

December 26, 2001

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Interest Rate Risk among Income Closed-end Funds

Income Investors Only: Proceed Cautiously in A Low Interest Rate Environment

When interest rates rise, discounts of income closed-end funds tend to widen and the net asset values of interest rate-sensitive income funds tend to fall. We believe that over the next twelve months interest rates have a higher probability of rising rather than falling even further. Therefore, we think income closed-end fund investors should anticipate increased volatility in the prices of these funds. We are not necessarily recommending that income investors sell their closed-end funds, because closed-end funds usually offer more attractive yields relative to comparable funds and it would be difficult to replace that income without incurring additional risk. However, investors should have a longer investment horizon and be willing to tolerate some price weakness in the event of rising rates.

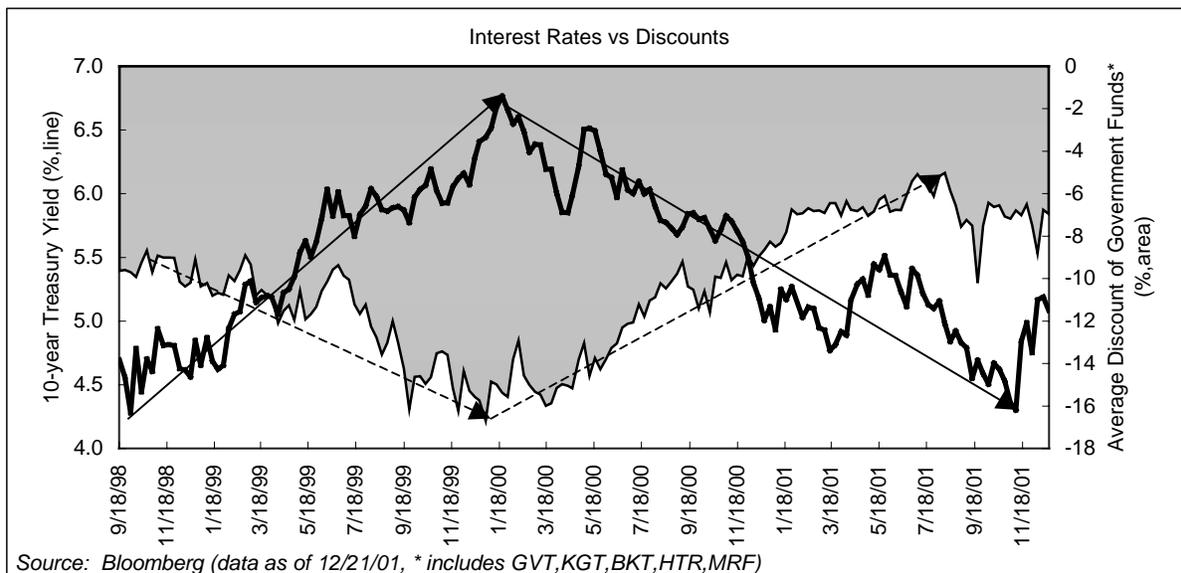
More Attractive Yields...

Closed-end funds typically offer more attractive yields relative to comparable products mainly because of their ability to leverage their assets and because they tend to trade at discounts to their net asset value. First, leverage enhances the yield of a closed-end fund by borrowing assets at a lower rate than at which it can invest them. Simplistically, for example, a leveraged fund is able to offer a 9.5% yield if it can borrow one third of its total assets at 5% and invest those assets at 8%. Meanwhile, a similar nonleveraged fund would be able to offer only an 8% yield. Second, discounts also boost the yield of a closed-end fund. For example, a closed-end fund, whose net asset value yields 9%, would yield 10% to an investor if the fund trades at a 10% discount.

...But Higher Volatility

Closed-end funds tend to be more volatile than comparable products. First, most closed-end funds are leveraged, which magnifies the effect of any underlying market changes on a leveraged fund's net asset value. In other words, the net asset values of leveraged closed-end funds tend to rise further in a bull market relative to those of comparable nonleveraged funds. Similarly, they tend to decline more in a bear market.

Second, the *price* volatility among closed-end funds is generally higher than their *net asset value* volatility. In a bear market, investors' demand for closed-end funds diminishes, prompting their discounts to widen. As long rates rise, investors can find attractive yields in other more conservative products. On the other hand, as investors are attracted to closed-end funds in a bull market, the funds' discounts narrow, and in some cases turn into premiums. The graph shows the relationship between the average discount of government closed-end funds and interest rates. We selected a group of government funds to try to isolate the effect of interest rate risk on discount trends and exclude the effect of credit



quality risk. The graph shows when long rates rose (such as they did in 1999), discounts widened. Similarly, when long rates fell (such as in 2000 and this year), discounts narrowed.

We think changes in short rates also have an effect on the discounts of leveraged closed-end funds. When short rates fall, the cost of leverage declines improving the earnings rate of the fund. A dividend increase may follow, increasing the demand for the fund and therefore causing its discount to narrow. On the contrary, when short rates rise, a fund's earnings rate typically declines resulting in potential dividend cuts. Lower dividends tend to diminish demand for a fund, prompting its discount to widen.

Conclusion

Investors who are considering buying closed-end funds in a low interest rate environment should beware that the prices of income closed-end funds would probably fall if interest rates begin to rise. The main purpose for investors to buy closed-end funds should be yield and they should be willing to accept the additional volatility. These investors should also be willing to accept some dividend cuts in the event of higher short rates. We think in the long term, closed-end funds outperform similar products, but at the expense of potentially greater short-term pain when rates rise.

Additional information is available upon request.

Definition of Risk Ratings

Two main factors contribute to a fund's risk rating: (1) the number of risks affecting a fund (credit quality, leverage, currency exposure, sovereign risk, market capitalization, security or industry concentration, etc.), and (2) a fund's expected net asset value volatility, which is measured by the 5-year annualized standard deviation of net asset value. A fund's historical volatility will be an indicator of its future volatility, but we will adjust it for any investment strategy changes.

A fund rated conservative (C) will typically have exposure to only one risk and its expected volatility will be below 8%. A fund rated moderate (M) will typically have at least two risks and its expected volatility will be between 9% and 16%. A fund rated aggressive (A) will be exposed to at least three risks and its volatility will be above 17%. A combined risk rating (C/M or M/A) means that each of the two risk factors (number of risks and expected volatility) reflects a different risk category.

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