Making Use of Muni Swaps

Track and value swaps with YCRV and SWPM.

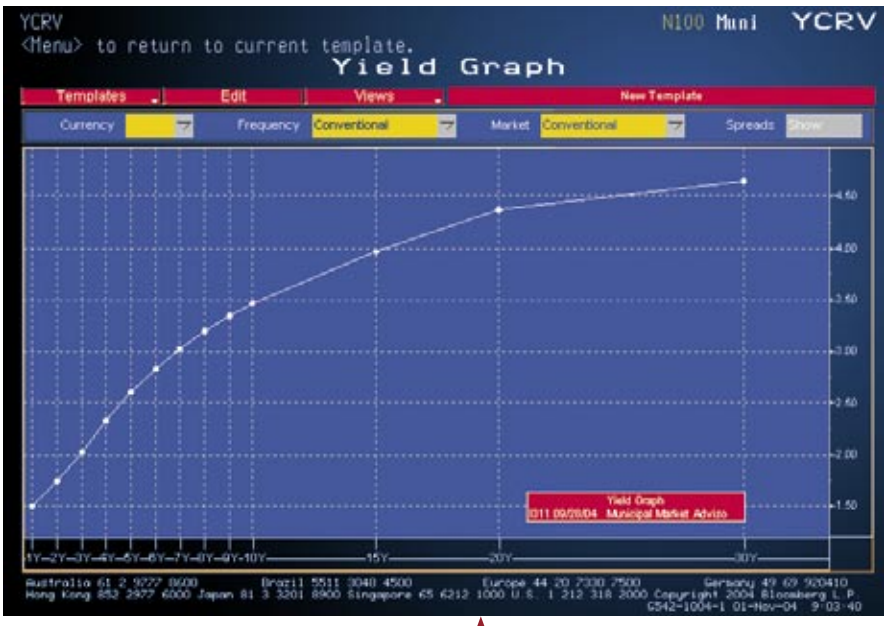
By Michael Olander

BOND MARKET ASSOCIATION swaps, which were first introduced to municipal issuers in the late 1980s as a fringe financing method, are now a common debt management tool. BMA swaps have become so established that the Governmental Accounting Standards Board, an organization that sets accounting standards for state and local governments, recently issued new guidelines for issuers on how to include swap disclosure in financial statements.

A BMA swap is an interest rate exchange in which parties agree to trade interest payments on debt obligations. One party pays a fixed interest rate and receives floating-rate interest payments based on the BMA's floating-rate municipal swap index. The other party receives fixed interest payments and pays the floating rate.

The growth of this market has led money managers to begin using these swaps for hedging. It has also created the opportunity to profit from any disparities in pricing between the municipal debt market and the BMA swap market.

TO FIND SUCH hedging and arbitrage opportunities, you first must track the relationship between the cash municipal bond market and municipal swaps. The best indicator of the cash market available on the Bloomberg Professional service is the Consensus yield curve from Concord, Massachusetts–based Municipal Market Advisors Inc. The curve is based on a market survey of prices for AAA-rated general obligation bonds with a 10-year par call. General obligation municipal bonds are backed by the full faith and credit of the issuer and are repaid from general revenue. The par call date is the first one on which the issuer may redeem the bonds at face value. For values of the maturity points in the Consensus curve, type CMMA <Go> 1 <Go>. To see the Consensus curve in graph form, type YCRV I311 <Go>. For municipal swap market rates, type PREB <Go> 13 <Go>, or to graph that data, type YCRV S43 <Go>.



Analyzing Muni Yield Curves
Type YCRV I311 <Go> and click on Expand Graph to chart consensus curve data from Municipal Market Advisors.

To graph both curves and to see the spreads at the different points on the curve, type YCRV <Go> for the Yield Curves function. Tab in to the first two CURVE ID fields, enter *I311* and *S43* and press <Go>. For this example, enter *09/28/04* in the first two DATE fields, and press <Go>. To compare the relationship between the municipal cash market and municipal swaps, click on the Expand Graph button and then on Views. Select Tables and click on Yield Table. Looking at the data from Sept. 28, you can see that the 30-year spread was 58 basis points. (A basis point is 0.01 percentage point.)

Type MMAI30Y <Index> USSMQ30 <Crncy> HS <Go> to compare the historical spread between the 30-year municipal bond market and the municipal swap market. Tab in to the RANGE fields, enter *09/28/03* and *09/28/04* and press <Go>. In September, the spread was close to the time period's widest point of 64 basis points, reached in September 2003. The spread had been as narrow as 31 basis points in March 2004. These data suggest you might be able to profit from a payer swap by buying into the cash market in anticipation that the spread will narrow to 31 basis points again.

You can use the Swap Manager (SWPM) function to analyze the potential profitability of that scenario. To evaluate a 30-year fixed-rate municipal swap paying a coupon of 4.63 percent,

type SWPM-MUNI P 30Y 4.63 <Go>. The 4.63 percentage represents the current coupon of a 30-year municipal bond from the Municipal Market Advisors Consensus curve, as of Sept. 28. SWPM calculates the premium as a zero-spread swap, meaning that the net present value of all cash flows is zero. For this analysis, click on the arrow to the right of Calculate at the bottom of the screen, and select Spread. Tab in to the PREMIUM field, and enter *0*. Press <Go> to recalculate the spread as the difference between where the cash municipal bond and the municipal swap markets are trading. To gauge potential profitability, tab in to the SPREAD field at the upper right of the screen, and enter *31*. Click again on the arrow to the right of Calculate, select Premium and press <Go>. The premium that you solve for indicates the market value of the swap if the spread returns to the 31 basis points observed in March.

TIP BOX

Type NIRM <Go> for the Municipal New Issue Comparison function, which lets you compare yields with benchmark fair value curves.

YOU CAN ALSO use this type of transaction to hedge against sudden moves in interest rates. You can neutralize the effects of changing interest rates on your investments by entering into a swap in which you pay the fixed rate and receive the floating rate. If you're holding fixed-rate debt, then you are long that fixed rate, and by entering into a swap in which you pay a fixed rate, you're in effect taking a short position in the same instrument.

This strategy enables you to match the overall interest rate sensitivity of the swap to the investments you're hedging. One potential problem is that the exchange of net payments on a municipal swap would create taxable income. To avoid that, you could enter into a forward effective cash settle swap, which has an effective date in the future. The effective date represents the maximum term of the hedge and is the day on which the swap will be settled at market value. You will make a one-time payment to the swap counterparty representing the change in market value of the swap, and it should equal the overall change in the market value of your initial investments if the sensitivities were equal.

You can use SWPM to evaluate the terms of the hedge with a forward effective swap. For example, type SWPM-MUNI P 3.10 6MOX5Y <Go> to create a five-year, 3.10 percent, fixed-payer municipal swap with an effective date in six months. The screen shows the premium required to enter the swap. You can click on the Options tab and select Send Deal to Another User to send your swap terms to another Bloomberg Professional service user. SWPM also calculates the risk value and dollar value of a 1-basis-point move in interest rates. Risk is a measurement used to show a security's price sensitivity to changes in interest rates, and the dollar value is an indication of the dollar change in price that results from a 1-basis-point change in yield. To ask questions about risk and other SWPM sensitivity measures, press <Help> twice.

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Historical Spreads
Type MMAI30Y <Index> USSMQ30 <Crncy> HS <Go> to graph the historical spread between the 30-year municipal cash and municipal swap markets. **Adjust the dates in the RANGE fields** to see spread data from March.