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

## Closed-End Fund

1st Quarter 2019 Review \& 2nd Quarter 2019 Outlook

Intermediate/Advanced CEF Skill Level

April 11, 2019

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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"
- Custom Discretionary Portfolio Management (SMA), 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 leverages

o BDCs Limited to 200\% (*150\%) asset coverage = total assets / total debt or "one turn" of leverage, excluding 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 | 1,183.44 | -1.11 | 0.91 | 1.77 | 15.86 | 1.07 | 6.45 | 10.43 | 5.66 | 1.77 | 15.86 | 15.86 |
| NAV | 1,172.33 | -0.86 | 0.91 | 1.94 | 10.74 | 1.78 | 7.13 | 9.02 | 5.26 | 1.94 | 10.74 | 10.74 |
| Difference |  | 0.25 | -0.00 | 0.17 | -5.11 | 0.71 | 0.68 | -1.41 | -0.40 | 0.17 | -5.11 | -5.11 |



| $0^{0^{20^{16}}}=0^{20,7}$ | per 20.7 | 30020.7 | 8092007 | $00^{20,7}$ | $0_{0} 20^{77}$ | $=0^{200^{18}}$ | $p e^{20^{18}}$ | $\operatorname{sun} 20^{18}$ | $1 / 9^{20,18}$ | $0+20^{18}$ | $00^{20^{18}}$ | $=0.020^{19}$ | $p e^{20^{19}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

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## CHARACTERISTICS

## PORTFOLIO

## Neighted Average Data

Discount
-4.91\%
Mkt Yield
8.51\%

1 Yr RoC
21.40\%

Equity Exposure
$41.52 \%$
Comp NAV TR
0.61\%

3Yr Disc
-4.24\%
After Tax Yield*
7.12\%

Leverage
23.72\%
\# Holdings 84
Net Assets (M)
1,160

5Yr Disc
-5.00\%
Est Tax Friction* 1.39\%

Non Lev Exp Ratio 1.53\%

Cash Weighted Duration

$$
2.74
$$

Liquidity - 90d (K)
4,029

* Based on marginal tax rates of $25 \%$ and long-term capital gains rates of 15\%.


## Closed-End Fund Advisors

## Asset Class Annual Returns (NAV) 2009-2019

| 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 YTD | 2009-2018 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { Senior Loan } \\ \text { 69.91\% } \end{gathered}$ | $\begin{gathered} \text { MLP } \\ \text { 24.35\% } \end{gathered}$ | $\begin{gathered} \text { Muni Bond } \\ 9.73 \% \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & \mathbf{2 5 . 5 6 \%} \end{aligned}$ | $\begin{gathered} \text { MLP } \\ \mathbf{2 8 . 7 1 \%} \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & \text { 24.47\% } \end{aligned}$ | $\begin{gathered} \text { Preferred } \\ 6.37 \% \end{gathered}$ | $\begin{gathered} \text { MLP } \\ 33.64 \% \end{gathered}$ | World Stock 25.80\% | $\begin{gathered} \text { BDC } \\ 9.39 \% \end{gathered}$ | $\begin{gathered} \text { MLP } \\ \text { 24.28\% } \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & \text { 12.11\% } \end{aligned}$ |
| World Stock 54.35\% | $\begin{aligned} & \text { REIT } \\ & 19.63 \% \end{aligned}$ | $\begin{aligned} & \text { MLP } \\ & \mathbf{4 . 1 4 \%} \end{aligned}$ | Preferred $23.75 \%$ | US Stock 25.62\% | Muni Bond 19.70\% | $\begin{gathered} \text { Muni Bond } \\ 5.53 \% \end{gathered}$ | HY Bond 18.43\% | $\begin{aligned} & \text { us Stock } \\ & \text { 19.79\% } \end{aligned}$ | $\begin{gathered} \text { Muni Bond } \\ 0.52 \% \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & 17.89 \% \end{aligned}$ | Preferred 11.36\% |
| HY Bond 52.35\% | $\begin{aligned} & \text { World Stock } \\ & 14.57 \% \end{aligned}$ | $\begin{gathered} \text { BDC } \\ -0.05 \% \end{gathered}$ | HY Bond 20.49\% | $\begin{aligned} & \text { Convertible } \\ & 20.89 \% \end{aligned}$ | $\begin{aligned} & \text { Preferred } \\ & 17.57 \% \end{aligned}$ | $\begin{gathered} \text { BDC } \\ 3.90 \% \end{gathered}$ | Senior Loan 14.91\% | $\begin{aligned} & \text { Covered Call } \\ & 17.59 \% \end{aligned}$ | Senior Loan -1.34\% | World Stock 13.84\% | $\begin{aligned} & \text { Senior Loan } \\ & \text { 11.25\% } \end{aligned}$ |
| Convertible 51.37\% | $\begin{aligned} & \text { Preferred } \\ & \text { 13.01\% } \end{aligned}$ | Investment Grade $-0.21 \%$ | World Stock $18.27 \%$ | $\begin{gathered} \text { Covered Call } \\ 16.31 \% \end{gathered}$ | US Stock 11.20\% | $\begin{gathered} \text { Covered Call } \\ 1.35 \% \end{gathered}$ | $\begin{aligned} & \text { Convertible } \\ & \text { 12.06\% } \end{aligned}$ | $\begin{aligned} & \text { Preferred } \\ & 14.19 \% \end{aligned}$ | Investment Grade $-2.51 \%$ | $\begin{aligned} & \text { Convertible } \\ & \text { 13.61\% } \end{aligned}$ | $\begin{aligned} & \text { HY Bond } \\ & 10.27 \% \end{aligned}$ |
| $\begin{gathered} \text { MLP } \\ 50.62 \% \end{gathered}$ | $\begin{aligned} & \text { Senior Loan } \\ & 7.40 \% \end{aligned}$ | Preferred $-2.15 \%$ | Convertible 16.40\% | $\begin{gathered} \text { BDC } \\ 13.36 \% \end{gathered}$ | $\begin{gathered} \text { BDC } \\ 8.10 \% \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & 0.95 \% \end{aligned}$ | $\begin{gathered} \text { BDC } \\ 10.09 \% \end{gathered}$ | Convertible 12.57\% | HY Bond $-3.49 \%$ | US Stock 12.26\% | $\begin{aligned} & \text { Convertible } \\ & \mathbf{9 . 1 9 \%} \end{aligned}$ |
| Preferred 42.35\% | HY Bond 7.25\% | $\begin{gathered} \text { Senior Loan } \\ -2.94 \% \end{gathered}$ | Muni Bond 15.38\% | $\begin{aligned} & \text { HY Bond } \\ & \text { 10.02\% } \end{aligned}$ | Investment Grade 7.73\% | $\begin{aligned} & \text { us Stock } \\ & \text { 0.42\% } \end{aligned}$ | Investment Grade 8.74\% | $\begin{aligned} & \text { REIT } \\ & \text { 12.42\% } \end{aligned}$ | US Stock $-5.54 \%$ | $\begin{aligned} & \text { Covered Call } \\ & 11.4 \% \end{aligned}$ | $\begin{gathered} \text { US Stock } \\ 8.46 \% \end{gathered}$ |
| $\begin{aligned} & \text { REIT } \\ & \mathbf{4 0 . 9 1 \%} \end{aligned}$ | $\begin{aligned} & \text { Convertible } \\ & 5.91 \% \end{aligned}$ | $\begin{aligned} & \text { REIT } \\ & -5.08 \% \end{aligned}$ | Investment Grade 15.38\% | $\begin{array}{\|c} \text { Senior Loan } \\ 8.49 \% \end{array}$ | $\begin{gathered} \text { Covered Call } \\ 4.86 \% \end{gathered}$ | Investment Grade -2.38\% | Covered Call 8.67\% | Investment Grade 10.77\% | Convertible $-6.09 \%$ | $\begin{aligned} & \text { Preferred } \\ & 10.62 \% \end{aligned}$ | World Stock 8.11\% |
| Muni Bond 26.64\% | Investment Grade $5.78 \%$ | $\begin{gathered} \text { US Stock } \\ -6.53 \% \end{gathered}$ | US Stock 13.52\% | $\begin{aligned} & \text { REIT } \\ & 3.65 \% \end{aligned}$ | $\begin{gathered} \text { MLP } \\ 3.45 \% \end{gathered}$ | $\begin{gathered} \text { Senior Loan } \\ -2.66 \% \end{gathered}$ | World Stock $8.45 \%$ | $\begin{gathered} \text { BDC } \\ 8.83 \% \end{gathered}$ | Preferred -7.02\% | HY Bond 7.93\% | $\begin{aligned} & \text { MLP } \\ & 7.77 \% \end{aligned}$ |
| Investment Grade 22.04\% | US Stock $4.76 \%$ | HY Bond $-7.49 \%$ | $\begin{gathered} \text { BDC } \\ \mathbf{1 3 . 1 3 \%} \end{gathered}$ | World Stock $3.34 \%$ | $\begin{aligned} & \text { HY Bond } \\ & \text { 1.59\% } \end{aligned}$ | $\begin{aligned} & \text { HY Bond } \\ & -4.99 \% \end{aligned}$ | $\begin{gathered} \text { US Stock } \\ 7.65 \% \end{gathered}$ | $\begin{aligned} & \text { HY Bond } \\ & 8.50 \% \end{aligned}$ | $\begin{aligned} & \text { Covered Call } \\ & -7.31 \% \end{aligned}$ | Investment Grade $5.82 \%$ | $\begin{gathered} \text { Muni Bond } \\ 7.51 \% \end{gathered}$ |
| $\begin{aligned} & \text { us Stock } \\ & \text { 13.73\% } \end{aligned}$ | $\begin{gathered} \text { BDC } \\ \mathbf{2 . 8 7} \% \end{gathered}$ | Covered Call $-8.92 \%$ | $\begin{gathered} \text { Senior Loan } \\ \text { 12.6\% } \end{gathered}$ | Preferred 2.15\% | $\begin{gathered} \text { Senior Loan } \\ \text { 1.32\% } \end{gathered}$ | World Stock -6.55\% | $\begin{gathered} \text { Preferred } \\ 6.89 \% \end{gathered}$ | Muni Bond 8.41\% | $\begin{gathered} \text { REIT } \\ -8.27 \% \end{gathered}$ | $\begin{gathered} \text { Senior Loan } \\ 5.66 \% \end{gathered}$ | $\begin{gathered} \text { BDC } \\ 6.45 \% \end{gathered}$ |
| $\begin{gathered} \text { Covered Call } \\ 7.25 \% \end{gathered}$ | Covered Call $-2.35 \%$ | Convertible $-14.09 \%$ | Covered Call 9.47\% | Investment Grade $-1.5 \%$ | $\begin{gathered} \text { Convertible } \\ 0.12 \% \end{gathered}$ | Convertible $-7.25 \%$ | $\begin{aligned} & \text { REIT } \\ & 6.84 \% \end{aligned}$ | $\begin{gathered} \text { Senior Loan } \\ \text { 4.82\% } \end{gathered}$ | World Stock -14.93\% | $\begin{aligned} & \text { Muni Bond } \\ & 3.85 \% \end{aligned}$ | Investment Grade $6.38 \%$ |
| $\begin{gathered} \text { BDC } \\ -5.10 \% \end{gathered}$ | $\begin{aligned} & \text { Muni Bond } \\ & -4.08 \% \end{aligned}$ | World Stock $-21.93 \%$ | $\begin{gathered} \text { MLP } \\ \text { 1.85\% } \end{gathered}$ | $\begin{aligned} & \text { Muni Bond } \\ & -7.35 \% \end{aligned}$ | $\begin{gathered} \text { World Stock } \\ -0.26 \% \end{gathered}$ | $\begin{gathered} \text { MLP } \\ -44.23 \% \end{gathered}$ | $\begin{gathered} \text { Muni Bond } \\ 0.61 \% \end{gathered}$ | $\begin{gathered} \text { MLP } \\ -5.77 \end{gathered}$ | $\begin{gathered} \text { MLP } \\ -19.05 \% \end{gathered}$ | $\begin{gathered} \text { BDC } \\ 2.41 \% \end{gathered}$ | $\begin{gathered} \text { Covered Call } \\ 4.69 \% \end{gathered}$ |




 2015 was determined using index constituents as of $12 / 31 / 2014$.
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# Closed-End Fund Advisors 

Closed-End Fund Discount / Premium 2009-2019

| 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 YTD | 2009-2018 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { MLP } \\ 10.99 \% \end{gathered}$ | $\begin{gathered} \text { MLP } \\ 7.93 \% \end{gathered}$ | HY Bond 4.81\% | HY Bond 8.27\% | $\begin{gathered} \text { BDC } \\ \mathbf{8 . 0 3 \%} \end{gathered}$ | $\begin{gathered} \text { BDC } \\ 1.69 \% \end{gathered}$ | $\begin{aligned} & \text { MLP } \\ & -6.10 \% \end{aligned}$ | Preferred $-0.77 \%$ | $\begin{gathered} \text { Preferred } \\ 0.03 \% \end{gathered}$ | Convertible $-1.35 \%$ | Preferred $-0.60 \%$ | $\begin{aligned} & \text { MLP } \\ & 0.57 \% \end{aligned}$ |
| Investment Grade $0.49 \%$ | HY Bond 2.99\% | $\begin{gathered} \text { MLP } \\ 3.36 \% \end{gathered}$ | $\begin{gathered} \text { MLP } \\ \mathbf{4 . 8 2 \%} \end{gathered}$ | $\begin{aligned} & \text { MLP } \\ & \text { 1.95\% } \end{aligned}$ | $\begin{gathered} \text { Convertible } \\ -\mathbf{3 . 1 7 \%} \end{gathered}$ | Muni Bond $-6.44 \%$ | Muni Bond $-1.88 \%$ | $\left\lvert\, \begin{gathered} \text { Investment Grade } \\ -2.09 \% \end{gathered}\right.$ | $\begin{gathered} \text { Covered Call } \\ -2.39 \% \end{gathered}$ | Investment Grade $-2.87 \%$ | HY Bond -1.75\% |
| $\begin{aligned} & \text { HY Bond } \\ & -2.97 \% \end{aligned}$ | $\begin{gathered} \text { Muni Bond } \\ 0.57 \% \end{gathered}$ | Investment Grade $0.14 \%$ | Investment Grade 4.32\% | $\begin{gathered} \text { Senior Loan } \\ -0.12 \% \end{gathered}$ | HY Bond $-3.48 \%$ | Investment Grade $-6.81 \%$ | Investment Grade $-3.74 \%$ | $\begin{aligned} & \text { MLP } \\ & -3.11 \% \end{aligned}$ | Investment Grade $-2.74 \%$ | $\begin{array}{\|c} \hline \text { Convertible } \\ -2.98 \% \end{array}$ | Investment Grade -1.81\% |
| Muni Bond $-3.31 \%$ | Investment Grade $0.23 \%$ | $\begin{aligned} & \text { Muni Bond } \\ & -0.53 \% \end{aligned}$ | Preferred 2.87\% | $\begin{aligned} & \text { HY Bond } \\ & -0.63 \% \end{aligned}$ | $\begin{gathered} \text { MLP } \\ -4.54 \% \end{gathered}$ | Preferred $-6.89 \%$ | HY Bond -4.84\% | $\begin{aligned} & \text { Muni Bond } \\ & -3.32 \% \end{aligned}$ | Preferred $-2.91 \%$ | $\begin{gathered} \text { Covered Call } \\ -3.47 \% \end{gathered}$ | $\begin{aligned} & \text { Preferred } \\ & -2.66 \% \end{aligned}$ |
| Preferred $-4.24 \%$ | $\begin{gathered} \text { Senior Loan } \\ -0.02 \% \end{gathered}$ | $\begin{gathered} \text { Senior Loan } \\ -1.27 \% \end{gathered}$ | $\begin{gathered} \text { Muni Bond } \\ \text { 1.99\% } \end{gathered}$ | Investment Grade $-2.92 \%$ | Investment Grade $-4.93 \%$ | $\begin{gathered} \text { Convertible } \\ -7.98 \% \end{gathered}$ | $\begin{aligned} & \text { MLP } \\ & -5.05 \% \end{aligned}$ | $\begin{gathered} \text { Convertible } \\ -\mathbf{4 . 0 0 \%} \end{gathered}$ | $\begin{gathered} \text { MLP } \\ -4.57 \% \end{gathered}$ | Muni Bond $-6.95 \%$ | Muni Bond $-3.15 \%$ |
| World Stock -5.31\% | Covered Call -1.97\% | Preferred $-1.61 \%$ | $\begin{aligned} & \text { BDC } \\ & 0.81 \% \end{aligned}$ | Muni Bond $-3.65 \%$ | $\begin{gathered} \text { Muni Bond } \\ -6.40 \% \end{gathered}$ | $\begin{gathered} \text { BDC } \\ -8.61 \% \end{gathered}$ | $\begin{gathered} \text { Covered Call } \\ -7.39 \% \end{gathered}$ | Covered Call $-4.25 \%$ | $\begin{gathered} \text { Senior Loan } \\ -7.77 \% \end{gathered}$ | HY Bond $-6.97 \%$ | $\begin{aligned} & \text { Senior Loan } \\ & -4.62 \% \end{aligned}$ |
| $\begin{aligned} & \text { Convertible } \\ & -6.25 \% \end{aligned}$ | $\begin{aligned} & \text { Convertible } \\ & -2.09 \% \end{aligned}$ | $\begin{aligned} & \text { Convertible } \\ & -2.40 \% \end{aligned}$ | $\begin{gathered} \text { Senior Loan } \\ -0.37 \% \end{gathered}$ | $\begin{aligned} & \text { Preferred } \\ & -3.83 \% \end{aligned}$ | $\begin{gathered} \text { Senior Loan } \\ -6.49 \% \end{gathered}$ | $\begin{aligned} & \text { Covered Call } \\ & -\mathbf{- 8 . 1 1 \%} \end{aligned}$ | $\begin{gathered} \text { Senior Loan } \\ -8.75 \% \end{gathered}$ | $\begin{gathered} \text { Senior Loan } \\ -4.32 \% \end{gathered}$ | HY Bond $-8.04 \%$ | $\begin{gathered} \text { BDC } \\ -7.26 \% \end{gathered}$ | $\begin{aligned} & \text { Convertible } \\ & 4.68 \% \end{aligned}$ |
| $\begin{aligned} & \text { Covered Call } \\ & -7.30 \% \end{aligned}$ | Preferred $-2.55 \%$ | $\begin{gathered} \text { BDC } \\ -2.92 \% \end{gathered}$ | $\begin{gathered} \text { Convertible } \\ -3.25 \% \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & -5.65 \% \end{aligned}$ | $\begin{aligned} & \text { Covered Call } \\ & -6.62 \% \end{aligned}$ | HY Bond $-8.41 \%$ | $\begin{aligned} & \text { Convertible } \\ & -10.08 \% \end{aligned}$ | $\begin{gathered} \text { BDC } \\ -4.48 \% \end{gathered}$ | $\begin{aligned} & \text { US Stock } \\ & -8.06 \% \end{aligned}$ | $\begin{gathered} \text { MLP } \\ -7.80 \% \end{gathered}$ | $\begin{gathered} \text { BDC } \\ -6.13 \% \end{gathered}$ |
| $\begin{gathered} \text { Senior Loan } \\ -8.43 \% \end{gathered}$ | $\begin{gathered} \text { BDC } \\ -3.37 \% \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & -4.48 \% \end{aligned}$ | $\begin{aligned} & \text { REIT } \\ & -5.20 \% \end{aligned}$ | $\begin{gathered} \text { Convertible } \\ -6.22 \% \end{gathered}$ | Preferred $-6.73 \%$ | $\begin{gathered} \text { Senior Loan } \\ -8.70 \% \end{gathered}$ | $\begin{gathered} \text { BDC } \\ -10.98 \% \end{gathered}$ | HY Bond -5.19\% | $\begin{aligned} & \text { Muni Bond } \\ & -\mathbf{8 . 5 7 \%} \% \end{aligned}$ | US Stock -9.77\% | Covered Call $-6.24 \%$ |
| $\begin{gathered} \text { REIT } \\ -9.66 \% \end{gathered}$ | World Stock $-4.03 \%$ | World Stock $-5.69 \%$ | World Stock -7.47\% | Covered Call -8.13\% | World Stock $-9.04 \%$ | World Stock $-11.00 \%$ | $\begin{aligned} & \text { us Stock } \\ & -11.47 \% \end{aligned}$ | $\begin{gathered} \text { REIT } \\ -9.18 \% \end{gathered}$ | World Stock $-9.6 \%$ | Senior Loan $-10.33 \%$ | World Stock $-8.22 \%$ |
| $\begin{aligned} & \text { US Stock } \\ & -\mathbf{1 0 . 5 6 \%} \end{aligned}$ | US Stock -7.34\% | $\begin{gathered} \text { Covered Call } \\ -7.41 \% \end{gathered}$ | Covered Call -8.83\% | World Stock -8.15\% | $\begin{aligned} & \text { us Stock } \\ & -9.63 \% \end{aligned}$ | $\begin{aligned} & \text { us Stock } \\ & -11.00 \% \end{aligned}$ | $\begin{aligned} & \text { REIT } \\ & -\mathbf{- 1 1 . 6 2 \%} \end{aligned}$ | $\begin{aligned} & \text { US Stock } \\ & -9.44 \% \end{aligned}$ | $\begin{gathered} \text { BDC } \\ -9.75 \% \end{gathered}$ | World Stock $-10.47 \%$ | $\begin{aligned} & \text { REIT } \\ & -8.79 \% \end{aligned}$ |
| $\begin{gathered} \text { BDC } \\ -\mathbf{3 1 . 7 8 \%} \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & -9.10 \% \end{aligned}$ | US Stock $-8.27 \%$ | US Stock $-9.66 \%$ | $\begin{aligned} & \text { US Stock } \\ & -9.32 \% \end{aligned}$ | $\begin{gathered} \text { REIT } \\ -\mathbf{1 0 . 6 3 \%} \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & -12.21 \% \end{aligned}$ | World Stock $-12.44 \%$ | $\begin{gathered} \text { World Stock } \\ -9.50 \% \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & -10.05 \% \end{aligned}$ | $\begin{aligned} & \text { REIT } \\ & -11.36 \% \end{aligned}$ | $\begin{aligned} & \text { US Stock } \\ & \text {-9.48\% } \end{aligned}$ |

Historical Premium / Discount expressed as average value over each year. 2018 YTD Premium / Discount average value as of March 31, 2019. "2009-2018" column shows yearly average for each sector.

## Closed-End Fund Advisors

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\% | 30.2\% | 72.6\% | 65.7\% | 11.4\% | 55.0\% | 47.8\% | 56.6\% | 68.0\% | 67.8\% | 51.8\% | 54.0\% |
| BDC | 30.2\% | 100\% | 11.0\% | 6.4\% | -23.5\% | -1.1\% | -12.7\% | 2.3\% | 11.1\% | 9.8\% | -11.9\% | -5.7\% |
| Convertible | 72.6\% | 11.0\% | 100\% | 92.4\% | 22.9\% | 85.6\% | 81.1\% | 93.6\% | 91.7\% | 95.1\% | 84.8\% | 84.4\% |
| HY Bond | 65.7\% | 6.4\% | 92.4\% | 100\% | 33.9\% | 95.8\% | 90.6\% | 88.0\% | 75.7\% | 81.6\% | 89.3\% | 95.9\% |
| Muni Bond | 11.4\% | -23.5\% | 22.9\% | 33.9\% | 100\% | 28.8\% | 50.3\% | 23.3\% | 11.6\% | 12.6\% | 51.9\% | 51.9\% |
| Senior Loan | 55.0\% | -1.1\% | 85.6\% | 95.8\% | 28.8\% | 100\% | 92.7\% | 80.5\% | 66.7\% | 74.3\% | 88.0\% | 93.7\% |
| Preferred | 47.8\% | -12.7\% | 81.1\% | 90.6\% | 50.3\% | 92.7\% | 100\% | 80.2\% | 64.5\% | 70.7\% | 94.1\% | 96.5\% |
| World Stock | 56.6\% | 2.3\% | 93.6\% | 88.0\% | 23.3\% | 80.5\% | 80.2\% | 100\% | 90.3\% | 93.1\% | 82.2\% | 83.1\% |
| Cov Call | 68.0\% | 11.1\% | 91.7\% | 75.7\% | 11.6\% | 66.7\% | 64.5\% | 90.3\% | 100\% | 97.7\% | 71.5\% | 65.2\% |
| US Stock | 67.8\% | 9.8\% | 95.1\% | 81.6\% | 12.6\% | 74.3\% | 70.7\% | 93.1\% | 97.7\% | 100\% | 78.6\% | 71.8\% |
| REIT | 51.8\% | -11.9\% | 84.8\% | 89.3\% | 51.9\% | 88.0\% | 94.1\% | 82.2\% | 71.5\% | 78.6\% | 100\% | 92.0\% |
| Investment Grade | 54.0\% | -5.7\% | 84.4\% | 95.9\% | 51.9\% | 93.7\% | 96.5\% | 83.1\% | 65.2\% | 71.8\% | 92.0\% | 100\% |

Correlation of 3 Month NAV Total Return values between 3/31/2009 and 3/31/2019.
Data sourced from Closed-End Fund Advisors 'CEFU Report' and cefadata.com. Past performance is not an indication of future results
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## Equity CEF <br> 20 Year Discount Chart



## Equity CEF 20 Year Discount Occurrence

Discount Monthly Levels (Mar '99 - Mar '19)


## Taxable Fixed Income CEF 20 Year Discount Chart



# Taxable Fixed Income CEF 20 Year Discount Occurrence 

Discount Monthly Levels (March '99-March '19)


## Municipal Bond CEF 20 Year Discount Chart



## Municipal Bond CEF 20 Year Discount Occurrence

Discount Monthly Levels (Mar '99 - Mar '19)


# Trad CEF - Total Return <br> March 31, 2009 - March 31, 2019 



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 alternative in a client's asset allocation strategy. Thus, the back-tested performana
could expect to generate due to the effect of recommended manager survivor bias.


BDC Debt - Total Return
March 31, 2009 - March 31, 2019

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 - Average Discount / Premium
March 31, 2009 - March 31, 2019


## Types of Loans Held By BDCs

1. First Lien Loans: 60\%
2. Second Lien Loans: 19\%
3. Unsecured Loans: 6\%
4. Equity/Other: 15\%

$>$ Avg Portfolio Turnover: 39.5\%
$>$ Avg Variable Loans: 82\% / Fixed: 18\%
$>$ Libor Floors: 41\% at 1\% Avg Level
$>$ Avg Loan Size: \$9.2M
> 75\% of Loans Under \$25MM
$>$ Average Maturity 4.3 with a range of 2 Years to 6 years
$>$ Avg No of Loans: 166 from 124 Companies

## Municipal Bonds - Total Return <br> March 31, 2009 - March 31, 2019

 could expect to generate due to the effect of recommended manager survivor bias.

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



Sources: CEFA's Universe Data as of 3/31/2019 and tax rates from IRS and NY State.

## MLP - Total Return

## March 31, 2009 - March 31, 2019



## MLP - Average Discount / Premium <br> March 31, 2009 - March 31, 2019



## Relative Discount Opportunity

Equity Sector Indexes

| Index | Discount | 1 Yr Avg Discount | 3 Yr Avg Discount | 5 Yr Avg Discount | $\begin{gathered} \text { Rel Disc }{ }^{\wedge} \\ \text { Range(3yr) } \end{gathered}$ | $\underset{\text { Yield }}{\text { Mk }}$ | $\begin{array}{\|l\|l\|l\|l\|l\|l\|l\|l\|} \hline \text { Lev Adj } \\ \text { Yield } \end{array}$ | After <br> Tax Yield <br> $*$ | Est. Tax Friction* | $\begin{gathered} 1 \mathrm{Yr} \\ \mathrm{RoC} \% \end{gathered}$ | $\begin{gathered} \hline 3 \mathrm{Yr} \\ \text { Dest } \\ \text { RoC\% } \end{gathered}$ | Lev\% | Non Lev <br> Expense Ratio | 3 YrNAV Volatility |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7. Master Limited Partnership (MLP) Fund Index | -6.41 | -5.58 | -3.56 | -4.74 | 33.09 | 10.69 | 7.76 | 10.25 | 0.44 | 83.9 | 9.1 | 30.5 | 1.77 | 25.14 |
| 1. International Equity Index | -11.12 | -11.25 | -10.91 | -10.75 | 43.87 | 5.15 | 4.54 | 4.44 | 0.71 | 15.3 | 5.3 | 1.5 | 1.41 | 17.26 |
| $\frac{\text { 5. Global Real Estate, REIT \& Real }}{\text { Asset Index }}$ | -10.77 | -10.48 | -10.24 | -11.00 | 47.14 | 7.97 | 5.99 | 6.76 | 1.21 | 28.2 | 4.1 | 20.9 | 1.33 | 12.28 |
| 3. Global Equity Index | -8.28 | -7.57 | -8.44 | -9.14 | 51.43 | 7.80 | 6.72 | 6.68 | 1.12 | 19.1 | 4.0 | 10.4 | 1.27 | 14.06 |
| 2.US Equity Index | -3.66 | -2.89 | -3.99 | -5.04 | 52.09 | 8.64 | 8.27 | 7.68 | 0.96 | 37.5 | 7.7 | 2.5 | 1.07 | 13.42 |
| 4. Covered Call / Option Funds | -2.75 | -1.93 | -3.80 | -5.00 | 53.36 | 8.23 | 7.83 | 7.44 | 0.79 | 48.0 | 5.7 | 2.2 | 1.07 | 12.13 |
| 9. Hybrid/Balanced Fund Index | -3.91 | -4.38 | -6.99 | -8.55 | 59.39 | 9.55 | 7.42 | 8.29 | 1.26 | 38.1 | 6.8 | 24.9 | 1.59 | 10.83 |
| 6. Utilities/Infrastructure Index | 2.80 | -0.20 | -1.58 | -3.15 | 67.43 | 7.36 | 6.06 | 6.41 | 0.95 | 32.8 | 3.5 | 26.3 | 1.35 | 13.03 |
| 8. Preferred Equity Index | 0.96 | -2.46 | -1.64 | -3.62 | 74.20 | 7.35 | 5.53 | 5.69 | 1.66 | 8.5 | 0.6 | 34.2 | 1.23 | 5.42 |


| Index | Discount | 1 Yr Avg Discount | 3 Yr Avg Discount | 5 Yr Avg Discount |
| :---: | :---: | :---: | :---: | :---: |
| 4. Senior Loan Index | -9.56 | -8.84 | -6.84 | -7.79 |
| 5. Convertible Bond Index | -4.03 | -1.92 | -4.26 | -4.96 |
| 8. US Bond Index | -5.35 | -6.61 | -5.72 | -6.57 |
| 6. Investment Grade Bond Index | -3.82 | -4.83 | -4.57 | -5.76 |
| 3. High Yield Bond Index | -7.75 | -9.63 | -9.19 | -8.90 |
| $\frac{\text { 1. Debt-Focused Business }}{\text { Development Company (BDC) }}$ Index | 1.22 | -1.84 | 0.09 | -1.04 |
| 9. International Bond Index | -4.49 | -7.47 | -8.07 | -9.45 |
| 7. Multisector Bond Fund Index | 2.73 | 1.97 | 2.61 | 1.41 |
| 2. BDC Baby Bond/ Debt Index | N/A | N/A | N/A | N/A |


| $\begin{gathered} \text { Rel Disc } \\ \text { Range(3yr) } \end{gathered}$ | $\begin{gathered} \mathrm{Mk} \\ \text { Yield } \end{gathered}$ | Lev Adj NAV Yield | After Tax Yield * | Est. Tax Friction* | $\begin{gathered} 1 \mathrm{Yr} \\ \mathrm{RoC} \% \end{gathered}$ | $\begin{gathered} 3 \mathrm{Yr} \\ \text { Dest } \\ \text { RoC \% } \end{gathered}$ | Lev\% | Non Lev Expense Ratio | 3 Yr NAV Volatility |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 38.36 | 7.01 | 4.74 | 5.27 | 1.74 | 0.5 | 0.0 | 33.9 | 1.52 | 2.96 |
| 47.01 | 9.25 | 6.72 | 7.54 | 1.71 | 18.7 | 0.0 | 32.0 | 1.38 | 10.05 |
| 51.83 | 7.20 | 5.35 | 5.43 | 1.77 | 1.5 | 0.2 | 28.4 | 1.35 | 4.23 |
| 53.23 | 6.97 | 5.58 | 5.55 | 1.42 | 13.8 | 8.5 | 21.6 | 1.04 | 5.05 |
| 56.34 | 7.79 | 5.69 | 5.90 | 1.89 | 2.8 | 0.0 | 25.5 | 1.22 | 4.96 |
| 58.61 | 9.32 | 6.50 | 7.02 | 2.30 | 0.9 | 0.3 | 42.4 | 3.45 | 4.36 |
| 65.06 | 8.66 | 7.53 | 6.95 | 1.71 | 16.4 | 13.9 | 16.7 | 1.49 | 7.48 |
| 68.38 | 8.63 | 7.06 | 6.77 | 1.86 | 11.7 | 3.9 | 27.8 | 1.34 | 4.72 |
| N/A | N/A | N/A | NA |  | N/A | N/A | N/A | N/A | N/A |

Tax-Free Bond Sector Indexes

| Index | Discount | 1 Yr Avg <br> Discount | 3 Yr Avg <br> Discount | 5 Yr Avg <br> Discount |
| :---: | :---: | :---: | :---: | :---: |
| $\frac{\text { 6. State Municipal Index (Non }}{}$NY/CA) | -11.08 | -13.15 | -8.65 | -8.88 |
| 4. California Municipal Index | -4.19 | -7.65 | -2.74 | -2.96 |
| 5. New York Municipal Index | -6.16 | -9.21 | -5.27 | -5.17 |
| 3. Term Municipal Fund Index | -3.02 | -4.44 | -2.69 | -4.09 |
| 1. National Municipal Bond Index | -4.62 | -7.51 | -4.27 | -4.85 |
| 2. High Yield Municipal Index | -1.16 | -5.45 | -2.75 | -2.69 |


| $\begin{gathered} \text { Rel Disc } \\ \text { Range(3yr) } \end{gathered}$ | $\begin{gathered} \text { Mk } \\ \text { Yield } \end{gathered}$ | Lev Adj NAV Yield | After Tax Yield * | Est. Tax Friction ${ }^{*}$ | $\begin{gathered} 1 \mathrm{Yr} \\ \mathrm{RoC} \% \end{gathered}$ | $\begin{gathered} 3 \mathrm{Yr} \\ \text { Dest } \\ \text { RoC\% } \end{gathered}$ | Lev\% | Non Lev Expense Ratio | 3 Yr NAV Volatility |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 36.16 | 4.13 | 2.66 | 4.12 | 0.01 | 0.0 | 0.0 | 36.7 | 1.02 | 3.37 |
| 41.40 | 4.43 | 3.09 | 4.40 | 0.03 | 0.3 | 0.1 | 38.3 | 0.99 | 3.65 |
| 42.05 | 4.20 | 2.90 | 4.20 | 0.00 | 2.1 | 0.3 | 37.0 | 1.05 | 3.45 |
| 49.44 | 3.74 | 2.91 | 3.60 | 0.14 | 1.2 | 1.2 | 23.4 | 0.82 | 2.97 |
| 50.80 | 4.87 | 3.41 | 4.86 | 0.01 | 0.9 | 0.2 | 36.7 | 0.96 | 3.81 |
| 59.29 | 4.98 | 3.77 | 4.98 | 0.00 | 0.0 | 0.0 | 30.8 | 1.04 | 3.12 |

[^1]
## Broad Investable Universe

Assets of Closed-End Funds/BDCs*
by type , as of March 31, 2019

|  | \# 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 | 197 | \$107,244 | -6.44\% | $7.81 \%$ | 0.75 |  | 16.20 \% | 1.43 | \$544 |
| Taxable Bond | 146 | \$63,099 | -4.09\% | $7.98 \%$ | 0.19 | 3.5 | 26.54 \% | 1.42 | \$432 |
| Municipal Bond | 151 | \$64,551 | -6.27\% | $4.49 \%$ | -0.02 | 9.3 | $33.37 \%$ | 0.99 | \$ 427 |
| BDCs | 49 | \$35,605 | -9.97\% | 9.32\% | 0.57 |  | 41.23 \% | 5.56 | \$ 727 |
| Total CEFs | 543 | \$270,499 | -6.08\% | 7.07 \% | 0.37 | 6.6 | $26.01 \%$ | 1.68 | \$ 498 |
| National Muni Bond | 86 | \$46,873 | -5.36\% | 4.72\% | -0.02 | 8.7 | 32.28\% | 0.94 | \$545 |
| Debt Focused BDC | 44 | \$34,926 | -6.93\% | 10.22\% | 0.57 |  | 43.42\% | 6.06 | \$794 |
| Covered Call | 27 | \$19,472 | -2.86\% | 8.43\% | 0.79 |  | 2.82\% | 1.11 | \$721 |
| US Stock | 29 | \$20,786 | -8.86\% | 7.25\% | 0.90 |  | 11.85\% | 1.35 | \$717 |
| MLP Funds | 24 | \$12,225 | -8.75\% | 10.62\% | 1.14 |  | 30.41\% | 1.83 | \$509 |
| High Yield Bond | 33 | \$11,762 | -6.31\% | 7.67\% | 0.21 | 3.4 | 24.56\% | 1.24 | \$356 |
| World Stock | 45 | \$11,249 | -9.99\% | 6.55\% | 0.70 |  | 10.16\% | 1.53 | \$250 |
| Senior Loan | 28 | \$12,308 | -10.46\% | 7.62\% | 0.12 | 1.1 | 33.56\% | 1.64 | \$440 |
| Preferred Equity | 16 | \$10,165 | 0.06\% | 7.30\% | 0.23 | 4.7 | 33.52\% | 1.23 | \$635 |
| REIT Funds | 10 | \$6,002 | -10.55\% | 7.91\% | 0.51 |  | 21.95\% | 1.40 | \$600 |
| Convertible Bond | 10 | \$4,110 | -1.32\% | 9.67\% | 0.73 | 2.5 | 30.87\% | 1.39 | \$411 |
| Investment Grade Bond | 12 | \$3,892 | -1.06\% | 5.99\% | 0.11 | 5.4 | 19.09\% | 0.91 | \$324 |

## CEF Universe Update



## Current Closed-End Discounts

12 Major Sectors Discount as of March 29, 2019


## Discount Trends \& Tax Loss Selling

## 12 Major Sectors CEFs (Nov - Feb)



Average Bounce: 2.8\%

## CEF Volume Trends - 1Q 2019

| Fund Grouping | Avg Vol Last Q | Avg Vol Prev Q | Volume Trend |
| :---: | :---: | :---: | :---: |
| BDC Debt | 313,963 | 330,560 | -5\% |
| Convertible | 145,412 | 218,558 | -33\% |
| Covered Call | 184,883 | 238,724 | -23\% |
| High Yield Bond | 132,754 | 151,230 | -12\% |
| Investment Grade | 66,948 | 94,511 | -29\% |
| MLP | 204,907 | 304,242 | -33\% |
| Municipal Bond | 68,674 | 97,168 | -29\% |
| Preferred Stock | 127,493 | 163,897 | -22\% |
| Real Estate / REIT | 172,863 | 214,496 | -19\% |
| Senior Loan | 182,421 | 206,814 | -12\% |
| US Stock | 150,761 | 217,786 | -31\% |
| World Stock | 67,382 | 87,283 | -23\% |
| Ave Traditional Equity CEF | 137,837 | 184,641 | -25\% |
| Ave Traditional Bond CEF | 104,370 | 132,726 | -21\% |
| Average BDC | 290,236 | 299,414 | -3\% |
| Average For ALL CEFs | 133,285 | 165,723 | -20\% |
|  | Source: CEFAData.com |  |  |

## CEF/BDC Yield Comparison



Data as of 3/31/2019.
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 - March 29, 2019



## Return of Capital (90 Day) For CEFs

## Main Peer Groups - Historical ROC <br> May 11, 2012 - March 29, 2019



# 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\% | 26\% | -29\% | 55\% |
| Non-US Equity Funds | 21 | 47\% | 42\% | -161\% | 37\% |
| Specialty Equity Funds | 40 | 37\% | 34\% | -110\% | 20\% |
| Equity CEF | 86 | 44\% | 35\% | -33\% | 26\% |
| Taxable Bond Funds | 70 | 48\% | 15\% | -61\% | 15\% |
| National Muni Bond Funds | 5 | 6\% | 3\% | 24\% | -24\% |
| State Muni Bond Funds | 0 | 0\% | N/A | 40\% | -28\% |
| Bond CEF | 75 | 25\% | 14\% | -28\% | -2\% |
| Average CEF | 161 | 33\% | 25\% | -30\% | 11\% |

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



Source: March 31, 2019 - CEFData.com

## CEF Press Release SEC Filings Summary (2160 CEF PRs in 1Q19)

| Announcement Type | 1Q 2019 | 2018 | 2017 | 2016 | Avg per Q since 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\longrightarrow$ Rights Issue / Offering | 1 | 26 | 16 | 9 | 4 |
| Secondary Offering (Trad CEF) | 0 | 1 | 1 | 6 | 1 |
| Secondary Offering (BDCs) | 3 | 5 | 17 | 4 | 2 |
| Tender Offer | 5 | 17 | 46 | 17 | 7 |
| Distribution Policy Change(Trad CEF) | 2 | 18 | 12 | 6 | 3 |
| Distribution Policy Change (BDCs) | 0 | 0 | 1 | 0 | 0 |
| 13 Filings (Trad CEF) | 99 | 207 | 700 | 897 | 146 |
| New N-2 Filings | 8 | 66 | 133 | 97 | 23 |
| $\square$ Updated N -2 Filings | 38 | 259 | 221 | 120 | 49 |
| Investment Manager / Advisor Change | 45 | 79 | 18 | 35 | 14 |
| Portfolio Manager Change | 19 | 60 | 52 | 39 | 13 |
| Leverage Amount / Type Change | 20 | 149 | 118 | 105 | 30 |
| 0 | www.CEFadvisors.com |  | Source: Fund Press Releases / SEC Filings. |  |  |

## CEF \& BDC

## Dividend Increases vs. Decreases

| Dividend <br> Announcement | 1Q 2019 <br> Number of <br> Announcements | 1Q 2019 <br> Average <br> Change | 1Q '18 - 4Q '18 <br> Number of <br> Announcements | 1Q '18 - 4Q '18 <br> Average <br> Change |
| :---: | :---: | :---: | :---: | :---: |
| Dividend Maintains | $1085(86.2 \%)$ | N/A | 4370 (88.9\%) | N/A |
| Dividend Increases | $72(5.7 \%)$ | $+5.38 \%$ | $142(2.9 \%)$ | $+10.17 \%$ |
| Dividend Decreases | $98(7.8 \%)$ | $-8.35 \%$ | $404(8.2 \%)$ | $-7.29 \%$ |
|  |  |  |  |  |
| Under 5\% Increase | $48(67 \%)$ | $+1.90 \%$ | $80(56 \%)$ | $+2.21 \%$ |
| Over 5\% Increase | $24(33 \%)$ | $+12.34 \%$ | $62(44 \%)$ | $+20.44 \%$ |
| Under 5\% Decrease | $44(45 \%)$ | $-2.15 \%$ | $186(46 \%)$ | $-1.90 \%$ |
| Over 5\% Decrease | $54(55 \%)$ | $-13.41 \%$ | $2187(54 \%)$ | $-11.89 \%$ |

## 1Q 2019 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 (4:1 Negative Ratio)

- 278 Funds (56\%) had negative 3 year growth averaging -21.7\%
- 69 Funds (14\%) had positive 3 year growth averaging $+15.2 \%$
$\underline{2}$ Year Lookback (3:1 Negative Ratio)
- 281 Funds changed their dividend policy in the past 2 years ( $57 \%$ of funds)
- 204 Cut ( $73 \%$ ) an average of $-11 \%$ while 77 ( $27 \%$ ) increased an average of $+12 \%$
- 154 of these funds have "level" or "managed distributions"
- 115 of those were cut an average $-11 \%$
- 39 were increased an average of $+11 \%$

1 Year Lookback (2.4:1 Negative Ratio)

- 96 increase vs. 226 decreases. 53 Funds had BOTH increases and decreases in the past year.


## CEF \& BDC Historical IPOs (1Q 19$)$

|  | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of <br> IPOs | 3 | 5 | 13 | 8 | 9 | 15 | 29 | 28 | 26 | 22 | 14 |
| Average <br> Assets <br> In \$ millions | $\$ 503$ | $\$ 94$ | $\$ 646$ | $\$ 225$ | $\$ 272$ | $\$ 511$ | $\$ 511$ | $\$ 442$ | $\$ 258$ | $\$ 371$ | $\$ 192$ |
| Total New <br> CEF IPO <br> Assets in \$ <br> Billions | $\$ 1.5 B$ | $\$ .5 B$ | $\$ 8.4 \mathrm{~B}$ | $\$ 1.8 \mathrm{~B}$ | $\$ 2.4 \mathrm{~B}$ | $\$ 7.7 \mathrm{~B}$ | $\$ 14.8 \mathrm{~B}$ | $\$ 12.4 \mathrm{~B}$ | $\$ 6.7 \mathrm{~B}$ | $\$ 8.2 \mathrm{~B}$ | $\$ 2.7 \mathrm{~B}$ |

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

## CEF \& BDC Historical IPOs (1Q 19)



# CEF\&BDC IPOs: By Investment Focus Apr 1, 2018 - Mar 31, 2019 



Note: Inception Assets in millions ; data as of 3/31/2019, cefdata.com

## 1Q 2019 IPO Details

## PIMCO Energy \& Tactical Credit (NRGX) - Specialty Equity Funds -

IPOed on February 2, 2019

IPO Price: $\$ 20.00$
Price as of $3 / 31 / 19$ : $\$ 20.37$

IPO Assets: \$900M
Disc/Prm as of 3/31/19: -1.7\%

## Highland Global Allocation Fund (HGLB) - Non U.S. Equity Funds -

Converted on February 15, 2019

IPO Price: $\$ 15.00$
Price as of $3 / 31 / 19$ : $\$ 12.92$

IPO Assets: \$350M
Disc/Prm as of 3/31/19: - $14.55 \%$

Tortoise Essential Assets Income Term Fund (TEAF) - Hybrid / Balanced IPOed on March 26, 2019

IPO Price: $\$ 20.00$
Price as of $3 / 31 / 19$ : $\$ 20.12$

IPO Assets: $\$ 260 \mathrm{M}$
Disc/Prm as of $3 / 31 / 19$ : $0 \%$

# IPOs during 2Q 2018-4Q 2018 Current Discount / Premium 

| IPO Date | Ticker | Current Disc/Prm | Current Price | IPO Price | Curr vs IPO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2Q 2018 | VAM | $3.27 \%$ | $\$ 14.22$ | $\$ 14.66$ | $97.00 \%$ |
|  | OCCI | $\mathbf{- 5 . 1 5 \%}$ | $\$ 17.85$ | $\$ 19.00$ | $93.95 \%$ |
|  | RMI | $\mathbf{- 5 . 7 9 \%}$ | $\$ 20.82$ | $\$ 20.00$ | $104.10 \%$ |
|  | BCSF | $3.27 \%$ | $\$ 14.22$ | $\$ 18.00$ | $79.00 \%$ |
|  | JHAA | $0.29 \%$ | $\$ 10.21$ | $\$ 10.00$ | $102.10 \%$ |

## Closed-End Fund Mergers

Closed-End Funds Merged into Other Closed-End Funds (March 2019)


Reasons to Merge:

1. Reduce expense ratio
2. Increase liquidity
3. Reduce bid/ask spread
4. Improve cost of future leverage

Source: Fund Press Releases

Avg. - 17 per year
31 Last 7 Yrs, 10 previous 7 Yrs

## 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 - March 29, 2019


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

| Fund Grouping | Correlation <br> $1 Q$ <br> 19 | Correlation <br> 4Q 18 | Correlation <br> Trend |
| :---: | :---: | :---: | :---: |
| US Equity Funds | $86.79 \%$ | $89.83 \%$ | $-3.04 \%$ |
| Non-US Equity Funds | $92.26 \%$ | $89.46 \%$ | $2.80 \%$ |
| Specialty Equity Funds | $91.85 \%$ | $92.92 \%$ | $-1.07 \%$ |
| Ave Equity CEF | $90.10 \%$ | $91.81 \%$ | $-1.71 \%$ |
| Taxable Bond Funds | $80.46 \%$ | $79.44 \%$ | $1.02 \%$ |
| National Muni Bond Funds | $68.06 \%$ | $43.86 \%$ | $24.20 \%$ |
| State Muni Bond Funds | $75.22 \%$ | $40.47 \%$ | $34.75 \%$ |
| Ave Bond CEF | $75.72 \%$ | $59.83 \%$ | $15.89 \%$ |
| Average CEF | $81.44 \%$ | $72.42 \%$ | $9.02 \%$ |

## CEF / BDC Index Performance

| Index | 10 2019 <br> NAV | 10 2019 <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 | $10.74 \%$ | $15.86 \%$ | $7.13 \%$ | $6.45 \%$ | $5.09 \%$ | $5.52 \%$ |
| High Income Index | $12.41 \%$ | $18.85 \%$ | $8.48 \%$ | $7.69 \%$ | $4.26 \%$ | $4.19 \%$ |
| Tax-Sensitive Income Index | $13.85 \%$ | $17.24 \%$ | $11.45 \%$ | $9.49 \%$ | $2.88 \%$ | $3.12 \%$ |
| 60/40 Balanced Index | $10.91 \%$ | $15.95 \%$ | $4.98 \%$ | $5.35 \%$ | $5.41 \%$ | $6.06 \%$ |
| Global Equity Index | $13.40 \%$ | $17.33 \%$ | $3.02 \%$ | $3.65 \%$ | $5.70 \%$ | $6.90 \%$ |
| Equity Income Index | $13.96 \%$ | $17.58 \%$ | $6.25 \%$ | $5.12 \%$ | $3.94 \%$ | $4.89 \%$ |
| Taxable Bond and BDC | $6.46 \%$ | $12.02 \%$ | $4.06 \%$ | $5.84 \%$ | $4.89 \%$ | $5.43 \%$ |
| National Municipal Bond | $3.85 \%$ | $9.56 \%$ | $6.16 \%$ | $8.94 \%$ | $6.07 \%$ | $6.43 \%$ |
| Preferred Equity Index | $10.62 \%$ | $15.67 \%$ | $4.60 \%$ | $8.25 \%$ | $7.64 \%$ | $9.69 \%$ |
| Convertible Bond Index | $13.61 \%$ | $21.87 \%$ | $6.02 \%$ | $8.24 \%$ | $4.03 \%$ | $4.58 \%$ |
| High Yield Bond Index | $7.93 \%$ | $13.29 \%$ | $4.59 \%$ | $6.13 \%$ | $4.44 \%$ | $4.14 \%$ |
| Sr. Loan Index | $5.66 \%$ | $7.73 \%$ | $2.23 \%$ | $-2.86 \%$ | $4.01 \%$ | $3.30 \%$ |
| MLP Index | $24.28 \%$ | $24.29 \%$ | $16.23 \%$ | $7.99 \%$ | $-6.75 \%$ | $-7.37 \%$ |
| REIT / Real Asset Index | $17.89 \%$ | $23.16 \%$ | $15.94 \%$ | $14.99 \%$ | $8.50 \%$ | $9.46 \%$ |
| Debt-BDCs Index | $2.41 \%$ | $16.81 \%$ | $10.39 \%$ | $14.15 \%$ | $7.93 \%$ | $4.33 \%$ |

# CEF Institutional Holdings <br> (1Q 19) 

## Institutional <br> Holdings Trends

Increase: 358 funds Decrease: 125 funds

Main Peer Groups - \% Shares Owned by Institutions
January 18, 2013 - March 29, 2019


# CEF / BDC Institutional Investors 

## (1Q 19): CEF/BDC \$AUM

| 1 | MORGAN STANLEY | $\$ 4,621,146,492$ |
| :---: | :--- | ---: |
| 2 | WELLS FARGO COMPANY MN | $\$ 3,034,216,516$ |
| 3 | UBS Group AG | $\$ 2,235,790,360$ |
| 4 | BANK OF AMERICA CORP DE | $\$ 1,974,644,213$ |
| 5 | RIVERNORTH CAPITAL MANAGEMENT LLC | $\$ 1,431,535,771$ |
| 6 | Karpus Management Inc | $\$ 1,216,799,275$ |
| 7 | SIT INVESTMENT ASSOCIATES INC | $\$ 1,139,674,304$ |
| 8 | Invesco Ltd | $\$ 1,096,151,824$ |
| 9 | 1607 Capital Partners LLC | $\$ 968,469,764$ |
| 10 | GUGGENHEIM CAPITAL LLC | $\$ 961,992,614$ |
| 11 | CITY OF LONDON INVESTMENT MANAGEMENT CO LTD | $\$ 935,894,024$ |
| 12 | Advisors Asset Management Inc | $\$ 845,657,669$ |
| 13 | ROYAL BANK OF CANADA | $\$ 845,617,415$ |
| 14 | Saba Capital Management L P | $\$ 833,129,412$ |
| 15 | RAYMOND JAMES ASSOCIATES | $\$ 780,568,884$ |
| 16 | PARAMETRIC PORTFOLIO ASSOCIATES LLC | $\$ 605,078,302$ |
| 17 | LAZARD ASSET MANAGEMENT LLC | $\$ 524,441,640$ |
| 18 | Relative Value Partners Group LLC | $\$ 491,887,987$ |
| 19 | JPMORGAN CHASE CO | $\$ 424,248,555$ |
| 20 | COHEN STEERS INC | $\$ 421,043,026$ |
| 21 | Raymond James Financial Services Advisors Inc | $\$ 418,350,604$ |
| 22 | AMERIPRISE FINANCIAL INC | $\$ 374,725,775$ |
| 23 | LPL Financial LLC | $\$ 359,812,512$ |
| 24 | COMMONWEALTH EQUITY SERVICES LLC | $\$ 353,601,485$ |
| 25 | STIFEL FINANCIAL CORP | $\$ 350,597,204$ |
|  |  |  |

## 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 3/31/19-\$2.4 Billion Activist // \$19.3 Billion Followers \& Activist

# Closed-End Fund Corporate Actions / Activist Update 1Q 2019 

| Month <br> Filed | Filing | Closed-End Fund/BDC | Investor/Who | Notes |
| :---: | :---: | :---: | :---: | :---: |
| Mar | 13D/A | Rand Capital Corp (RAND) | User-Friendly Phone <br> Book, LLC | $23.03 \%$ <br> Intent to vote against stock <br> purchase agreement |
| Mar | Proxy | Bain Cap Splty Fin (BCSF) | Public | Secondary offer <br> proposal (below NAV) |
| Mar | 13D/A | Alcentra Capital Corp (ABDC) | Stillwell | $8.15 \%$ |
| Mar | Proxy | Bain Cap Splty Fin (BCSF) | Public | Secondary offer proposal <br> representation |
| (up to 25\% shares, below |  |  |  |  |
| NAV) |  |  |  |  |

## Closed-End Fund Corporate Actions / Activist Update <br> Source: SEC Filings, Press Releases

| Month Filed | Filing | Closed-End Fund/BDC | Investor/Who | Notes |
| :---: | :---: | :---: | :---: | :---: |
| Feb | 13D | Ivy Hi Incm Opp Fd (IVH) | Saba | 8\% (Inc) Board declassification proposal |
| Feb | Announ cement | BR TCP Capital Corp (TCPC) | Public | Leverage Amount Change - Approved |
| Feb | 13D | Invsc Sr Incm Tr (VVR) | Saba | 8.3\% (Inc) <br> Board declassification proposal |
| Jan | Proxy | Mexico Fund (MXF) | Matisse Capital | proposal to terminate the Investment Advisory Agreement |
| Proxy | Proxy | Frk Univ $\operatorname{Tr}$ (FT) | Public | Investment Policy Change |
| Jan | 13G | Nuv Muni 2021 Tgt Trm Fd (NHA) | Karpus | 10.7\% (new) |

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



Note：millions of dollars，data as of 3／31／2019，cefdata．com

```
日Taxable Bond
⿴囗Non U.S. Equity
日BDC
日Specialty Equity
日U.S. Equity
日National Muni Bond
aSingle State Muni Bond
\squareHybrid / Balanced Funds
\begin{tabular}{|c|c|}
\hline CEF Activist Ownership & \(\$ 19,608\) \\
\hline
\end{tabular}
```

|  | Top 5 Peer Groups |
| :--- | :--- |
| BDC Debt |  |
| Asian Equity | $\$ 2,820$ |
| Loan Participation | $\$ 1,764$ |
| General Equity | $\$ 1,573$ |
| High Yield Bond | $\$ 1,550$ |

## 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 52 current funds with a combined $\$ 29.53 \mathrm{~B}$ in AUM as of $3 / 31 / 19$. This compares to CEF/BDC listed AUM of $\$ 270$ billion in 543 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


Interval Closed-Ended Fund (iCEFs)

iFunds - Net Assets (\$B)


Interval Funds - Equity Focused

| Fund Name | Structure | Major Group | Sub-Group | Sponsor | Inception | $\begin{aligned} & \text { Min } \\ & \text { Inv } \end{aligned}$ | Lev(\%) | Managed Assets(M) | Av Net Exp Ratio | Div <br> Freq | Avg NAV Yield | TR (Last Q) | $\begin{gathered} \text { TR } \\ (3 \mathrm{MO}) \end{gathered}$ | $\begin{gathered} \text { TR } \\ \text { (YDT) } \end{gathered}$ | $\begin{gathered} \text { TR } \\ \text { (1YR) } \end{gathered}$ | $\begin{gathered} \text { TR } \\ \text { (3YR) } \end{gathered}$ | $\begin{gathered} \text { TR } \\ \text { (5YR) } \end{gathered}$ | $\begin{gathered} \text { TR } \\ (10 \mathrm{YR}) \end{gathered}$ | Redemption Details | Number of Share Classes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BMO LGM Frontier Markets Equity Fund | Interval | Equity | Global Equity | BMO Asset | 12/18/13 | 5,000 | 0.0 | 131.1 | 2.00 | A | 2.1 | 0.77 | -0.33 | 0.66 | -19.65 | 5.05 | -0.86 | - | Quarterly: 5\% to 25\% | 1 |
| Flat Rock Opportunity Fund | Interval | Equity | Global Equity | Flat Rock |  | 20,000 |  |  |  | Q | 3.4 | 3.35 | 3.63 | 5.1 | - | - | - | - | Quarterly: 5\% to 25\% | 1 |
| FS Energy Total Return Fund | Interval | Equity | Global Equity | FS Energy | 3/15/17 | 2,500 | 26.8 | 42.7 | 3.09 | Q | 5.4 | 21.7 | 10.5 | 21.35 | 9.95 | - | - | - | Quarterly: 5\% to 25\% | 5 |
| FS Multi-Alternative Income Fund | Interval | Equity | Global Equity | FS MultiAlternative | 9/27/18 | 2,500 | 0.0 | 31.4 | 2.38 | Q | - | - | - | - | - | - | - | - | Quarterly: 5\% to 25\% | 5 |
| Multi-Strategy Growth \& Income Fund | Interval | Equity | Global Equity | LCM Investment | 3/6/12 | 2,500 | 10.5 | 191.9 | 2.20 | M | 6.0 | 4.83 | 3.27 | 4.81 | 0.34 | 1.95 | 1.64 | - | Quarterly: 5\% to 25\% | 4 |
| NexPoint Healthcare Opportunities Fund | Interval | Equity | Global Equity | NexPoint Advisors | 5/10/18 | 500 | 0.0 | 5.0 | 2.37 | Q | - | 15.61 | 14.6 | 17.07 | - | - | - | - | Quarterly: 5\% to 25\% | 4 |
| Variant Alternative Income Fund | Interval | Equity | Global Equity | Variant Investments | 10/2/17 | 25,000 | 0.0 | 25.6 | 0.73 | Q | 6.2 | 3.06 | 3.06 | 3.18 | - | - | - | - | Quarterly: no less than 5\% | 2 |
| Relative Value Fund | Interval | Equity | Global Equity | Vivaldi | 6/12/17 | 1,000 | 0.0 | 10.6 | 2.69 | A | 1.7 | 3.37 | 2.68 | 3.91 | 2.91 | - | - | - | Quarterly: 5\% to 25\% | 2 |
| Weiss Strateqic Interval Fund | Interval | Equity | Global Equity | Weiss MultiStrategy | 2/1/18 | - | 0.0 | 186.1 | 8.64 | Q | - | - | - | - | - | - | - | - | Monthly: 5\% to 25\% | 1 |
| Wildermuth Endowment Fund | Interval | Equity | Global Equity | Wildermuth Advisory | 12/31/14 | 2,500 | 0.0 | 93.4 | 2.67 | Q | 2.9 | 1.54 | 1.97 | 2.68 | 2.79 | 9.74 | - | - | Quarterly: 5\% to 25\% | 3 |
| Global Equity |  |  |  |  |  | 6,833 | 9.3 | 79.8 | 3.0 |  | 4.0 | 6.8 | 4.9 | 7.3 | -0.7 | 5.6 | 0.4 |  |  |  |
| ACAP Strategic Fund | Interval | Equity | Long / Short Equity | SilverBay Capital | 3/1/10 | 50,000 | 1.8 | 3,344,6 | 4.70 | A | - | 18.95 | 16.47 | 20.64 | 4.22 | 10.14 | 7.11 | - | Quarterly: 5\% to 25\% | 2 |
| Long / Short Equity |  |  |  |  |  | 50,000 | 1.8 | 3,344.6 | 4.7 |  |  | 19.0 | 16.5 | 20.6 | 4.2 | 10.1 | 7.1 |  |  |  |
| Stone Ridge All Asset Variance Risk Premium Fund | Interval | Equity | Option Writing | Stone Ridge | 4/2/15 | 15,000,000 | 15.6 | 1,628.4 | 2.59 | A | - | 3.04 | 3.82 | 4.17 | -3.95 | -2.34 | . | - | Quarterly: 5\% to 25\% | 1 |
| Option Writing |  |  |  |  |  | 15,000,000 | 15.6 | 1,628.4 | 2.6 |  |  | 3.0 | 3.8 | 4.2 | -4.0 | -2.3 |  |  |  |  |
| Total Income+ Real Estate Fund | Interval | Equity | Real Estate / Real Asset | Bluerock | 10/22/12 | 2,500 | 8.0 | 1,281.3 | 2.60 | Q | 5.3 | 1.88 | 1.76 | 2.03 | 7.1 | 6.71 | 6.25 | - | Quarterly: 5\% to 25\% | 4 |
| Broadstone Real Estate Access Fund | Interval | Equity | Real Estate / Real Asset | Broadstone | 10/4/18 | 2,500 | 0.0 | 0.1 |  | Q | 5.5 | 10.21 | 9.12 | 10.58 | - | - | - | - |  | 2 |
| Griffin Institutional Access Real Estate Fund | Interval | Equity | Real Estate / Real Asset | Griffin Capital | 6/30/14 | 2,500 | 0.1 | 2,629.3 | 2.35 | Q | 5.3 | 3.42 | 3.65 | 3.78 | 8.04 | 6.35 | - | - | Quarterly: 5\% to 25\% | 5 |
| Alternative Strategies Fund | Interval | Equity | Real Estate / Real Asset | Ladenburg Thalmann | 9/28/10 | 2,500 | 0.0 | 23.8 | 1.92 | Q | 7.6 | 10.6 | 6.22 | 11.37 | 9.59 | 4.9 | -0.42 | - | Quarterly: 5\% to 25\% | 3 |
| Predex | Interval | Equity | Real Estate / Real Asset | PREDEX Capital | 7/1/16 | 2,500 | 0.0 | 155.0 | 1.28 | Q | 4.2 | -0.17 | -0.02 | 0.01 | 2.46 | - | - | - | Quarterly: 5\% to 25\% | 3 |
| Resource Real Estate Diversified Income Fund | Interval | Equity | Real Estate / Real Asset | Resource Real | 3/12/13 | 2,500 | 15.0 | 317.4 | 3.01 | Q | 5.5 | 5.93 | 3.65 | 6.25 | 12.3 | 8.55 | 6.9 | - | Quarterly: 5\% to 25\% | 8 |
| USQ Core Real Estate Fund | Interval | Equity | Real Estate / Real Asset | Union Square | 9/27/17 | 2,500 | 0.0 | 28.0 | 0.85 | Q | 4.0 | 0.86 | 0.8 | 1.01 | 6.26 | - | - | - | Quarterly: 5\% to 25\% | 2 |
| Versus Cap Real Estate Income Fund | Interval | Equity | Real Estate / Real Asset | Versus Capital | 7/9/12 | 10,000,000 | 0.0 | 2,516.0 | 1.17 | Q | 4.4 | 2.61 | 2.38 | 2.79 | 6.69 | 5.89 | 6.73 | - | Quarterly: 5\% to 8\% | 1 |
| Versus Capital Real Assets Fund | Interval | Equity | Real Estate / Real Asset | Versus Capital | 9/18/17 | 10,000,000 | 0.0 | 1,128.2 | 1.31 | Q | 3.5 | 3.38 | 2.67 | 3.62 | 3.47 | $\cdot$ | $\checkmark$ | - | Quarterly: 5\% to 25\% | 1 |
| Real Estate / Real Asset |  |  |  |  |  | 2,224,167 | 7.7 | 897.7 | 1.8 |  | 5.0 | 4.3 | 3.4 | 4.6 | 7.0 | 6.5 | 4.9 |  |  |  |
| SharesPost 100 Fund | Interval | Equity | Venture / Private Equity | SP Investments | 3/25/14 | 2,500 | 0.0 | 121.5 | 2.50 | A | - | 4.86 | 2.7 | 2.61 | 6.23 | 5.03 | 7.43 | - | Quarterly: 5\% to 25\% | 3 |
| Venture / Private Equity |  |  |  |  |  | 2,500 |  | 121.5 | 2.5 |  |  | 4.9 | 2.7 | 2.6 | 6.2 | 5.0 | 7.4 |  |  |  |
| Equity |  |  |  |  |  | 1,672,929 | 8.7 | 661.5 | 2.6 |  | 4.6 | 6.0 | 4.6 | 6.4 | 3.7 | 5.6 | 4.3 |  |  |  |

## Interval Funds - Debt Focused

| Fund Name | Structure | Major <br> Group | Sub-Group | Sponsor | Inception | $\begin{aligned} & \text { Min } \\ & \text { Inv } \end{aligned}$ | Lev(\%) | Managed Assets(M) | Av Net Exp Ratio | Div Freq | Avg <br> NAV <br> Yield | $\begin{gathered} \text { TR } \\ \text { (Last Q) } \end{gathered}$ | $\begin{gathered} \text { TR } \\ (3 M O) \end{gathered}$ | $\begin{gathered} \text { TR } \\ \text { (YDT) } \end{gathered}$ | $\begin{gathered} \text { TR } \\ \text { (1YR) } \end{gathered}$ | $\begin{gathered} \text { TR } \\ (3 \mathrm{YR}) \end{gathered}$ | $\begin{gathered} \text { TR } \\ (5 \mathrm{YR}) \end{gathered}$ | $\begin{gathered} \text { TR } \\ (10 \mathrm{YR}) \end{gathered}$ | Redemption Details | Number of Share Classes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Angel Oak Strategic Credit Fund | Interval | Bond | Global Credit | Angel Oak | 12/26/17 | 1,000 | 0.0 | 7.0 | 0.42 | Q | 2.2 | 4.3 | 2.3 | 4.47 | 5.93 | - | - | - | $\begin{gathered} \text { Quarterly: } 5 \% \text { to } \\ 25 \% \end{gathered}$ | 2 |
| Destra International Event Driven Credit | Interval | Bond | Global Credit | Destra Capital | 5/9/18 | 2,500 | 0.0 | 25.2 | 2.25 | Q | 2.5 | 4.73 | 5.03 | 5.94 | - | - | - | - | $\begin{aligned} & \text { Quarterly: } 5 \% \text { to } \\ & 25 \% \end{aligned}$ | 4 |
| FS Credit Income Fund | Interval | Bond | Global Credit | F5 Credit | 11/1/17 | 2,500 | 76.9 | 118.5 | 2.68 | Q | 5.7 | 7.85 | 5.82 | 7.57 | 5.83 | - | - | - | Quarterly: $5 \%$ to 25\% | 3 |
| PIMCO Flexible Credit Income Fund | Interval | Bond | Global Credit | PIMCO | 2/22/17 | 2,500 | 39.4 | 755.0 | 2.11 | Q | 6.6 | 4.95 | 4.05 | 5.58 | 2.4 | - | - | - | $\begin{aligned} & \text { Quarterly: } 5 \% \text { to } \\ & 25 \% \end{aligned}$ | 2 |
| Resource Credit Income Fund | Interval | Bond | Global Credit | Resource Alternative | 4/17/15 | 2,500 | 0.0 | 171.1 | 2.76 | Q | 6.3 | 5.92 | 4.66 | 6.9 | 4.74 | 11.47 | - | - | Quarterly: no less than $5 \%$ | 5 |
| Zazove Convertible Securities Fund | Interval | Bond | Global Credit | Zazove |  | - | 0.0 | 48.7 |  |  | - | - | - | - | - | - | - | - | Quarterly: 5\% to 25\% | 1 |
| Global Credit |  |  |  |  |  | 2,200 | 38.8 | 187.6 | 2.0 |  | 4.7 | 5.6 | 4.4 | 6.1 | 4.7 | 11.5 |  |  |  |  |
| American Beacon Apollo Total Return Fund | Interval | Bond | Loans / Structured Credit | American Beacon |  | 100,000 | 0.0 | 5.0 | 2.69 | Q | 0.5 | 4.59 | 2.78 | 5.0 | . | . | - | - | $\begin{aligned} & \text { Quarterly: } 5 \% \text { to } \\ & 25 \% \end{aligned}$ | 1 |
| American Beacon Sound Point Enhanced Income Fund | Interval | Bond | Loans / Structured Credit | American Beacon | 7/2/18 | 100,000 | 0.0 | 5.2 | 1.61 | Q | 1.3 | 3.9 | 3.37 | 4.3 | - | - | - | - | $\begin{aligned} & \text { Quarterly: } 5 \% \text { to } \\ & 25 \% \end{aligned}$ | 1 |
| Blackstone / GSO Floating Rate Enhanced Income Fund | Interval | Bond | Loans / Structured Credit | Blackstone | 1/18/18 | 10,000 | 23.4 | 499.0 | 1.10 | M | 6.8 | 5.05 | 2.92 | 6.1 | 4.18 | - | - | - | Monthly: 5\% to 25\% | 3 |
| Cion Ares Diversified Credit Fund | Interval | Bond | Loans / Structured Credit | CION Ares | 1/26/17 | 2,500 | 0.0 | 230.7 | 0.34 | M | 5.5 | 4.21 | 3.11 | 4.41 | 5.8 | - | - | - | $\begin{aligned} & \text { Quarterly: } 5 \% \text { to } \\ & 25 \% \end{aligned}$ | 6 |
| Forefront Income Trust | Interval | Bond | Loans / Structured Credit | Forefront Capital | 12/31/14 | 1,000 | 0.0 | 8.3 | 0.83 | A | - | 1.27 | 1.07 | 1.27 | 6.34 | 2.82 | - | - | $\begin{gathered} \text { Quarterly: } 5 \% \text { to } \\ 25 \% \end{gathered}$ | 1 |
| Grifin Institutional Access Credit Fund | Interval | Bond | Loans / Structured Credit | Griffin Capital | 4/3/17 | 2,500 | 0.0 | 196.2 | 0.00 | Q | 6.2 | 4.55 | 2.23 | 4.87 | 2.75 | - | - | - | $\begin{gathered} \text { Quarterly: } 5 \% \text { to } \\ 25 \% \end{gathered}$ | 5 |
| Invesco Senior Loan Fund | Interval | Bond | Loans / Structured Credit | Invesco | 10/4/89 | 1,000 | 17.5 | 863.5 | 2.42 | M | 4.5 | 5.32 | 2.55 | 6.08 | 3.29 | 7.79 | 3.66 | 9.52 | Monthly: 5\% to 25\% | 5 |
| OFI Carlyle Global Private Credit Fund | Interval | Bond | Loans / Structured Credit | OCP | 6/4/18 | 25,000 | 6.1 | 93.8 | 4.18 | Q | - | - | - | - | - | - | - | - | $\begin{gathered} \text { Quarterly: } 5 \% \text { to } \\ 25 \% \end{gathered}$ | 5 |
| Palmer Square Opportunistic Income Fund | Interval | Bond | Loans / Structured Credit | Palmer Square | 8/29/14 | 250,000 | 0.0 | 133.0 | 1.58 | Q | 5.6 | 3.24 | 2.85 | 3.41 | 2.31 | 7.4 | - | - | $\begin{aligned} & \text { Quarterly: } 5 \% \text { to } \\ & 25 \% \end{aligned}$ | 1 |
| Pathway Capital Opportunity Fund | Interval | Bond | Loans / Structured Credit | Pathway Capital |  | 1,000 | 6.6 | 6.9 | 24.72 | M | - | - | - | - | $\cdot$ | - | - | - | $\begin{aligned} & \text { Quarterly: } 5 \% \text { to } \\ & 25 \% \end{aligned}$ | 2 |
| Sierra Total Return Fund | Interval | Bond | Loans / Structured Credit | STRF Advisors | 6/1/17 | 2,500 | 0.0 | 2.1 | 2.96 | Q | 5.2 | 2.65 | 2.28 | 2.9 | 6.42 | - | - | - | $\begin{aligned} & \text { Quaterly: } 5 \% \text { to } \\ & 25 \% \end{aligned}$ | 4 |
| Tortoise Tax-Advantaged Social Infrastructure | Interval | Bond | Loans / Structured Credit | Tortoise | 3/26/18 | 2,500 | 0.0 | 108.6 | 1.50 | Q | 4.8 | 2.81 | 1.72 | 2.7 | 3.83 | - | - | - | $\begin{gathered} \text { Quarterly: } 5 \% \text { to } \\ 25 \% \end{gathered}$ | 1 |
| Voya Senior Income Fund | Interval | Bond | Loans / Structured Credit | Voya | 4/2/01 | 1,000 | 28.4 | 458.0 | 2.90 | M | 6.2 | 5.02 | 2.45 | 5.91 | 2.19 | 5.18 | 3.13 | 8.12 | $\begin{aligned} & \text { Quarterly: } 5 \% \text { to } \\ & 25 \% \end{aligned}$ | 4 |
| Loans / Structured Credit |  |  |  |  |  | 38,385 | 16.4 | 200.8 | 3.9 |  | 4.7 | 3.9 | 2.5 | 4.3 | 4.1 | 5.8 | 3.4 | 8.8 |  |  |
| RiverNorth Marketplace Lendina Corp | Interval | Bond | Marketplace Loans | RiverNorth | 9/22/16 | 1,000,000 | 22.2 | 275.1 | 4.96 | Q | 8.1 | 0.68 | 0.64 | 0.68 | 0.67 | . | . | . | $\begin{aligned} & \text { Quarterly: } 5 \% \text { to } \\ & 25 \% \end{aligned}$ | 1 |
| Stone Ridge Alternative Lending Risk Premium Fund | Interval | Bond | Marketplace Loans | Stone Ridge | 11/12/15 | 15,000,000 | 28.3 | 4,426.9 | 4.80 | A | - | -0,1 | -0.1 | -0.1 | -0.78 | $\cdot$ | $\cdot$ | - | $\begin{gathered} \text { Quarterly: } 5 \% \text { to } \\ 25 \% \end{gathered}$ | 1 |
| Marketplace Loans |  |  |  |  |  | 8,000,000 | 25.3 | 2,351.0 | 4.9 |  | 8.1 | 0.3 | 0.3 | 0.3 | -0.1 |  |  |  |  |  |
| 504 FUND | Interval | Bond | Real Estate Debt | Bluestone | 12/16/13 | 10,000 | 0.0 | 46.2 | 1.75 | Q | - | 1.04 | 0.93 | 1.04 | 1.35 | -1.3 | - | - | Vearly: 5\% to 25\% | 1 |
| Church Capital Fund | Interval | Bond | Real Estate Debt | Church Capital | 10/4/05 | . | 0.0 | 17.8 | 2.54 | Q | 0.3 | 2.83 | 2.75 | 2.92 | 7.77 | -8.11 | -4.77 | -5.18 |  | 1 |
| Nexpoint Real Estate Strategies Fund | Interval | Bond | Real Estate Debt | NexPoint | 7/1/16 | 500 | 0.0 | 13.4 | 2.13 | M | 6.7 | 7.63 | 5.09 | 8.96 | 10.96 | - | - | - | Quarterly: $5 \%$ to $25 \%$ | 4 |
| Vertical Capital Income Fund | Interval | Bond | Real Estate Debt | Oakline Advisors | 12/30/11 | 2,500 | 4.6 | 144.4 | 2.35 | M | 2.4 | 2.72 | 1.7 | 1.33 | 3.75 | 4.57 | 6.91 | - |  | 4 |
| RiverPark Floating Rate CMBS Fund | Interval | Bond | Real Estate Debt | RiverPark Advisors | 5/31/10 | 1,000 | 0.0 | 49.7 | 1.00 | M | 2.4 | 1.69 | 1.89 | 1.89 | 3.15 | . | . | - | $\begin{aligned} & \text { Quarterly: } 5 \% \text { to } \\ & 25 \% \end{aligned}$ | 1 |
| Thrivent Church Loan and Income Fund | Interval | Bond | Real Estate Debt | Thrivent Financial |  | 2,000 | 0.0 | 0.1 |  |  | 0.6 | 3.55 | 3.24 | 3.35 | - | - | - | - | $\begin{aligned} & \text { Quarterly: } 5 \% \text { to } \\ & 25 \% \end{aligned}$ | 1 |
| Real Estate Debt |  |  |  |  |  | 3,200 | 4.6 | 45.3 | 2.0 |  | 2.5 | 3.2 | 2.6 | 3.2 | 5.4 | -1.6 | 1.1 | -5.2 |  |  |
| City National Rochdale Select Strateqies Fund | Interval | Bond | Reinsurance / Insurance Linked Securities | City National | 7/27/17 | 1,000,000 | 0.0 | 45.6 | 1.00 | A | - | . | 0.1 | . | 6.34 | . | . | . | $\begin{aligned} & \text { Quarterly: } 5 \% \text { to } \\ & 25 \% \end{aligned}$ | 1 |
| Pioneer ILS Interval Fund | Interval | Bond | Reinsurance / Insurance Linked Securities | Pioneer | 12/17/14 | 1,000,000 | 0.0 | 908.7 | 1.95 | A | 6.4 | -0.46 | -0.58 | -0.58 | -4.32 | -0.96 | - | - | $\begin{gathered} \text { Quarterly: } 5 \% \text { to } \\ 25 \% \end{gathered}$ | 1 |
| Stone Ridge Reinsurance Risk Premium Interval Fund | Interval | Bond | Reinsurance / Insurance Linked Securities | Stone Ridge | 12/9/13 | - | 0.0 | 5,975,7 |  | A | $\cdot$ | -0.61 | -0.85 | -1.21 | -9.56 | -7.38 | -4.32 | - | $\begin{gathered} \text { Quarterly: } 5 \% \text { to } \\ 25 \% \end{gathered}$ | 1 |
| Reinsurance / Insurance Linked Securities |  |  |  |  |  | 1,000,000 |  | 2,310.0 | 1.5 |  | 6.4 | -0.5 | -0.4 | -0.9 | -2.5 | -4.2 | -4.3 |  |  |  |
| Bond |  |  |  |  |  | 686,148 | 23.0 | 521.3 | 3.1 |  | 4.4 | 3.4 | 2.4 | 3.7 | 3.3 | 2.1 | 0.9 | 4.2 |  |  |

## Tender Offer Funds

| Fund Name | Structure | Major Group | Sub-Group | Sponsor | Inception | $\begin{aligned} & \text { Min } \\ & \text { Inv } \end{aligned}$ | Lev(\%) | Managed Assets(M) | Av Net Exp Ratio | Div Freq |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GAI Aqility Income Fund | Tender Offer | Equity | Fund of Funds | Alternative Strategies |  | 50,000 | 0.0 | 287.3 | 1.76 | Q |
| GAI Corbin Multi-Strategy Fund, LLC | Tender Offer | Equity | Fund of Funds | Alternative Strategies |  | 50,000 | 0.1 | 143.5 | 2.10 | A |
| ABS Lonq/Short Strateqies Fund | Tender Offer | Equity | Fund of Funds | ABS Investment | 1/4/16 | 25,000 | 0.0 | 161.4 | 1.10 | A |
| AB Multi-Manager Alternative Fund | Tender Offer | Equity | Fund of Funds | AllianceBernstein | 10/1/12 | 20,000 | 0.0 | 1,092.2 | 1.34 | A |
| Excelsior Private Markets Fund II (TE), LLC Excelsior Private Markets Fund II (TI), LLC | Tender Offer Tender Offer | Equity Equity | Fund of Funds Fund of Funds | Bank of America Bank of America | $\begin{aligned} & 1 / 1 / 12 \\ & 8 / 10 / 11 \end{aligned}$ | $\begin{aligned} & 50,000 \\ & 50,000 \end{aligned}$ | $\begin{aligned} & 0.0 \\ & 0.0 \end{aligned}$ | $\begin{aligned} & 81.5 \\ & 135.8 \end{aligned}$ | $\begin{aligned} & 1.39 \\ & 1.39 \end{aligned}$ |  |
| Excelsior Private Markets Fund III (TE). | Tender Offer | Equity | Fund of Funds | Bank of America | 10/25/13 | 50,000 | 0.0 | 27.5 | 2.10 |  |
| Excelsior Private Markets Fund III (TI). LLC | Tender Offer | Equity | Fund of Funds | Bank of America | 10/25/13 | 50,000 | 0.0 | 38.1 | 2.10 |  |
| MAN FRM ALTERNATIVE MULTISTRATEGY FUND LLC | Tender Offer | Equity | Fund of Funds | Bank of America | 10/1/00 | 50,000 | 0.0 | 133.8 | 1.07 | A |
| Blackstone Alternative Alpha Fund | Tender Offer | Equity | Fund of Funds | Blackstone Alternative | 4/1/12 | 25,000 | 0.0 | 660.8 | 0.11 | A |
| Blackstone Alternative Alpha Fund II | Tender Offer | Equity | Fund of Funds | Blackstone Alternative | 9/1/13 | 25,000 | 0.0 | 68.9 | 0.29 | A |
| CPG Carlyle Commitments Fund, LLC CPG Vintage Access Fund, LLC | Tender Offer Tender Offer | Equity Equity | Fund of Funds Fund of Funds | Central Park Central Park | $\begin{gathered} 6 / 1 / 13 \\ 11 / 17 / 17 \end{gathered}$ | $\begin{aligned} & 50,000 \\ & 50,000 \end{aligned}$ | $\begin{aligned} & 0.0 \\ & 0.0 \end{aligned}$ | $\begin{gathered} 1,098.7 \\ 48.2 \end{gathered}$ | $\begin{aligned} & 1.80 \\ & 5.21 \end{aligned}$ |  |
| Cross Shore Discovery Fund | Tender Offer | Equity | Fund of Funds | Cross Shore | 1/2/15 | 50,000 | 0.0 | 37.5 | 2.16 | A |
| Evanston Alternative Opportunities Fund | Tender Offer | Equity | Fund of Funds | Evanston | 7/1/14 | 50,000 | 0.0 | 43.0 | 2.08 | A |
| FEG Absolute Access Fund I LLC | Tender Offer | Equity | Fund of Funds | FEG | 4/1/08 | 50,000 | 0.0 | 257.3 | 1.26 |  |
| FSI Low Beta Absolute Return Fund | Tender Offer | Equity | Fund of Funds | Financial Solutions | 7/1/13 | 50,000 | 0.0 | 30.8 | 1.72 | A |
| GROSVENOR REGISTERED MULTISTRATEGY FUND (TI 1), LLC | Tender Offer | Equity | Fund of Funds | Grosvenor | 1/1/10 | 25,000 | 0.0 | 232.5 | 1.95 | A |
| GROSVENOR REGISTERED MULTISTRATEGY FUND (TI 2), LLC | Tender Offer | Equity | Fund of Funds | Grosvenor | 7/1/10 | 25,000 | 0.0 | 85.7 | 2.32 | A |
| Grosvenor Reqistered Multi-Strateqy Fund | Tender Offer | Equity | Fund of Funds | Grosvenor | 9/1/13 | 25,000 | 0.0 | 17.3 | 1.80 | A |
| Hatteras Core Alternatives Fund, L.P. | Tender Offer | Equity | Fund of Funds | Hatteras | 4/1/05 | 1,000,000 | 0.0 | 68.9 | 2.73 |  |
| Hatteras Core Alternatives Institutional Fund, L.P. | Tender Offer | Equity | Fund of Funds | Hatteras | 1/1/07 | 1,000,000 | 0.0 | 77.8 | 2.70 |  |
| Hatteras Core Alternatives TEI Fund, L.P. | Tender Offer | Equity | Fund of Funds | Hatteras | 4/1/15 | 1,000,000 | 0.0 | 89.6 | 2.97 |  |
| Hatteras Core Alternatives TEI Institutional Fund, L. P. | Tender Offer | Equity | Fund of Funds | Hatteras | 1/1/07 | 1,000,000 | 0.0 | 210.5 | 2.85 |  |
| Peachtree Alternative Strategies Fund | Tender Offer | Equity | Fund of Funds | Homrich \& Berg | 1/3/17 | 10,000 | 0.0 | 205.8 | 0.51 | A |
| Infinity Lonq/Short Equity Fund, LLC | Tender Offer | Equity | Fund of Funds | Infinity Capital | 10/4/17 | 25,000 | 0.0 | 19.6 | 1.50 | A |
| Ironwood Multi-Strategy Fund LLC | Tender Offer | Equity | Fund of Funds | Ironwood | 1/1/11 | 25,000 | 0.0 | 1,289.4 | 1.39 | A |
| J.P. Morqan Access Multi-Strateqy Fund II | Tender Offer | Equity | Fund of Funds | J.P. Morgan | 10/1/11 | 50,000 | 3.7 | 107.4 | 1.63 | A |
| Mellon Optima L/S Strateqy Fund, LLC | Tender Offer | Equity | Fund of Funds | Mellon | 5/2/05 | 50,000 | 0.0 | 233.5 | 2.00 |  |
| Morqan Creek Global Equity Lonq/Short Institutional Fund | Tender Offer | Equity | Fund of Funds | Morgan Creek | 10/3/11 | 25,000 | 4.2 | 30.2 | 3.21 | A |
| AIP Macro Reqistered Fund P | Tender Offer | Equity | Fund of Funds | Morgan Stanley AIP | 7/1/12 | 25,000 | 0.0 | 12.1 | 2.26 | A |
| AIP Multi-Strategy Fund P | Tender Offer | Equity | Fund of Funds | Morgan Stanley AIP | 5/1/10 | 50,000 | 0.0 | 24.5 | 2.65 | A |
| Alternative Investment Partners Absolute Return Fund STS | Tender Offer | Equity | Fund of Funds | Morgan Stanley AIP | 9/1/06 | 50,000 | 0.0 | 250.7 | 3.04 | A |
| NB Crossroads Private Markets Fund IV (TE) - Client LLC | Tender Offer | Equity | Fund of Funds | Neuberger Berman |  | 50,000 | 0.0 | 52.5 | 2.44 | NA |
| NB Crossroads Private Markets Fund IV (TI) - Client LLC | Tender Offer | Equity | Fund of Funds | Neuberger Berman | 11/15/16 | 50,000 | 0.0 | 95.0 | 2.44 | NA |
| NB Crossroads Private Markets Fund V (TE) Advisory LP | Tender Offer | Equity | Fund of Funds | Neuberger Berman | 5/18/18 | 50,000 | 0.0 | 9.9 | 116.69 | NA |
| NB Crossroads Private Markets Fund V (TE) | Tender Offer | Equity | Fund of Funds | Neuberger Berman | 5/18/18 | 50,000 | 0.0 | 8.2 | 116.69 | NA |
| NB Crossroads Private Markets Fund V (TI) Advisory LP | Tender Offer | Equity | Fund of Funds | Neuberger Berman | 7/31/18 | 50,000 | 0.0 | 1.0 | 116.69 | NA |
| NB Crossroads Private Markets Fund V (TI) | Tender Offer | Equity | Fund of Funds | Neuberger Berman | 5/18/18 | 50,000 | 0.0 | 14.9 | 116.69 | NA |
| Pomona Investment Fund | Tender Offer | Equity | Fund of Funds | Pomona | 5/7/15 | 25,000 | 0.0 | 102.4 | 3.23 | A |

## Tender Offer Funds - continued

| Fund Name | Structure | Major Group | Sub-Group | Sponsor | Inception | $\begin{aligned} & \text { Min } \\ & \text { Inv } \end{aligned}$ | Lev(\%) | Managed Assets(M) | Av Net Exp Ratio | Div Freq |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Princeton Private Investment Fund | Tender Offer | Equity | Fund of Funds | Princeton | 5/13/16 | 50,000 | 0.0 | 42.5 | 2.42 | A |
| Skybridge G II Fund, LLC | Tender Offer | Equity | Fund of Funds | SkyBridge Capital | 1/2/14 | 25,000 | 0.7 | 111.1 | 1.50 | A |
| Skybridqe Multi-Adviser Hedqe Fund Portfolios LLC | Tender Offer | Equity | Fund of Funds | SkyBridge Capital | 1/1/03 | 25,000 | 0.0 | 4,827.0 | 1.88 | A |
| STEBEN SELECT MULTI-STRATEGY FUND | Tender Offer | Equity | Fund of Funds | Steben \& Company | 8/1/13 | 25,000 | 0.0 | 54.9 | 0.80 | A |
| A\&Q Alternative Fixed-Income Strateqies Fund LLC | Tender Offer | Equity | Fund of Funds | UBS Hedge Fund | 8/1/02 | 50,000 | 0.0 | 2.3 | 27.93 | A |
| ARO Masters Fund | Tender Offer | Equity | Fund of Funds | UBS Hedge Fund | 7/1/13 | 50,000 | 0.0 | 130.7 | 1.70 | A |
| ARQ Multi-Strateqy Fund | Tender Offer | Equity | Fund of Funds | UBS Hedge Fund | 3/29/11 | 50,000 | 1.4 | 607.6 | 2.10 | A |
| USCA All Terrain Fund | Tender Offer | Equity | Fund of Funds | USCA | 7/1/15 | 100,000 | 0.0 | 56.3 | 1.26 | NA |
| Infinity Core Alternative Fund | Tender Offer | Equity | Fund of Funds | Vivaldi | 10/1/13 | 25,000 | 2.2 | 85.4 | 1.65 | A |
| Fund of Funds |  |  |  |  |  | 119,490 | 2.0 | 275.6 | 11.8 |  |
| Altegris KKR Commitments Master Fund | Tender Offer | Equity | Venture / Private Equity | Altegris Advisors | 8/1/18 | 25,000 | 0.0 | 398.0 | 2.09 | A |
| AMG Pantheon Fund, LLC | Tender Offer | Equity | Venture / Private Equity | Pantheon Ventures | 10/1/14 | 25,000 | 0.0 | 16.9 | 0.44 | A |
| Partners Group Private Equity (Master Fund), LLC | Tender Offer | Equity | Venture / Private Equity | Partners Group | 1/1/17 | 50,000 | 0.0 | 3,726.2 | 2.45 | A |
| Venture / Private Equity |  |  |  |  |  | 33,333 | 0.0 | 1,380.4 | 1.7 |  |
| Equity |  |  |  |  |  | 114,519 | 1.7 | 339.3 | 11.3 |  |
| BlackRock Multi-Sector Opportunities Trust | Tender Offer | Bond | Global Credit | BlackRock | 1/15/18 | 25,000 | 0.9 | 450.1 | 1.33 | Q |
| Federated Proiect \& Trade Finance Tender Fund | Tender Offer | Bond | Global Credit | Federated | 12/7/16 | 100,000 | 0.0 | 50.6 | 0.70 | Q |
| Guggenheim Energy \& Income Fund | Tender Offer | Bond | Global Credit | Guggenheim | 8/13/15 | 25,750 | 0.0 | 72.2 | 3.08 | Q |
| Western Asset Middle Market Debt Fund Inc. | Tender Offer | Bond | Global Credit | Legg Mason | 12/20/12 | 25,000 | 19.3 | 102.7 | 2.41 | Q |
| Western Asset Middle Market Income Fund | Tender Offer | Bond | Global Credit | Legg Mason | 8/26/14 | 25,750 | 14.7 | 210.8 | 2.20 | Q |
| Global Credit |  |  |  |  |  | 40,300 | 7.0 | 177.3 | 1.9 |  |
| Stira Alcentra Global Credit Fund | Tender Offer | Bond | Loans / Structured Credit | Stira | 5/8/17 | 5,000 | 0.0 | 34.2 | 1.20 | M |
| FS Global Credit Opportunities Fund - ADV | Tender Offer | Bond | Loans / Structured Credit | FS Global | 7/6/16 | 5,000 | 0.0 | 2,200.0 | 0.82 | M |
| FS Global Credit Opportunities Fund - T | Tender Offer | Bond | Loans / Structured Credit | FS Global | 6/1/16 | 5,000 | 0.0 | 2,200.0 | 1.20 | M |
| FS Global Credit Opportunities Fund-A | Tender Offer | Bond | Loans / Structured | FS Global | 12/12/13 | 5,000 | 0.0 | 2,200.0 | 0.16 | M |
| FS Global Credit Opportunities Fund-D | Tender Offer | Bond | Loans / Structured Credit | FS Global | 12/12/13 | 5,000 | 0.0 | 2,200.0 | 0.24 | M |
| FS Global Credit Opportunities Fund-T2 | Tender Offer | Bond | Loans / Structured | FS Global | 8/2/17 | 5,000 | 0.0 | 2,200.0 | 1.76 | M |
| Partners Group Private Income Opportunities, LLC | Tender Offer | Bond | Loans / Structured | Partners Group | 4/1/17 | 50,000 | 0.0 | 65.6 | 1.96 | Q |
| Priority Income Fund, Inc | Tender Offer | Bond | Loans / Structured | Priority Senior | 5/9/13 | 1,000 | 13.5 | 403.6 | 7.76 | M |
| City National Rochdale Structured Claims Fixed Income Fund LLC | Tender Offer | Bond | Loans / Structured | Rochdale | 2/24/10 | 25,000 | 0.0 | 21.4 | 1.30 | M |
| Loans / Structured Credit |  |  |  |  |  | 11,778 | 13.5 | 1,280.5 | 1.8 |  |
| Blackstone Real Estate Income Fund | Tender Offer | Bond | Real Estate Debt | Blackstone Real Estate | 4/1/14 | 25,000 | 0.0 | 559.6 | 4.58 | Q |
| Blackstone Real Estate Income Fund II | Tender Offer | Bond | Real Estate Debt | Blackstone Real Estate | 4/1/14 | 25,000 | 0.0 | 214.6 | 4.00 | Q |
| CC Real Estate Income Fund | Tender Offer | Bond | Real Estate Debt | CNI RECF |  | 4,000 | 0.0 | 29.5 | 0.60 | NA |
| CCReal Estate Income Fund-ADV | Tender Offer | Bond | Real Estate Debt | CNI RECF | 11/8/17 | 4,000 | 0.0 | 0.1 | 0.60 | M |
| CCReal Estate Income Fund-C | Tender Offer | Bond | Real Estate Debt | CNI RECF | 1/30/18 | 4,000 | 0.0 | 0.1 | 0.60 | M |
| CC Real Estate Income Fund-T | Tender Offer | Bond | Real Estate Debt | CNI RECF | 5/6/16 | 4,000 | 0.0 | 3.3 | 0.60 | M |
| Real Estate Debt |  |  |  |  |  | 11,000 |  | 134.5 | 1.8 |  |
| Bond |  |  |  |  |  | 18,675 | 8.1 | 660.9 | 1.9 |  |
| ALL FUNDS AVERAGE |  |  |  |  |  | 87,896 | 4.7 | 428.7 | 8.6 |  |

## PIMCO Flexible Credit Income Fund bond-Global Credit



# Recent Active iCEFs 

(launched since 2018)

| Fund Name | Structure | Major Group | Sub-Group | Sponsor | Inception | Min <br> Inv | $\begin{aligned} & \text { Lev } \\ & \text { (\%) } \end{aligned}$ | Managed Assets (M) | Av <br> Net <br> Exp <br> Ratio | Div Freq |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Broadstone Real Estate Access Fund | Interval | Equity | Real Estate / Real Asset | Broadstone | 10/4/18 | 2,500 | 0.0 | 0.1 |  | Q |
| FS Multi-Alternative Income Fund | Interval | Equity | Global Equity | FS MultiAlternative | 9/27/18 | 2,500 | 0.0 | 31.4 | 2.38 | Q |
| American Beacon Sound Point Enhanced Income Fund | Interval | Bond | Loans / Structured Credit | American Beacon | 7/2/18 | 100,000 | 0.0 | 5.2 | 1.61 | Q |
| OFI Carlyle Global Private Credit Fund | Interval | Bond | Loans / Structured Credit | OCP | 6/4/18 | 25,000 | 6.1 | 93.8 | 4.18 | Q |
| NexPoint Healthcare Opportunities Fund | Interval | Equity | Global Equity | NexPoint Advisors | 5/10/18 | 500 | 0.0 | 5.0 | 2.37 | Q |
| Destra International Event Driven Credit | Interval | Bond | Global Credit | Destra Capital | 5/9/18 | 2,500 | 0.0 | 25.2 | 2.25 | Q |
| Tortoise Tax-Advantaged Social Infrastructure | Interval | Bond | Loans / Structured Credit | Tortoise | 3/26/18 | 2,500 | 0.0 | 108.6 | 1.50 | Q |
| Weiss Strategic Interval Fund | Interval | Equity | Global Equity | Weiss MultiStrategy | 2/1/18 | - | 0.0 | 186.1 | 8.64 | Q |
| Blackstone / GSO Floating Rate Enhanced Income Fund | Interval | Bond | Loans / Structured Credit | Blackstone | 1/18/18 | 10,000 | 23.4 | 499.0 | 1.10 | M |
|  |  |  |  |  |  |  | Source: CEFData.com |  |  |  |

Total Active iFunds: 52. AUM: \$29.53B

## CEFA's Outlook for 2Q 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


## 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

7204Glen Forest Drive, Suite \#105 Richmond, Virginia 23226USA • Toll-Free: (800) 356-3508/Local: (804) 288-2482 * www.CEFadvisors.com • Contact@CEFadvisors.com CEF Advisors' Model Portfolio Offerings

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Data ${ }^{\text {D }}$ | itions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Portfolio | Discount | ${ }^{1} \mathrm{Y}_{\mathrm{r}}$ Avg Discount | 3Yr Avg Discount | Rel Disc Range(3yr) | MkYield | Lev AdjNAV Yield | $\begin{aligned} & \text { After Tax } \\ & \text { Yield } \end{aligned}$ | TaxFriction | 1Yr RoC\% | 3 Yr Dest RoC\% | Lev\% | EtLeecost | NonLev Expense Ratio | 3YrnaV Volatility | 3YrNavtr | Purchases Turnover | $\begin{aligned} & \text { Sales } \\ & \text { Turnover } \end{aligned}$ | \% Equity Exposure | \%Bond Exposure | \#Holdings | Cash Weighted Duration | Beta (2yr) | Comp NAV TR | $\begin{aligned} & \text { Comp } \\ & \text { Discount } \end{aligned}$ |
| 1 CEFA International Opoortunity | -1105 | -1147 | -1129 | 50.87 | 7.20 | 5.68 | 6.15 | 105 | 25.8 | 9.9 | 13.5 | 0.44 | 139 | 1228 | 8.07 | 48.95 | 54.02 | 63.64 | 3211 | 26 | 143 | 0.50 | -135 | -3.24 |
| 2 CEFA Diversitied Eouity | -14.44 | -1434 | -1451 | 46.07 | 6.64 | 5.25 | 5.72 | 0.92 | 17.8 | 13 | 10.3 | 0.36 | 0.78 | 14.53 | 9.30 | 57.80 | 67.43 | 88.16 | 9.82 | 25 | N/A | 0.86 | 0.09 | -3.89 |
| 3 3. CEFA Diversified Growth | -10.73 | -1137 | -1132 | 49.45 | 8.13 | 5.99 | 6.79 | 134 | 25.2 | 24 | 217 | 122 | 199 | 12.68 | 9.37 | 51.57 | 51.61 | 63.17 | 35.07 | 32 | 0.87 | 0.73 | -140 | -3.88 |
| 4.CEFA Aly ${ }^{\text {ard (Hish) Income }}$ | -8.40 | -8.51 | -7.71 | 50.72 | 10.60 | 7.77 | 9.21 | 1.39 | 46.1 | 10.8 | 26.8 | 1.52 | 212 | 11.43 | 8.40 | 59.41 | 63.43 | 51.36 | 46.76 | 37 | 0.96 | 0.64 | -0.68 | -285 |
| $\frac{\text { 4.1 CEFAHybrid (High) Income }}{\text { Monthly }}$ | -3.69 | -5.29 | -5.70 | 57.92 | 10.64 | 8.30 | 9.17 | 147 | 424 | 120 | 26.4 | 149 | 225 | 10.62 | 8.82 | 77.37 | 8104 | 44.19 | 54.10 | 39 | 155 | 0.58 | -138 | 0.75 |
| 5.CEFA Discount Opportunity | -15.23 | -16.49 | -14.97 | 49.47 | 6.91 | 4.74 | 5.64 | 127 | 16.4 | 28 | 23.4 | 145 | 201 | 11.10 | 7.19 | 49.08 | 5218 | 59.08 | 38.96 | 37 | 124 | 0.66 | 0.17 | -8.32 |
| 6. CEFAA Alterative Income | -5.81 | -7.29 | -8.01 | 56.42 | 8.78 | 6.64 | 7.33 | 1.45 | 28.4 | 4.8 | 25.3 | 1.57 | 237 | 10.21 | 9.76 | 71.29 | 6238 | 42.78 | 54.66 | 29 | 0.95 | 0.59 | 0.24 | -0.42 |
| $\frac{\text { 6.1CEFAAlternative Income-Tax }}{\text { Advantazed }}$ | -8.55 | -9.24 | -8.03 | 5144 | 8.64 | 6.19 | 7.49 | 115 | 34.2 | 9.0 | 28.7 | 1.60 | 195 | 9.59 | 6.99 | 66.47 | 6263 | 40.06 | 58.50 | 38 | 166 | 0.53 | -0.64 | -244 |
| 7.CEFA Foundation/Balanced | -8.23 | -9.32 | -8.72 | 55.82 | 8.57 | 6.39 | 7.17 | 140 | 28.2 | 3.1 | 23.1 | 122 | 181 | 10.80 | 9.39 | 48.89 | 5201 | 51.07 | 47.17 | 30 | 1.18 | 0.59 | 0.34 | -223 |
| $\frac{7.1 \text { CEFAF Foundation/Balanced- }}{\text { TaxAdvantaged }}$ | -8.41 | -8.73 | -8.16 | 49.27 | 7.81 | 5.93 | 6.97 | 0.84 | 33.7 | 4.5 | 22.1 | 108 | 160 | 11.87 | 7.83 | 51.25 | 56.16 | 59.33 | 39.32 | 36 | 193 | 0.66 | 0.10 | -240 |
| 8. CEFA Taxable Bond\& BDC | -5.90 | -7.34 | -7.23 | 60.71 | 8.81 | 6.31 | 6.87 | 1.94 | 9.6 | 28 | 30.9 | 183 | 225 | 4.95 | 8.73 | 70.91 | 59.58 | 9.34 | 87.61 | 25 | 252 | 0.30 | 0.20 | -1.21 |
| $\begin{aligned} & \text { 9. CEFA Dividend Confidence } \\ & \text { Model } \end{aligned}$ | -8.63 | -8.99 | -8.35 | 50.51 | 7.73 | 5.58 | 6.35 | 138 | 20.2 | 0.3 | 27.0 | 128 | 187 | 10.35 | 9.33 | 58.35 | 55.33 | 51.13 | 47.66 | 36 | 107 | 0.68 | 0.21 | -281 |
| 10. CEFA Diversified Low Beta | -5.87 | -6.94 | -5.82 | 54.19 | 8.01 | 5.98 | 6.57 | 144 | 23.4 | 7.9 | 27.7 | 147 | 186 | 6.63 | 7.13 | 61.50 | 64.55 | 31.52 | 66.74 | 36 | 1.6 | 0.32 | 0.21 | -0.91 |
| 11 CEFA Low Correlation | -5.30 | -6.59 | -5.81 | 56.25 | 8.23 | 6.29 | 6.98 | 125 | 17.1 | 5.2 | 25.9 | 144 | 243 | 9.31 | 7.33 | 48.69 | 47.42 | 45.77 | 5275 | 27 | 268 | 0.53 | -0.69 | -0.96 |
| 111. CEFA Low Correation-IRA | -4.56 | -6.42 | -6.40 | 58.58 | 7.93 | 6.15 | 6.43 | 1.50 | 17.7 | 6.1 | 24.2 | 154 | 181 | 9.64 | 8.20 | 38.23 | 39.57 | 40.47 | 58.15 | 24 | 249 | 0.52 | -126 | -105 |
| 12. CEFA Div Tax-Sensitive Income <br> $($ EaWt $)$ | -6.06 | -6.89 | -5.90 | 48.56 | 8.41 | 6.62 | 7.82 | 0.59 | 44.4 | 112 | 23.6 | 101 | 134 | 13.29 | 6.05 | 42.53 | 47.12 | 55.86 | 43.14 | 19 | 198 | 0.68 | -198 | -0.94 |
| 12.1. CEFA DivTax-Sensitive Income(Muniow | -6.68 | -7.99 | -6.18 | 5213 | 7.54 | 5.63 | 6.97 | 0.57 | 44.2 | 4.3 | 27.9 | 116 | 153 | 10.90 | 6.52 | 32.55 | 36.48 | 47.56 | 47.08 | 39 | 3.91 | 0.58 | 122 | -2.12 |
| 13.CEFA ADCSelect | 0.70 | -1.17 | 0.40 | 59.60 | 9.60 | 6.72 | 7.20 | 240 | 0.0 | 0.5 | 43.2 | 4.97 | 3.67 | 259 | 8.73 | 41.99 | 4199 | 8.73 | 88.78 | 13 | N/A | 0.55 | 276 | 6.58 |
| 13.1.CEFA BDC Monthly income | -282 | -5.69 | -3.10 | 56.23 | 9.39 | 6.08 | 7.04 | 235 | 0.0 | 0.0 | 45.8 | 5.40 | 3.63 | 355 | 6.97 | 36.07 | 36.07 | 1183 | 87.15 | 8 | N/A | 0.64 | 127 | 3.07 |
| 13.2 CEFA BDC-Low Beta | -222 | -4.08 | 223 | 47.18 | 8.82 | 5.85 | 6.63 | 219 | 0.0 | 0.0 | 44.9 | 4.52 | 3.47 | 4.48 | 6.68 | 43.80 | 43.80 | 7.90 | 89.69 | 8 | N/A | 0.44 | 0.79 | 3.66 |
| 13.3.CEFA BDCPremium | 9.22 | 8.57 | 13.18 | 5201 | 9.12 | 6.66 | 6.84 | 228 | 0.0 | 0.0 | 47.1 | 5.01 | 3.10 | 2.46 | 9.31 | 39.15 | 39.15 | 6.26 | 9294 | 11 | N/A | 0.50 | 281 | 15.10 |
| 14.CEFASelect Municioal | -4.05 | -7.85 | -5.03 | 60.55 | 5.17 | 3.65 | 5.16 | 0.01 | 1.3 | 13 | 35.9 | 1.18 | 105 | 3.50 | 3.47 | 19.86 | 20.35 | 0.25 | 90.13 | 12 | 9.97 | -0.02 | 0.49 | -0.44 |
| 14.1 CEFA Low Duration Municipa | -4.14 | -6.41 | -3.43 | 38.48 | 3.51 | 282 | 3.51 | 0.00 | 0.0 | 0.0 | 15.7 | 0.59 | 0.79 | 233 | 210 | 21.51 | 28.16 | 0.00 | 98.64 | 5 | 280 | -0.01 | -143 | 0.07 |

## DISCLOSURES


 NOTES: Distribution type sourced from CEFdata.com. For specific information about a fund's distribution sources, visit the fund sponsor's website.

 companies frequently trade at a discount to their net asset value. NAV returns are net of fund expenses, and assume reinvestment of distributions.



## 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]:    Premium / Discount

[^1]:    - Based on marginal tax rates of 25\% and long-term capital gains rates of 15\%.

