TAX LOSS SELLING STRATEGIES FOR CLOSED-END FUND INVESTORS

October 2016

What is Tax Loss Selling?

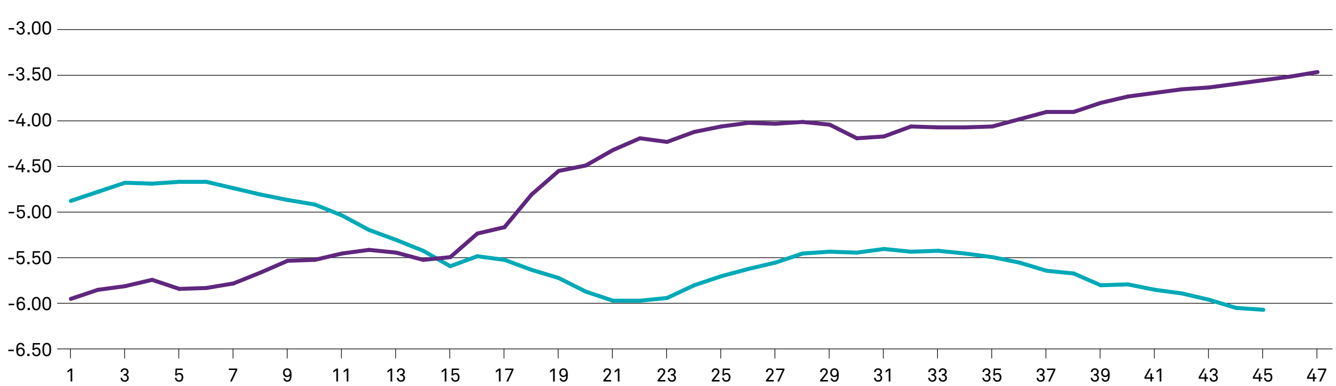
Investors generally evaluate their portfolios and plan for the upcoming tax season during the fourth quarter. BlackRock believes that an important consideration for investors during the tax season should be identifying underperforming investments for potential liquidation to help reduce current year tax liabilities. The term “tax loss selling” refers to the process of selling investments to realize capital losses that can be used to offset, or reduce, realized capital gains stemming from the sale of a security that has appreciated. This strategy may allow investors to lower their tax liability for the current year, or a future year, and potentially increase the tax efficiency of an investor’s portfolio. Importantly, BlackRock believes that this seasonal phenomenon may present an opportunity for certain investors seeking to buy securities at reduced prices. In practice, investors may seek to realize capital losses while maintaining exposure to the market. This strategy, termed a “tax swap”, involves the sale of a security with an unrealized loss and a subsequent purchase of separate security with a similar investment objective. Notably, in addition to the calendar year-end tax period, tax loss selling tends to be pronounced during periods of market volatility and may have a negative impact on market prices due to the resulting increase in sales volume.

Tax Loss Selling in Closed-End Funds

Historically, fourth quarter tax loss selling of closed-end fund (“CEF”) shares has been prevalent in the market. CEFs exhibit several characteristics that may cause them to be more susceptible to tax loss selling. CEFs trade on a national stock exchange and market prices often deviate from underlying net asset values (“NAVs”). When a CEF’s NAV and market price diverges, the result is a premium (market price above NAV) or discount (market price below NAV) to NAV. Moreover, the ‘closed’ structure does not permit creations or redemptions that may help mitigate any gap between the market price and NAV. Based on the timing of an investor’s purchase of a CEF, these dynamics may affect performance

EXHIBIT 1

Average Closed-End Fund Premium/Discount: November – January (1997-2015)



Source: Morningstar.

relative to the CEF's NAV. Finally, the CEF universe spans most major asset classes and each asset class generally includes peer funds with similar investment objectives, thus providing potential tax swap candidates.

When a CEF's discount widens, the market price underperforms the NAV and may lead to capital losses for an investor. In this circumstance, the investor may choose to realize a capital loss by selling the CEF, which results in additional supply and may further widen the CEF's discount (i.e. discount widening occurs when supply is greater than demand). Discount widening may be amplified in asset classes that experience elevated levels of underperformance in a given year. As illustrated in Exhibit 1, the effects of tax loss selling have historically been most prevalent during the 45-day period between November and mid-December. Based on historical trends, discount widening may present an opportunity to purchase funds below their fair market value due to the consistent trend of tax loss selling during the defined period, particularly given the historic propensity for CEF discounts to narrow (i.e. market prices outperform NAVs) toward the end of the year and into January of the following year.

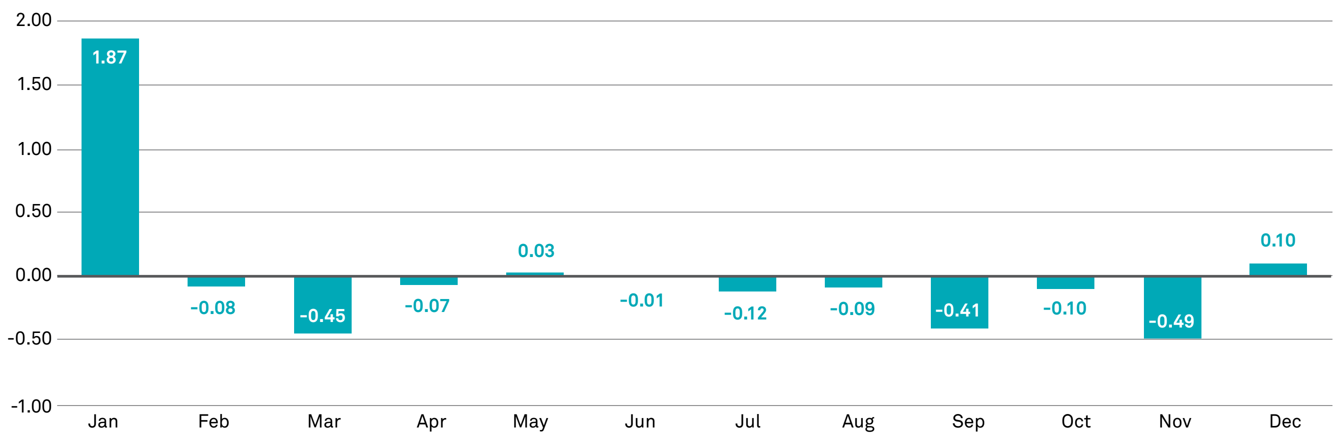
Importantly, past results are not indicative of future performance and investors should consider a CEF's underlying portfolio as NAV performance may negate or exceed any potential discount narrowing.

The "January Effect"

Historically, investors that have purchased CEFs in the latter part of the fourth quarter have generally realized the benefits of tax-loss selling through the short-term effect of discount narrowing most prevalent in the month of January. Notably, CEF discounts have narrowed in January in 17 of the last 20 years. This consistency may be attributed to the 'January Effect', which is a commonly accepted theory that attempts to explain the outsized historical outperformance of equity securities in January relative to all other calendar months. According to this theory, pent up demand following tax loss selling may be the factor driving the outperformance as investors re-enter the market after selling positions in prior months to harvest taxes and rebalance their portfolios. Based on historical trends, BlackRock believes that tax loss selling may present an opportunity to reap the rewards of a temporary mispricing in the CEF market.

EXHIBIT 2

Average Change in Premium/Discount: 1995-2016



Source: Lipper.

A Look Ahead in 2016

2016 has been a strong year for CEFs, with double-digit NAV returns in many CEF categories (Exhibit 3). Additionally, discounts have narrowed significantly over the course of the year (Exhibit 4), driving market price outperformance versus NAVs. Positive market price returns may lead to fewer opportunities for investors to employ tax loss selling strategies in 2016. However, given the income focus of many CEFs, and the large distributions they pay out, the current market value may be lower than an investor's cost basis, resulting in a capital loss. Moreover, CEFs held for more than one year may be in a capital loss position.

Although tax loss selling may be limited compared to 2015, the fourth quarter has historically exhibited discount widening prior to year-end as investors seek to harvest capital losses to help reduce current year tax liabilities. That being said, BlackRock believes the demand for yield remains strong and could lead to tighter discounts given the earnings pickup from leverage and our expectations for a continuation of low rates despite the potential for a rate increase prior to year-end. Additionally, discounts remain wide relative to history (Exhibit 4) and opportunities exist across asset classes for long-term investors.

EXHIBIT 3

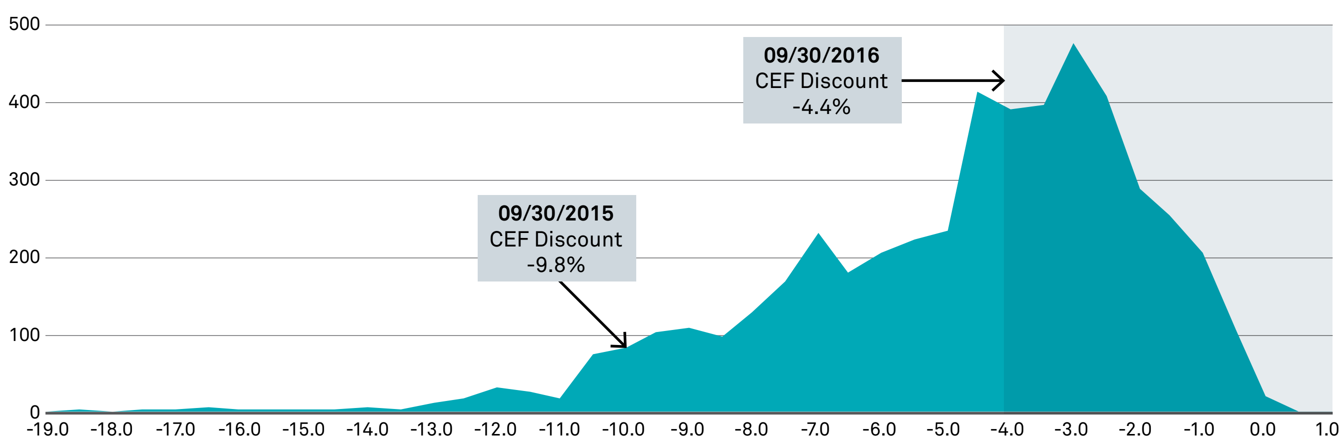
2016 Year to Date Returns

Category	YTD Total Return (Market Price)	YTD Total Return (NAV)	Premium/Discount
Energy MLP	26.86%	30.38%	-4.60%
Emerging Market Debt	17.95%	27.56%	-8.00%
High Yield	16.30%	20.91%	-5.80%
Sector Equity	14.30%	18.03%	-5.20%
Emerging Market Equity	13.57%	13.52%	-12.60%
General Bond	10.82%	17.77%	-2.50%
Loan Participation Funds	10.70%	15.99%	-6.40%
Investment Grade	9.77%	12.12%	-7.70%
Municipal	6.78%	11.45%	-0.80%
Mortgage	5.25%	9.36%	-4.90%
Equity (Options Strategies)	5.08%	7.82%	-1.70%

Source: Lipper as of 9/30/16.

EXHIBIT 4

59% of the time discounts have been narrower than where they are today (versus 95% in 2015)



Source: Morningstar as of 9/30/16.

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* Source: BlackRock. Based on $4.89 trillion in AUM as of 6/30/15.

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