# MUNICIPAL BOND FUNDS: PACKAGED TAX-EXEMPT INCOME

By John Markese

Tax-exempt bond funds have decidedly different strategies, but the end game is always the same—to minimize taxes.

Want a steady income stream but don't want to pay taxes on the income?

Don't want to be bothered with buying individual bonds and managing a bond portfolio yourself?

Looking for a simple tax shelter?

This may sound like a come-on for an investment you will soon regret. But as it turns out, municipal bond funds live up to the description. The only difficulty with muni bond funds: Picking one.

## TAX-SHELTERING RETURNS

The purpose of municipal bond funds is to generate income that is exempt from federal, and sometimes state and local, taxes. But not all returns from tax-exempt bond funds are tax-exempt. Some funds generate significant return in the form of capital gains, which is subject to taxes.

Differences in maturity of the bonds held by a fund drive differences in capital gains, returns, income, and risk. In Table 1, statistics are presented for national, investment-grade, tax-exempt bond funds tracked in the *Quarterly Low-Load Mutual Fund Update.*

National funds are funds that do not have a specific state focus. Investment-grade narrows the fund listing down by eliminating high-yield bond funds, which concentrate in lower-rated, higher-default-risk bonds.

Take a look at Table 1 on pages 9 and 10 and you will notice that the funds have been grouped by weighted average maturity—short-, intermediate-, and long-term; within each of these, they are ranked by yield. The short-term maturity category ranges up to three years, intermediate is three to 10 years, and long-term is over 10 years, with the longest maturity fund at a very long-weighted-average portfolio maturity of 24.0 years.

Yield, the focal point for most tax-exempt bond fund investors, is annual income per share relative to ending net asset value per share for the period. Net asset value per share is simply the market value of the portfolio divided by the number of fund shares. Yield is not total return because it does not include any capital gains or losses, but it does indicate the income flow relative to investment value.

The charm of these tax-exempt bond funds is quickly evident when the tax-exempt yields are converted to fully taxable equivalent yields. In other words, the yield on a taxable bond or bond fund that would have the same after-federal-tax yield as the tax-exempt bond fund. As an example, the highest-yielding long-term bond fund, USAA Tax Exempt: Long Term, yields 5.6% and is exempt from federal income tax. To determine the taxable equivalent yield, divide the tax-exempt yield by 1.00 minus your marginal federal income tax rate in decimal form. Using the highest marginal federal rate on income, 39.6%, the taxable equivalent yield on this fund is 9.3%:

$$\text{Taxable equivalent yield} = \frac{\text{tax-exempt yield}}{1.00 - \text{marginal federal inc. tax rate}}$$

$$9.3\% = 5.6\% \div (1.0 - 0.396)$$

*John Markese is president of AAII.*

**TABLE 1. TAX-EXEMPT BOND FUND CHARACTERISTICS**

| Short-Term Funds (Ticker) | Yield (%) | Tax-Equiv. Yield (%) 39.6%* | Tax-Equiv. Yield (%) 15.0%* | Annual Return (%) One Yr. | Annual Return (%) Three Yrs. | Annual Return (%) Five Yrs. | Avg. Maturity (Years) | Std. Dev. (%) | Expense Ratio (%) | Phone |
|---|---|---|---|---|---|---|---|---|---|---|
| Strong Sht Tm Muni Bond (STSMX) | 4.8 | 7.9 | 5.6 | 3.5 | 5.4 | 4.5 | 2.7 | 1.4 | 0.60 | 800-368-1030 |
| USAA Tax Ex:Short Term (USSTX) | 4.5 | 7.5 | 5.3 | 3.2 | 4.7 | 4.9 | 2.4 | 1.1 | 0.38 | 800-531-8181 |
| Dreyfus Short Int Muni Bd (DSIBX) | 4.1 | 6.8 | 4.8 | 3.3 | 4.3 | 4.3 | 2.3 | 1.0 | 0.76 | 800-782-6620 |
| Strong Municipal Advtg (SMUAX) | 4.0 | 6.6 | 4.7 | 3.9 | 4.7 | — | > 1.0 | 0.5 | 0.50 | 800-368-1030 |
| Fidelity Spart Sh Int Mun (FSTFX) | 3.9 | 6.5 | 4.6 | 3.2 | 4.5 | 4.7 | 3.0 | 1.5 | 0.55 | 800-544-8888 |
| Vanguard Muni:Short Term (VWSTX) | 3.7 | 6.1 | 4.4 | 3.3 | 3.9 | 4.0 | 1.2 | 0.6 | 0.20 | 800-635-1511 |
| Calvert Tx Fr Rsv:Ltd/A (CTFLX) | 3.4 | 5.6 | 4.0 | 4.2 | 4.0 | 4.1 | 1.0 | 0.6 | 0.70 | 800-368-2750 |
| **Intermediate-Term Funds (Ticker)** | | | | | | | | | | |
| USAA Tax Ex:Intmed Term (USATX) | 5.3 | 8.8 | 6.2 | 2.4 | 6.4 | 6.6 | 10.0 | 2.8 | 0.36 | 800-531-8181 |
| Vanguard Muni:Intmed Tm (VWITX) | 5.0 | 8.3 | 5.9 | 2.3 | 5.2 | 5.7 | 7.0 | 2.7 | 0.21 | 800-635-1511 |
| Scudder Managed Muni Bond (SCMBX) | 5.0 | 8.3 | 5.9 | 1.8 | 6.2 | 6.6 | 8.9 | 3.7 | 0.62 | 800-225-2470 |
| Fidelity Spart Int Muni (FLTMX) | 4.8 | 7.9 | 5.6 | 2.4 | 5.7 | 6.2 | 8.6 | 2.7 | 0.50 | 800-544-8888 |
| Dreyfus Intmed Muni Bond (DITEX) | 4.8 | 7.9 | 5.6 | 1.8 | 5.3 | 5.6 | 8.8 | 2.9 | 0.74 | 800-782-6620 |
| AARP Tax Fr:Ins General (AITGX) | 4.7 | 7.8 | 5.5 | 1.4 | 5.5 | 6.0 | 9.5 | 3.7 | 0.62 | 800-253-2277 |
| Scudder Medium Term Tx Fr (SCMTX) | 4.6 | 7.6 | 5.4 | 1.9 | 5.4 | 5.7 | 6.1 | 2.9 | 0.72 | 800-225-2470 |
| Allghny:Chicago Tr Mu Bnd (CHTMX) | 4.6 | 7.6 | 5.4 | 1.7 | 4.2 | 4.5 | 8.5 | 2.5 | 0.35 | 800-992-8151 |
| SteinRoe Muni:Intmed (SRIMX) | 4.6 | 7.6 | 5.4 | 2.0 | 5.2 | 5.5 | 8.5 | 3.0 | 0.70 | 800-338-2550 |
| Dreyfus BASIC Intm Muni (DBIMX) | 4.6 | 7.6 | 5.4 | 2.5 | 6.3 | 6.4 | 9.1 | 3.2 | 0.45 | 800-782-6620 |
| T Rowe Price Sum:Muni Int (PRSMX) | 4.5 | 7.5 | 5.3 | 2.3 | 5.8 | 6.1 | 6.6 | 2.8 | 0.50 | 800-638-5660 |
| Amer Cnt:Intm Tax Free (TWTIX) | 4.5 | 7.5 | 5.3 | 2.3 | 5.2 | 5.5 | 8.5 | 2.9 | 0.51 | 800-345-2021 |
| T Rowe Price TF:Int Fd (PTIBX) | 4.4 | 7.3 | 5.2 | 2.1 | 5.2 | 5.6 | 8.5 | 3.0 | 0.65 | 800-638-5660 |
| Babson Tx Fr Inc:Port L (BALTX) | 4.4 | 7.3 | 5.2 | 1.7 | 5.6 | 5.9 | 8.8 | 3.3 | 1.06 | 800-422-2766 |
| Vanguard Muni:Limited Tm (VMLTX) | 4.3 | 7.1 | 5.1 | 3.1 | 4.5 | 4.6 | 3.4 | 1.5 | 0.21 | 800-662-2739 |
| Legg Mason Tx Fr:Int In/P (LTITX) | 4.3 | 7.1 | 5.1 | 2.1 | 4.5 | 5.0 | 7.7 | 2.4 | 0.70 | 800-822-5544 |
| Boston 1784 TE Medium Inc (SETMX) | 4.3 | 7.1 | 5.1 | 1.8 | 6.0 | 6.2 | 9.2 | 3.3 | 0.80 | 800-252-1784 |
| Marshall:Intm Tax Free Fd (MITFX) | 4.2 | 7.0 | 4.9 | 1.8 | 4.9 | 5.1 | 8.0 | 2.9 | 0.61 | 800-236-8554 |
| Payden & Rygel Tx Ex Bd/R (PYTEX) | 4.2 | 7.0 | 4.9 | 2.2 | 5.2 | 5.5 | 8.8 | 2.9 | 0.49 | 800-572-9336 |
| Scudder Limited Term TF (SCLTX) | 4.1 | 6.8 | 4.8 | 2.6 | 4.5 | 4.7 | 3.7 | 1.8 | 0.75 | 800-225-2470 |
| Neuberger Muni Sec Trust (NBMUX) | 4.1 | 6.8 | 4.8 | 2.2 | 5.1 | 5.2 | 7.7 | 3.0 | 0.65 | 800-877-9700 |
| T Rowe Price TF:Short Int (PRFSX) | 4.0 | 6.6 | 4.7 | 2.9 | 4.4 | 4.6 | 4.1 | 1.6 | 0.53 | 800-638-5660 |
| Amer Cnt:Ltd Tax Free (TWTSX) | 3.9 | 6.5 | 4.6 | 2.9 | 4.3 | 4.5 | 3.6 | 1.6 | 0.52 | 800-345-2021 |
| Schwab Inv:Sht/Int Tx Fr (SWITX) | 3.9 | 6.5 | 4.6 | 2.6 | 4.2 | 4.5 | 4.3 | 1.6 | 0.49 | 800-266-5623 |
| Excelsior Intm Tax Exmpt (UMITX) | 3.9 | 6.5 | 4.6 | 2.0 | 5.4 | 5.9 | 8.6 | 2.9 | 0.58 | 800-446-1012 |
| Northern Intm Tax Exempt (NOITX) | 3.8 | 6.3 | 4.5 | 2.2 | 4.5 | 4.8 | 6.5 | 2.4 | 0.85 | 800-595-9111 |

**Marginal federal tax rate*

*Continued on page 10*

Of course, the lower the marginal federal tax rates that an investor has, the lower the taxable equivalent yield, and for low tax bracket investors, fully taxable bonds and bond funds may be more appropriate. As a comparison, the yield on a U.S. government bond of the same approximate maturity is currently about 6.1%. For an individual at the 15% marginal tax rate, a 5.6% tax-exempt yield would have a taxable equivalent yield of 6.6%, while a 5.0% tax-exempt yield would have only a 5.9% taxable equivalent yield.

The average annual one-year, three-year, and five-year returns in Table 1 are total returns—income plus capital gains or losses. Because returns include gains and losses due to changes in interest rates—when interest rates rise, bond prices fall, and when interest rates fall, bond prices rise—yields and returns move in opposite directions. Lower bond prices translate into higher yields, but lower bond prices produce capital losses, lowering returns.

## MATURITIES AND RISK

Maturity is important for the usual two reasons: return and risk. If you want higher yields and returns on average, you will have to go to funds with longer maturities, as the summary statistics on the bottom of Table 1 on page 10 show. However, as is apparent from looking at individual fund experience, longer maturity does not always lead to higher yields or returns. Recall the impact a change in interest has on bond funds—if interest rates rise, bond prices drop—but the prices drop further the longer the average maturity of the bond fund.

The impact of maturity on risk can be seen in the column next to maturity in Table 1, which is standard deviation, a measure of return volatility. The larger the standard deviation, the greater the risk. Glance at the average standard deviation by maturity class at the bottom of Table 1. Long-term tax-exempt bond funds have on average over three times the standard deviation of short-term tax exempt bond funds, three times the risk.

The expense ratio, expressed as a percentage of net asset value, tells just how much of your yield is lost to fund expenses. Higher expense ratios mean lower yields. The average expense ratio for these funds is 0.58%. Funds with expense ratios approaching 1.00% are expensive and funds with ratios closer to 0.25% are cheap.

There is more information than in

**TABLE 1 CONTINUED. TAX-EXEMPT BOND FUND CHARACTERISTICS**

| Long-Term Funds (Ticker) | Yield (%) | Tax-Equiv. Yield (%) 39.6%* | Tax-Equiv. Yield (%) 15.0%* | Annual Return (%) One Yr. | Annual Return (%) Three Yrs. | Annual Return (%) Five Yrs. | Avg. Maturity (Years) | Std. Dev. (%) | Expense Ratio (%) | Phone |
|---|---|---|---|---|---|---|---|---|---|---|
| USAA Tax Ex:Long Term (USTEX) | 5.6 | 9.3 | 6.6 | 1.6 | 6.7 | 6.8 | 15.9 | 3.3 | 0.36 | 800-531-8181 |
| Vanguard Muni:High Yield (VWAHX) | 5.4 | 8.9 | 6.4 | 2.5 | 6.4 | 7.0 | 12.6 | 3.2 | 0.20 | 800-635-1511 |
| Vanguard Muni:Ins Long Tm (VILPX) | 5.3 | 8.8 | 6.2 | 2.3 | 6.1 | 6.8 | 11.2 | 3.6 | 0.21 | 800-635-1511 |
| Strong Municipal Bond (SXFIX) | 5.2 | 8.6 | 6.1 | 2.3 | 7.5 | 6.1 | 11.4 | 3.4 | 0.70 | 800-368-1030 |
| Vanguard Muni:Long Term (VWLTX) | 5.2 | 8.6 | 6.1 | 2.0 | 6.2 | 7.0 | 12.1 | 3.5 | 0.21 | 800-635-1511 |
| SteinRoe Muni:Managed (SRMMX) | 5.1 | 8.4 | 6.0 | 1.6 | 6.1 | 6.3 | 15.7 | 3.5 | 0.72 | 800-338-2550 |
| T Rowe Price TF:Income (PRTAX) | 5.1 | 8.4 | 6.0 | 1.8 | 6.1 | 6.6 | 15.9 | 3.5 | 0.55 | 800-638-5660 |
| Dreyfus Gen Muni Bond (GMBDX) | 5.1 | 8.4 | 6.0 | 0.7 | 5.4 | 5.8 | 21.3 | 3.2 | 0.87 | 800-645-6561 |
| Sit Tax Free Income Fund (SNTIX) | 5.0 | 8.3 | 5.9 | 2.5 | 6.6 | 6.8 | 17.2 | 2.4 | 0.71 | 800-332-5580 |
| Dreyfus Muni Bond (DRTAX) | 5.0 | 8.3 | 5.9 | 1.2 | 5.5 | 5.8 | 22.3 | 3.1 | 0.73 | 800-645-6561 |
| Dreyfus BASIC Muni Bond (DRMBX) | 4.9 | 8.1 | 5.8 | 2.3 | 7.3 | 7.4 | 17.1 | 3.6 | 0.45 | 800-782-6620 |
| Amer Cnt:Long Tm Tax Free (TWTLX) | 4.9 | 8.1 | 5.8 | 1.0 | 6.1 | 6.5 | 19.4 | 4.2 | 0.51 | 800-345-2021 |
| SAFECO Muni Bond (SFCOX) | 4.9 | 8.1 | 5.8 | 1.3 | 6.7 | 7.1 | 23.9 | 4.4 | 0.51 | 800-426-6730 |
| Janus Inv:Federal Tx Ex (JATEX) | 4.8 | 7.9 | 5.6 | 1.7 | 5.4 | 6.1 | 10.2 | 3.7 | 0.65 | 800-525-8983 |
| T Rowe Price Sum:Muni Inc (PRINX) | 4.8 | 7.9 | 5.6 | 1.8 | 7.2 | 7.5 | 16.5 | 3.6 | 0.50 | 800-638-5660 |
| Schwab Inv:Long Tm Tx Fr (SWNTX) | 4.7 | 7.8 | 5.5 | 0.6 | 6.0 | 6.5 | 19.7 | 4.0 | 0.49 | 800-266-5623 |
| Dreyfus Insured Muni Bond (DTBDX) | 4.7 | 7.8 | 5.5 | 1.9 | 5.7 | 5.4 | 23.0 | 3.6 | 0.85 | 800-782-6620 |
| Value Line Tx Ex:High Yld (VLHYX) | 4.6 | 7.6 | 5.4 | 1.7 | 5.7 | 6.2 | 20.0 | 3.2 | 0.63 | 800-223-0818 |
| ABN AMRO:TxEx Fxd Inc/Cmn (RTETX) | 4.4 | 7.3 | 5.2 | 1.7 | 6.0 | 6.2 | 15.8 | 3.6 | 0.83 | 800-443-4725 |
| Excelsior Long Term Tx Ex (UMLTX) | 4.2 | 7.0 | 4.9 | 0.6 | 6.5 | 7.8 | 24.0 | 4.2 | 0.74 | 800-446-1012 |
| Northern Tax Exempt (NOTEX) | 4.1 | 6.8 | 4.8 | 1.8 | 5.7 | 6.1 | 16.0 | 3.9 | 0.85 | 800-595-9111 |
| INVESCO TF Inc:TF Long Bd (FTIFX) | 4.0 | 6.6 | 4.7 | 1.2 | 5.0 | 5.6 | 10.2 | 3.8 | 0.91 | 800-525-8085 |
| **Averages** | | | | | | | | | | |
| **Overall** | **4.5** | **7.5** | **5.4** | **2.1** | **5.5** | **5.8** | **10.7** | **2.8** | **0.58** | |
| **Short Term (three years or less)** | **4.1** | **6.7** | **4.8** | **3.5** | **4.5** | **4.4** | **2.1** | **0.9** | **0.53** | |
| **Intermediate Term (three to 10 years)** | **4.4** | **7.3** | **5.2** | **2.2** | **5.2** | **5.5** | **7.4** | **2.7** | **0.58** | |
| **Long Term (greater than 10 years)** | **4.9** | **8.1** | **5.7** | **1.6** | **6.2** | **6.5** | **16.9** | **3.6** | **0.60** | |

**Marginal federal tax rate*

*Source: AAII's Quarterly Low-Load Mutual Fund Update/Standard & Poor's Micropal. Data as of June 30, 1999.*

Table 1 that you need to know in order to intelligently select a municipal bond fund. Get the prospectus and annual report (which contains a list of all securities in the portfolio) of the fund and follow this check list:

- What quality are the bonds? Other than high-yield funds, most municipal bond funds have almost all of their portfolio in AAA and AA-rated bonds, with a few perhaps in the A-rated category. High-yield funds will have most in BBB bonds, lower-quality bonds that have higher default risks.
- What percentage of the portfolio is in general obligation bonds? General obligation bonds are backed up by the full faith and credit of the issuer and are lower risk than special purpose bonds, which are dependent upon revenues from specific projects.
- Does the fund hold bonds subject to the alternative minimum tax (AMT)? The interest on municipal bonds that are issued for private use is subject to the dreaded alternative tax, so if you want to avoid even doing the AMT calculation, then avoid funds with AMT-type bonds.
- How many different bond issues does the fund hold? Most funds hold well over 100 issues, with some pushing 400. Geographic and issuer diversity is important. Single-state bond funds carry additional risks, although they have the benefit of double or triple tax exemption, because they are concentrated and subject to the risks of state or city fiscal woes.
- What is the investment philosophy of the fund—does it offer high yield or high quality? Do you want to rely on diversification to blunt any defaults and go for high yield or do you want to sacrifice some yield for the security of high quality bonds?
- What is the investment style of the fund—is the manager betting on interest rate moves, shortening the portfolio maturity on expectations of interest rate increases or lengthening maturity in anticipation of interest rate drops? This kind of active style management would be appropriate if you think it is possible to consistently forecast the direction of interest rates correctly. If you want to avoid most of the risk of your bond fund dropping in value when rates rise but don't want to give up substantial yield, think intermediate-term funds.

## THE END GAME

Tax-exempt bond funds have the same end game in mind as you do, minimizing taxes, but often decidedly different strategies.

So, bat these questions around until they are answered to your satisfaction, and you should find several funds that closely match your yield, risk, and tax-shielding preferences. ✦