things threatened to really get out of hand by Friday, August 17, 2007 did they take the unusual move of cutting the discount rate but not the target federal funds rate. And, as discussed below, they allowed the effective federal funds rate to drift well below their target rate of 5.25%.

The end result has been a period of confusion. Yes, we avoided a major panic in mid-August, but the commercial paper and LIBOR markets both remain in disarray. And given that corporations set their funding costs off LIBOR, not off the federal funds rate, a cut in the target federal funds rate without a commensurate drop in LIBOR is less effective than the banging-pots-and-pans crowd would have you believe.

### Target And Effective Rates

Shorter-term interest rates are more volatile than are longer-term interest rates; we tend to believe the opposite because the dollar impact of long-term rate volatility is higher. The overnight federal funds rate is one of the most volatile of all as banks have to scramble to meet their reserve reporting requirements or to lend surplus funds at short notice. The open market desk of the New York Federal Reserve has done a pretty good job historically keeping the effective rate close to its target rate given the short-term frame and price-inelasticity of this market.

**Federal Funds Gap And Short-Term Interest Rate Expectations**



This is what makes the recent divergence between the target rate and the effective rate so unusual. The Federal Reserve's willingness to allow the effective rate to plunge is a de facto relaxation of credit. However, it is a most ineffective policy tool. One lesson of fiscal policy since the Reagan tax cuts of the early 1980s is policy certainty, what the marginal tax rate will be over a planning horizon, is just as important as the absolute marginal tax rate itself. In plain English, a one-day drop in the effective federal funds rate does not cut it; banks and others dependent on short-term funding need to know with a measure of certainty what their costs will be over the next 30, 60 or 90 days.

As an important aside, the federal funds futures settle to the average effective rate over the month, not to the weighted average target rate. Once the monkey business of playing with the effective federal funds rate began, the implied volatility hedge cost exploded. Not only does higher volatility lower the probability that any given short-term rate will be the "correct" one, and not only does higher volatility raise option hedging costs, but the simple mathematics of how lognormal distributions are calculated injects a positive bias into the equation. In a higher volatility environment, the upper bound of a confidence interval will rise faster than the lower bound will fall, which raises the average of probable future interest rates. All else held equal, higher short-term interest rate volatility steepens the yield curve and makes the long-term rates critical to investment higher than they would be otherwise.

The wild swings in the effective-target rate gap have been accompanied by a sharp flattening of the 3-6 month segment of the LIBOR curve as measured by its forward rate ratio. This is the rate at which a bank or other participant in the LIBOR market can lock in three-month funds starting three months from now, divided by the six-month rate itself. A forward rate ratio below one indicates an inverted money market curve.

Four Octobers are marked on the chart above, 1989 1998 2001 and 2002. All four were periods of major stock market stress culminating in a tradable bottom. All four of these have the exact same combination we see today, an inverted money market curve and a negative gap between the effective and target federal funds rates.

Too bad this is not a precise timing indicator. I cannot say whether this is the light at the end of the tunnel or the headlight of an oncoming train, nor do I intend to find out the hard way.