Bonds

September 2006

An Investor’s Guide to Closed-End Muni Funds

Technically, ordinary mutual funds are known as open-end funds. That is because, when they are launched, the number of shares is open-ended, and the fund can continuously issue new shares as capital comes in.

A second type of fund exists, not as well known, called closed-end funds: These are launched with a fixed number of shares outstanding.

Either type of fund can serve as a vehicle for investing in a managed portfolio of bonds.

Like their open-end cousins, closed-end bond funds cover the entire bond universe, including:

- Domestic taxable bonds such as governments, mortgages, corporates, both investment and non-investment grade (high yield or “junk”);
- Foreign bonds, including those of emerging economies;
- Loan participation funds, which invest primarily in floating-rate or variable rate notes; and
- Domestic municipal bonds.

As is the case with their open-end cousins, municipals constitute the largest percentage of closed-end bond funds: 54%, according to the latest figures published by the Investment Company Institute.

The main attraction of closed-end funds is higher yield. And when market conditions are favorable, closed-end bond funds do deliver higher yields than open-end funds.

But in the world of bonds, higher yield always comes at a cost, namely, higher risk. Closed-end bond funds are no exception. The higher risk comes in the form of much higher volatility.

This article will focus primarily on municipal closed-end bond funds. But note that much of the discussion is applicable to other categories of closed-end bond funds as well.

Open- and Closed-End Similarities

When you purchase a bond fund, whether open-end or closed-end, you are investing in a continually managed and diversified portfolio of bonds. The main difference between investing in either type of fund and investing in an individual bond is that an individual bond has a definite date at which it matures—i.e., when the bond is redeemed, usually at par. The price of an individual bond moves closer to par as it approaches the maturity date. But for most bond funds, whether open or closed, there is no date at which the entire portfolio matures (the exception is certain funds that invest in zero-coupon bonds).

Also, the market value of the bonds in both closed-end and open-end funds (and therefore, the value of the total portfolio) reacts to changes in the level of interest rates. Whenever interest rates decline, the value of the bonds in the fund goes up; and whenever interest rates rise, their market value declines. Those changes are proportionately larger as...
the maturity of the bonds increases.

But the price changes of closed-end bond funds are more complex than those of open-end funds. So let us now turn to some of the unique aspects of closed-end bond funds.

**NAV and Market Price**

The most striking difference between closed-end and open-end funds is their share structure. Open-end funds are issued with an unlimited number of shares. When an investor buys shares in an open-end fund, new shares are issued and the added capital allows the fund to buy additional securities. The assets of an open-end fund grow if it attracts new investors. Conversely, if investors sell shares, the fund must sell securities to redeem the shares, and investor sales cause the portfolio to shrink. The net asset value (NAV) of each share is tabulated at the end of each trading day: It is the total market value of the securities in the fund, divided by the number of shares (with a tiny amount deducted for expenses). The shares of open-end funds are priced according to their NAV (sometimes a commission or expense fee is added).

Closed-end funds, however, are issued with a fixed number of shares. These shares trade on any of the three stock exchanges, like those of any ordinary stock. At the end of each day, the market price of the bonds in the fund is tabulated as it is in an open-end fund, and that market value, divided by the total number of shares, results in a tabulated NAV per share. But because the number of shares is fixed and traded in the secondary markets, the price of one share can move independently of the value of the assets in the fund, based on demand for the shares.

As a result, the shares of closed-end funds have two reported values: the net asset value of one share; and the market price of one share, which can be higher or lower than its NAV.

If a share is selling for more than the NAV, then the fund is said to be selling at a premium. If its price is lower than its NAV, it is said to be selling at a discount.

Understanding this distinction is critical to understanding how closed-end funds differ from the more numerous open-end mutual funds. This distinction is reflected in the way prices of closed-end bond funds are quoted in the financial press. A generic listing for a closed-end bond fund looks something like the example in Table 1.

<table>
<thead>
<tr>
<th>Fund Name (Ticker)</th>
<th>Stock Exchange</th>
<th>NAV</th>
<th>Market Price</th>
<th>Premium/Discount</th>
<th>Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>XYZ</td>
<td>NYSE</td>
<td>8.26</td>
<td>7.4</td>
<td>-10%</td>
<td>5.5%</td>
</tr>
</tbody>
</table>

Reading from left to right, this tells you the following:

- The name of the fund (XYZ),
- The exchange on which it trades (the NYSE),
- The net asset value of the bonds in the portfolio,
- The price at which the shares of the fund last changed hands,
- The fact that the listed market price is currently at a discount to NAV (10%), and
- The yield of the fund (for more on yield, see below).

Don’t be confused by commissions. All closed-end funds are sold with a commission, but the commission is that charged for any stock. Closed-end funds trade anywhere that stocks trade, on-line or off-line.

**Premiums and Discounts**

What, if anything, other than demand (or lack of it) causes shares of a closed-end fund to trade at a discount or at a premium to its net asset value?

Oddly enough, one answer to this question is that there is no clear explanation for this phenomenon. It is just the case that many closed-end funds seem to generally trade at a discount to net asset value, for reasons that are not clear to anyone. But note one exception, and that has to do with the market price of shares at issue.

When a closed-end fund is first launched, its shares nominally trade at NAV. But the process for originating shares and bringing a fund to market actually involves hidden costs. What happens typically is that a management company will announce that it is going to be originating the Many Happy Returns Closed-End Bond Fund; that the fund will be structured to buy bonds (say tax-exempt nationally or for a particular state); and, furthermore, that the fund will be structured so that the yield will exceed say 5%. After it has gathered capital, the management company then purchases a portfolio of bonds. But typically, underwriters build in fees of 5% to 8% or so. What that means is that if you buy a closed-end bond fund at issue, approximately 5% to 8% of the NAV represents hidden commissions and underwriter fees: only about 92 cents to 95 cents out of every dollar an investor spends actually buys bonds.

After the fund begins trading, typically, underwriters “support” the price for some period of time, perhaps weeks or perhaps months. But subsequently, and almost inevitably, the share price declines and trades at a discount to NAV.

Unfortunately for unsophisticated buyers, the time that your friendly broker is most likely to be aware of a new closed-end bond fund offering is when it first comes to market and when it is therefore quite expensive. So buying a closed-end bond fund at issue is almost never advisable.

On the other hand, when the fund price does go to a discount to NAV, that in itself makes it an attractive buy.

Why?

Simple arithmetic. Suppose the bond fund is trading at a discount of 10% to NAV, as in our example above. Further suppose that the portfolio yield
Sources of Information

Data on closed-end bond funds is extremely limited in the daily financial printed media. Net asset value (NAV) data is available on a weekly basis in the Wall Street Journal (Mondays), in the Sunday New York Times, and in Barron’s. But that information is limited to NAV, yield, and whether the fund is trading at a discount or at a premium. It gives you no perspective at all on total return over any longer time period.

Quarterly performance numbers are published in Barron’s. These figures include historical returns (based on market price) for the quarter and year and for three-, five- and 10-year periods.

These data appear in table form only: There is no analysis of returns, and no comparative analysis of funds. There is much better data on the Internet. One excellent Web site is the one maintained by the Closed-End Fund Association (CEFA). This site shows daily NAV information for all closed-end funds: Just type in the ticker symbol. But the site also allows you to conduct searches and zero in on individual funds, obtaining a full picture of the fund’s historical performance data.

Another excellent Web site is ETF Connect, which is maintained by Nuveen Investments. In spite of its name (ETF stands for exchange-traded fund), ETF Connect contains daily price information as well as historical performance information both for closed-end funds as well as for exchange-traded funds.

The best coverage of closed-end bond funds is contained in a newsletter published by Thomas Herzfeld, The Investor’s Guide to Closed-End Funds. Herzfeld also maintains a free Web site (www.herzfeldresearch.com) that has contact phone numbers for all closed-end funds, price information and links to numerous Web sites, as well as a free sample newsletter.

If you do not have access to the Internet, the best sources of information on any closed-end fund are the annual or semiannual reports issued by the management companies. Some of the larger issuers of closed-end municipal bond funds are: Nuveen Investments, BlackRock Advisors, Pacific Investment Management Co. (PIMCO), and Eaton Vance Management.

Fund Data Web Sites

Closed-End Fund Association
www.cefa.com

ETF Connect
www.etfconnect.com

Thomas J. Herzfeld Advisors, Inc.
www.herzfeldresearch.com

Fund Manager Web Sites

Nuveen: www.nuveen.com
Black Rock: www.blackrock.com

PIMCO: www.pimco.com
Eaton Vance: www.eatonvance.com

Newsletter

The Investor’s Guide to Closed-End Funds
($475/year for on-line version; $625/year for printed version)

Thomas J. Herzfeld Advisors, Inc.
P.O. Box 161465, Miami, FL 33116
(305) 271-1900
www.herzfeld.com

is 5.5%. If you are paying 90 cents on the dollar that boosts the yield you will receive to 6.1%. You are receiving a higher yield than if you were to purchase the bonds directly, at their market value.

Leverage

The primary tool for boosting yield in closed-end municipal bond funds is the use of leverage. This is distinct from the boost in yield resulting from the fact that the fund is trading at a discount. Approximately 85% of all closed-end bond funds use leverage, and for municipal bond funds, the percentage reaches 95%.

Leverage can best be understood as analogous to the use of margin by individual investors. The strategy relies on borrowing money at short-term rates, in order to finance the purchase of longer-term bonds, which typically deliver higher interest. These longer term bonds appear in the portfolio as preferred shares, and the amount of leverage can vary: A typical percentage is around 30% of the total net assets of the fund. The income per share is boosted by the difference between the cost of borrowing and the higher interest generated.

Leverage works well when the yield curve is upward sloping, and the difference between short-term rates and long-term rates is high. It works particularly well when the yield curve is steep: The yield curve in the municipal bond market is generally steeper than that of the Treasury market.

However, leveraging ceases to work
well if the yield curve flattens, as it has over the past two years. During that time, as the Federal Reserve has repeatedly raised the discount rate, short-term rates in the muni market have gone up steeply, whereas some long-term rates have remained the same and others have declined slightly. This has produced a double whammy for leveraged funds: Borrowing costs have risen and long-term rates have declined, sharply reducing (or eliminating) any profit due to leverage.

At the present time, the yield curve in the muni market remains more upward sloping than in the Treasury market, about 100 basis points between one-year notes and 30-year issues, but that is a far cry from what it was two years ago. That has greatly reduced the advantage of leverage.

Just as buying on margin magnifies profits and losses, so does leverage in a closed-end municipal fund, and that is the chief reason that the market price of closed-end bond funds is much more volatile than the market price of ordinary open-end mutual funds.

When market conditions become unfavorable (and this can involve a number of different scenarios—for example, a rise in short-term rates, resulting in increased borrowing costs; or long-term rates rising, causing NAV to fall), then the fund suffers a double or a triple whammy:

- The dividends are cut,
- The NAV declines, and
- Investor sales cause the market price of the fund to plummet.

**“Not Exactly Yield”**

The phrase “not exactly yield” was coined by Thomas Herzfeld, whose monthly newsletter provides the most complete coverage of closed-end funds. He coined the phrase to warn investors that published yield figures may not accurately measure the tax-exempt distributions of municipal closed-end funds. This arises from several different situations.

The first is that some funds actually pay out more than just dividend income due to the fact that, in order to avoid being taxed at the fund level, closed-end bond funds distribute capital gains as they occur. This income is taxable as capital gains.

Also, a number of funds have managed payout policies, which dictate that a minimum amount has to be distributed every month: If income falls short, these funds actually return a portion of the paid-in capital (designated by the funds as “distributions from paid-in capital”). Such distributions are a return of your own money and certainly not income or “yield.”

Quote services do not discriminate between the sources of these distributions: All are lumped together as income.

Moreover, there is not a single formula, such as the SEC yield formula published by open-end mutual funds, that obligates funds to calculate yield so that published yields of different closed-end bond funds are comparable. Obviously, there is also no figure comparable to yield to maturity for individual bonds, since the portfolio has no maturity date.

A second type of problem with published yield figures is that dividend distributions may be cut. Over the past two years, for example, as the cost of borrowing has gone up and long-term yields have declined, the result has been repeated dividend cuts. Also, while a declining interest rate environment is generally good news for a bond portfolio (as interest rates fall, the value of older bonds rises), if the portfolio in question consists of municipal bonds, this makes it likely that older, higher-yielding bonds will be called, which then have to be replaced with lower-yielding bonds. This also may result in dividend cuts.

**Income Ratios**

There is one additional figure that
funds are required to calculate and publish, and that is their income ratio. A fund’s income ratio is its net investment income (minus expenses) divided by the fund’s net asset value. But because the denominator of the equation is net asset value, and not market price, the income ratio will not be the same as the published “yield.”

The income ratio number gives investors information about the fund’s potential earning power. But unfortunately, income ratios are published only twice a year, in the annual and semiannual reports, and by the time they are published, they may be obsolete.

If published yield figures are lower than recently published income ratios, it is safe to assume that the income ratio numbers do not reflect recent dividend cuts, and are obsolete.

**Volatility and Total Return**

While many investors purchase closed-end municipal bond funds primarily as a source of steady income, these funds look far less attractive if you look at total return. Focusing on yield alone misses the big picture.

The total return for any bond fund, whether closed-end or open-end, includes several different cash flows:

1) The difference between the market price at which a fund is bought, and the price at which it is sold, plus
2) Interest income and interest on interest earned by reinvesting distributions.

Published total return numbers for closed-end bond funds specify whether returns are based on net asset value, or market price. In either case, total return figures include all distributions and further assume that those are reinvested.

The market price data are the total return numbers, the ones affecting your pocketbook. But the historical performance figures derived from NAV enable you to evaluate how good a job the managers of the fund are doing in managing the portfolio value under different market conditions.

As noted above, the use of leverage magnifies both gains and losses. When market conditions change, the market price of closed-end bond funds (including munis) can change suddenly and steeply. A 20% swing in market price within a period of a few months is not uncommon.

But patterns of price changes can be complex and seemingly illogical. It is not unusual for net asset value and market price returns to move in opposite directions.

There are approximately 270 closed-end municipal bond funds. For the year 2005, in spite of several rounds of dividend cuts, the average total return of municipal closed-end funds based on market price was about 6.8%; average total return based on net asset value was about 5.3%.

For the first half of 2006, average total return of the same funds, based on market price, was a negative 0.15%.

But the averages mask enormous differences from fund to fund: total return (based on market price with distributions included) for the top 10 municipal closed-end funds was above 20%; total return (again, based on market price and with distributions included) was –6% to –10% for the bottom 10 funds. Moreover, the top 10 and bottom 10 funds change from year to year.

[Return data from Herzfeld’s Investor’s Guide to Closed-End Funds]

Figure 1 shows the average discount of all national municipal closed-end funds between February 2002 and May 2006. This figure provides a striking illustration of the fact that much of the time, closed-end bond funds trade at a discount to NAV. This price pattern has led many experts to suggest that one should never buy a closed-end bond fund at issue or at a premium, and that the best time to purchase such a fund is when its price has moved to a discount, preferably a wide discount.

**Conclusion**

The sales pitch for closed-end bond funds is their higher yield compared to open-end funds or to individual bonds.

The good news is that under favorable market conditions, the funds do deliver higher yield. The cost, however, is higher volatility (due to the use of leverage) and therefore unpredictable total return. You should not purchase closed-end municipal bond funds for income unless you are prepared to accept considerable fluctuations in the market price of the fund.

Note also that published yield figures may not accurately reflect the tax-exempt payout you will receive, since distributions other than tax-exempt income include capital gains (taxable at the capital gains rate) and paid-in-capital distributions (your own money being returned to you). Published yield figures lump all distributions as yield. Finally, under unfavorable market conditions, dividends may be cut.

Advice on when to buy these funds can be summed up very briefly:

- Never buy a fund at issue.
- Only buy if the fund is trading at a wide discount to net asset value; that would also be a time when its yield would be particularly attractive.
- One variation of this piece of advice, suggested by Herzfeld, is to track the discount pattern of a fund, and only buy it if its discount is wider than the normal discount. Sell when the discount narrows.

---

Annette Thau, Ph.D., is author of “The Bond Book: Everything Investors Need to Know About Treasuries, Municipals, GNMA, Corporates, Zeros, Bond Funds, Money Market Funds, and More,” (copyright 2001, published by McGraw-Hill; $29.95). She has spoken to AAII chapters in different parts of the country about bonds and bond funds.

Ms. Thau is a former municipal bond analyst for Chase Manhattan Bank. She also until recently was a visiting scholar at the Columbia University Graduate School of Business.