Closed End Funds 101

Closed-end funds (CEFs) are investment vehicles, actively managed by separate entities known as investment advisors, distinguished by their unique features and benefits. By our count there are currently 589 CEFs, each with its own unique investment objective, be it capital growth, current income, or a combination of the two. Shares of CEFs are created through an initial public offering (IPO), after which they trade on a stock exchange, similar to common stocks. As a result of trading on an exchange, CEFs will have both a market price and a net asset value (NAV). Market prices fluctuate based on supply and demand and typically trade above (premium) or below (discount) the fund’s NAV. This characteristic, as well as others explained throughout this report, differentiate CEFs from their open-end mutual fund counterparts.

Types of Closed-End Funds

Tax-Free (Municipal) Funds

Municipal funds account for over 34 percent of all CEFs. These funds seek to provide current income exempt from regular federal income tax by investing in municipal securities - bonds issued by state and local governments and agencies. Single-state municipal funds are intended to provide income free from state-related taxes as well. Options available within the municipal fund sector besides the typical longer-term high quality and investment-grade funds include non-leveraged funds, intermediate-term funds, and funds with a substantial amount of low-quality or non-rated bonds. A breakdown of these various sub-sectors can be seen in Chart B below. The majority of municipal funds utilize a leveraging strategy, which is explained in greater detail later in this report.

Taxable Funds

The taxable fund universe can be broken down into two categories - income-oriented funds and equity-oriented funds. Those hybrid funds that combine the two objectives are typically categorized as equity-oriented under the sector equity-income.
Taxable income funds invest in bonds or other debt-related instruments. These include securities such as mortgage-backed securities, U.S. government bonds, corporate bonds, senior bank loans, and preferred stock. Some funds concentrate on one particular type of debt instrument, while others invest in various forms of debt securities (i.e. multi-sector bond funds). There are also a number of funds that invest in international securities, both in developed and emerging market countries. Sector breakdown within the taxable income fund category is available in Chart C.

There are a wide array of equity-oriented funds to suit both investors looking for broad-based equity allocations and sector-specific allocations. Chart D represents a breakdown of the various sectors of equity funds. Global and international equity funds invest in both U.S. and foreign equity securities. While some funds are fully diversified throughout various countries, there are also funds available that invest specifically in the equity securities of one country or region. Domestic equity funds invest primarily in companies whose common stock is both listed and incorporated in the U.S. There are also many sector-specific or specialty funds that invest in specific industries or asset classes, such as master limited partnerships (MLPs), real estate investment trusts (REITs), or specialty finance investments. Option-premium funds, also referred to as covered-call, offer a way to maintain equity while also receiving income. The objective of this strategy is to invest in a portfolio of common stocks and write call options on those stocks or comparable indexes. The premium received on the call options then flows through to investors through a regular distribution stream. Lastly, equity-income funds provide exposure to portions of both the equity and debt markets. Many of these funds pass income through to shareholders on a monthly or quarterly basis.

Open-End Funds vs. Closed-End Funds

CEFs differ in many respects from open-end funds, better known simply as mutual funds. Both generally benefit from active professional management, diversification, and stated investment objectives. However, mutual funds typically issue and repurchase shares directly, as needed. Shares are purchased and sold at NAV, calculated at the end of the trading day, rather than at a market price determined by supply and demand. Thus, the price reflects the value of the underlying securities, rather than demand for the fund. Higher liquidity requirements can make mutual funds less volatile investments than CEFs,
but the need to hold cash positions to satisfy redemption requests can negatively affect returns in a favorable market. Conversely, CEFs can be fully invested and hold little or no cash position in their portfolios. In addition, CEFs do not incur the ongoing costs associated with creating and redeeming shares and typically have lower expense ratios than standard mutual funds. There are also no minimum investment restrictions or minimum holding periods on purchases of CEF shares.

**Comparison of Closed-End Funds vs. Open-End Funds**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Open-End Mutual Funds</th>
<th>Closed-End Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase price</td>
<td>End of day NAV</td>
<td>Market price set by supply and demand</td>
</tr>
<tr>
<td>Prices change</td>
<td>Daily – close of business</td>
<td>Intra-day</td>
</tr>
<tr>
<td>Additional costs</td>
<td>Sales, redemption charges, 12b1 fees</td>
<td>Standard trading fees and commissions</td>
</tr>
<tr>
<td>Shares sold to/purchased from</td>
<td>Fund company</td>
<td>Secondary market (NYSE, NASDAQ, etc.)</td>
</tr>
<tr>
<td>Shares offered by fund company</td>
<td>Continuously</td>
<td>Primarily at IPO</td>
</tr>
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**Capital Structure**

The assets of CEFs are raised during an IPO and the shares outstanding are then generally fixed. The closed-end structure allows the manager to be fully invested at all times. CEFs are not subject to daily redemption requests; therefore managers are not forced to satisfy demand by increasing their investment in potentially over-valued markets or to sell attractive prospects in a declining market. In addition, the distribution rate on CEFs can be higher due to low cash positions, as a larger cash position can lower the overall income level of the portfolio. Furthermore, the fixed asset base facilitates investment in specialized areas such as illiquid markets.

A CEF’s shares outstanding typically remain constant and additional shares are generally only issued through a secondary offering, rights offering, or dividend reinvestment program. A rights offering is an offering of new shares to current investors at a subscription price that is typically lower than the current share price. CEFs typically engage in rights offerings to take advantage of favorable market conditions.

The primary negative effect of the closed-end structure is the potential illiquidity of shares. Since shares cannot be purchased or sold directly through the fund company, liquidity is subject to the fund’s trading volume in the market. A purchase that represents a meaningful percentage of the fund’s daily trading volume does have the potential to move the market to satisfy the increase in demand. Likewise, if an investor wishes to sell a larger than average number of shares, the price will drop to a level where there are enough investors willing to purchase this number of shares. The use of limit orders is one possible way to mitigate this effect.

**Discounts and Premiums**

One of the most important components of closed-end fund income investing is the potential ability to purchase funds at a discount to their NAV. The NAV of a closed-end fund is the same calculation as that of a regular, open-end mutual fund. It is the current market value of all of the securities a fund owns, minus any outstanding liabilities of the fund company, divided by the number of outstanding shares. In essence, it is the liquidation value of a fund, or what each share of the fund would be worth to an investor after paying off any liabilities if all the securities within the portfolio were liquidated today.
Investors in an open-end mutual fund who want to sell their shares can do so by selling them back to the investment company at NAV. Because closed-end funds trade on a stock exchange, the price they are bought and sold for is not NAV; it is the going market price of their shares. This price is determined by an interaction of buyers and sellers. Lack of advertising and research, non-competitive distribution rates relative to its peers, and general investor interest are some of the biggest reasons behind why some closed-end funds trade at discounts to their underlying portfolio values. Investor sentiment for a particular portfolio manager, fund sponsor, sector or investment style of a closed-end fund can also push a fund to a discount or premium. If investors believe that a fund’s investment objective is likely to underperform others or decline significantly, they may be willing to sell the fund at a deep discount to avoid larger future losses. Conversely, buyers of a closed-end fund may be willing to actually pay more than NAV (a premium) if they are constructive on the prospects of that given fund.

**Distributions**

Distributions for closed-end funds are comprised of one or more of the following: interest income, dividend income, short-term/long-term capital gains, and return of capital. At the end of the fund’s fiscal year, the fund will typically reclassify distributions paid into the above categories for tax purposes, based on the fund’s actual income, and capital gains over the previous year. Income funds pass through to the shareholders interest and dividends from their investments. Income from distributions is typically taxable, with the exception of that from municipal bond funds, which may be exempt from certain taxes, and return of capital which is non-taxable but will reduce the holding’s cost-basis. CEFs pay realized capital gains through capital gains distributions, typically at the end of the year and broken into long and short-term components. Income-oriented funds may maintain a balance of undistributed net investment income (UNII), or cushion, to help stabilize distribution payouts. UNII is an accounting item that expresses the fund’s lifetime balance of over or under distributed income, with a higher balance typically signifying better financial health. We think of this balance as the fund’s buffer, or cushion, and should a fund encounter an earnings deficit, the fund would be able to make payments from this balance without having to return capital. If the fund’s earnings or UNII deteriorate to a level that the fund’s board of directors deems to be unsustainable, CEFs may reduce their distributions. The opposite can also occur if a fund builds a sizable UNII balance, or earnings meaningfully improve.

Some CEFs have a managed distribution policy which is a commitment to provide investors with a stable, predictable cash flow, typically on a monthly or quarterly basis. These distributions are typically composed of dividend income, interest income, net realized capital gains, and/or return of capital. They can be either a fixed dollar amount or based on a percentage of assets under management. These distributions are not guaranteed. The majority of managed distribution funds invest in equity securities. The advantage of this policy is that the investor can maintain equity exposure while also receiving a regular cash flow. The primary disadvantage is that providing investors with cash flow requires removing assets from the fund, which can constitute a return of capital if capital appreciation does not meet the distribution rate.
Leverage

The fixed capital structure of closed-end funds allows them to efficiently borrow money or issue senior securities (preferred stock) to attempt to enhance distribution yield and/or performance, otherwise known as leveraging. What most leveraging strategies have in common is borrowing based on short-term interest rates and then investing the proceeds in their given investment objective, usually longer-term bonds that yield a higher rate than their borrowing costs. A positive yield spread between the investment rate and the borrowing rate increases a fund’s earnings, allowing the fund to increase its distribution payout to shareholders. Equity funds may also utilize a leveraging strategy to increase returns. Through this strategy, funds may magnify both the gains and losses of the portfolio over that of a non-leveraged fund.

A leveraging strategy increases the volatility of a fund’s net asset value (NAV) by essentially magnifying the gains or losses of the fund’s portfolio holdings. There is a high likelihood that this increased volatility will impact the market price of the fund in the same fashion. Leveraged funds typically benefit from a steep yield curve, and are hindered by an inverted yield curve. There are two primary situations in which a leverage-enhanced yield is negatively affected – a flattening yield curve and an inverted yield curve. In both situations, the spread between the investment rate of the fund and the borrowing costs of leverage narrows, leading to less income earned by the fund. On the other hand, if this spread widens, funds can benefit from improved earnings which will flow through to shareholders. We feel that the use of modest leverage is neither positive nor negative; it is just an additional component of fund analysis that must be properly understood in order to evaluate a fund.

Portfolio managers currently have multiple types of investment products that allow them to leverage CEFs including Tender Option Bonds (TOBs), Variable-Rate Term Preferred shares (VRTPs), Variable-Rate MuniFund Term Preferred shares (VMTP), Muni-Term Preferred shares (MTPs), bank loans, reverse repurchase agreements, lines of credit, and notes payable. The details of these types of leverage is beyond the scope of this publication, but available upon request.

Conclusion

Closed-end funds offer an opportunity for investors to achieve attractive returns by taking advantage of their unique characteristics. Historically, the majority of CEFs trade at a discount to NAV, making them potentially attractive investments with multiple ways to achieve capital gains and enhanced returns. Because of market inefficiencies and the disconnect from price and NAV, investors can benefit from the in-depth research offered by Raymond James’ Closed-End Fund Research. Closed-End Fund Research seeks to provide Raymond James’ financial advisors and their clients with the most relevant, comprehensive, and timely data and research available on closed-end funds and to provide unbiased opinions.

This piece was prepared by Amy Charles, Dan Kemler, and Brian Gary at Raymond James
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<tr>
<th>Company Name</th>
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Risk Factors
Risk factors vary from fund to fund. Not every risk factor below will pertain to each fund. Based on these risk factors, not every fund may be suitable for all investors.

Market Risk: Closed-end funds are subject to the same risks as their underlying securities. Securities may decline in value due to factors affecting securities markets generally or particular industries. The value of a fund may be worth less than the original investment.

Valuation Risk: Shares may trade above (a premium) or below (a discount) the net asset value (NAV) of the fund's portfolio. At times, discounts could widen or premiums could shrink, either diluting positive performance or compounding negative performance. There is no assurance that discounted funds will appreciate to their NAV.

Interest Rate Risk: The risk that securities held by the fund will decline in value due to changes in interest rates. Specific to fixed income securities and some non-fixed rate securities with bond-like characteristics, the value of such a holding may decrease in value as market interest rates increase and vice versa. The prices of longer maturity securities generally fluctuate more than those of shorter-term securities.

Credit Risk: One or more securities in a fund's portfolio could decline or fail to pay interest or principal when due. Income-related securities of below investment grade quality are predominately speculative with respect to the issuer's capacity to pay interest and repay principal when due and, therefore, involve a greater risk of default. Securities rated below investment grade may not be suitable for all investors.

Concentration/Non-Diversification Risk: A fund which invests a substantial portion of its assets in securities within a specific region, country, or sector may be subject to greater price volatility or adversely affected by the performance of securities in that particular region, country, or sector as caused by a lack of diversification. A fund registered as a "non-diversified" investment company under the Investment Company Act of 1940, may invest greater than 5% of the fund's total assets in the obligations of a single issuer. A fund registered as a "non-diversified" investment company under the Investment Company Act of 1940, may invest greater than 5% of the fund's total assets in the obligations of a single issuer.

Reinvestment Risk: Income from a fund's bond 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. A decline in income could affect the common shares' market price or their overall returns.

Leverage Risk: The use of leverage may lead to increased volatility of a fund's NAV and market price relative to its common shares. Leverage is likely to magnify any losses in the fund's portfolio, which may lead to increased market price declines. Fluctuations in interest rates on borrowings or the dividend rates on preferred shares as a result of changes in short-term interest rates may reduce the return to common shareholders or result in fluctuations in the dividends paid on common shares. There is no assurance that a leveraging strategy will be successful.

Foreign/Emerging Markets Investment Risk: Investment in foreign securities (both equity and debt) may involve a high degree of risk. Funds invested in foreign securities are subject to additional risks such as, but not limited to, currency risk and exchange rate risk, political and economic instability of the countries the securities originate from, and liquidity of the markets in which securities are purchased and/or traded. In regards to debt securities, such risks may impair the timely payment of principal and/or interest. These international risks are generally greater in emerging markets.

Alternative Minimum Tax (AMT): A fund may invest in securities subject to the alternative minimum tax. Actively Managed Portfolios Have Fluctuating Dividends: The composition of the funds' portfolios could change, which, all else being equal, could cause a reduction in dividends paid to common shares. Fluctuations in dividend levels over time, up and down, are to be expected.

Small & Mid-Cap Securities Risk: Investing in small and/or mid-capitalization, newer companies generally involves greater risks than investing in larger, more established companies, and may not be appropriate for every investor.

Technology: The companies engaged in the technology industry are subject to fierce competition and their products and services may be subject to rapid
obsolescence.

**Real Estate:** Real estate securities are subject to the many risks associated with the direct ownership of real estate, including but not limited to declines in property values, increases in property taxes, operating expenses, interest rates or competition, overbuilding, changes in zoning laws, and losses from casualty or condemnation.

**Options:** Certain funds may utilize option strategies. Since option strategies involve unique risk considerations they may not be suitable for all investors.

**Illiquid securities:** Illiquid securities may trade at a discount when compared to more liquid investments. The fund may be unable to sell illiquid securities in a timely manner or at a fair price due to lack of liquidity. In addition, the sale of such securities may require more time and increased selling expenses. Consequently, the fund’s investments in illiquid securities may have an adverse impact on its net asset value.

**Insurance:** The bonds held in certain closed-end funds may be insured. The insurance relates only to the timely payment of principal and interest by the issuer of the bonds within the fund. The insurance does not remove market risks, since it does not guarantee the market value of the fund’s shares. No representation is made as to an insurer’s ability to meet its financial commitments.

**Margin:** Certain funds may borrow on margin and use securities as collateral. This may involve a high degree of risk and is not suitable for all investors.

**Aggressive Investment Techniques Risk:** Certain funds may use investment techniques and financial instruments that may be considered aggressive. This may include the use of futures contracts, options on futures contracts, forward contracts, swap agreements and similar instruments, and the short sale of securities. These techniques and instruments may expose the fund to substantial risks.

**High-Yield Risk:** Certain funds may invest in high-yield bonds. These bonds are commonly referred to as “junk bonds” and involve higher risks.

**Foreign Currency Risks:** Currency fluctuations could materially and adversely affect the value of fund shares. Factors impacting the price of foreign currencies include, but are not limited to, national debt levels and trade deficit, inflation rates, domestic and foreign interest rates, and substantial sales of a currency by a central bank or other government agency.

**C-Corporation Risk:** Funds that are treated as a regular corporation, or a “C” corporation, for U.S. federal income tax purposes, unlike most investment companies, are subject to federal and applicable state corporate income tax to the extent the fund recognizes taxable income. Funds that have a high concentration in MLPs (over 25%) are not eligible to be treated as a “regulated investment company” under the Internal Revenue Code of 1986, as amended (the “Code”).

The securities selected by Closed-End Fund Research could underperform comparable trusts/funds. There is no assurance that the recommended trusts/funds will outperform their peer group.

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