Other Governments, Other Debts

Uncle Sam can sure turn a few heads whenever he moseys on up to the bar each quarter and borrows to buy a few rounds and whatever else suits his fancy. And why not: An entity more than \$7 trillion in debt and congenitally unable to exercise even a modicum of fiscal discipline is regarded as providing the most risk-free securities in the world.

But while the lions on the savanna get the starring roles in nature documentaries, the cumulative killing power of the mosquitoes and tsetse flies is far greater. So it is, too, with credit markets. The mortgage market, driven largely by individual borrowers, is larger than the federal debt market (see "Bonds Begin At Home," August 2003) and total municipal stand in excess of \$1.6 trillion.

Each of the major classes of debt, including corporate bonds and asset-backed securities in addition to those mentioned above is rich in information, not only about itself but about capital markets in general. The municipal market, with its huge number of illiquid securities each with its own unique credit risks and its sensitivity to the vagaries of taxation can be used to measure the pressures finance and politics place on each other.

The size, breadth and dynamism of the municipal bond market may come as a surprise to futures-oriented traders who, if they are aware of the Chicago Board of Trade's municipal bond contract, have not done very much in response thereto. The volume for this contract has been in a steady decline for the last decade.



Where Have All The Munis Gone?

The MOB Sings Muni Tunes

For much of American financial history municipal bonds were considered second only to Treasuries in safety. However, the near-bankruptcy of New York City in 1975 and the federal government's habit of creating unfunded mandates for state and local governments injected new elements of risk into the market. The 1986 tax law hit the municipal bond market with a double whammy. First, banks could no longer deduct the interest rate expenses involved in financing their municipal bond portfolios against their taxes. Second, the interest earned on municipal bonds issued to finance private activity projects such as sports stadiums became a tax preference item in the calculus of the dreaded alternative minimum tax.

Municipal bonds, like most credit market instruments, are measured by their yield spread to Treasuries. The yield on municipal bonds, represented by the *Bond Buyer's* index of 40 issues, should be expected to be lower than that of a corresponding Treasury due to the tax-advantaged nature of municipal bonds. As most municipal issues are exempt from federal taxes, and since most states do not tax the income from their own bonds to their own residents, municipal bonds can have a lower nominal yield and still have a competitive-tax equivalent yield, or TEY, which is the bond's yield divided by (1-marginal tax rate):

$TEY = Yield / (1 - \tau)$

However, the expected relationship narrowed precipitously in the late 1990s, and we have seen protracted periods of negative MOB (muni-over-bond) and MUT (Muni-under-note) spreads. The correlation between the spreads, especially the MUT, and Treasury yields is such that a casual observer might assume the two lines on the chart to be price histories of closely related commodities. This is especially true when Treasury yields rise.



When Good MOBs Go Bad

MUT In A Note Yield Rut



A negative MOB spread implies a much greater after-tax return for holding the municipal bond than for holding the Treasury, but as always in the world of fixed income we need to be careful of such simplistic apples-and-oranges comparisons.

The Muni Puzzle

The negative MOB spreads are not as inexplicable as we might have believed only a short number of years ago. Treasuries are highly liquid, and no one ever has made such a claim for municipal bonds. Investors should be willing to pay a yield penalty in return for this liquidity, and it is apparent they do. The surges lower in the MOB and MUT both corresponded to periodic flight-to-quality rallies and episodes of massive Treasury buying by mortgage lenders such as Fannie Mae and Freddie Mac. And, in an interesting twist, the massive currency interventions by the Bank of Japan in late 2003 and early 2004 pushed Treasury yields lower. While the Japanese surely were more interested in protecting the competitive position of their currency-sensitive exporters than in lowering the financing costs of America's water and sewer districts and toll road authorities, they may have been far more effective in achieving the latter and surely unintended objective.

Second, and perhaps the most obvious, the data sample available all occurs within the context of a long-term bond market rally, one that has returned yields to half-century lows. Many municipal bonds are callable and therefore have a negative convexity, or declining price gain for a continued drop in yields. Callable Treasuries have not been issued since the early 1960s. Investors looking to match assets with liabilities, such as pension funds and insurers, find callable bonds less attractive and thus require a higher yield as the investor faces the prospects of lower reinvestment yields should the bonds be called.

Third, the phase-out of federal Schedule A exemptions and personal deductions raises the effective marginal rate on wealthy investors. While a Rich Peoples' March on Washington is unlikely to capture the popular fancy, these phaseouts combine with the alternative minimum tax to produce great uncertainty on what the effective marginal tax rate will be.

A fourth reason is the IRS can challenge all municipal issues' tax status at any time, and this requires greater yield protection. Few organizations embody Machiavelli's maxim that it is better to be feared than loved more than the IRS.

State of Affairs

Finally, the yields paid on general obligation bonds, those backed by the tax authority of the issuer and not linked to the revenue of a specific project, are subject to the credit rating of the issuer and therefore need to be much higher. The MOB spread based on the *Bond Buyer's* index is an interesting intellectual abstraction, but investors are faced with decisions to own specific bonds, and given the high transaction costs involved with municipal bonds, own them for a long time.

In addition, yield spreads are a function of time to maturity as well as credit rating. The Federal Reserve's policy of keeping short-term interest rates artificially low has allowed for negative and very low spreads at the money market horizon. Municipalities issue a large number of these short-dated instruments in anticipation of taxes and other revenues. At the long end of the curve, investors need to price in credit risk. Only in the mid-range, five to seven years, do general obligation bonds trade near their TEY.



Yield Spreads By Credit Quality

Credit risk is no small matter in these markets, either. Take a state such as California, which so bollixed its finances under Governor Gray Davis that it recalled him from office. For a while, the good citizens of the Golden State had to pay far more for their borrowings than did the federal government. Arnold Schwarzenegger might provide grist for comedians, but his budgetary controls saved his constituents millions of dollars in unnecessary interest. Even states with better and similar-to-each-other credit ratings face different funding costs. The funding costs of various states taken as a percentage of Treasury yields are displayed with their Moody's credit rating and the state's highest individual income tax rate, adjusted for the 35% federal rate.

General Obligation Spreads By Selected State



Death And Taxes

The tax status of municipal issues makes the MOB and MUT spreads interesting thermometers for the American body politic. A normal reaction would be to buy municipal bonds in anticipation of higher federal taxes. Did this happen in the 1992 election cycle, the first time an incumbent Republican named Bush presided over a tepid economy in a reelection fight?



To paraphrase another American president, it depends on what the meaning of "buy" is. Once again, the municipal spreads versus Treasuries behaved in a maturity-dependent fashion. The long-dated MOB spreads were relatively quiescent, and as the maturity of the various notes became shorter, the spreads became more active. This is consistent with earlier observations of credit risk affecting the longer maturities more and with the high transaction costs involved with municipal bonds.

Once a Clinton victory became apparent late in the election cycle, yields on the short-dated notes fell, but then rebounded early in 1993 as the various Clinton tax proposals appeared headed for defeat. They fell again as the administration eked out its tax increase by one vote in the summer of 1993.

A similar tracking over the 2004 election cycle confirmed just how little traction John Kerry achieved with his threat to raise taxes on the "highest 1% of earners." The market rippled a little after the Democratic convention and then concluded a Bush reelection was in the offing.



Muni Yields Over 2004 Election And Aftermath

If federal tax rates rise over the next few years, which given the state of federal finances seems a decent bet, we can expect MOBsters to sing like canaries. It then will be time to revisit the MUT spread trade of buying the municipal bond and selling the ten-year note.