

CEFs - Key Investor Info



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Assets in CEFs continue to increase'

We estimate that there are roughly 645 closed-end funds (CEFs) with an approximate market capitalization of \$240 million. Assets in CEFs continue to increase in the aggregate as new funds are brought to market. In this report we provide the basics of closed-end fund investing.

A structure, *not* an asset class

In our view, a major misconception among investors is that CEFs are an asset class instead of an investment structure. When a closed-end fund is formed, the investment objective is pre-set. The structure is conducive to strategies such as leveraging or investing in illiquid securities that otherwise may not be available in mutual funds.

Premiums or discounts depend on several factors

Closed-end funds typically trade at a discount or premium to a fund's net asset value. Factors that determine whether a fund will trade at a premium or discount include perceptions of the underlying assets, liquidity and/or distribution levels. For example, in an attractive international market not easily accessible by most investment vehicles, a CEF could trade at a substantial premium. For income vehicles, the income generated from the underlying assets is generally the primary determinant of the premium or discount level.

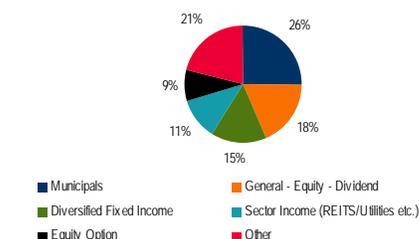
Higher yields bring additional risk

CEFs can provide investors with the potential for increased yields and total return because many funds are leveraged. Leveraging is akin to using a margin account. While leverage may add incremental income and increased total return, it can also work against an investor in down markets or periods of rising interest rates. Depending on the form of leverage, a fund can leverage up to 50% of net assets, although 20-40% is a more typical range.

Not so liquid owing to small float

Many CEFs are relatively illiquid because of their relatively small float, so when one group sells off, some closed-end fund groups and closed-end fund sectors may decline as well. The converse also applies; significant interest in a particular fund or group of funds may increase demand and prices

Chart 1: CEF Sector Breakdown



Source: Merrill Lynch

The basics

Definition of a closed-end fund

Like a traditional mutual fund, a closed-end fund (CEF) is an investment company that pools the assets of its investors and uses professional managers to invest the money to meet clearly identified objectives. However, unlike a mutual fund, a CEF issues a fixed number of shares through an IPO, and it lists those shares on a national stock exchange such as the New York Stock Exchange (NYSE) or the American Stock Exchange (AMEX). Investors who wish to buy or sell fund shares after an IPO do not purchase or redeem them directly from the fund, rather, they buy or sell fund shares on the stock exchange in a process identical to the purchase or sale of any other listed stock. A CEF is *not* a mutual fund that is closed to new investors. Like mutual funds, CEFs may be purchased in regular brokerage accounts, retirement plan accounts, and trust or custodial accounts.

We believe the biggest misconception investors have regarding CEFs is that CEFs are an “asset class” instead of what they are, which is a structure.

A structure *not* an asset class

In our view, a major misconception among investors is that CEFs are an asset class instead of an investment structure. As a registered investment company under the Investment Company Act of 1940, a CEF has the ability to invest in many different asset classes. When the fund is formed the investment objective is pre-set. The structure enables management to engage in strategies that are not generally available in traditional mutual fund structures. For example, leverage and investing in illiquid private placement securities are the most common reasons fund managers choose to create CEFs. Although the leverage can provide higher income for investors, it also increases volatility, and therefore tends to magnify negative returns in a market downturn.

NAV and pricing

There are two principal indicators of a CEFs value: 1) net asset value (NAV) and 2) stock price. Like a mutual fund, the NAV of a closed-end fund is simply the per share market value of the net assets held by the fund. The stock price represents the market value of one share in the open market.

Intuitively there should be a close relationship between the stock price and the NAV, yet CEFs typically trade at levels other than their NAV, producing discounts or premiums. Currently about 71% of CEFs trade at discounts. The average discount is now about 5.8%.

Although CEFs generally may be more volatile than a typical mutual fund, due in part to the leveraged capital structure, there also exists the potential for higher yields and total returns.

Risk and returns

We believe properly selected CEFs can enable investors to enhance yields and total returns. CEFs may be riskier than mutual funds since many employ leverage and/or invest in less liquid securities providing higher yields and potentially higher total returns. CEFs as a group also carry greater risk of price declines than mutual funds since many funds are leveraged and leverage may increase volatility.

Correlation of returns

Because the assets held by a fund vary from fund to fund, there are fund-specific sensitivities to macro forces. In the case of fixed income funds factors the impact returns include interest rate movements and credit events. However, there are common factors across funds that can cause a correlation between the stock price returns of individual CEFs both within select closed-end fund groups and across closed-end fund sectors. For example, when the stock price of one municipal bond fund declines, other municipal bond funds may decline as well.

There are times when the stock returns, say in the municipal bond sector, will move in tandem with the returns of the high-yield and preferred-fund sectors. The correlations tend to be cyclical, rising and falling depending upon market events including sharp movements in interest rates or other marketplace shocks.

Fund Governance

A CEF has a board of directors elected by the shareholders. The investment advisor employs a portfolio manager who may be assisted by a team of analysts who make investment decisions in accordance with the stated investment objectives of the fund. Administrative duties such as mailing shareholder reports or addressing shareholder concerns may be performed by the investment advisor or a separate administrator.

Types of closed-end funds

We estimate that there are about 645 CEFs invested in a variety of sectors as shown in Table 1. While the municipal sector (including National and State funds) remains the largest group both in number and aggregate assets, the percentage size has diminished, giving up ground to equity funds that have some form of income orientation (such as tax-advantaged dividend, option writing or a combination of both strategies). If the assets of Option and tax advantaged funds are combined, their assets exceed the municipal bond fund group.

Table 1: Broad CEF Sectors

Municipals	25%
General - Equity - Dividend	18%
Diversified Fixed Income	15%
Sector Income (REITS/Utilities, etc)	11%
Equity Option	9%
Country/Region	5%
Preferred	4%
Loan Participation	4%
Corporate - HY	3%
Balanced	2%
Limited Duration	2%
Convertible	2%
EM - Equity/Debt	1%

Source: Merrill Lynch as of 3/7/2007

Fixed income funds

Fixed income funds include municipal national, single-state municipal, government, global income, emerging market debt, mortgage-backed securities, loan participation, investment-grade corporate, high-yield, and multi-sector funds.

Municipal bond funds

This is the largest category of CEFs in terms of assets under management. We estimate that there are currently about 275 municipal funds (\$62 billion market capitalization) out of the universe of approximately 645 CEFs. Municipal bond funds seek to pay investors income that is exempt from federal income taxes (and, in some cases, exempt from both state or local taxes). Municipal bond funds invest in bonds issued by state and local governments and agencies. Investments are typically broadly diversified to avoid adverse events or defaults that might occur in a given sector, region, or issuer. The large majority of municipal closed-end funds employ leverage. When the yield curve is positively sloped (it is very rare to have an inverted muni yield curve), leverage can enhance the income generated resulting in potentially higher overall returns. There are only a handful of non-leveraged municipal funds in the market.

Income from most CEFs investing in municipal bonds is generally not subject to federal income tax with one important exception. Income derived from interest on tax exempt private activity bonds such as airport and housing issues are taxable under the federal alternative minimum tax (AMT). These types of bonds carry a higher yield than similar non-AMT bonds having like yields, maturity and quality and can enhance the overall yield of a portfolio. Individuals subject to AMT will lose some of the tax free advantage that they would have if they owned a municipal bond fund the assets of which do not include AMT bonds.

Investors not subject to AMT, however, can benefit from the yield premium on the AMT bonds in a portfolio. Although municipal CEFs have a minority portion of their portfolio in AMT bonds, there are a handful of funds that have no exposure to AMT. (for more info on AMT in general see Marty Mauro's report, [Dealing with The AMT, March 6, 2007](#))

The large majority of municipal closed-end funds utilize leverage.

Taxable fixed income

There are a spectrum of taxable fixed income funds focused on both high-quality and below-investment-grade instruments, including treasuries, government agencies, investment-grade, and high-yield debt. Also, there are different asset classes mixed within a single fund. Generally, the income generated by such instruments is fully taxable at an individuals' marginal tax rate.

Equity funds

Country or region

These CEFs invest in the securities of a single country, specific regions including, emerging markets.

Equity: domestic

Broadly diversified among U.S. equities, domestic funds may emphasize a theme reflecting the portfolio manager's investment philosophy. Each fund has its own mandate. CEFs offer a variety of different strategies, including value, growth, small-cap, blue-chip, and venture-capital-type funds, to name a few.

Equity option: strategies

Option funds employ a strategy of writing covered calls on all or portions of the underlying equity portfolios. This is a broad category, and each fund employs somewhat of a different strategy, be it option writing on individual stocks or indexes. Also some of the new funds employ multiple strategies within a fund. The distributions are derived from: 1) writing of option premiums; and 2) dividends of the underlying stocks. When options are used strategically with only a portion of the assets in the fund, in a market upturn, there exists the possibility for capital appreciation beyond the distribution. In some cases a fund will return capital in order to maintain a certain distribution level which is not necessarily a negative. Paying out capital can be used as a tax management tool by the fund if the fund has an equal or greater amount of unrealized gains in the portfolio.

Equity: tax-advantaged

Tax-advantaged funds invest in equities whose distributions largely consist of qualified dividend income (QDI). This strategy was employed as a result of legislation passed in May 2003 and reduces the income tax rate for corporate dividends to a 15% or lower based on an individual's tax rate. This favorable tax treatment is scheduled to expire at the end of 2010.

Sector

Sector funds are limited by their charters to investing in a particular sector or group, such as banking and financial, utilities, precious metals, and health care, among others.

Definition of terms

Duration

Duration is a rough measure of a bond's sensitivity to changes in interest rates. The lower the duration number, the less sensitive the price of a bond is to interest rate movements; the higher the duration number, the more sensitive the price of a bond is to changes in interest rates. To adjust the duration for leverage in a fund, the duration number is scaled up by the percent a fund is leveraged. The duration of a coupon bond would generally be a smaller number than its time to maturity.

Option and tax advantaged funds are growing areas and together, their assets have edged past the assets of the previous largest sector of funds, which was municipal bond funds.

Table 2: Premium/Discount Calculation

Market Price:	\$18
NAV:	\$20
Discount:	-10%
Premium/discount= (market price/NAV) -1	

Source: Merrill Lynch

Discount/premium

When demand exceeds supply, the market price of a CEF trades at a premium to its NAV. When supply exceeds demand, the shares of the CEF may trade at a discount to its NAV (i.e. the share price will be less than the fund's NAV).

There are a number of factors that can result in either a premium or discount including perception of the underlying assets, liquidity or distribution levels. For example, in an attractive international market not easily accessible by most investment vehicles, a CEF could trade at a substantial premium. Conversely, there could be a negative view on an asset class so the market may price the fund below its NAV.

We believe the discount or premium is largely correlated to the distribution of the underlying portfolio. Generally, if a fund's distribution is higher based on the underlying assets (NAV) in comparison to its peers, that fund may trade at a higher valuation than other funds. If, for example, a CEF has higher expenses than its peers, it may have a lower net distribution available to common shareholders and could trade at a discount.

We believe that discounts or premiums to NAV are not necessarily an indicator of overall performance.

We believe that discounts or premiums to NAV are not necessarily an indicator of a fund's overall performance. We can point to examples where funds have traded consistently at large discounts, yet the stock price performance has done well by all benchmarks. In other cases, such as where there are market or fund specific events that trigger changes in dividends (up or down), new IPO's that saturate the market, interest rate movements, or changes in perception of an asset class that may change the valuation of a fund, then the discount or premium may be more likely to be an indicator of performance.

Expenses

CEFs generally have lower turnover and, therefore, somewhat lower operating costs, than a mutual fund. Also, CEFs tend not to advertise, since these costs would cut into the funds' asset base.

Leverage

Many funds utilize leverage to enhance returns to shareholders by borrowing capital at a lower rate (some forms of leverage include preferred shares, reverse purchase agreements, and bank debt to name a few) than the fund's earnings on investments. Since CEFs have a stable pool of assets, the closed-end structure becomes a reasonable structure to use leverage. It is more difficult for a mutual fund to use leverage since the pool of assets is not static, but subject to change to accommodate purchases and redemption by investors (see leverage section under risks on page 8).

Net asset value

NAV = (total assets – total liabilities)/shares outstanding. The NAV of a CEF fluctuates as the value of the assets within the portfolio changes. NAVs can be found in *Barron's*, *The Wall Street Journal* and various websites including fund-sponsored web sites. Also, NAVs are available through pricing systems by using an "x" before and after the ticker. For example, the NAV for fund ABC may be obtained by using the ticker XABCX as a ticker. Most fund companies now provide daily NAVs on their web sites. In the recent past NAVs were available only weekly.

Many CEFs are fairly illiquid because of their relatively small float. When one group sells off, declines are exacerbated within select closed-end fund groups and across closed-end fund sectors.

Market price and liquidity

CEFs are publicly-traded securities; CEF shares trade on an exchange such as the NYSE. The market price of a CEF fluctuates depending on the supply and demand in the market. Many CEFs are fairly illiquid because of their relatively small float, so when one group sells off, declines are exacerbated both within select closed-end fund groups and across closed-end fund sectors. Therefore, if an investor prepares ahead of time, there may be opportunities in a future downturn to cherry pick certain funds and either add to or create positions in funds that have strong fundamentals, realizing that the initial sell-off may likely have been a response to diversification in the broader market sector.

Benefits of closed-end funds

Consistency

The pool of assets available for investment remains stable for CEFs. In a CEF, the investment manager can put capital to work in a long-term strategy with less concern for liquidity since shares are not redeemed.

With mutual funds, in contrast, fluctuations in fund performance and sentiment in the market can influence inflows and outflows. During a bull market, there may be a large inflow into a fund, leaving the fund manager with a decision whether to invest in a richly valued market or hold a larger portion of assets in cash. During market downturns, redemptions may occur, forcing a manager to sell securities in a declining market.

Increased investment opportunities

The closed-end structure is conducive for investing in less liquid or illiquid securities, which include funds that invest in re-organizations and emerging markets securities.

CEFs and mutual funds: similarities

Most investors are familiar with mutual funds. CEFs are like mutual funds in many respects. Both are investment companies that pool assets from investors to buy securities. Investors buy into a fund by purchasing shares of the fund, but shares are purchased in different ways. Mutual fund shares are bought from the fund company at the end of the day at NAV, while closed-end funds are bought in the open market as with any typical equity. CEFs can be bought on an IPO.

Diversification

The risk of investing in a single security is that the value of a company or instrument will decrease and the share price will drop. Mutual funds reduce this risk through diversification. Mutual funds invest in many companies, industries, and markets. Even funds that invest in a particular sector of the economy tend to be reasonably diversified within that sector.

Fees and commissions

A mutual fund investor may pay a commission to buy and sell shares of the mutual fund, depending on whether the fund is no-load or load. CEF investors pay a commission to a broker to buy or sell shares. The management fees from both a mutual fund and closed-end fund is paid from the assets of a portfolio.

Professional management

Mutual funds and CEFs are managed by portfolio managers who are assisted by a team of analysts who research the companies, industries, and markets in which the funds invest. Such managers typically have years of experience and in-depth knowledge of the asset class in which they invest.

With a mutual fund, shares are not exchange traded, so investors buy and sell shares at NAV. With a closed-end fund, shares may be purchased above or below NAV.

Economies of scale

The costs of buying and selling securities in large quantities are considerably less than the cost of effecting many smaller transactions. Through larger purchases of securities fixed costs are shared over a large group thus bringing down individual costs for investors.

CEFs and mutual funds: differences

Buying and selling shares

With a mutual fund are bought and sold at NAV at the end of each day. With a closed-end fund shares are purchased on an exchange and may be purchased above or below NAV.

Shares are created in a mutual fund every time an investment is made in the fund. When an investor wishes to sell shares, the mutual fund will redeem the shares. If the fund manager has to sell assets to fund the redemption, it may trigger a capital gain for all shareholders of the mutual fund. The number of outstanding shares of a mutual fund is constantly changing; therefore, the amount of assets in a mutual fund is also fluctuating as a result of inflows and outflows.

When an investor wishes to buy or sell shares of an existing CEF, the investor must purchase shares on the secondary market. After the IPO, the shares created by the CEF generally remain constant, although additional shares can be created through additional offerings, rights offerings, or the issuance of shares in connection with dividend reinvestment. Since shares are sold in the open market unlike a mutual fund, there are no tax consequences for existing shareholders of the fund.

Fees and commissions

A mutual fund investor may pay a commission to buy and sell shares of the mutual fund, depending on whether the fund is a no-load or load. A CEF investor pays a commission to a broker to buy or sell shares.

Mutual fund management earns more if they manage more assets. Often, the asset base is raised by extensive advertising, and this is reflected in higher costs to shareholders. Some of those costs include 12b-1 fees.

CEFs do not have 12b-1 fees, which pay for the marketing and distribution of mutual funds, therefore tending to result in lower expenses for the CEFs. The absence of consistent marketing of CEFs may contribute to some funds trading at a discount to NAV.

Table 3: Closed-end funds versus mutual funds

Characteristics	Closed-End	Mutual
Assets	Gathered at IPO	Continuously
Shares	Sold/Purchased in market (NYSE, AMEX)	Sold/Purchased from Fund Co.
Pricing	Market Bids-Continuously	NAV determined at market close
Sales Charge	Regular Commissions in Secondary	sales, redemption fees
12b-1 Fees	No	yes

Source: Merrill Lynch

For leverage to make sense, fund management will borrow at lower rates than invest in assets with higher rates.

The closed-end structure, with its stable pool of assets, facilitates the utilization of leverage.

Risks

Leverage

When the return on assets invested exceeds the cost of borrowing assets, leverage can be positive. Assets of the fund are used as collateral. The additional income is passed on to shareholders in the form of a higher distribution. Depending on the form of leverage, a fund can leverage up to 50% of net assets, although 20-40% is a more typical range.

Why leverage?

Many funds utilize leverage to enhance returns to shareholders by borrowing capital at a lower cost (possibly by issuing senior securities such as preferred stock or debentures) than the fund earns on investments. The closed-end structure, with its stable pool of assets, facilitates the utilization of leverage. It is more difficult for a mutual fund to utilize leverage for several reasons including the pool of assets are constantly changing.

Types of Leverage

There are many types of leverage utilized by closed-end funds, including preferred stock, reverse purchase agreements, bank loans, and notes. For income funds, when the yield curve is positively sloped, leverage can be a good tool via which to increase income and total return.

Municipal bond funds employ a unique form of leverage by issuing a second class of shares: preferred stock, also known as auction rate preferred stock (ARPs). ARPs are typically purchased by investors looking for a relatively safe, attractive short-term tax-free investment. Essentially, a fund issues ARPs and invests the proceeds raised by this issuance in its portfolio of long-term bonds, and then pays the ARP shareholders a dividend based on short-term rates. As long as the rates earned by the fund's portfolio are greater than the rate the fund is paying to ARP shareholders, the fund will generally be able to generate extra income for its common shareholders. We find that municipal funds that employ auction rate preferreds (ARPs) have leverage closer to 40%.

When the yield curve is positively sloped, leverage enhances income, which is then passed on to the shareholder in the form of higher yields.

Effects of leverage on earnings

Leveraged funds' earnings are sensitive to changes in short-term interest rates. When the spread narrows as a result of increasing short-term rates, the funds' earnings capability declines. Conversely, if the cost of borrowing declines, there can be a positive impact on earnings.

In this basic example in Table 4, we illustrate the effects of the cost of leverage on earnings. In our base case we use a 5% rate for the cost of leverage and a 7% rate earned on invested assets resulting in \$0.80 per share in earnings. When we adjust the cost of leverage to 6%, EPS declines by \$0.05 per share to \$0.75 (per share when all other variables are held constant). When the cost of leverage declines to 4%, EPS increases by \$0.05 per share to \$0.75 per share.

Table 4: How a Change in the Cost of Leverage Effects Earnings

	Base Case 5%	Scenario 1 6%	Scenario 2 4%
Income*	\$ 105,000	\$ 105,000	\$ 105,000
Leverage Cost	\$ 25,000	\$ 30,000	\$ 20,000
Net Investment Income	\$ 80,000	\$ 75,000	\$ 85,000
Shares Outstanding	100,000	100,000	100,000
Earnings per Share	0.80	0.75	0.85

Source: Merrill Lynch

* 7% of \$1,500,000

A simple way to look at leverage within a fixed income fund portfolio is to equate leverage to a margin account.

Effects of leverage on NAV and stock price?

A simple way to look at leverage within a fixed income fund portfolio is to equate leverage to a margin account. Leverage moves more than 100% of a portfolio's assets. If the value of the assets drops then the overall NAV of the portfolio drops more than if the portfolio was not leveraged. The decline in NAV typically results in a drop in the stock price as well. With a closed-end fund, the stock price may diverge from the NAV, but typically there is a correlation between the NAV and stock price. In this simple example below, we illustrate how movements in the underlying assets generally may impact the NAV.

In this basic example in Table 5, we illustrate the effects of the movements in the underlying market on the NAV per share of a fund. In our market-neutral case, we begin with an NAV of \$10, leveraged 33%. In scenario 1, the underlying market declines 10% which causes the leverage ratio to increase to 37% and the NAV to decline \$1.50 to \$8.50. In scenario 2, the market increases 10% from our market neutral case resulting in a decrease in the leverage ratio to 30% and a \$1.50 increase in NAV to \$11.50. Leverage magnifies the changes in NAV both positively and negatively.

Table 5: Effects of market movement on NAV

	Market Neutral	Scenario 1 10% decline	Scenario 2 10% increase
Net Assets	\$ 1,000,000	\$ 850,000	\$ 1,150,000
Leverage Amount	\$ 500,000	\$ 500,000	\$ 500,000
Total Assets	\$ 1,500,000	\$ 1,350,000	\$ 1,650,000
Leverage %	33%	37%	30%
Shares Outstanding	100,000	100,000	100,000
Price Per Share	\$ 10.00	\$ 8.50	\$ 11.50

Source: Merrill Lynch

Income

Income risk is the risk that the income from a portfolio will decline if and when the fund invests the proceeds from matured, traded, or called bonds at market interest rates that are below the portfolio's current earnings rate. In the case of leveraged funds, income risk also refers to an increase in short-term rates, which is an additional expense to the fund thus reducing the earnings available to pay distributions to the holders of the fund. In Table 6, we changed the rate earned on assets to illustrate what would occur to earnings per share if the income declined as a result of a bond being called away and replaced with a lower yielding bond. We make the assumption that there is one bond in the portfolio that is being called away and the prevailing interest rate environment is lower.

Table 6: Effects of Bond Calls on a Portfolio

	Old rate 7%	New rate 5%
Bond	\$ 100,000	\$ 100,000
Income	\$ 7,000	\$ 5,000
Shares Outstanding	10,000	10,000
Earnings per Share	0.70	0.50

Source: Merrill Lynch

Interest rate

Interest rate risk is the risk that the value of a fund's portfolio will decline because of rising interest rates. While this applies mostly to bond funds, the longer the duration of a fund's portfolio, the greater its sensitivity to movements in interest rates. Leverage will tend to magnify interest rate risk.

Credit

Credit risk refers to a bond issuer's ability to meet its obligation to make interest and principal payments or a decline in the market's assessment of the issuer's ability to pay. Generally, lower-rated bonds provide higher current income but are considered to carry greater credit risk than higher-rated bonds. In general, the lower the quality of the bonds in a CEF portfolio, the greater the credit risk of the fund.

Price

Price risk refers to the fact that the stock price of a fund could decline as result of a declining NAV or a declining distribution rate. Stock prices will fluctuate with market demand for both the fund and underlying assets. A fund's stock price can trade at a premium or a discount to its underlying NAV.

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Price risk refers to the fact that the stock price of a fund could decline as result of a declining NAV or a declining distribution rate. Stock prices will fluctuate with market demand for both the fund and underlying assets.

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