## Quarterly Closed-End Fund \& BDC Review and Outlook

## Closed-End Fund

4th Quarter 2018 Review \& 1st Quarter 2019 Outlook

Intermediate/Advanced CEF Skill Level

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Closed-End Fund Advisors is a SEC Registered Investment Advisory Firm Specializing in Closed-End Fund \& BDC Research, Trading and Management Founded in 1989.

## What Is CEF Advisors?

- Investment Management, Research \& Data
- Independent, Fee Only \& Family Owned
- "Scott Letter: Closed-End Fund Report"
- Discretionary Portfolio Management (SMA), Unit Investment Trust (UIT) \& Model Portfolios

- CEF \& BDC News/SEC Alert \& "CEFA’s Closed-End Fund Universe" Report (w/ BDCs).
- Consulting with Institutional Investors and CEF Fund Sponsors
- CEFData.com: CEF/BDC /iCEF Web Modules Daily Data


Specializing in CEF/BDC/iCEF Research, Trading \& Portfolio Management

## What is a Closed-End Fund (CEF) / Business Development Company (BDC) ?

o 1940 Act Investment Company with Fixed-Capital, Active Management, and Daily Liquidity
o CEFs have traded on The NYSE since 1893
o Tax-advantaged and earnings are passed through to investors in the form of dividends and distributions (similar to REITs and MLPs)
0 CEFs can have debt and preferred shares as leverage

o BDCs Limited to 200\% (*150\%) asset coverage = tota assets / total debt or "one turn" of leverage, excludirı SBIC facilities (BDCs). Higher fee structure w/ carry
o The closed-end structure is not an asset class but an investment vehicle "wrapper"
o BDCs were created by Congress in 1980 to provide an opportunity for individual nonaccredited investors to participate in private investments
o BDCs are closed-end funds that provide small, growing companies access to capital
o Interval CEFs (nonlisted), have been around since 1989, but gaining traction since 2017

## ABOUT THE INDEX

The seven most liquid funds by 90-day average trading dollar \$ liquidity in each of the 12 major groupings of funds: Business Development Companies (BDCs), Convertible Bonds, Covered Call Funds, Global Equity, High Yield Bonds, Investment Grade Bonds, Master Limited Partnership (MLP), Municipal Bonds, Preferred Equity, REITs/Real Assets, Senior Loans, and US Equity. Combine leverage and non-leverage groupings into one grouping when calculating the seven funds. The funds will be equal weight in the index. If there are less than seven available funds in a specific grouping, then equal weight the grouping with the smaller number of funds available. Each group will be $1 / 12$ of the indexes over-all weighting. The index constituents will be rebalanced each quarter.

## INDEX PERFORMANCE

|  | Current(\$) | Previous Day(\%) | 1 Week(\%) | 1 Month(\%) | 3 Month(\%) | 6 Month(\%) | 1 Year(\%) | 3 Year(\%) | 5 Year(\%) | MTD(\%) | QTD(\%) | YTD(\%) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Price | 1,021.48 | -6.93 | 4.84 | -6.53 | -12.76 | -10.91 | -10.35 | 5.18 | 3.41 | -6.53 | -12.76 | -9.93 |
| NAV | 1,058.59 | -3.85 | 2.86 | -4.17 | -8.09 | -5.48 | -5.08 | 5.00 | 3.88 | -4.17 | -8.09 | -4.79 |
| Difference |  | 3.08 | -1.99 | 2.36 | 4.67 | 5.43 | 5.26 | -0.18 | 0.46 | 2.36 | 4.67 | 5.15 |

2018 - Monthly Performance (\%)
Show Previous Years

|  | 2018 - Monthly Performance (\%) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Show Previous Years |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jan | Feb | Mar | Q1 | Apr | May | Jun | Q2 | 1H | Jul | Aug | Sep | Q3 | Oct | Nov | Dec | Q4 | 2 H | 2018 |
| Price | 1.13 | -2.81 | -0.73 | -2.43 | 1.98 | 1.74 | -0.66 | 3.07 | 0.64 | 1.90 | 1.54 | -1.24 | 2.19 | -7.33 | 0.72 | -6.53 | -12.76 | -10.57 | -9.93 |
| NAV | 2.26 | -3.20 | -0.88 | -1.88 | 1.09 | 1.38 | -0.04 | 2.45 | 0.56 | 1.95 | 1.22 | -0.43 | 2.74 | -4.17 | 0.08 | -4.17 | -8.09 | -5.35 | -4.79 |
| Difference | 1.14 | -0.39 | -0.15 | 0.54 | -0.88 | -0.36 | 0.62 | -0.62 | -0.07 | 0.05 | -0.32 | 0.81 | 0.55 | 3.16 | -0.64 | 2.36 | 4.67 | 5.22 | 5.15 |

DISCOUNT $\quad$ Premium / Discount (\%)


## CHARACTERISTICS

| PORTFOLIO <br> Weighted Average Data |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Discount -9.06\% | $\begin{aligned} & \text { 1Yr Disc } \\ & -4.62 \% \end{aligned}$ | $\begin{gathered} 3 Y r \text { Disc } \\ -4.24 \% \end{gathered}$ | $\begin{aligned} & \text { 5Yr Disc } \\ & -5.03 \% \end{aligned}$ | Rel Disc Range (3yr) 30.11\% |
| Mkt Yield 9.56\% | Lev Adj NAV Yield 7.21\% | ```After Tax Yield* 8.04%``` | $\begin{gathered} \text { Est Tax Friction* } \\ 1.52 \% \end{gathered}$ | 3 Yr NAV Volatiliy 9.72 |
| $\begin{gathered} 1 \text { Yr RoC } \\ 20.78 \% \end{gathered}$ | $\begin{gathered} 3 \text { Yr Dest RoC } \\ 12.37 \% \end{gathered}$ | $\begin{gathered} \text { Leverage } \\ 23.71 \% \end{gathered}$ | Non Lev Exp Ratio 1.50\% | $\begin{gathered} \text { Beta (2yr) } \\ 0.46 \end{gathered}$ |
| $\begin{gathered} \text { Equity Exposure } \\ 38.77 \% \end{gathered}$ | Bond Exposure 59.83\% | \# Holdings | Cash Weighted Duration 2.47 |  |
| $\begin{gathered} \text { Comp NAV TR } \\ 0.57 \% \end{gathered}$ | $\begin{gathered} \text { Comp Discount } \\ 1.31 \% \end{gathered}$ | $\begin{gathered} \text { Net Assets (M) } \\ 1,093 \end{gathered}$ | $\begin{gathered} \text { Liquidity - 90d (K) } \\ 4,722 \end{gathered}$ |  |
| *Based on marginal tax rates of 25\% and long-term capital gains rates of 15\%. |  |  |  |  |

## Closed-End Fund Advisors

## Asset Class Annual Returns (NAV) 2008-2018

| 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2009-2018 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { BDC } \\ -19.35 \% \end{gathered}$ | $\begin{aligned} & \text { Senior Loan } \\ & 69.91 \% \end{aligned}$ | $\begin{gathered} \text { MLP } \\ \mathbf{2 4 . 3 5 \%} \end{gathered}$ | $\begin{gathered} \text { Muni Bond } \\ 9.73 \% \end{gathered}$ | $\begin{gathered} \text { REIT } \\ \mathbf{2 5 . 5 6 \%} \end{gathered}$ | $\begin{gathered} \text { MLP } \\ \mathbf{2 8 . 7 1 \%} \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & \mathbf{2 4 . 4 7 \%} \end{aligned}$ | $\begin{aligned} & \text { Preferred } \\ & 6.37 \% \end{aligned}$ | $\begin{gathered} \text { MLP } \\ 33.64 \% \end{gathered}$ | World Stock 25.80\% | $\begin{gathered} \text { BDC } \\ 9.39 \% \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & \text { 12.11\% } \end{aligned}$ |
| Investment Grade -23.36\% | World Stock 54.35\% | $\begin{gathered} \text { REIT } \\ \text { 19.63\% } \end{gathered}$ | $\begin{gathered} \text { MLP } \\ 4.14 \% \end{gathered}$ | $\begin{aligned} & \text { Preferred } \\ & \text { 23.75\% } \end{aligned}$ | US Stock 25.62\% | $\begin{gathered} \text { Muni Bond } \\ 19.70 \% \end{gathered}$ | $\begin{gathered} \text { Muni Bond } \\ 5.53 \% \end{gathered}$ | $\begin{aligned} & \text { HY Bond } \\ & \text { 18.43\% } \end{aligned}$ | $\begin{aligned} & \text { us Stock } \\ & \text { 19.79\% } \end{aligned}$ | $\begin{gathered} \text { Muni Bond } \\ 0.52 \% \end{gathered}$ | $\begin{aligned} & \text { Preferred } \\ & 11.36 \% \end{aligned}$ |
| $\begin{gathered} \text { Muni Bond } \\ -27.04 \% \end{gathered}$ | $\begin{aligned} & \text { HY Bond } \\ & 52.35 \% \end{aligned}$ | World Stock 14.57\% | $\begin{gathered} \text { BDC } \\ -0.05 \% \end{gathered}$ | $\begin{aligned} & \text { HY Bond } \\ & \text { 20.49\% } \end{aligned}$ | $\begin{aligned} & \text { Convertible } \\ & \mathbf{2 0 . 8 9 \%} \end{aligned}$ | $\begin{aligned} & \text { Preferred } \\ & 17.57 \% \end{aligned}$ | $\begin{gathered} \text { BDC } \\ 3.90 \% \end{gathered}$ | $\begin{aligned} & \text { Senior Loan } \\ & \text { 14.91\% } \end{aligned}$ | $\begin{aligned} & \text { Covered Call } \\ & 17.59 \% \end{aligned}$ | $\begin{gathered} \text { Senior Loan } \\ -1.34 \% \end{gathered}$ | $\begin{aligned} & \text { Senior Loan } \\ & \text { 11.25\% } \end{aligned}$ |
| Covered Call -34.67 | $\begin{aligned} & \text { Convertible } \\ & 51.37 \% \end{aligned}$ | $\begin{aligned} & \text { Preferred } \\ & \text { 13.01\% } \end{aligned}$ | Investment Grade $-0.21 \%$ | $\begin{aligned} & \text { World Stock } \\ & \text { 18.27\% } \end{aligned}$ | $\begin{aligned} & \text { Covered Call } \\ & 16.31 \% \end{aligned}$ | US Stock 11.20\% | $\begin{gathered} \text { Covered Call } \\ 1.35 \% \end{gathered}$ | $\begin{aligned} & \text { Convertible } \\ & 12.06 \% \end{aligned}$ | Preferred 14.19\% | Investment Grade -2.51\% | $\begin{aligned} & \text { HY Bond } \\ & 10.27 \% \end{aligned}$ |
| $\begin{aligned} & \text { us Stock } \\ & -39.26 \% \end{aligned}$ | $\begin{gathered} \text { MLP } \\ 50.62 \% \end{gathered}$ | $\begin{gathered} \text { Senior Loan } \\ 7.40 \% \end{gathered}$ | $\begin{aligned} & \text { Preferred } \\ & -2.15 \% \end{aligned}$ | $\begin{aligned} & \text { Convertible } \\ & 16.40 \% \end{aligned}$ | $\begin{gathered} \text { BDC } \\ 13.36 \% \end{gathered}$ | $\begin{gathered} \text { BDC } \\ 8.10 \% \end{gathered}$ | $\begin{gathered} \text { REIT } \\ 0.95 \% \end{gathered}$ | $\begin{gathered} \text { BDC } \\ 10.09 \% \end{gathered}$ | $\begin{aligned} & \text { Convertible } \\ & 12.57 \% \end{aligned}$ | $\begin{aligned} & \text { HY Bond } \\ & -3.49 \% \end{aligned}$ | $\begin{gathered} \text { Convertible } \\ 9.19 \% \end{gathered}$ |
| $\begin{aligned} & \text { Preferred } \\ & -\mathbf{4 2 . 8 6 \%} \end{aligned}$ | $\begin{aligned} & \text { Preferred } \\ & \text { 42.35\% } \end{aligned}$ | $\begin{gathered} \text { HY Bond } \\ 7.25 \% \end{gathered}$ | $\begin{gathered} \text { Senior Loan } \\ -2.94 \% \end{gathered}$ | $\begin{gathered} \text { Muni Bond } \\ \text { 15.38\% } \end{gathered}$ | $\begin{aligned} & \text { HY Bond } \\ & \text { 10.02\% } \end{aligned}$ | Investment Grade 7.73\% | US Stock 0.42\% | Investment Grade 8.74\% | $\begin{aligned} & \text { REIT } \\ & \text { 12.42\% } \end{aligned}$ | US Stock $-5.54 \%$ | US Stock 8.46\% |
| $\begin{aligned} & \text { HY Bond } \\ & -47.59 \% \end{aligned}$ | $\begin{aligned} & \text { REIT } \\ & \mathbf{4 0 . 9 1 \%} \end{aligned}$ | $\begin{gathered} \text { Convertible } \\ 5.91 \% \end{gathered}$ | $\begin{gathered} \text { REIT } \\ -5.08 \% \end{gathered}$ | Investment Grade 15.38\% | $\begin{gathered} \text { Senior Loan } \\ 8.49 \% \end{gathered}$ | $\begin{gathered} \text { Covered Call } \\ 4.86 \% \end{gathered}$ | Investment Grade $-2.38 \%$ | $\begin{gathered} \text { Covered Call } \\ 8.67 \% \end{gathered}$ | Investment Grade 10.77\% | $\begin{gathered} \text { Convertible } \\ -6.09 \% \end{gathered}$ | $\begin{gathered} \text { World Stock } \\ 8.11 \% \end{gathered}$ |
| $\begin{gathered} \text { MLP } \\ -53.03 \% \end{gathered}$ | $\begin{gathered} \text { Muni Bond } \\ 26.64 \% \end{gathered}$ | Investment Grade 5.78\% | US Stock $-6.53 \%$ | US Stock 13.52\% | $\begin{gathered} \text { REIT } \\ 3.65 \% \end{gathered}$ | $\begin{gathered} \text { MLP } \\ \mathbf{3 . 4 5 \%} \end{gathered}$ | $\begin{gathered} \text { Senior Loan } \\ -2.66 \% \end{gathered}$ | $\begin{gathered} \text { World Stock } \\ 8.45 \% \end{gathered}$ | $\begin{gathered} \text { BDC } \\ \mathbf{8 . 8 3 \%} \end{gathered}$ | Preferred $-7.02 \%$ | $\begin{gathered} \text { MLP } \\ 7.77 \% \end{gathered}$ |
| $\begin{aligned} & \text { Senior Loan } \\ & -54.72 \% \end{aligned}$ | $\begin{array}{\|c} \text { Investment Grade } \\ \mathbf{2 2 . 0 4 \%} \end{array}$ | US Stock 4.76\% | $\begin{aligned} & \text { HY Bond } \\ & -7.49 \% \end{aligned}$ | $\begin{gathered} \text { BDC } \\ 13.13 \% \end{gathered}$ | World Stock 3.34\% | $\begin{gathered} \text { HY Bond } \\ \text { 1.59\% } \end{gathered}$ | $\begin{gathered} \text { HY Bond } \\ -4.99 \% \end{gathered}$ | US Stock 7.65\% | $\begin{gathered} \text { HY Bond } \\ 8.50 \% \end{gathered}$ | $\begin{gathered} \text { Covered Call } \\ -7.31 \% \end{gathered}$ | Muni Bond 7.51\% |
| $\begin{aligned} & \text { Convertible } \\ & -55.22 \% \end{aligned}$ | US Stock 13.73\% | $\begin{gathered} \text { BDC } \\ \mathbf{2 . 8 7 \%} \end{gathered}$ | $\begin{gathered} \text { Covered Call } \\ -8.92 \% \end{gathered}$ | $\begin{aligned} & \text { Senior Loan } \\ & 12.6 \% \end{aligned}$ | $\begin{aligned} & \text { Preferred } \\ & \mathbf{2 . 1 5 \%} \end{aligned}$ | $\begin{aligned} & \text { Senior Loan } \\ & \text { 1.32\% } \end{aligned}$ | $\begin{gathered} \text { World Stock } \\ -6.55 \% \end{gathered}$ | $\begin{gathered} \text { Preferred } \\ 6.89 \% \end{gathered}$ | Muni Bond 8.41\% | $\begin{gathered} \text { REIT } \\ -8.27 \% \end{gathered}$ | $\begin{gathered} \text { BDC } \\ 6.45 \% \end{gathered}$ |
| World Stock -57.57\% | $\begin{gathered} \text { Covered Call } \\ 7.25 \% \end{gathered}$ | $\begin{gathered} \text { Covered Call } \\ -2.35 \% \end{gathered}$ | $\begin{gathered} \text { Convertible } \\ -14.09 \% \end{gathered}$ | $\begin{aligned} & \text { Covered Call } \\ & 9.47 \% \end{aligned}$ | Investment Grade -1.5\% | $\begin{array}{\|c} \text { Convertible } \\ 0.12 \% \end{array}$ | $\begin{gathered} \text { Convertible } \\ -7.25 \% \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & 6.84 \% \end{aligned}$ | $\begin{gathered} \text { Senior Loan } \\ 4.82 \% \end{gathered}$ | World Stock -14.93\% | $\begin{array}{\|l} \hline \text { Investment Grade } \\ \mathbf{6 . 3 8 \%} \end{array}$ |
| $\begin{aligned} & \text { REIT } \\ & -63.22 \% \end{aligned}$ | $\begin{gathered} \text { BDC } \\ -5.10 \% \end{gathered}$ | $\begin{gathered} \text { Muni Bond } \\ -4.08 \% \end{gathered}$ | World Stock -21.93\% | $\begin{gathered} \text { MLP } \\ \mathbf{1 . 8 5 \%} \end{gathered}$ | $\begin{gathered} \text { Muni Bond } \\ -7.35 \% \end{gathered}$ | $\begin{gathered} \text { World Stock } \\ -0.26 \% \end{gathered}$ | $\begin{gathered} \text { MLP } \\ -\mathbf{4 4 . 2 3 \%} \end{gathered}$ | $\begin{gathered} \text { Muni Bond } \\ 0.61 \% \end{gathered}$ | $\begin{gathered} \text { MLP } \\ -5.77 \end{gathered}$ | $\begin{gathered} \text { MLP } \\ -19.05 \% \end{gathered}$ | $\begin{gathered} \text { Covered Call } \\ 4.69 \% \end{gathered}$ |

US Stock - CEFA's US Equity Index; REIT - CEFA's Global Real Estate, REIT \& Real Asset Index; MLP - CEFA's Master Limited Partnership (MLP) Fund Index; BDC - CEFA's Debt-Focused Business Development Company (BDC) Inder; High Yield Bond - CEFA's High Yield Bond Inder; Preferred - CEFA's Preferred Equity Inder; World Stock - CEFA's International Equity Inder; Sr Loan - CEFA's Senior Loan Inder; Muni Bond - CEFA's National Municipal Bond Inder; Covered Call - CEFA's Covered Call / Option Funds Index; Convertible - CEFA's Convertible Bond Inder; Investment Grade - CEFA's Investment Grade Bond Inder. Returns data are NAV total returns which include dividends and capital appreciation. "2009-2018" column shows yearly average for each sector. You cannot invest directly in an inder. Past performance is not an indication of future results. Data for all inderes is sourced from CEFDATA.COM, as of 12/31/2018. Performance prior to 2015 was determined using index constituents as of $12 / 31 / 2014$.
Contact@CEFadvisors.com -- Toll Free: (800) 356-3508 -- www.CEFadvisors.com

## Closed-End Fund Advisors

## Closed-End Fund Discount / Premium 2008-2018

| 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2009-2018 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { MLP } \\ -4.22 \% \end{gathered}$ | $\begin{gathered} \text { MLP } \\ 10.99 \% \end{gathered}$ | $\begin{gathered} \text { MLP } \\ 7.93 \% \end{gathered}$ | $\begin{gathered} \text { HY Bond } \\ \text { 4.81\% } \end{gathered}$ | HY Bond 8.27\% | $\begin{gathered} \text { BDC } \\ 8.03 \% \end{gathered}$ | $\begin{gathered} \text { BDC } \\ \mathbf{1 . 6 9 \%} \end{gathered}$ | $\begin{gathered} \text { MLP } \\ -6.10 \% \end{gathered}$ | $\begin{aligned} & \text { Preferred } \\ & -0.77 \% \end{aligned}$ | $\begin{aligned} & \text { Preferred } \\ & 0.03 \% \end{aligned}$ | $\begin{aligned} & \text { Convertible } \\ & -1.35 \% \end{aligned}$ | $\begin{gathered} \text { MLP } \\ 0.57 \% \end{gathered}$ |
| $\begin{gathered} \text { REIT } \\ -4.29 \% \end{gathered}$ | Investment Grade 0.49\% | $\begin{aligned} & \text { HY Bond } \\ & \mathbf{2 . 9 9 \%} \end{aligned}$ | $\begin{gathered} \text { MLP } \\ 3.36 \% \end{gathered}$ | $\begin{gathered} \text { MLP } \\ 4.82 \% \end{gathered}$ | $\begin{gathered} \text { MLP } \\ \mathbf{1 . 9 5 \%} \end{gathered}$ | $\begin{gathered} \text { Convertible } \\ -3.17 \% \end{gathered}$ | Muni Bond $-6.44 \%$ | $\begin{gathered} \text { Muni Bond } \\ -1.88 \% \end{gathered}$ | $\left\|\begin{array}{c} \text { Investment Grade } \\ -2.09 \% \end{array}\right\|$ | $\begin{gathered} \text { Covered Call } \\ -2.39 \% \end{gathered}$ | $\begin{aligned} & \text { HY Bond } \\ & -1.75 \% \end{aligned}$ |
| $\begin{gathered} \mid \text { Investment Grade } \\ -5.75 \% \end{gathered}$ | $\begin{aligned} & \text { HY Bond } \\ & -2.97 \% \end{aligned}$ | $\begin{gathered} \text { Muni Bond } \\ 0.57 \% \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { Investment Grade } \\ 0.14 \% \end{gathered}\right.$ | $\begin{array}{\|c\|} \hline \text { Investment Grade } \\ 4.32 \% \end{array}$ | $\begin{gathered} \text { Senior Loan } \\ -0.12 \% \end{gathered}$ | $\begin{gathered} \text { HY Bond } \\ -3.48 \% \end{gathered}$ | $\left\|\begin{array}{c} \text { Investment Grade } \\ -6.81 \% \end{array}\right\|$ | Investment Grade $-3.74 \%$ | $\begin{gathered} \text { MLP } \\ -\mathbf{- 3 . 1 1 \%} \end{gathered}$ | Investment Grade $-2.74 \%$ | $\begin{array}{\|l} \hline \text { Investment Grade } \\ -1.81 \% \end{array}$ |
| $\begin{gathered} \text { Muni Bond } \\ -6.20 \% \end{gathered}$ | $\begin{gathered} \text { Muni Bond } \\ -3.31 \% \end{gathered}$ | $\left\|\begin{array}{c} \text { Investment Grade } \\ 0.23 \% \end{array}\right\|$ | $\begin{gathered} \text { Muni Bond } \\ -0.53 \% \end{gathered}$ | $\begin{aligned} & \text { Preferred } \\ & \mathbf{2 . 8 7 \%} \end{aligned}$ | $\begin{aligned} & \text { HY Bond } \\ & -0.63 \% \end{aligned}$ | $\begin{gathered} \text { MLP } \\ -4.54 \% \end{gathered}$ | $\begin{aligned} & \text { Preferred } \\ & -6.89 \% \end{aligned}$ | $\begin{aligned} & \text { HY Bond } \\ & -4.84 \% \end{aligned}$ | $\begin{aligned} & \text { Muni Bond } \\ & -3.32 \% \end{aligned}$ | $\begin{aligned} & \text { Preferred } \\ & -2.91 \% \end{aligned}$ | $\begin{aligned} & \text { Preferred } \\ & -2.66 \% \end{aligned}$ |
| $\begin{aligned} & \text { Preferred } \\ & -8.28 \% \end{aligned}$ | $\begin{aligned} & \text { Preferred } \\ & -4.24 \% \end{aligned}$ | $\begin{gathered} \text { Senior Loan } \\ -0.02 \% \end{gathered}$ | $\begin{gathered} \text { Senior Loan } \\ -1.27 \% \end{gathered}$ | $\begin{gathered} \text { Muni Bond } \\ 1.99 \% \end{gathered}$ | $\left\|\begin{array}{c} \text { Investment Grade } \\ -2.92 \% \end{array}\right\|$ | $\begin{array}{\|c\|} \hline \text { Investment Grade } \\ -4.93 \% \end{array}$ | $\begin{gathered} \text { Convertible } \\ -7.98 \% \end{gathered}$ | $\begin{gathered} \text { MLP } \\ -5.05 \% \end{gathered}$ | $\begin{aligned} & \text { Convertible } \\ & -4.00 \% \end{aligned}$ | $\begin{gathered} \text { MLP } \\ -4.57 \% \end{gathered}$ | $\begin{gathered} \text { Muni Bond } \\ -\mathbf{3 . 1 5 \%} \end{gathered}$ |
| $\begin{aligned} & \text { Convertible } \\ & -8.66 \% \end{aligned}$ | $\begin{aligned} & \text { World Stock } \\ & -5.31 \% \end{aligned}$ | $\begin{aligned} & \text { Covered Call } \\ & -1.97 \% \end{aligned}$ | $\begin{aligned} & \text { Preferred } \\ & -1.61 \% \end{aligned}$ | $\begin{gathered} \text { BDC } \\ 0.81 \% \end{gathered}$ | $\begin{aligned} & \text { Muni Bond } \\ & -3.65 \% \end{aligned}$ | $\begin{gathered} \text { Muni Bond } \\ -6.40 \% \end{gathered}$ | $\begin{gathered} \text { BDC } \\ -8.61 \% \end{gathered}$ | $\begin{aligned} & \text { Covered Call } \\ & -7.39 \% \end{aligned}$ | $\begin{aligned} & \text { Covered Call } \\ & -4.25 \% \end{aligned}$ | $\begin{gathered} \text { Senior Loan } \\ -7.77 \% \end{gathered}$ | $\begin{gathered} \text { Senior Loan } \\ -4.62 \% \end{gathered}$ |
| $\begin{gathered} \text { World Stock } \\ -8.85 \% \end{gathered}$ | $\begin{aligned} & \text { Convertible } \\ & -6.25 \% \end{aligned}$ | $\begin{aligned} & \text { Convertible } \\ & -2.09 \% \end{aligned}$ | $\begin{gathered} \text { Convertible } \\ -2.40 \% \end{gathered}$ | $\begin{gathered} \text { Senior Loan } \\ -0.37 \% \end{gathered}$ | $\begin{aligned} & \text { Preferred } \\ & -3.83 \% \end{aligned}$ | $\begin{gathered} \text { Senior Loan } \\ -6.49 \% \end{gathered}$ | $\begin{gathered} \text { Covered Call } \\ -8.11 \% \end{gathered}$ | $\begin{gathered} \text { Senior Loan } \\ -8.75 \% \end{gathered}$ | $\begin{gathered} \text { Senior Loan } \\ -4.32 \% \end{gathered}$ | $\begin{aligned} & \text { HY Bond } \\ & -8.04 \% \end{aligned}$ | $\begin{gathered} \text { Convertible } \\ 4.68 \% \end{gathered}$ |
| US Stock $-8.86 \%$ | $\begin{aligned} & \text { Covered Call } \\ & -7.30 \% \end{aligned}$ | $\begin{aligned} & \text { Preferred } \\ & -2.55 \% \end{aligned}$ | $\begin{gathered} \text { BDC } \\ -2.92 \% \end{gathered}$ | $\begin{gathered} \text { Convertible } \\ -3.25 \% \end{gathered}$ | $\begin{gathered} \text { REIT } \\ -5.65 \% \end{gathered}$ | $\begin{aligned} & \text { Covered Call } \\ & -6.62 \% \end{aligned}$ | $\begin{gathered} \text { HY Bond } \\ -8.41 \% \end{gathered}$ | $\begin{aligned} & \text { Convertible } \\ & -10.08 \% \end{aligned}$ | $\begin{gathered} \text { BDC } \\ -4.48 \% \end{gathered}$ | US Stock $-8.06 \%$ | $\begin{gathered} \text { BDC } \\ -6.13 \% \end{gathered}$ |
| $\begin{aligned} & \text { HY Bond } \\ & -10.47 \% \end{aligned}$ | $\begin{gathered} \text { Senior Loan } \\ -\mathbf{- 8 . 4 3 \%} \end{gathered}$ | $\begin{gathered} \text { BDC } \\ -3.37 \% \end{gathered}$ | $\begin{gathered} \text { REIT } \\ -4.48 \% \end{gathered}$ | $\begin{gathered} \text { REIT } \\ -5.20 \% \end{gathered}$ | $\begin{gathered} \text { Convertible } \\ -6.22 \% \end{gathered}$ | $\begin{aligned} & \text { Preferred } \\ & -6.73 \% \end{aligned}$ | $\begin{gathered} \text { Senior Loan } \\ -8.70 \% \end{gathered}$ | $\begin{gathered} \text { BDC } \\ -10.98 \% \end{gathered}$ | $\begin{aligned} & \text { HY Bond } \\ & -5.19 \% \end{aligned}$ | $\begin{aligned} & \text { Muni Bond } \\ & -\mathbf{8 . 5 7 \%} \end{aligned}$ | $\begin{gathered} \text { Covered Call } \\ -6.24 \% \end{gathered}$ |
| $\begin{aligned} & \text { Covered Call } \\ & -11.45 \% \end{aligned}$ | $\begin{gathered} \text { REIT } \\ -9.66 \% \end{gathered}$ | $\begin{gathered} \text { World Stock } \\ -4.03 \% \end{gathered}$ | $\begin{aligned} & \text { World Stock } \\ & -5.69 \% \end{aligned}$ | World Stock $-7.47 \%$ | Covered Call <br> 8.13\% | $\begin{aligned} & \text { World Stock } \\ & -9.04 \% \end{aligned}$ | World Stock $-11.00 \%$ | US Stock $-11.47 \%$ | $\begin{gathered} \text { REIT } \\ -9.18 \% \end{gathered}$ | World Stock $-9.6 \%$ | World Stock -8.22\% |
| $\begin{aligned} & \text { Senior Loan } \\ & -11.64 \% \end{aligned}$ | $\begin{aligned} & \text { us Stock } \\ & -10.56 \% \end{aligned}$ | US Stock $-7.34 \%$ | $\begin{gathered} \text { Covered Call } \\ -7.41 \% \end{gathered}$ | $\begin{gathered} \text { Covered Call } \\ -8.83 \% \end{gathered}$ | $\begin{gathered} \hline \text { World Stock } \\ -8.15 \% \end{gathered}$ | US Stock $-9.63 \%$ | us Stock $-11.00 \%$ | $\begin{gathered} \text { REIT } \\ -\mathbf{- 1 1 . 6 2 \%} \end{gathered}$ | US Stock $-9.44 \%$ | $\begin{gathered} \text { BDC } \\ -9.75 \% \end{gathered}$ | $\begin{gathered} \text { REIT } \\ -8.79 \% \end{gathered}$ |
| $\begin{gathered} \text { BDC } \\ -\mathbf{1 8 . 2 3 \%} \end{gathered}$ | $\begin{gathered} \text { BDC } \\ -\mathbf{3 1 . 7 8 \%} \end{gathered}$ | $\begin{gathered} \text { REIT } \\ -9.10 \% \end{gathered}$ | US Stock $-8.27 \%$ | US Stock $-9.66 \%$ | US Stock $-9.32 \%$ | $\begin{gathered} \text { REIT } \\ -10.63 \% \end{gathered}$ | $\begin{gathered} \text { REIT } \\ \text {-12.21\% } \end{gathered}$ | World Stock $-12.44 \%$ | $\begin{gathered} \text { World Stock } \\ -9.50 \% \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & -10.05 \% \end{aligned}$ | US Stock $-9.48 \%$ |

Historical Premium / Discount expressed as average value over each year. 2018 YTD Premium / Discount average value as of December 31, 2018. "2009-2018" column shows yearly average for each sector. Data sourced from Closed-End Fund Advisors 'CEFU Report' and CEFData.com. Past performance is not an indication of future results
Contact@CEFadvisors.com -- Toll Free: (800) 356-3508 -- www.CEFadvisors.com

## Closed-End Funds - NAV Total Return Correlation (10 Year)

|  | MLP | BDC | Convertible | HY Bond | Muni Bond | Senior Loan | Preferred | World Stock | Cov Call | US Stock | REIT | Investment Grade |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MLP | 100\% | 12.5\% | 69.7\% | 65.0\% | 12.8\% | 56.8\% | 38.6\% | 50.3\% | 59.3\% | 57.9\% | 37.7\% | 48.0\% |
| BDC | 12.5\% | 100\% | -2.9\% | -3.1\% | -34.7\% | -16.9\% | -7.1\% | -1.3\% | 4.0\% | 6.3\% | -1.3\% | -3.8\% |
| Convertible | 69.7\% | -2.9\% | 100\% | 92.8\% | 20.2\% | 84.2\% | 76.7\% | 91.9\% | 88.6\% | 91.0\% | 76.1\% | 82.8\% |
| HY Bond | 65.0\% | -3.1\% | 92.8\% | 100\% | 32.4\% | 93.7\% | 84.2\% | 86.0\% | 72.6\% | 77.3\% | 79.0\% | 92.8\% |
| Muni Bond | 12.8\% | -34.7\% | 20.2\% | 32.4\% | 100\% | 33.6\% | 33.8\% | 15.3\% | 1.4\% | 1.0\% | 29.9\% | 40.6\% |
| Senior Loan | 56.8\% | -16.9\% | 84.2\% | 93.7\% | 33.6\% | 100\% | 76.7\% | 72.7\% | 57.6\% | 62.7\% | 66.5\% | 83.5\% |
| Preferred | 38.6\% | -7.1\% | 76.7\% | 84.2\% | 33.8\% | 76.7\% | 100\% | 80.5\% | 67.3\% | 73.6\% | 94.5\% | 96.0\% |
| World Stock | 50.3\% | -1.3\% | 91.9\% | 86.0\% | 15.3\% | 72.7\% | 80.5\% | 100\% | 90.3\% | 92.5\% | 80.4\% | 83.8\% |
| Cov Call | 59.3\% | 4.0\% | 88.6\% | 72.6\% | 1.4\% | 57.6\% | 67.3\% | 90.3\% | 100\% | 97.7\% | 72.7\% | 67.1\% |
| US Stock | 57.9\% | 6.3\% | 91.0\% | 77.3\% | 1.0\% | 62.7\% | 73.6\% | 92.5\% | 97.7\% | 100\% | 80.1\% | 73.5\% |
| REIT | 37.7\% | -1.3\% | 76.1\% | 79.0\% | 29.9\% | 66.5\% | 94.5\% | 80.4\% | 72.7\% | 80.1\% | 100\% | 90.5\% |
| Investment Grade | 48.0\% | -3.8\% | 82.8\% | 92.8\% | 40.6\% | 83.5\% | 96.0\% | 83.8\% | 67.1\% | 73.5\% | 90.5\% | 100\% |

[^0]Data sourced from Closed-End Fund Advisors 'CEFU Report' and cefadata.com. Past performance is not an indication of future results

## Equity CEF 20 Year Discount Chart



## Equity CEF 20 Year Discount Occurrence

Discount Monthly Levels (Dec '98-Dec '18)


## Taxable Fixed Income CEF 20 Year Discount Chart



# Taxable Fixed Income CEF 20 Year Discount Occurrence 

Discount Monthly Levels (Dec '98-Dec '18)


## Municipal Bond CEF 20 Year Discount Chart



## Municipal Bond CEF 20 Year Discount Occurrence

Discount Monthly Levels (Dec '98-Dec '18)


## Trad CEF - Total Return

## December 31, 2008 - December 31, 2018



Back-tested results also do not account for those Funds that were previously recommended by the Adviser and which are no longer included as an alternative in a client's asset allocation strategy. Thus, the back-tested performance results shown above may overestimate the potential returns a client could expect to generate due to the effect of recommended manager survivor bias.

# BDC Debt - Total Return <br> December 31, 2008 - December 31, 2018 



Back-tested results also do not account for those Funds that were previously recommended by the Adviser and which are no longer included as an alternative in a client's asset allocation strategy. Thus, the back-tested performance results shown above may overestimate the potential returns a client

BDC Debt - Average Discount / Premium December 31, 2008 - December 31, 2018


## Types of Loans Held By BDCs

1. First Lien Loans: 57\%
2. Second Lien Loans: 19\%
3. Unsecured Loans: 5\%
4. Equity/Other: 19\%

$>$ Avg Portfolio Turnover: 38.0\%
$>$ Avg Variable Loans: 81\% / Fixed: 19\%
$>$ Libor Floors: 40\% at 1\% Avg Level
$>$ Avg Loan Size: \$9.3M
> $75 \%$ of Loans Under $\$ 25 \mathrm{MM}$
$>$ Average Maturity 4.2 with a range of 2 Years to 6 years
$>$ Avg No of Loans: 155 from 117 Companies

# Municipal Bonds - Total Return December 31, 2008 - December 31, 2018 



Back-tested results also do not account for those Funds that were previously recommended by the Adviser and which are no longer included as an alternative in a client's asset allocation strategy. Thus, the back-tested performance results shown above may overestimate the potential returns a client could expect to generate due to the effect of recommended manager survivor bias.

## Municipal Bond Closed-End Fund Universe

|  | National <br> Muni Funds | Single State <br> Muni Funds | Total |
| :--- | :---: | :---: | :---: |
| Number of Funds | 88 | 74 | 162 |
| Net Assets (Total) | $\$ 45,635$ | $\$ 17,605$ | $\$ 63,240$ |
| Net Assets | $\$ 519$ | $\$ 238$ | $\$ 390$ |
| Earnings Coverage Ratio \% | 103.3 | 117.0 | 109.6 |
| Premium / Discount \% | -10.10 | -12.35 | -11.13 |
| Total Mkt Yield \% | 5.13 | 4.45 | 4.82 |
| Leverage Adj NAV Yield \% | 3.50 | 2.88 | 3.22 |
| NAV Volatility | 2.90 | 2.77 | 2.84 |
| Leverage \% | 32.1 | 34.7 | 33.3 |
| Leverage Cost \% | 1.05 | 1.23 | 1.13 |
| Duration | 8.17 | 8.26 | 8.22 |
| Insured \% | 10.4 | 11.0 | 10.6 |
| Investment Grade \% | 83 | 91 | 87 |
| Credit Quality | A | A | A |



Note: Volatility is a one year rolling calculation

# Tax Equivalent Yield Comparison Married Couple with W-2 Income of \$1MM+ 



[^1]
## MLP - Total Return <br> December 31, 2008 - December 31, 2018



Back-tested results also do not account for those Funds that were previously recommended by the Adviser and which are no longer included as an alternative in a client's asset allocation strategy. Thus, the back-tested performance results shown above may overestimate the potential returns a client LOSED-END FUND could expect to generate due to the effect of recommended manager survivor bias.

## MLP - Average Discount / Premium <br> December 31, 2008 - December 31, 2018



## CEF Advisors' Senior Loan Index Data as of $12 / 31 / 2018 \sim$

## About the Index

 index constituents will be rebalanced each quarter.

## Index Performance

|  | Current(\$) |  | Previous Day(\%) |  | 1 Week(\%) |  | 1 Month(\%) | 3 Month(\%) | 6 Mon | (\%) | 1 Year(\%) |  | 3 Year(\%) | 5 Year(\%) |  | MTD(\%) | QTD(\%) | YTD(\%) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Price | 949.64 |  | -5.06 |  | 2.02 |  | -4.66 | -9.86 | -8.51 |  | -6.43 |  | 5.54 | 2.12 |  | -4.66 | -9.86 | -6.04 |
| NAV | 1,034.13 |  | -3.67 |  | -0.36 |  | -4.38 | -6.33 | -4.0 |  | -1.34 |  | 5.92 | 3.22 |  | -4.38 | -6.33 | -1.08 |
| Difference |  |  | 1.40 |  | -2.38 |  | 0.28 | 3.53 | 4.4 |  | 5.09 |  | 0.37 | 1.10 |  | 0.28 | 3.53 | 4.96 |
| - Periods greater than 1 Year are annualized. *On Inception Date (12/30/16), Index Price was \$1,000 and NAV was \$1,000.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 2018 - Mon | ly Performance ( |  |  |  |  |  |  |  |  | Show P | vious Years |
|  | Jan | Feb | Mar | Q1 | Apr | May | Jun | Q2 $\quad 1 \mathrm{H}$ | Jul | Aug | Sep | Q3 | Oct | Nov | Dec | Q4 | 2 H | 2018 |
| Price | 0.84 | 1.12 | 1.76 | 3.77 | 0.50 | -0.33 | -1.15 | -0.99 2.78 | 0.09 | 0.31 | 0.64 | 1.03 | -3.76 | -1.76 | -4.66 | -9.86 | -8.83 | -6.04 |
| NAV | 1.62 | 0.12 | 0.22 | 1.97 | 0.58 | 0.21 | 0.02 | $0.80 \quad 2.77$ | 1.06 | 0.47 | 0.92 | 2.48 | -0.52 | -1.53 | -4.38 | -6.33 | -3.86 | -1.08 |
| Difference | 0.78 | -1.00 | -1.54 | -1.80 | 0.08 | 0.54 | 1.16 | $1.79-0.01$ | 0.98 | 0.16 | 0.28 | 1.44 | 3.24 | 0.23 | 0.28 | 3.53 | 4.97 | 4.96 |
| Performance Chart |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1200 ( Price \& NAV Peformance |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1100 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\mathrm{Fe}^{200^{17}}$ | $N^{2 a^{2017}} P P^{2}$ | Nay | $0^{2017} \mathrm{jun}^{20.17} \mathrm{ju}$ | $200^{17}$ | $\operatorname{puN}^{209^{201}} \mathrm{ser}^{22}$ | $20^{17}$ | $\mathrm{of}^{20^{17}} \text { Nor } 20^{\circ}$ | $0^{00^{20017}} \mathrm{ser}^{20^{2018}}$ | $=200^{18}$ | $20^{18}$ | $20^{18} \sqrt{28} 2^{201}$ | 18 <br> Ju | $\operatorname{un}^{2018} \quad \mathrm{sul}^{12}$ | $\mathrm{Nu}^{29^{2018}}$ | $e^{20^{18}}$ | $\operatorname{od}^{20^{18}}$ | $0.20^{18}$ | $\operatorname{san} 20^{19}$ |

Discount

> Premium / Discount (\%)

5


## Broad Investable Universe

Assets of Closed-End Funds/BDCs*
by type, as of December 31, 2018

|  | \# of Funds | Total Net Assets | Premium / <br> Discount | Market <br> Yield | Beta | Duration | Leverage | Non Lev <br> Expense <br> Ratio | Average <br> Net Assets |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Equity Funds | 198 | \$97,182 | -9.29\% | 9.19\% | 0.74 |  | 15.56\% | 1.43 | \$ 491 |
| Taxable Bond | 146 | \$60,443 | -8.60\% | 8.64 \% | 0.17 | 3.6 | $26.47 \%$ | 1.41 | \$414 |
| Municipal Bond | 162 | \$63,240 | -11.13\% | $4.82 \%$ | 0.00 | 8.2 | $33.33 \%$ | 0.99 | \$390 |
| BDCs | 48 | \$36,025 | -23.02\% | $10.22 \%$ | 0.54 |  | $39.40 \%$ | 6.99 | \$751 |
| Total CEFs | 554 | \$ 256,890 | -10.84\% | 7.85 \% | 0.36 | 6.2 | 25.68 \% | 1.78 | \$ 464 |
| National Muni Bond | 88 | \$45,635 | -10.10\% | 5.13\% | 0.00 | 8.2 | 32.12\% | 0.93 | \$519 |
| Debt Focused BDC | 43 | \$35,290 | -20.15\% | 11.23\% | 0.53 |  | 41.91\% | 6.84 | \$821 |
| Covered Call | 27 | \$17,834 | -6.52\% | 9.66\% | 0.78 |  | 2.77\% | 1.10 | \$661 |
| US Stock | 29 | \$18,436 | -12.16\% | 8.95\% | 0.83 |  | 11.61\% | 1.41 | \$636 |
| MLP Funds | 24 | \$10,100 | -8.66\% | 13.31\% | 1.30 |  | 30.23\% | 1.82 | \$421 |
| High Yield Bond | 33 | \$11,147 | -10.21\% | 8.22\% | 0.17 | 3.5 | 24.46\% | 1.22 | \$338 |
| World Stock | 46 | \$10,486 | -12.27\% | 7.19\% | 0.67 |  | 8.79\% | 1.50 | \$228 |
| Senior Loan | 28 | \$11,904 | -12.70\% | 7.63\% | 0.10 | 1.0 | 33.56\% | 1.62 | \$425 |
| Preferred Equity | 16 | \$9,388 | -4.29\% | 8.38\% | 0.20 | 4.3 | 33.67\% | 1.22 | \$587 |
| REIT Funds | 10 | \$5,204 | -14.12\% | 9.57\% | 0.46 |  | 21.28\% | 1.39 | \$520 |
| Convertible Bond | 10 | \$3,717 | -8.17\% | 11.61\% | 0.71 | 3.2 | 30.75\% | 1.37 | \$372 |
| Investment Grade Bond | 12 | \$3,691 | -5.87\% | 6.93\% | 0.08 | 5.2 | 19.23\% | 0.91 | \$308 |

## CEF Universe Update



## Current Closed-End Discounts

12 Major Sectors Discount as of December 31, 2018


Source: CEFData.com

## Discount Trends \& Tax Loss Selling

## 12 Major Sectors CEFs (Nov - Feb)



Average Bounce: 2.5\%

## Discount Trends \& Tax Loss Selling

## CEFs \& BDCs with 1YR Price Return -5\% or lower (Nov - Feb)



Average Bounce: 2.9\%

## CEF Volume Trends - 4Q 2018



## CEF/BDC Yield Comparison



Data as of 12/31/2018.
MLP Index: Alerian MLP Index; REIT Index: Wilshire US REIT Index; Corporate Debt Index: S\&P 500 Bond Index US High Yield Indices : BofA Merrill Lynch US High Yield (BB Rated, B Rated, CCC and Lower Rated)

# Relative UNII for Traditional CEF Municipal Bond Funds 

Nat Muni Bond - Relative UNII<br>May 11, 2012 - December 31, 2018



## Return of Capital (90 Day) For CEFs

Main Peer Groups - Historical ROC
May 11, 2012 - December 31, 2018


# Destructive Return of Capital (1YR DRoC) 

(Traditional)

| Fund Grouping | \# Funds with Destructive RoC | \% Funds with Destructive RoC | Average Destructive RoC \% | 1 Yr NAV TR vs NAV Yield | 3Yr NAV TR vs NAV Yield |
| :---: | :---: | :---: | :---: | :---: | :---: |
| US Equity Funds | 12 | 41\% | 35\% | -187\% | -21\% |
| Non-US Equity Funds | 21 | 46\% | 46\% | -306\% | -23\% |
| Specialty Equity Funds | 88 | 81\% | 52\% | 104\% | -52\% |
| Equity CEF | 134 | 68\% | 48\% | -217\% | -42\% |
| Taxable Bond Funds | 70 | 48\% | 21\% | -129\% | -10\% |
| National Muni Bond Funds | 9 | 10\% | 3\% | -91\% | -37\% |
| State Muni Bond Funds | 6 | 8\% | 6\% | -101\% | -43\% |
| Bond CEF | 85 | 28\% | 18\% | -116\% | -23\% |
| Average CEF | 219 | 43\% | 36\% | -164\% | -32\% |

## Closed-End Fund Market Price volatility vs. NAV volatility (1 vear)



## CEF Press Release SEC Filings Summary (2501 CEF PRs in 4Q18)

| Announcement Type | 4Q 2018 | 2017 | 2016 | 2015 | Avg per Q since 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\longrightarrow$ Rights Issue / Offering | 6 | 16 | 9 | 6 | 3 |
| Secondary Offering (Trad CEF) | 0 | 1 | 6 | 2 | 1 |
| Secondary Offering (BDCs) | 1 | 17 | 4 | 16 | 3 |
| Tender Offer | 4 | 46 | 17 | 15 | 6 |
| Distribution Policy Change(Trad CEF) | 12 | 12 | 6 | 11 | 3 |
| Distribution Policy Change (BDCs) | 0 | 1 | 0 | 1 | 0 |
| 13 Filings (Trad CEF) | 60 | 700 | 897 | 906 | 169 |
| New N-2 Filings | 6 | 133 | 97 | 52 | 21 |
| Updated N-2 Filings | 22 | 221 | 120 | 104 | 44 |
| Investment Manager / Advisor Change | 2 | 18 | 35 | 5 | 9 |
| Portfolio Manager Change | 23 | 52 | 39 | 45 | 13 |
| Leverage Amount / Type Change | 37 | 118 | 105 | 52 | 27 |
| 0 | www.CEFadvisors.com |  | Source: Fund Press Releases / SEC Filings. |  |  |

## CEF \& BDC

## Dividend Increases vs. Decreases

| Dividend <br> Announcement | 4Q 2018 <br> Number of <br> Announcements | 4Q 2018 <br> Average <br> Change | 4Q '17-3Q '18 <br> Number of <br> Announcements | 4 Q '17-3Q '18 <br> Average <br> Change |
| :---: | :---: | :---: | :---: | :---: |
| Dividend Maintains | $\mathbf{1 1 9 5 ( 8 9 . 6 \% )}$ | N/A | $4358(88.2 \%)$ | N/A |
| Dividend Increases | $34(2.6 \%)$ | $+10.69 \%$ | $159(3.2 \%)$ | $+9.59 \%$ |
| Dividend Decreases | $104(7.8 \%)$ | $-6.44 \%$ | $426(8.6 \%)$ | $-8.21 \%$ |
|  |  |  |  |  |
| Under 5\% Increase | $15(44 \%)$ | $+2.46 \%$ | $100(63 \%)$ | $+1.89 \%$ |
| Over 5\% Increase | $19(56 \%)$ | $+17.18 \%$ | $59(37 \%)$ | $+22.66 \%$ |
| Under 5\% Decrease | $60(58 \%)$ | $-1.97 \%$ | $179(42 \%)$ | $-1.95 \%$ |
| Over 5\% Decrease | $44(42 \%)$ | $-12.54 \%$ | $247(58 \%)$ | $-12.73 \%$ |

## 4Q 2018 Closed-End Fund Dividend Increases vs. Decreases

Major CEF Groups: Number of dividend decreases / increases
Last Quarter \& Previous 1 Year Rolling
$\square$ Last Q Decreases $\quad$ Previous 1 Yr Rolling Decreases $\quad$ Last Q Increases $\quad$ Previous 1 Yr Rolling Increases


# CEF Recent Dividend Changes (Policies NOT Promises) 

## 3 Year Dividend Growth

- 301 Funds (59\%) had negative 3 year growth averaging -22.9\%
- 56 Funds (11\%) had positive 3 year growth averaging +20.3\%
 (64\% of funds)
- 251 Cut ( $78 \%$ ) an average of $-12 \%$ while $71(22 \%)$ increased an average of $+13 \%$
- 173 of these funds have "level" or "managed distributions"
- 135 of those were cut an average $-12 \%$
- 37 were increased an average of $+15 \%$


## 1 Year Lookback

- 94 increase vs. 240 decreases. 50 Funds had BOTH increases and decreases in the past year.


## CEF \& BDC Historical IPOs (4Q 18)

|  | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of <br> IPOs | 5 | 13 | 8 | 9 | 15 | 29 | 28 | 26 | 22 | 14 | 3 |
| Average <br> Assets <br> In \$ millions | $\$ 94$ | $\$ 646$ | $\$ 225$ | $\$ 272$ | $\$ 511$ | $\$ 511$ | $\$ 442$ | $\$ 258$ | $\$ 371$ | $\$ 192$ | $\$ 134$ |
| Total New <br> CEF IPO <br> Assets in \$ <br> Billions | $\$ .5 B$ | $\$ 8.4 B$ | $\$ 1.8 B$ | $\$ 2.4 B$ | $\$ 7.7 B$ | $\$ 14.8 B$ | $\$ 12.4 B$ | $\$ 6.7 B$ | $\$ 8.2 B$ | $\$ 2.7 B$ | $\$ .4 B$ |

10 Year Average: 17 Funds per year, \$352MM Ave Fund, \$6.6 Billion Per Year

## CEF \& BDC Historical IPOs (4Q 18)



# CEF\&BDC IPOs: By Investment Focus Jan 1, 2018 - Dec 31, 2018 



QDebt Focused BDC

■Muni - High Yield
®Hybrid / Balanced

- High Yield Bond

Note: Inception Assets in millions ; data as of 12/31/2018 , cefdata.com

## 4Q 2018 IPO Details

## OFS Credit Company (OCCI) - Taxable Bond Funds -

IPOed on October 5, 2018

IPO Price: \$19.00
Price as of $12 / 31 / 18$ : $\$ 15.26$

IPO Assets: \$50M
Disc/Prm as of 12/31/18:-24.12\%

RivNth Opportunistic Muni Incm (RMI) - Nat Municipal Bond Funds IPOed on October 20, 2018

IPO Price: \$20.00
Price as of $12 / 31 / 18$ : $\$ 20.02$

IPO Assets: \$119M
Disc/Prm as of 12/31/18: -2.44\%

## Bain Capital Specialty Finance (BCSF) - Debt Focused BDCs-

 IPOed on November 15, 2018IPO Price: $\$ 18.00$
Price as of $12 / 31 / 18: \$ 16.67$

IPO Assets: $\$ 151.8 \mathrm{M}$
Disc/Prm as of 12/31/18: -17.68\%

## Nuv Hi Incm 2023 Tgt Trm Fd (JHAA) - Taxable Bond Funds -

IPOed on December 19, 2018

IPO Price: $\$ 10.00$
Price as of $12 / 31 / 18: \$ 10.85$

IPO Assets: \$70M
Disc/Prm as of $12 / 31 / 18:+10.15 \%$

# IPOs during 1Q 2018-3Q 2018 Current Discount / Premium 

| IPO Date | Ticker | Current Disc/Prm | Current Price | IPO Price | Curr vs IPO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2Q 2018 | VAM | $3.27 \%$ | $\$ 14.22$ | $\$ 14.66$ | $97.00 \%$ |

## Closed-End Fund Mergers

Closed-End Funds Merged into Other Closed-End Funds (December 2018)


1. Reduce expense ratio
2. Increase liquidity
3. Reduce bid/ask spread

Avg. -17 per year
4. Improve cost of future leverage

## Closed-End Fund Deaths

CEF Funds Open-Ended, Liquidated or Converted to ETF


Source: Fund Press Releases

Causes: Open-ending, liquidation \& conversion. (9 per year on average)

# Traditional Closed-End Fund 90 Day NAV - Market Price Correlation 

Trad CEFs Groups - 90 Day NAV/Price Correlation June 22, 2012 - December 31, 2018


Source: December 31, 2018 - CEFData.com

## Traditional Closed-End Fund NAV - Market Price Correlation

| Fund Grouping | Correlation <br> $3 Q 18$ | Correlation <br> $2 Q 18$ | Correlation <br> Trend |
| :---: | :---: | :---: | :---: |
| US Equity Funds | $89.83 \%$ | $70.98 \%$ | $18.85 \%$ |
| Non-US Equity Funds | $89.46 \%$ | $77.07 \%$ | $12.39 \%$ |
| Specialty Equity Funds | $92.92 \%$ | $69.99 \%$ | $22.93 \%$ |
| Ave Equity CEF | $91.81 \%$ | $70.31 \%$ | $21.50 \%$ |
| Taxable Bond Funds | $79.44 \%$ | $37.08 \%$ | $42.36 \%$ |
| National Muni Bond Funds | $43.86 \%$ | $64.27 \%$ | $-20.41 \%$ |
| State Muni Bond Funds | $40.47 \%$ | $59.76 \%$ | $-19.29 \%$ |
| Ave Bond CEF | $59.83 \%$ | $50.45 \%$ | $9.38 \%$ |
| Average CEF | $72.42 \%$ | $58.24 \%$ | $14.18 \%$ |

## CEF / BDC Index Performance

| Index | 4Q 2018 <br> NAV | 4Q 2018 <br> Mkt Pr | 1 Year <br> NAV | 1 Year <br> Mkt Pr | 5 Year <br> NAV | 5 Year <br> Mkt Pr |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12 Major Sectors Index | $-8.09 \%$ | $-12.76 \%$ | $-5.08 \%$ | $-10.35 \%$ | $3.88 \%$ | $3.41 \%$ |
| High Income Index | $-10.89 \%$ | $-17.31 \%$ | $-6.87 \%$ | $-12.79 \%$ | $2.57 \%$ | $1.53 \%$ |
| Tax-Sensitive Income Index | $-10.95 \%$ | $-13.88 \%$ | $-8.17 \%$ | $-13.15 \%$ | $1.04 \%$ | $0.63 \%$ |
| 60/40 Balanced Index | $-9.22 \%$ | $-13.48 \%$ | $-6.47 \%$ | $-10.61 \%$ | $4.03 \%$ | $3.77 \%$ |
| Global Equity Index | $-11.71 \%$ | $-14.73 \%$ | $-9.69 \%$ | $-11.89 \%$ | $3.62 \%$ | $4.01 \%$ |
| Equity Income Index | $-12.77 \%$ | $-16.17 \%$ | $-10.19 \%$ | $-13.68 \%$ | $2.03 \%$ | $2.42 \%$ |
| Taxable Bond and BDC | $-3.69 \%$ | $-8.28 \%$ | $-2.06 \%$ | $-6.32 \%$ | $4.49 \%$ | $4.10 \%$ |
| National Municipal Bond | $1.30 \%$ | $-1.20 \%$ | $0.52 \%$ | $-5.79 \%$ | $6.73 \%$ | $6.04 \%$ |
| Preferred Equity Index | $-7.03 \%$ | $-8.47 \%$ | $-7.02 \%$ | $-10.49 \%$ | $7.25 \%$ | $8.45 \%$ |
| Convertible Bond Index | $-13.42 \%$ | $-21.05 \%$ | $-6.09 \%$ | $-11.50 \%$ | $1.92 \%$ | $1.87 \%$ |
| High Yield Bond Index | $-6.36 \%$ | $-9.49 \%$ | $-3.49 \%$ | $-8.37 \%$ | $3.66 \%$ | $2.47 \%$ |
| Sr. Loan Index | $-6.33 \%$ | $-9.86 \%$ | $-1.34 \%$ | $-6.43 \%$ | $3.22 \%$ | $2.12 \%$ |
| MLP Index | $-23.17 \%$ | $-25.03 \%$ | $-19.05 \%$ | $-24.00 \%$ | $-10.07 \%$ | $-11.22 \%$ |
| REIT / Real Asset Index | $-8.43 \%$ | $-12.25 \%$ | $-8.27 \%$ | $-13.66 \%$ | $6.72 \%$ | $6.85 \%$ |
| Debt-BDCs Index | $2.46 \%$ | $-12.39 \%$ | $9.39 \%$ | $-6.36 \%$ | $8.04 \%$ | $0.91 \%$ |

# CEF Institutional Holdings (4Q 18) 

## Institutional Holdings Trends

Increase: 317 funds Decrease: 178 funds

Main Peer Groups - \% Shares Owned by Institutions
January 18, 2013 - December 31, 2018


## CEF / BDC Institutional Investors

## (4Q 18)

```
MORGAN STANLEY
WELLS FARGO COMPANY MN
UBS Group AG
BANK OF AMERICA CORP DE
5 Invesco Ltd
6 GUGGENHEIM CAPITAL LLC
7 \text { Karpus Management Inc}
8 CITY OF LONDON INVESTMENT MANAGEMENT CO LTD
9 Advisors Asset Management Inc
10 SIT INVESTMENT ASSOCIATES INC
11 ROYAL BANK OF CANADA
12 RIVERNORTH CAPITAL MANAGEMENT LLC
13 RAYMOND JAMES ASSOCIATES
1 4 1 6 0 7 \text { Capital Partners LLC}
15 THORNBURG INVESTMENT MANAGEMENT INC
16 LAZARD ASSET MANAGEMENT LLC
17 PARAMETRIC PORTFOLIO ASSOCIATES LLC
1 8 \text { Saba Capital Management L P}
1 9 \text { Raymond James Financial Services Advisors Inc}
20 COHEN STEERS INC
```

MORGAN STANLEY
WELLS FARGO COMPANY MN
UBS Group AG
BANK OF AMERICA CORP DE
Invesco Ltd
GUGGENHEIM CAPITAL LLC
Karpus Management Inc
CITY OF LONDON INVESTMENT MANAGEMENT CO LTD
Advisors Asset Management Inc
SIT INVESTMENT ASSOCIATES INC
ROYAL BANK OF CANADA
RIVERNORTH CAPITAL MANAGEMENT LLC
RAYMOND JAMES ASSOCIATES
1607 Capital Partners LLC
THORNBURG INVESTMENT MANAGEMENT INC
LAZARD ASSET MANAGEMENT LLC
PARAMETRIC PORTFOLIO ASSOCIATES LLC
Saba Capital Management LP
Raymond James Financial Services Advisors Inc
20 COHEN STEERS INC

| $\$ 5,580,908,522$ <br> $\$ 3,373,828,780$ <br> $\$ 2,666,339,954$ <br> $\$ 2,352,119,104$ <br> $\$ 1,333,138,275$ <br> $\$ 1,290,901,233$ <br> $\$ 1,124,150,911$ <br> $\$ 1,112,965,763$ <br> $\$ 1,103,798,212$ <br> $\$ 1,045,670,861$ <br> $\$ 990,175,427$ <br> $\$ 946,545,394$ <br> $\$ 872,337,072$ <br> $\$ 851,539,442$ <br> $\$ 759,194,292$ <br> $\$ 706,266,505$ <br> $\$ 665,250,485$ <br> $\$ 581,947,372$ <br> $\$ 497,560,002$ <br> $\$ 472,158,299$ |
| ---: |


| 21 | JPMORGAN CHASE CO | $\$ 471,100,652$ |
| :--- | :--- | :--- |
| 22 | Relative Value Partners Group LLC | $\$ 469,682,525$ |
| 23 | STIFEL FINANCIAL CORP | $\$ 445,675,940$ |
| 24 | AMERIPRISE FINANCIAL INC | $\$ 433,840,420$ |
| 25 | COMMONWEALTH EQUITY SERVICES LLC | $\$ 425,661,014$ |
| 26 | LPL Financial LLC | $\$ 393,339,538$ |
| 27 | Muzinich Co Inc | $\$ 391,184,763$ |
| 28 | McGowan Group Asset Management Inc | $\$ 334,008,171$ |
| 29 | LADENBURG THALMANN FINANCIAL SERVICES INC | $\$ 330,883,052$ |
| 30 | ROBINSON CAPITAL MANAGEMENT LLC | $\$ 322,259,468$ |
| 31 | BANK OF MONTREAL CAN | $\$ 315,997,721$ |
| 32 | VAN ECK ASSOCIATES CORP | $\$ 311,360,526$ |
| 33 | ARES MANAGEMENT LLC | $\$ 271,756,673$ |
| 34 | GOLDMAN SACHS GROUP INC | $\$ 230,813,501$ |
| 35 | Cambridge Investment Research Advisors Inc | $\$ 217,198,826$ |
| 36 | Fiera Capital Corp | $\$ 215,462,734$ |
| 37 | Oxbow Advisors LLC | $\$ 214,469,200$ |
| 38 | Advisor Group Inc | $\$ 213,542,027$ |
| 39 | HighTower Advisors LLC | $\$ 210,536,646$ |
| 40 | RMB Capital Management LLC | $\$ 205,360,986$ |

Source: CEFData.com
All 13 Filings $=\$ 52$ billion. Top $40=\$ 35$ Billion

## CEF/BDC

## Primary Activist / Institutional Investors

## Activist:

1. Ancora Advisors
2. Bull Dog Investors
3. Special Opportunities Fund (SPE -- Bulldog)
4. City of London
5. Ironsides Partners
6. Karpus Investment Management
7. Western Investment
8. Saba Capital Management
9. Elliott Associates (BDCs)
10. Wynnefield Capital (BDCs)

## Followers:

1. Punch \& Associates Investment Management
2. Relative Value Partners
3. 1607 Capital Partners LLC
4. Rivernorth Capital Management
5. SIT Investment Associates*
6. DG Capital Management (BDCs)
7. Sims Capital Management (BDCs)

Total Assets at work 12/31/18-\$1.5 Billion Activist // \$16 Billion Followers \& Activist

# Closed-End Fund Corporate Actions / Activist Update 

4Q 2018

| Month <br> Filed | Filing | Closed-End Fund/BDC | Investor/Who | Notes |
| :---: | :---: | :---: | :---: | :---: |
| Dec | 13D/A | China Fund (CHN) | City of London | 27.6\% (Inc) <br> Intent to vote against <br> current directors |
| Dec | Proxy | D\&P Util \& Corp Bnd Tr (DUC) | Public | Secondary offer <br> proposal |
| Dec | 13G/A | WA Hi Incm Fd II (HIX) | Saba | $10.1 \%$ (Inc) |
| Dec | Announ <br> cement | Hercules Capital (HTGC) | Public | Leverage Amount <br> Increase - approved |
| Nov | 13D/A | BR Enh Govt Fd (EGF) | SIT Investment | $34.9 \%$ (Dec) |
| Nov | 13D/A | Taiwan Fund(TWN) | City of London | 40.1\% (Dec) <br> Unhappy with discount policy <br> and invstmnt performance |

## Closed-End Fund Corporate Actions / Activist Update

| Month <br> Filed | Filing | Closed-End Fund/BDC | Investor/Who | Notes |
| :---: | :---: | :---: | :---: | :---: |
| Nov | $13 G$ | Madison Cov Call \& Eq Stgc (MCN) | Karpus | 5.4\% (Dec) |
| Oct | Proxy | Abd Tot Dyn Div Fd (AOD) | Saba | Board declassification <br> proposal |
| Oct | Announ <br> cement | Solar Capital (SUNS) | Public | Secondary Offering - <br> approved |
| Oct | $13 D$ | Alliance CA Muni Incm Fd (AKP) | Bulldog | $12.4 \%$ (Inc) |
| Proxy | Announ <br> cement | Japan Sml Caplz Fd (JOF) | Steiner | Board declassification |
| proposal |  |  |  |  |

## Activist \& Follower Ownership (13D/13G) by Investment Focus


-Taxable Bond
回BDC

- Specialty Equity

■Non U.S. Equity
-U.S. Equity

- National Muni Bond
- Single State Muni Bond

Note: millions of dollars, data as of 12/31/2018, cefdata.com

| CEF Activist Ownership | $\mathbf{\$ 2 0 , 6 5 7}$ |
| :--- | :---: |
| Top 5 Peer Groups |  |
| BDC Debt | $\$ 3,643$ |
| Loan Participation | $\$ 1,757$ |
| Asian Equity | $\$ 1,584$ |
| High Yield Bond | $\$ 1,386$ |
| Covered Call | $\$ 1,222$ |

## Interval Closed-Ended Fund (iCEFs)

Interval funds (iCEFs) are growing in popularity as an alternative investment vehicle. Many interval funds can be seen as the best of both worlds. ICEFs had a slow start, the second iCEF wasn't created until 2001 and the third fund formed in 2005. The structure is a small ( $0.1 \%$ ) portion of the overall multitrillion dollar fund industry. However, iCEFs are growing assets quickly, in the $50 \%$ range annually with 50 current funds with a combined \$29.12B in AUM as of $12 / 31 / 18$. This compares to CEF/BDC listed AUM of $\$ 257$ billion in 554 funds according to CEFData.com.

## Whitepaper / Overview on: www.CEF-Blog.com

## Interval Fund Sector Breakdown

| - Equity | - Real Estate | - Structured Credit | - Real Estate Debt |
| :--- | :--- | :--- | :--- |
| - Reinsurance | - Global Credit | - VC/PE | - Option Writing |

Interval Funds By Year



## PIMCO Flexible Credit Income Fund Bono-Gobal Creod

## Fund Info

Website
Sponsor
Custodian
Transfer Agent
Fiscal Year
Redemption Details
Inception Date

Objective: The Fund seeks to provide attractive risk-adjusted returns and current income.

| Capital Structure |  |
| :---: | :---: |
| Managed Assets (Sept. 30, 2018) | $\$ 648 \mathrm{M}$ |
| Net Assets (Sept. 30, 2018) | $\$ 434 \mathrm{M}$ |
| Leverage as\% of Managed Assets (Sept. 30, 2018) | $33.0 \%$ |


| Fundamental Data <br> (From Shareholder Report dated June 30, 2018) |  |
| :---: | :---: |
| Total Assets | \$825M |
| Net Assets | \$539M |
| Leverage as\% of Total Assets | 28.9\% |
| Leverage Expense as \% of NAV | 0.6\% |
| Rel Lev Cost\% | 1.32\% |
| Leverage Type | Borrowings \& Other Financing |
| Portfolio Turnover | 14.00\% |
| Latest Repurchase Offer |  |
| Status | In Progress |
| Start Date | Jan. 11, 2019 |
| End Date | Feb. 7, 2019 |
| Shares (\%) to Repurchase | 5.00 |


| MPT Statistics |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ticker NAV StDev (1yr) |  | NAV StDev (3yr) |  |  | $\begin{aligned} & \text { Beta }(2 \mathrm{Yr}) \\ & \text { vs. } 5 \& P \text { POO(TR) } \end{aligned}$ | $\underset{\text { vs. } S \& P 500(T R)}{\operatorname{Corr}(2 \mathrm{Yr})}$ | Beta (2Yr) vs. Txbl Bond \& BDC Index (Price) | Corr (2Yr) <br> vs. Txbl Bond\& BDC Index (Price) |  |  | Beta (2Yr) vs. Txbl Bond\& BDC Index (NAV) | $\begin{gathered} \text { Corr (2Yr) } \\ \text { vs. Txbl Bond \& } \\ \text { BDC Index (NAV) } \end{gathered}$ |
| PFFLX | X | - |  |  | -0.08 | 41.9 | -0.02 | -16.1 |  |  | 0.72 | 14.9 |
| PFLEX | X 3.72 | - |  |  | 0.08 | 40.1 | 0.11 | 70.5 |  | 0.64 |  | 56.2 |
| Ticker |  | Last Q | Q 3mo |  | NAV Total Return (Rolling) |  |  |  | $5 y \mathrm{l}$ | 10yr |  | Inception |
|  |  | YTD |  |  | 1yr | 3 yr |  |  |  |  |  |
|  | PFFLX |  | - |  | - | 0.21 | - | - | - |  |  | -3.94 |  |
|  | PFLEX | -3.35 |  | -4.55 | 2.12 | -0.37 | - | - |  | - | 5.11 |  |
| Total Return Calendar |  |  |  |  |  |  |  |  |  |  |  |  |
| Ticker |  | 2014 |  |  | 2015 | 2016 | 2017 |  |  | 2018 |  | YTD |
|  | PFFLX | - |  |  | - | - |  | - |  | - |  | 0.212.12 |
|  | PFLEX |  | - |  | - | - |  | - |  |  | 1.47 |  |

3 Year Distribution Levels(\$): PFLEX


# Newly Launched iCEFs (3Q - 4Q 2018) 

| Funds | Major Group | SEC Effective <br> Date |
| :---: | :---: | :---: |
| NexPoint Healthcare Opportunities Fund | Equity | $2018-05-10$ |
| OFI Carlyle Global Private Credit Fund | Bond | $2018-05-31$ |
| American Beacon Sound Point Enhanced Income Fund | Bond | $2018-06-29$ |
| Flat Rock Opportunity Fund | Bond | $2018-07-02$ |
| PIMCO Flexible Municipal Income Fund | Bond | $2018-07-19$ |
| Variant Alternative Income Fund | Bond | $2018-08-30$ |
| Pioneer ILS Bridge Fund | Bond | $2018-09-11$ |
| American Beacon Apollo Total Return Fund | Bond | $2018-09-12$ |
| Thrivent Church Loan Income Fund | Bond | $2018-09-28$ |
| Broadstone Real Estate Access Fund | Equity | $2018-10-01$ |

# Recent Active iCEFs 

## (launched 3Q'17-4Q'18)

| Fund Name | Structure | Major Group | Sub-Group | Sponsor | Inception | Min Inv | Lev(\%) | Managed <br> Assets(M) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Broadstone Real Estate Access Fund | Interval | Equity | Real Estate / Real Asset | Broadstone | 10/4/2018 | 2,500 | 0.0 | 0.1 |
| American Beacon Sound Point Enhanced Income Fund | Interval | Bond | Loans / Structured Credit | American Beacon | 7/2/2018 | 100,000 | 0.0 | 5.2 |
| OFI Carlyle Global Private Credit Fund | Interval | Bond | Loans / Structured Credit | OCP | 6/4/2018 | 25,000 | 21.0 | 69.9 |
| NexPoint Healthcare Opportunities Fund | Interval | Equity | Global Equity | NexPoint Advisors | 5/10/2018 | 500 | 0.0 | 5.0 |
| Tortoise Tax-Advantaged Social Infrastructure | Interval | Bond | Loans / Structured Credit | Tortoise | 3/26/2018 | 2,500 | 0.0 | 70.8 |
| Angel Oak Strategic Credit Fund | Interval | Bond | Global Credit | Angel Oak | 12/26/2017 | 1,000 | 0.0 | 6.3 |
| FS Credit Income Fund | Interval | Bond | Global Credit | FS Credit | 11/1/2017 | 2,500 | 76.9 | 118.5 |
| USQ Core Real Estate Fund | Interval | Equity | Real Estate / Real Asset | Union <br> Square | 9/27/2017 | 2,500 | 0.0 | 28.0 |
| Versus Capital Real Assets Fund | Interval | Equity | Real Estate / Real Asset | Versus <br> Capital | 9/18/2017 | 10,000 | 0.0 | 1128.2 |
| City National Rochdale Select Strategies Fund | Interval | Bond | Reinsurance / Insurance Linked Securities | City National | 7/27/2017 | 1,000,000 | 0.0 | 45.6 |

Source: CEFData.com
Total Active iFunds: 50. Total Assets: \$29.12B

## CEFA's Outlook for 1Q and 2019

- US Equity Funds
- Non-US Equity Funds
- Specialty Equity (Sector) Funds
- Taxable Bond Funds

- National Municipal Bond (Tax-Free) Funds
- State Specific Municipal Bond (Tax-Free) Funds
- Debt-Focused Business Development Companies (BDCs)
- Equity-Focused Business Development Companies (BDCs)
- Sustainable CEF Portfolio Distribution Yields, Beta, Correlations, Duration and After-Tax Income, Gross Asset Exposure, Leverage


# Closed-End Funds \& BDCs in a Rising Rate Environment 

(March 2004 to September 2007)

| Group/Sector | $\stackrel{\#}{\text { CEFs }}$ | Avg Total Return on Mkt Pr. | \% Funds w/ Neg TR Perf | $\begin{gathered} \hline \text { Avg } \\ \text { Yield } \\ \text { Change } \\ \% \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \text { \% CEFs } \\ & \text { with } \\ & \text { Dividend } \\ & \text { Changes } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { US Equity } \\ & \text { Funds } \end{aligned}$ | 30 | +37.7\% | 3.3\% | +100.2\%* | 63.3\% |
| Non US Equity Funds | 39 | +133.0\% | 2.6\% | +681.2\%* | 46.2\% |
| Specialty Equity Funds | 34 | +30.6\% | 11.8\% | +5.65\% | 79.4\% |
| Taxable Bond Funds | 95 | +19.3\% | 4.2\% | -2.06\% | 81.1\% |
| National Municipal Bond Funds | 89 | +17.1\% | 2.3\% | -18.91\% | 96.7\% |
| State Focused Muni Bond Funds | 93 | +12.92\% | 12.4\% | -15.70\% | 100\% |
| Debt-Focused BDC Funds | 5 | +31.94\% | 0.0\% | +4.42\% | 100\% |
| Average Traditional CEF | 361 | +28.48\% | 6.4\% | -2.50\% | 97.2\% |
| S\&P 500 TR |  | +42.33\% TR |  |  |  |
| Barclays Global Agg. Bond Index |  | +16.96\% TR |  |  |  |
| Barclays Municipal Bond Index |  | +13.26\% TR |  |  |  |

Full article on our blog: www.CEF-Blog.com

Avg. Yield change is expressed in percentage terms. If the yield went from $8 \%$ to $7 \%$ the calculation would be $-12.5 \%$, not $-1 \%$. Also the column that shows the percentages of funds with dividend changes includes funds with increases, and is meant to help show which areas of the CEF universe are likely to have a higher number of funds that change their distribution policies.

Index Data from Thompson Reuters. CEF data from CEF Universe Data and Yahoo Finance.

* Over the 43 month period, US CEFs went from yields of $6.1 \%$ yields to $8.1 \%$ and Non-US CEFs went from yields of $4.9 \%$ to $6.1 \%$. Many of the dividends came as semi-annual or annual dividends and were driven by pass through capital gains vs. income to maintain the tax-beneficial status for the fund itself.


## CEF Advisors Links

- CEF Advisors' Website: www.CEFadvisors.com
- CEF/BDC Index Data: www.CEFdata.com/cefaindex
- CEFA's Blog: www.CEF-Blog.com / CEF/BDC Research Sites: www.BDCUniverse.net -- www.CEFdata.com
- Published Articles
- Seeking Alpha: http://seekingalpha.com/author/john-cole-scott/articles
- WealthManagement.com: http://wealthmanagement.com/author/john-scott
- Vimeo Channel: https://vimeo.com/johncolescott/videos
- Weekly CEF Data (14 Day Trial), Daily News Alerts (10 Day Trial), www.CEFUniverse.com
- CEF Universe Data Definitions: http://www.cefadvisors.com/Download/CEFUDataDefinitions.pdf
- CEFA's Form ADV Part 2A and 2B http://www.cefadvisors.com/Download/ADV-II-Form.pdf


## For Your Information CEF Resources

CEF/BDC Fund Profiles: www.cefdata.com
The Closed-End Fund Association: www.Closed-EndFunds.com
CEF Connect (Nuveen Sponsored): www.CEFconnect.com
Morningtar's CEF Site:
http://www.morningstar.com/Cover/CEF-Closed-End-Funds.aspx


Investment Company Institute: http://www.ici.org/research\#fact books
CEFNetwork (Pristine Advisers): www.CEFnetwork.com
CEF Insight (Activist Info from AST Fund Solutions): www.CEFinsight.com
Capital Link's CEF Portal: http://cef.capitallink.com/
Morningstar Discussion Board:
http://socialize.morningstar.com/NewSocialize/forums/100000006.aspx
Yahoo CEF Discussion Board: https://groups.yahoo.com/neo/groups/closedendfunds2/info
The CEF Network on LinkedIN: www.CEF-Network.com
Seeking Alpha: http://seekingalpha.com/articles?filters=closed-end-funds

More Useful Links at: www.cefadvisors.com/investRes.html

## CEF Advisors' Model Portfolio Offerings

Data Definitions

| Portfolio | Discount | 1 Yr Avg Discount | 3 Yr Avg Discount | Rel Disc Range(3yr) | $\begin{gathered} \text { Mk } \\ \text { Yield } \end{gathered}$ |  | After <br> Tax <br> Yield | $\begin{array}{\|c\|} \text { Tax } \\ \text { Friction } \end{array}$ | $\begin{array}{\|c} 1 \mathrm{Yr} \\ \mathrm{RoC} \\ \% \end{array}$ | $\qquad$ | $\begin{array}{\|c} \mathrm{Lev} \\ \% \end{array}$ | $\begin{array}{\|c\|} \hline \text { Est } \\ \text { Lev } \\ \text { Cost } \end{array}$ | Non Lev <br> Expense Ratio | 3 Yr NAV Volatility | $\begin{gathered} 3 \mathrm{Yr} \\ \text { NAV } \\ \text { TR } \end{gathered}$ | Purchases Turnover | Sales Turnover | \% Equity Exposure | \% Bond <br> Exposure | \# Holdings | Cash Weighted Duration | $\begin{aligned} & \text { Beta } \\ & \text { (2yr) } \end{aligned}$ | $\begin{aligned} & \text { Comp } \\ & \text { NAV } \\ & \text { TR } \end{aligned}$ | Comp Discount |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. CEFA International Opportunity | -11.61 | -10.79 | -11.29 | 51.51 | 8.22 | 6.34 | 7.02 | 1.20 | 27.1 | 7.1 | 15.2 | 0.47 | 1.37 | 12.68 | 8.52 | 52.76 | 57.51 | 63.77 | 32.59 | 28 | 1.30 | 0.52 | -1.86 | -3.63 |
| 2. CEFA Diversified Equity | -14.96 | -13.99 | -14.76 | 48.40 | 7.95 | 6.34 | 6.79 | 1.16 | 15.4 | 1.9 | 10.1 | 0.36 | 1.94 | 16.01 | 9.43 | 57.17 | 66.79 | 88.38 | 8.93 | 25 | N/A | 0.86 | -1.64 | -3.54 |
| 3. CEFA Diversified Growth | -11.94 | -11.40 | -11.69 | 50.95 | 9.58 | 7.10 | 7.98 | 1.60 | 22.0 | 2.6 | 20.6 | 1.16 | 1.95 | 13.87 | 9.81 | 51.58 | 51.62 | 63.17 | 34.40 | 32 | 0.97 | 0.72 | -1.40 | -3.66 |
| 4. CEFA Hybrid (High) Income | -9.46 | -7.30 | -7.55 | 48.44 | 11.50 | 8.30 | 10.02 | 1.48 | 45.4 | 10.3 | 27.1 | 1.51 | 2.19 | 12.95 | 9.14 | 59.89 | 63.92 | 52.23 | 45.09 | 31 | 1.23 | 0.63 | -1.05 | -1.57 |
| 4.1. CEFA Hybrid (High) Income Monthly | -7.46 | -5.63 | -6.38 | 49.61 | 11.61 | 8.58 | 9.94 | 1.67 | 41.3 | 10.2 | 27.3 | 1.56 | 2.38 | 10.76 | 9.31 | 64.14 | 64.77 | 44.01 | 53.50 | 34 | 1.83 | 0.52 | -0.92 | -0.39 |
| 5. CEFA Discount Opportunity | -17.51 | -16.47 | -15.15 | 42.90 | 7.87 | 5.33 | 6.57 | 1.30 | 15.8 | 0.6 | 22.2 | 1.35 | 1.97 | 11.68 | 7.90 | 48.70 | 51.80 | 59.40 | 38.21 | 37 | 1.14 | 0.64 | -1.89 | -8.21 |
| 6. CEFA Alternative Income | -8.80 | -7.24 | -8.35 | 50.74 | 9.45 | 6.92 | 7.79 | 1.66 | 24.4 | 3.6 | 25.6 | 1.48 | 2.32 | 10.94 | 10.26 | 69.03 | 59.87 | 42.54 | 53.77 | 28 | 1.17 | 0.57 | 0.77 | -0.70 |
| 6.1 CEFA Alternative Income - Tax Advantaged | -9.05 | -7.23 | -6.19 | 43.10 | 9.25 | 6.56 | 7.91 | 1.34 | 28.4 | 8.7 | 29.1 | 1.51 | 2.05 | 10.09 | 7.85 | 63.03 | 61.50 | 37.25 | 61.05 | 38 | 1.68 | 0.48 | 0.00 | -1.24 |
| 7. CEFA Foundation/Balanced | -10.05 | -9.15 | -8.99 | 50.97 | 9.24 | 6.84 | 7.69 | 1.55 | 24.8 | 2.9 | 23.2 | 1.14 | 1.80 | 11.87 | 9.76 | 48.73 | 51.85 | 50.95 | 46.56 | 30 | 1.32 | 0.58 | -0.30 | -2.42 |
| 7.1 CEFA Foundation / Balanced Tax Advantaged | -8.33 | -7.67 | -7.62 | 47.64 | 8.19 | 6.19 | 7.28 | 0.91 | 31.1 | 6.1 | 22.1 | 0.89 | 1.49 | 13.33 | 8.66 | 52.66 | 58.15 | 57.34 | 40.77 | 30 | 1.93 | 0.66 | -0.17 | -1.20 |
| 8. CEFA Taxable Bond \& BDC | -9.46 | -7.47 | -7.74 | 48.31 | 8.86 | 6.15 | 6.88 | 1.98 | 9.0 | 1.2 | 30.5 | 1.65 | 2.27 | 5.24 | 8.93 | 71.05 | 59.54 | 9.96 | 86.69 | 25 | 2.69 | 0.28 | 0.83 | -1.90 |
| 9. CEFA Dividend Confidence Model | -9.96 | -8.79 | -8.56 | 47.62 | 8.52 | 6.20 | 6.95 | 1.57 | 16.9 | 0.0 | 25.5 | 1.25 | 1.90 | 11.27 | 9.89 | 58.34 | 55.32 | 52.60 | 45.90 | 36 | 1.24 | 0.66 | -1.27 | -2.39 |
| 10. CEFA Diversified Low Beta | -10.24 | -9.16 | -8.46 | 45.07 | 8.42 | 6.12 | 6.99 | 1.43 | 24.1 | 6.4 | 25.2 | 1.19 | 1.93 | 9.49 | 7.45 | 54.28 | 58.42 | 42.16 | 55.59 | 32 | 0.92 | 0.45 | 2.60 | -2.76 |
| 11. CEFA Low Correlation | -7.48 | -6.66 | -6.16 | 50.27 | 8.59 | 6.49 | 7.31 | 1.28 | 17.7 | 2.6 | 24.8 | 1.35 | 2.43 | 10.17 | 7.76 | 48.63 | 47.36 | 45.04 | 52.34 | 27 | 2.65 | 0.52 | 0.08 | -1.10 |
| 11.1. CEFA Low Correlation - IRA | -6.70 | -6.76 | -6.83 | 52.31 | 8.67 | 6.65 | 7.13 | 1.54 | 21.9 | 5.2 | 22.7 | 1.30 | 1.84 | 10.45 | 8.52 | 37.22 | 38.57 | 40.40 | 57.73 | 24 | 2.44 | 0.50 | 0.39 | -0.96 |
| $\begin{array}{\|c\|} \text { 12. CEFA Div Tax-Sensitive Income } \\ \text { (Eq Wt) } \end{array}$ | -7.26 | -6.67 | -6.03 | 45.97 | 9.04 | 6.95 | 8.51 | 0.53 | 48.6 | 8.3 | 24.2 | 1.03 | 1.37 | 15.26 | 7.32 | 42.53 | 47.12 | 56.10 | 42.98 | 19 | 2.09 | 0.68 | -0.35 | -1.65 |
| 12.1. CEFA Div Tax-Sensitive Income (MuniOW) | -7.40 | -6.72 | -5.68 | 42.69 | 7.99 | 6.27 | 7.53 | 0.46 | 34.1 | 8.0 | 24.0 | 0.91 | 1.25 | 11.69 | 5.58 | 38.17 | 41.94 | 43.79 | 54.88 | 19 | 2.81 | 0.46 | -0.08 | -1.64 |
| 13. CEFA BDC Select | -6.27 | -1.96 | -0.93 | 48.68 | 10.11 | 6.66 | 7.58 | 2.53 | 0.0 | 1.0 | 41.4 | 4.33 | 3.94 | 2.67 | 8.70 | 38.07 | 38.07 | 8.98 | 86.65 | 13 | N/A | 0.50 | 1.21 | 7.78 |
| 13.1. CEFA BDC Monthly Income | -7.47 | -7.12 | -4.39 | 52.84 | 9.96 | 6.13 | 7.47 | 2.49 | 0.0 | 0.0 | 45.3 | 4.69 | 4.26 | 3.39 | 7.14 | 29.36 | 29.36 | 10.82 | 87.64 | 8 | N/A | 0.58 | -0.08 | 6.58 |
| 13.2. CEFABDC - Low Beta | -3.13 | -0.74 | -0.01 | 47.39 | 9.77 | 6.29 | 7.35 | 2.42 | 0.0 | 0.6 | 44.6 | 4.72 | 4.08 | 2.50 | 8.10 | 30.98 | 30.98 | 10.82 | 86.46 | 10 | N/A | 0.50 | 1.33 | 10.92 |
| 13.3. CEFA BDC Premium | 2.94 | 8.02 | 12.12 | 42.33 | 9.44 | 6.60 | 7.08 | 2.36 | 0.0 | 0.0 | 44.8 | 4.15 | 3.61 | 2.21 | 9.62 | 36.36 | 36.36 | 6.24 | 92.16 | 11 | N/A | 0.44 | 1.41 | 16.99 |
| 14. CEFA Select Municipal | -6.20 | -7.10 | -3.23 | 38.50 | 5.51 | 3.78 | 5.51 | 0.00 | 0.2 | 0.1 | 36.9 | 1.33 | 1.05 | 3.54 | 3.06 | 19.26 | 21.28 | 0.04 | 99.80 | 12 | 8.19 | 0.00 | 0.26 | 0.39 |
| 14.1. CEFA Low Duration Municipal | -6.17 | -6.40 | -4.31 | 26.40 | 3.66 | 2.86 | 3.66 | 0.00 | 0.0 | 0.0 | 15.7 | 0.58 | 0.80 | 2.48 | 1.98 | 21.51 | 28.16 | 0.00 | 99.10 | 5 | 2.86 | 0.00 | -0.14 | 0.47 |

## DISCLOSURES




NOTES: Distribution type sourced from CEFdata.com. For specific information about a fund's distribution sources, visit the fund sponsor's website.
 (FDIC). Shares of closed-end funds (CEFs) and business development companies (BDCs) are subject to investment risks, including the possible loss 9列
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## Current CEFA Portfolio Modes

CEFA Portfolio Models' Investment Objectives. Diversified models typically hold 20-40 positions and sector models hold 5-15. All CEFA models start with our asset allocation and market outlook. Then, we select funds that meet or exceed our Trifecta analysis for discount direction, dividend sustainability and manager or NAV performance, blending our fundamental and data driven investment resources.

1. International Opportunity: Diversified portfolio of non-US and global sector of closed-end funds. We seek to blend our global market outlook with the ability to buy funds, often at significant discounts to NAV while having the opportunity for discount narrowing over time. Yield is a byproduct of the model as many CEFs pay at least annual or semi-annual distributions. We expect the model to be $60 \%-80 \%$ Equity exposure and $55 \%$ to $85 \%$ Non US holdings at the fund level. We seek duration of the portfolio on a "cash weighted" basis under 2 and a Beta to the S\&P 500 between 0.75 and 0.90 .
2. Diversified Equity: Diversified portfolio seeking primarily equity exposure. The Beta to the $S \& P 500$ is expected to be 0.85 to 1.15 . This model is a good candidate for adding SpiderRock's option overlay, as you could outperform in an option-overlaid portfolio when the holdings are more volatile by nature. This portfolio is expected to have little to no duration exposure.
3. Diversified Growth: Diversified portfolio focusing on the sectors and funds where we see the best risk-adjusted growth potential. Yield is a byproduct of the model as many CEFs pay at least annual or semi-annual distributions. We expect the model to be $65 \%$ to $90 \%$ equity exposure based on the fund's reported holdings and seeking to have duration of the portfolio on a "cash weighted" basis around 1 and a Beta to the S\&P 500 between 0.70 and 1.0 .
4. Hybrid (High) Income: Diversified portfolio seeking $50 / 50$ allocation to equity and debt at the fund level; focusing on the highest sustainable dividend levels possible in the current environment with at least $75 \%$ of funds paying monthly. Historically $8 \%-9 \%$ is our target income level. We seek to have duration of the portfolio on a "cash weighted" basis under 2 and a Beta to the $S \& P 500$ between 0.75 and 0.95 . We offer a $100 \%$ monthly paying version of this model for investors that seek this feature to their investment needs. A SpiderRock overlay can be a nice addition to this model.
5. Discount Opportunity: Diversified portfolio seeking $50 / 50$ allocations to equity and debt at the fund level. Researching funds that both have a larger that average absolute discount to NAV as well as wider than normal Comp Discount (vs. peer-group average) without a significantly worse NAV total return performance vs. their peer funds. This model can work well for contrarian investors. A SpiderRock overlay can be a nice addition to this model.
6. Alternative Income: Diversified portfolio seeking $50 / 50$ allocation to equity and debt at the fund level; focusing on less "plain vanilla" or core sectors and managers that could offer a more "hedge fund" like experience and a diversifier to traditional equity and bond allocations. We seek $2 \%$ a quarter in distributions at roughly half the Beta o the S\&P 500 with "cash weighted" duration under 2 . A SpiderRock overlay can be a nice addition to this model.
7. Foundation/Balanced: Diversified model based on a $60 \%$ equity / $40 \%$ debt allocation at the fund level. We believe this model is a "medium risk portfolio" for a typical retired investor. Historically $7 \%-8 \%$ is our target income level. We seek to have duration of the portfolio on a "cash weighted" basis under 2.5 and a Beta to the S\&P 500 between 0.60 and 0.85 . This model is a good candidate for adding SpiderRock's option overlay, as you could outperform in an option-overlaid portfolio at these Beta levels. We offer a "Tax Advantaged" version of this model, that could reduce the after tax friction by $65 \%-75 \%$ for a typical investor in a taxable environment. We also offer more conservative portfolio (Conservative Diversified), comprised of $2 / 3$ the $\mathrm{F} / \mathrm{B}$ model and $1 / 3$ invested in non-traditional asset classes using ETFs and open-end funds to reduce the expected volatility over time.

## Current CEFA Portfolio Modes

8. Taxable Bond and BDC: Diversified portfolio focused on the taxable bond and debt-focused business development company (BDC) sectors. This income focused model historically targets a $7 \%-8 \%$ income level. It seeks "cash weighted" duration under 4 and a Beta to the S\&P 500 from $0.35-0.50$.
9. Dividend Confidence Model: Diversified portfolio of roughly $50 \%$ equity and bond funds where we see above average dividend coverage as the primary factor after our Trifecta analysis. Historically $6.25 \%-7.5 \%$ is our target income level and we expect durations under 2.5 and a beta under 0.80 .
10.Diversified Low Beta: Diversified portfolio seeking $50 / 50$ allocations to equity and debt at the fund level focusing on a lower Beta for to the $S \& P 500$ in the sector when selecting funds. We seek to have duration of the portfolio on a "cash weighted" basis under 1.75 and a Beta to the S\&P 500 between 0.40 and 0.60 . This model is a good candidate for adding SpiderRock's option overlay, as you could potentially lower the Beta to 0.25 to 0.40 levels.
11.Low Correlation: Diversified portfolio seeking roughly $50 / 50$ allocations to equity and debt at the fund level. Focusing on exposure to the CEF sectors we find have the lowest long-term NAV correlations to each other. Historically $6 \%-7 \%$ is our target income level. We seek to have duration of the portfolio on a "cash weighted" basis under 3.25 and a Beta to the S\&P 500 between 0.50 and 0.70 . We offer an "IRA" version of this model that replaces Build America Bond (BABs) exposure for the municipal bond exposure. A SpiderRock overlay can be a nice addition to this model.
10. Diversified Tax-Sensitive Income: Designed to maximize after-tax yield for high income investors seeking little-to-no tax friction. Equal weight exposure to three CEF sectors who historically have low correlation: municipal bonds, master limited partnerships and tax-advantage equity funds. Muni's, the most common tax-avoidance sector for many investors has a 39\% 10 Year NAV correlation to MLPs and 33\% correlation to Covered Call Funds. Covered Call funds have only a $70 \%$ correlation to MLP funds. We seek a Beta to the S\&P 500 of 0.55 to 0.70 and an after-tax yield of $6 \%$ to $7 \%$. Duration is expected to be under 4. We offer a Municipal bond overweight version of this model where $50 \%$ of the portfolio is Muni bond CEFs.
13.Business Development Company Select: Diversified portfolio of BDCs with strong fundamental research on each BDC's portfolio and management. Seeking BDCs exposure with above average dividend sustainability, NAV performance, variable and senior secured loan exposure as well as low nonaccruals (defaults). We look for sector and geographic diversity. We expect a Beta to the S\&P 500 of 0.6 to 0.8 and historically yield levels of $8.5 \%$ to $9.5 \%$ are common. BDCs have low 10-year correlation to most asset classes; including $15 \%$ to municipal bond, $13 \%$ to preferred equity and $27 \%$ to REITs and only a $40 \%-43 \%$ correlation to high yield and Sr. loans. We offer a " $100 \%$ monthly paying only", "low Beta" and Premium BDC version of this model.
11. Municipal Bond Select: A focused portfolio managed for $100 \%$ tax-free municipal bond exposure. We seek to build and manage the portfolio for better than average: discount to NAV, NAV total return performance, distribution levels, duration exposure, dividend coverage and other criteria we believe can give investors a better experience when looking to allocate funds into this sector. We also offer this model with lower duration (and yield) exposure.

SpiderRock's Custom Option Overlay for CEFA's diversified portfolios in taxable accounts. This generally reduces Beta by $40 \%-50 \%$ and increases the income on the portfolio by $2 \%-3 \%$ in many but not all market conditions. Learn more at www. SpiderRockadvisors.com

## Speaker's Biography



## John Cole Scott, CFS

EXPERIENCE
CIO of Registered Investment
Advisor Focused Exclusively on CEFs, BDCs \& iCEFs since 2001

EDUCATION
College of William \& Mary
Bachelor of Science in Psychology 2000

## John Cole Scott, cFs

## Chief Investment Officer of Closed-End Fund Advisors

Mr. Scott has worked at Closed-End Fund Advisors since 2001. He holds the FINRA 66 License and the Certified Fund Specialist designation (CFS). He is a graduate of The College of William and Mary and has been quoted and interviewed widely in the financial press and presented at conferences and for investment groups on more than 50 occasions.

In 2008 John founded CEFA's Closed-End Fund Universe, a data service covering all US listed closed-end funds and BDCs. Currently supported by an internal 10 member analyst team with a data manager/ programmer covering the 600+ ticker universe of CEFs/BDCs/iCEFs. They regularly do consulting and projects for CEF/BDC Sponsors, Hedge Funds and Institutional Investors.

Portfolio Consultant with over a quarter billion deposits into a fund focused on BDCs with a fund sponsor partner. He developed 35 CEF/BDC based indexes; 9 diversified portfolio objective, 9 Equity and 15 Bond sector. John is a past board member of The Richmond Association for Business Economics (RABE), and serves as Assistant Treasurer and on the Investment Committee for The New York State Society of The Cincinnati. Board member and Finance \& Investment Committees for The William \& Mary National Alumni Board.

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## Closed-End Fund Advisors

## Thank You For Attending

## Questions?



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[^0]:    Correlation of 3 Month NAV Total Return values between 12/31/2008 and 12/31/2018.

[^1]:    Sources: CEFA's Universe Data as of 12/31/2018 and tax rates from IRS and NY State.

