Closed-end Funds
Premiums and Discounts

Mariana F. Bush, CFA
Head of CEF/ETP Research

Adam Shah, CFA
CEF/ETP Analyst

Joe Hussain
CEF/ETP Analyst

Dival Vroom
CEF/ETP Analyst

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Summary

>> *A unique characteristic of a closed-end fund that distinguishes it from other packaged products is that its market price may trade at a discount or premium to its net asset value (NAV).*

>> *Changes in demand may cause a closed-end fund's market price to deviate from the NAV resulting in a premium (i.e. the market price is higher than the NAV) or a discount (i.e. the market price is lower than the NAV).*

Causes & Opportunity

One of the more unique aspects of closed-end funds (CEFs), relative to other packaged products such as open-end mutual funds or unit investment trusts (UITs), is the dynamic between the market price and the net asset value (NAV), which may lead to widening or narrowing premiums or discounts. This report explains why premiums and discounts exist, why these may widen or narrow, as well as how this dynamic may create opportunities for CEF investors.

Why they occur

Changes in the demand for a CEF have a different impact on its shares versus an open-end mutual fund. Similar to open-end mutual funds, CEFs are registered under the Investment Company Act of 1940 and hold a collection of securities that are actively managed by investment professionals. The basket of securities is valued at its aggregate market value, which is then adjusted for any liabilities and expenses, creating an NAV that is displayed on a per share basis. This is where the similarities to a mutual fund start to diverge.

The number of shares of a typical open-end mutual fund may change on a daily basis, which will increase or decrease the total assets in the fund. CEFs, like stocks, raise capital primarily through an initial public offering (IPO). Once the IPO is completed, CEFs are "closed" (i.e. no more assets flow into the portfolio, except for any leveraging of the assets), and the shares are listed on an exchange.[1] As such, after the IPO, the only means by which investors can gain exposure to a CEF is to purchase the shares on an exchange during market hours similar to trading stocks. Therefore, even though the NAV fluctuates as the value of the portfolio's underlying holdings change, the market price of the CEF is determined by market forces. While the market price and the NAV often move in tandem, changes in demand may cause the market price to deviate from the NAV, creating a premium (i.e., the market price is higher than the NAV) or a discount (i.e., the market price is lower than the NAV).

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[1] *CEFs are able to raise additional capital through follow-on (secondary) offerings, rights offerings, and at-the-market offerings. However, this is uncommon among the majority of CEFs.*

Please see page 4 of this report for Important Disclosures, Disclaimers and Analyst Certification.

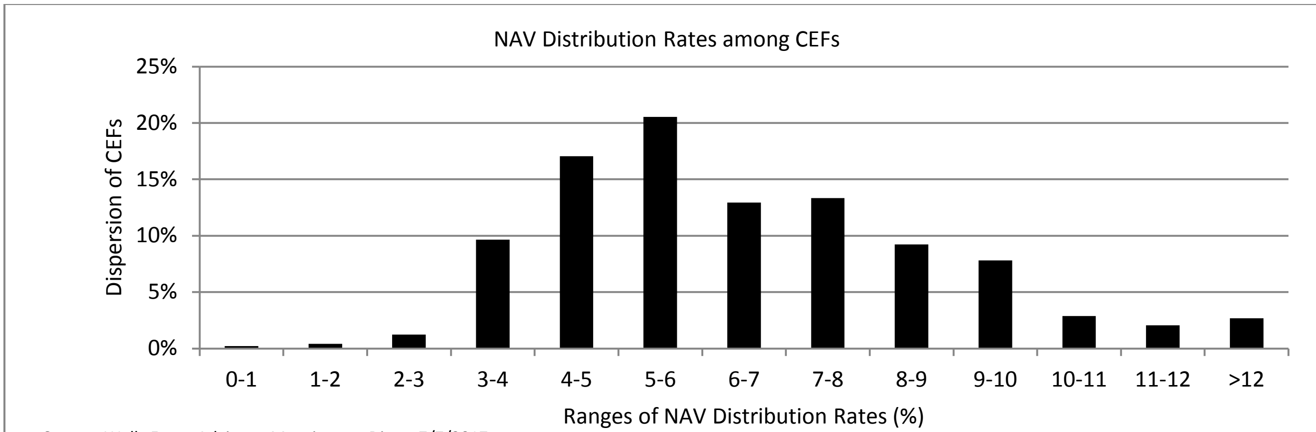
It should be noted that the liquidity of CEFs resembles that of micro-cap stocks, thus making the market prices of these vehicles quite sensitive to changes in demand, which is sometimes evident by sharp fluctuations in the premiums and discounts.

Attractive and consistent distribution rates

In our opinion, an important driver of investor demand for CEFs is the attractiveness and consistency of their distribution rates. Regardless of the asset class, both the NAV distribution rates and the market-price distribution rates[2] are usually greater than those provided by most stocks and other structures with equivalent underlying exposure (e.g., exchange-traded products (ETPs), mutual funds, UITs, etc.).

Several characteristics contribute to the superior distribution power of a CEF. First, many CEFs use leverage to enhance their distribution rates. Second, discounts tend to enhance the distribution rate based on market price to shareholders without increasing the risks of the portfolio. Third, many CEFs tend to invest in securities with a higher yield or expected total return due to lower credit quality, longer duration, and/or less liquidity. Finally, the CEF structure lends itself to holding less liquid securities because portfolio managers need not worry about inopportune and/or unexpected redemptions, due to the "closed-end" structure. Keep in mind that many CEFs, especially those that hold equities, establish managed distributions using a specific methodology i.e. annual distribution of 7% of the average NAV over the last four quarters. Ideally, the distribution should be set at a reasonable level that is in line with the portfolio's expected total return over time. The distribution of a CEF may include net interest income from bonds and dividend income from stocks; as well as capital gains and/or return of capital. Note that if the distribution rate is set too high, the CEF's NAV is more likely to will erode over time.

As of July 07, 2017, the median distribution rate for those CEFs with a regular monthly or quarterly distribution was 6.1% (based on NAV) and 6.2% (based on market price.) Note that only 9% of the CEF universe has a distribution frequency other than monthly or quarterly, while 75% of all CEFs pay a monthly distribution and 17% do so quarterly. The chart below illustrates the dispersion of NAV distribution rates among CEFs. For example, 21% of the CEF universe has NAV distribution rates between 5% and 6%. Note that only 2% of CEFs with a regular distribution have an NAV distribution rate below 3%, and those with NAV distribution rates between 0% and 4% are mostly municipal CEFs — single state funds and/or municipal term trusts with only a few years until termination — that would have higher tax-equivalent NAV distribution rates. In other words, some of the lowest tax-equivalent NAV distribution rates currently in the CEF universe are generally above 4%. Additionally, many of the highest NAV distribution rates — the outliers on the right side of the chart — are probably not sustainable over the long-term increasing the likelihood of future reductions in distributions.



Source: Wells Fargo Advisors, Morningstar Direct 7/7/2017

[2] *The NAV and market price distribution rates are calculated by annualizing the most recent regular distribution and dividing it by the NAV or market price, respectively.*

Distribution Changes

Changes in a CEF distribution can impact its valuation. Usually, a reduction in distribution — especially if it is not anticipated — tends to negatively impact a CEF's valuation, and vice versa. Typically, the magnitude of a distribution change will have a corresponding impact on a CEFs valuation. Furthermore, the impact on the valuation is partly dependent upon where the valuation is at the time of the declaration of the distribution. For example, a sizeable distribution reduction will more than likely have a larger impact on a CEF trading at a substantial premium versus one already trading at a wide discount.

Outlook for the underlying asset class

Additional factors that impact valuations include market volatility and investor sentiment as well as the outlook for the CEF's underlying asset class. In fact, when certain types of open-end funds experience outflows, discounts among CEFs with a similar exposure tend to widen, and vice versa. In some cases, a previous disappointing experience will reduce the interest for a CEF even after its valuation becomes compelling. For example, a substantial bet (involving derivatives or options) by the manager that caused sharp NAV underperformance, a substantial cut in distribution after many years of stable distributions, or an untimely IPO are some of the "scars" that may keep investors from buying a CEF regardless of its valuation.

Opportunity

Given the unique and often misunderstood market-price/NAV relationship, we believe it is worthwhile for investors to take the premium/discount factor of CEFs into consideration during the selection process. A wide discount alone should not be sufficient when selecting a CEF for purchase. Investors should also consider factors such as portfolio exposure, leverage, sustainability of the distribution, and liquidity. Clearly, a wide premium — a double-digit premium in particular — should be avoided because investors take an unnecessary risk, in our opinion.

Disclaimers

Closed-End Funds (CEFs) are actively-managed and can employ a number of investment strategies in pursuit of the fund's objectives. Some strategies may increase the overall risk of the fund outlined in the prospectus under the heading "Risk Factors." A CEF has both a market price and net asset value (NAV), and these two values and their respective performances may differ. Changes in investor demand for a particular fund may cause the fund to trade at a price that is greater (lower) than its NAV, creating a share price premium (discount) to its NAV.

Distributions are not guaranteed and are subject to change or elimination.

You should be aware that investments can fluctuate in price, value and/or income, and you may get back less than you invested. We recommend that existing shareholders consider their objectives, their risk tolerance, and the size of their positions relative to their portfolios when evaluating their holdings.

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