

Municipal Derivative Trade Note

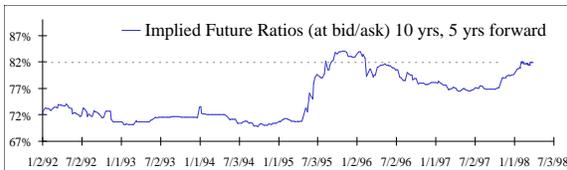
Mispricing of risk in the implied forward BMA basis swap

Inefficiencies in the BMA swap market have caused inconsistent implications in the forward market for these contracts.

The implied forward ratios on BMA basis swaps are exhibited in the component slopes of the current BMA swap ratios.

As measured by the implied ratio for the basis swap 10yrs, 5 years forward, the market has been pricing more uncertainty relative to history, than the other implied forward swap rates would indicate. The 5 into 10 swap has an implied ratio of 81.9%, close to its high.

Chart 1
Implied forward ratio on the 5yr basis swap, 10 yrs fwd



The slope of the ratio curve cannot be trending in the long term without a fundamental change in the tax exempt status of municipal securities. The reason for this is the fundamental relationship between the swap ratio and the ratio of tax exempt to taxable bonds. The only other fundamental driver of the swap ratio is the expectations of the future ratio of tax exempt to taxable bonds.

The current ratio of tax exempt to taxable bonds is known. In the case of the BMA swaps, the ratio is given by the ratio of the BMA index to 3 month Libor. The only thing left uncertain is the expectations of future ratios. The tax exempt status of municipals and uncertainty about the tax legislation drives expectations. If municipal bonds were to lose their tax exempt status, for example, the ratio would move to close to 1.0.

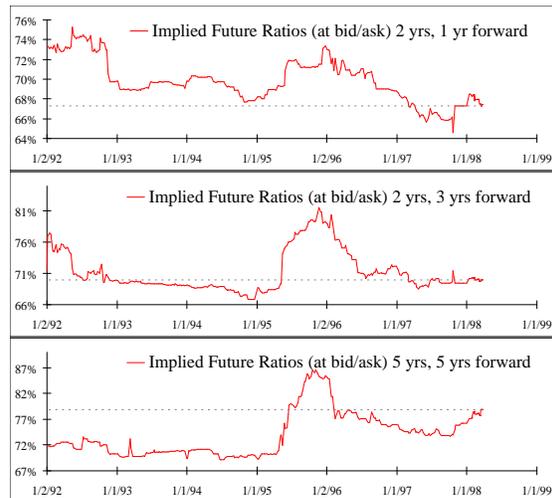
The probability of this occurring is between 0 and 100 so the ratio of a medium to long term swap should be between the current ratio of BMA/Libor and a ratio of one.

When there is thought to be high probability of material tax legislation changes, it should effect swap ratios along the term structure of swaps. Uncertainty about tax reform should not target a specific swap unless it is the preferred vehicle of

hedging and/or speculation and the other swaps are somehow ignored.

This seems to be the case. The implied ratios of other forward swaps are not near their highs; some are nearer their lows.

Chart 1
Implied forward ratios on various forward swaps



To position to take advantage of a fall in the implied forward ratio on the 10yr, 5yrs fwd, buy the 15yr swap and short an equal value of the 5yr swap. Put on a long 15yr at 76.38% of Libor, short a 5yr at 69.01% of Libor.

The net position could be unwound immediately for a loss of about 5 bps (.75% bid/ask spread on the ratio, times Libor)

The break-even shift in the implied forward ratio is 1.5%, implying a forward ratio of 80.3% (assuming equal magnitude shifts in the ratios of the 5 and 15yr swaps). 80.3% is 6.67% higher than the current 10 year ratio of 73.63%, indicating that rolldown works in the trade's favor.

There is positive carry of 41 bps per year under constant ratios (No rolldown)

The risk of this trade is that tax reform changes the ratio of the BMA with 3mo Libor. The percent change in the position's value for a 1% change in the ratio is 0.33. (Ratio Duration, or price sensitivity to parallel shifts in the ratio curve)