

Steeper My Curve To Thee

If you find yourself in need of some good landfill, go to a university library and ask for a dump-truck full of research on determinants of the yield curve. You might be able to get enough to recreate the land-bridge across the Bering Straits so that Alaskans can walk over to Asia and present gifts of bendable straws. What a loss it will be when publish-or-perish studies are Web-only.

The yield curve remains extraordinarily steep by any measure. As we will see below, this is the result of artificially low short-term interest rates.

Three Strikes Are Out

Let's use the spread between ten-year U.S. Treasuries and three-month LIBOR, commonly known as the liquidity premium. There was a time before the advent of TIPS economists were content to recite Fisher's Law that long-term rates are the sum of short-term rates plus expected inflation. This will be addressed at another time and place, but suffice it to say Fisher's Law cannot be demonstrated either backwards or forwards using actual data. As markets anticipate events, it is more demonstrable to say a steeper yield curve leads inflation expectations than to say inflation expectations determine the yield curve.

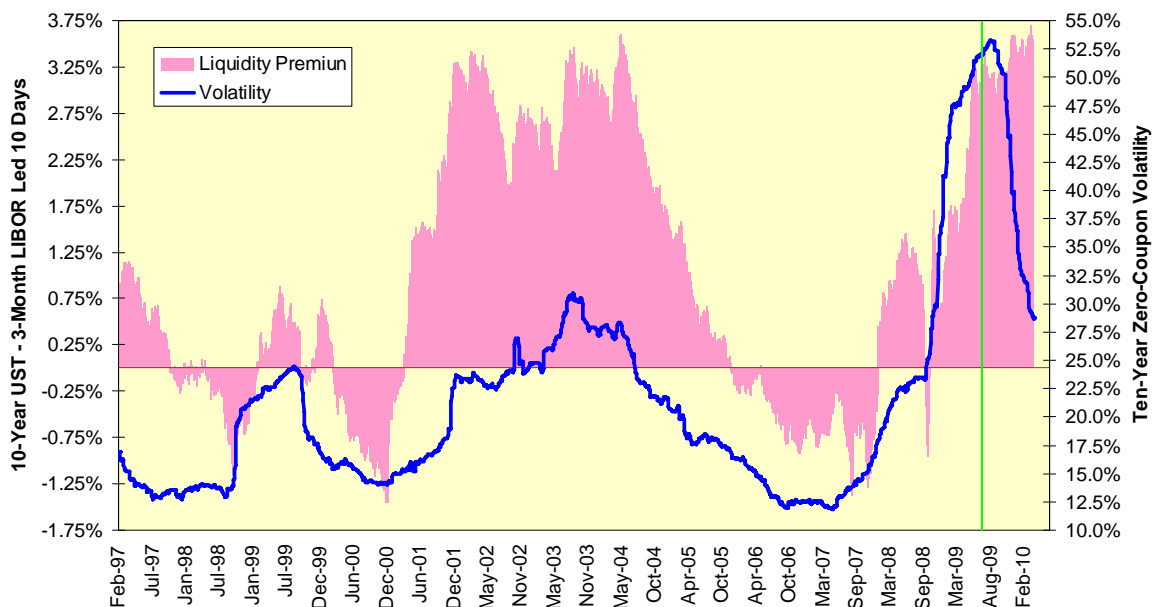
A second determinant of the liquidity premium, and one that operated robustly for much of the past decade, was currency volatility. As our foreign creditors were at risk to a declining dollar, they had to demand a higher long-term yield in recompense. While the economics remain sound, the data have been distorted completely and utterly by China's re-pegging of the yuan and by the buffeting of the yen by spasmodic unwinding of the yen carry trade during each and every financial crisis.

A third determinant, mortgage prepayment risk, was shot down in flames during the I-can't-believe-the-unemployed-guy-couldn't-pay-his-mortgage era. Here again, the economics are sound and this may re-emerge as a factor some day.

Long-Term Treasury Volatility

The volatility of ten-year zero-coupon Treasuries remained a determinant of the liquidity premium until last July, marked on the chart below with a green line; it led the liquidity premium by ten trading days on average. Then as volatility plunged once the market recognized the Federal Reserve was not going to raise rates until the Mayan Apocalypse of 2012, by which point it would not matter, the liquidity premium actually expanded.

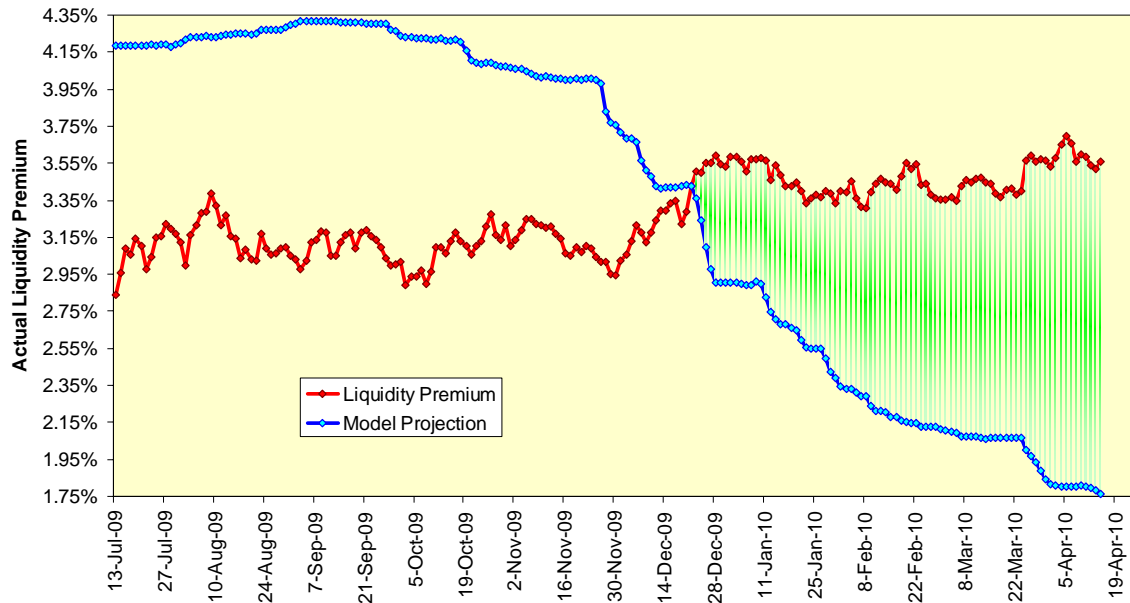
Volatility And The Yield Curve



Ten-year Treasury yields have increased by approximately 50 basis points since that time; however, three-month LIBOR has decreased by almost 20 basis points during an economic recovery. If we model the liquidity premium as

a function of ten-year volatility through July 2009 and project the fitted value forward, we can see the current actual liquidity premium is almost 180 basis points greater than what we should expect.

Current Liquidity Premium Well Over Expected Level



As the shape of the yield curve is a determinant for all capital markets – and I do mean all – this artificially steep yield curve is causing distortions throughout the economy, including the ongoing frat party on Wall Street. Each day the distortion persists more energy is stored in the spring for the eventual unwinding.