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

## Closed-End Fund

4th Quarter 2016 Review \& 1st Quarter 2017 Outlook

Intermediate/Advanced CEF Skill Level

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John Cole Scott, cFs
Chief Investment Officer Closed-End Fund Advisors, Inc.

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

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

- 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 Web Modules Daily Data: Est \$1K- \$4K per quarter based on classification (Indv, RIA or FA / Fund Sponsor)


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

Closed-End Fund Advisors
Asset Class Annual Returns 2006-2016

| 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2007-2016 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { REIT } \\ & 30.52 \% \end{aligned}$ | World Stock 17.12\% | $\begin{gathered} \text { Corporate Debt } \\ -3.52 \% \end{gathered}$ | Senior Loan 76.30\% | $\begin{gathered} \text { BDC } \\ 50.99 \% \end{gathered}$ | $\begin{aligned} & \text { MLP } \\ & \mathbf{1 3 . 8 7 \%} \end{aligned}$ | $\begin{gathered} \text { BDC } \\ 34.48 \% \end{gathered}$ | US Stock 32.38\% | $\begin{aligned} & \text { REIT } \\ & \mathbf{2 7 . 1 5 \%} \end{aligned}$ | Preferred $5.47 \%$ | Senior Loan 24.73\% | $\begin{aligned} & \text { MLP } \\ & \text { 12.21\% } \end{aligned}$ |
| $\begin{gathered} \text { BDC } \\ 29.49 \% \end{gathered}$ | $\begin{aligned} & \text { MLP } \\ & \text { 12.61\% } \end{aligned}$ | $\begin{aligned} & \text { Muni Bond } \\ & -5.09 \% \end{aligned}$ | $\begin{gathered} \text { MLP } \\ 75.63 \% \end{gathered}$ | $\begin{gathered} \text { MLP } \\ \mathbf{3 5 . 6 3 \%} \end{gathered}$ | $\begin{aligned} & \text { Muni Bond } \\ & \text { 10.63\% } \end{aligned}$ | World Stock 17.39\% | $\begin{gathered} \text { MLP } \\ \text { 27.59\% } \end{gathered}$ | $\begin{aligned} & \text { uS Stock } \\ & \text { 13.68\% } \end{aligned}$ | $\begin{aligned} & \text { REIT } \\ & 4.23 \% \end{aligned}$ | $\begin{gathered} \text { BDC } \\ \mathbf{2 4 . 4 2 \%} \end{gathered}$ | $\begin{aligned} & \text { Convertible } \\ & 9.31 \% \end{aligned}$ |
| $\begin{aligned} & \text { World Stock } \\ & 27.16 \% \end{aligned}$ | US Stock $5.57 \%$ | HY Bond $-26.39 \%$ | HY Bond 57.51\% | $\begin{aligned} & \text { REIT } \\ & \mathbf{2 3 . 8 9} \% \end{aligned}$ | $\begin{gathered} \text { Corporate Debt } \\ 7.77 \% \end{gathered}$ | $\begin{aligned} & \text { us Stock } \\ & \text { 15.99\% } \end{aligned}$ | $\begin{aligned} & \text { Convertible } \\ & 26.60 \% \end{aligned}$ | $\begin{aligned} & \text { Convertible } \\ & 9.97 \% \end{aligned}$ | $\begin{gathered} \text { Muni Bond } \\ 3.32 \% \end{gathered}$ | $\stackrel{\text { MLP }}{18.31 \%}$ | $\begin{gathered} \text { Senior Loan } \\ \mathbf{9 . 1 3 \%} \end{gathered}$ |
| $\begin{gathered} \text { MLP } \\ \text { 27.06\% } \end{gathered}$ | $\begin{aligned} & \text { Covered Call } \\ & 5.07 \% \end{aligned}$ | Convertible -29.44\% | $\begin{aligned} & \text { Convertible } \\ & \text { 45.63\% } \end{aligned}$ | $\begin{gathered} \text { Convertible } \\ \text { 15.68\% } \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & 5.35 \% \end{aligned}$ | HY Bond 15.58\% | $\begin{aligned} & \text { Covered Call } \\ & \mathbf{2 0 . 8 4 \%} \end{aligned}$ | $\begin{gathered} \text { Muni Bond } \\ 9.26 \% \end{gathered}$ | $\begin{aligned} & \text { us Stock } \\ & \text { 1.38\% } \end{aligned}$ | HY Bond 17.49\% | $\begin{aligned} & \text { HY Bond } \\ & 9.12 \% \end{aligned}$ |
| US Stock 15.78\% | $\begin{aligned} & \text { Corporate Debt } \\ & \text { 4.78\% } \end{aligned}$ | Preferred $-32.02 \%$ | $\begin{gathered} \text { BDC } \\ \mathbf{4 2 . 7 8 \%} \end{gathered}$ | HY Bond 15.19\% | $\begin{gathered} \text { HY Bond } \\ 4.38 \% \end{gathered}$ | $\begin{gathered} \text { Senior Loan } \\ 14.33 \% \end{gathered}$ | $\begin{gathered} \text { BDC } \\ 16.33 \% \end{gathered}$ | $\begin{gathered} \text { Covered Call } \\ 7.87 \% \end{gathered}$ | $\begin{gathered} \text { Corporate Debt } \\ -0.06 \% \end{gathered}$ | $\begin{aligned} & \text { us Stock } \\ & \text { 11.96\% } \end{aligned}$ | $\begin{gathered} \text { BDC } \\ 9.01 \% \end{gathered}$ |
| $\begin{aligned} & \text { Covered Call } \\ & 14.64 \% \end{aligned}$ | $\begin{gathered} \text { Convertible } \\ 3.95 \% \end{gathered}$ | $\begin{gathered} \text { Covered Call } \\ -\mathbf{3 3 . 3 8 \%} \end{gathered}$ | World Stock $42.14 \%$ | $\begin{aligned} & \text { us Stock } \\ & \text { 15.06\% } \end{aligned}$ | $\begin{aligned} & \text { us stock } \\ & \text { 2.11\% } \end{aligned}$ | $\begin{aligned} & \text { Convertible } \\ & \text { 13.63\% } \end{aligned}$ | World Stock $15.78 \%$ | $\begin{gathered} \text { Corporate Debt } \\ 7.47 \% \end{gathered}$ | $\begin{gathered} \text { Covered Call } \\ -0.57 \% \end{gathered}$ | $\begin{aligned} & \text { Convertible } \\ & \text { 11.94\% } \end{aligned}$ | $\begin{gathered} \text { US Stock } \\ 8.76 \% \end{gathered}$ |
| $\begin{gathered} \text { Convertible } \\ \text { 12.03\% } \end{gathered}$ | $\begin{aligned} & \text { Muni Bond } \\ & \text { 2.81\% } \end{aligned}$ | US Stock $-37.00 \%$ | Preferred 32.12\% | $\begin{gathered} \text { Senior Loan } \\ 14.98 \% \end{gathered}$ | $\begin{gathered} \text { Covered Call } \\ \mathbf{2 . 0 2 \%} \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & \text { 13.40\% } \end{aligned}$ | $\begin{gathered} \text { Senior Loan } \\ \text { 11.73\% } \end{gathered}$ | $\begin{gathered} \text { Preferred } \\ 6.86 \% \end{gathered}$ | $\begin{aligned} & \text { Convertible } \\ & -1.15 \% \end{aligned}$ | $\begin{gathered} \text { Covered Call } \\ 7.31 \% \end{gathered}$ | $\begin{gathered} \text { Covered Call } \\ 6.20 \% \end{gathered}$ |
| HY Bond 11.77\% | $\begin{aligned} & \text { HY Bond } \\ & \text { 2.19\% } \end{aligned}$ | $\begin{gathered} \text { MLP } \\ -\mathbf{3 7 . 1 1} \% \end{gathered}$ | $\begin{gathered} \text { Covered Call } \\ \mathbf{2 7 . 9 1} \% \end{gathered}$ | $\begin{gathered} \text { Covered Call } \\ 13.69 \% \end{gathered}$ | $\begin{gathered} \text { Senior Loan } \\ 1.48 \% \end{gathered}$ | $\begin{aligned} & \text { Covered Call } \\ & 11.22 \% \end{aligned}$ | $\begin{aligned} & \text { HY Bond } \\ & 7.42 \% \end{aligned}$ | $\begin{aligned} & \text { MLP } \\ & \mathbf{4 . 8 0 \%} \end{aligned}$ | $\begin{gathered} \text { Senior Loan } \\ -3.45 \% \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & 7.24 \% \end{aligned}$ | $\begin{gathered} \text { Corporate Debt } \\ 5.63 \% \end{gathered}$ |
| $\begin{gathered} \text { Senior Loan } \\ \mathbf{8 . 8 2 \%} \end{gathered}$ | $\begin{gathered} \text { Senior Loan } \\ -0.50 \% \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & -42.54 \% \end{aligned}$ | US Stock 26.45\% | World Stock 11.60\% | $\begin{gathered} \text { Convertible } \\ -3.76 \% \end{gathered}$ | $\begin{aligned} & \text { Preferred } \\ & 10.81 \% \end{aligned}$ | $\begin{aligned} & \text { REIT } \\ & -1.74 \% \end{aligned}$ | $\begin{gathered} \text { Senior Loan } \\ \text { 3.02\% } \end{gathered}$ | HY Bond -4.64\% | Corporate Debt 5.98\% | $\begin{gathered} \text { Muni Bond } \\ \text { 4.37\% } \end{gathered}$ |
| $\begin{gathered} \text { Corporate Debt } \\ 5.58 \% \end{gathered}$ | $\begin{gathered} \text { BDC } \\ -\mathbf{- 1 4 . 1 7 \%} \end{gathered}$ | $\begin{gathered} \text { BDC } \\ -\mathbf{4 5 . 0 7 \%} \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & 21.90 \% \end{aligned}$ | Corporate Debt 8.72\% | $\begin{gathered} \text { BDC } \\ -7.18 \% \end{gathered}$ | $\begin{gathered} \text { Corporate Debt } \\ 9.17 \% \end{gathered}$ | Corporate Debt -1.02\% | HY Bond 2.50\% | $\begin{gathered} \text { BDC } \\ -4.69 \% \end{gathered}$ | World Stock $5.01 \%$ | World Stock 4.18\% |
| $\begin{gathered} \text { Muni Bond } \\ 5.30 \% \end{gathered}$ | $\begin{aligned} & \text { Preferred } \\ & -17.69 \% \end{aligned}$ | World Stock $-45.24 \%$ | $\begin{aligned} & \text { Corporate Debt } \\ & \text { 17.02\% } \end{aligned}$ | $\begin{gathered} \text { Preferred } \\ 6.36 \% \end{gathered}$ | Preferred $-7.93 \%$ | $\begin{aligned} & \text { Muni Bond } \\ & 7.42 \% \end{aligned}$ | Muni Bond -2.55\% | World Stock $-3.44 \%$ | World Stock $-5.25 \%$ | $\begin{gathered} \text { Preferred } \\ 1.94 \% \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & 3.79 \% \end{aligned}$ |
| $\begin{gathered} \text { Preferred } \\ 1.92 \% \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & -20.97 \% \end{aligned}$ | Senior Loan -51.37\% | $\begin{gathered} \text { Muni Bond } \\ \text { 14.63\% } \end{gathered}$ | Muni Bond 2.45\% | World Stock -13.33\% | $\begin{aligned} & \text { MLP } \\ & 4.80 \% \end{aligned}$ | Preferred $-6.75 \%$ | $\begin{gathered} \text { BDC } \\ -7.79 \% \end{gathered}$ | $\begin{gathered} \text { MLP } \\ -\mathbf{3 4 . 0 7} \% \end{gathered}$ | $\begin{gathered} \text { Muni Bond } \\ 0.77 \% \end{gathered}$ | $\begin{aligned} & \text { Preferred } \\ & -0.08 \% \end{aligned}$ |

## Closed-End Fund Advisors

## Closed-End Fund Discount / Premium 2006-2016

| 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2006-2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { BDC } \\ 17.77 \% \end{gathered}$ | $\begin{gathered} \text { BDC } \\ 10.73 \% \end{gathered}$ | $\begin{gathered} \text { MLP } \\ -4.22 \% \end{gathered}$ | $\begin{aligned} & \text { MLP } \\ & \text { 10.99\% } \end{aligned}$ | $\begin{gathered} \text { MLP } \\ 7.93 \% \end{gathered}$ | HY Bond 4.81\% | HY Bond 8.27\% | $\begin{gathered} \text { BDC } \\ 8.03 \% \end{gathered}$ | $\begin{gathered} \text { BDC } \\ 1.69 \% \end{gathered}$ | $\begin{gathered} \text { MLP } \\ -6.10 \% \end{gathered}$ | Preferred $-0.77 \%$ | $\begin{gathered} \text { MLP } \\ 0.73 \% \end{gathered}$ |
| $\begin{aligned} & \text { Convertible } \\ & 1.25 \% \end{aligned}$ | $\begin{aligned} & \text { us Stock } \\ & -1.29 \% \end{aligned}$ | $\begin{aligned} & \text { REIT } \\ & -4.29 \% \end{aligned}$ | Investment Grade $0.49 \%$ | $\begin{gathered} \text { HY Bond } \\ 2.99 \% \end{gathered}$ | $\begin{aligned} & \text { MLP } \\ & 3.36 \% \end{aligned}$ | $\begin{aligned} & \text { MLP } \\ & \mathbf{4 . 8 2 \%} \end{aligned}$ | $\begin{gathered} \text { MLP } \\ 1.95 \% \end{gathered}$ | $\begin{gathered} \text { Convertible } \\ -\mathbf{3 . 1 7 \%} \end{gathered}$ | $\begin{gathered} \text { Muni Bond } \\ -6.44 \% \end{gathered}$ | $\begin{gathered} \text { Muni Bond } \\ -1.88 \% \end{gathered}$ | HY Bond $-1.80 \%$ |
| $\begin{gathered} \text { HY Bond } \\ -0.65 \% \end{gathered}$ | $\begin{gathered} \text { MLP } \\ -\mathbf{1 . 8 2 \%} \end{gathered}$ | Investment Grade $-5.75 \%$ | $\begin{aligned} & \text { HY Bond } \\ & -2.97 \% \end{aligned}$ | $\begin{gathered} \text { Muni Bond } \\ 0.57 \% \end{gathered}$ | Investment Grade $0.14 \%$ | Investment Grade $4.32 \%$ | $\begin{gathered} \text { Senior Loan } \\ -\mathbf{0 . 1 2 \%} \end{gathered}$ | HY Bond $-3.48 \%$ | Investment Grade $-6.81 \%$ | Investment Grade $-3.74 \%$ | Investment Grade $-2.43 \%$ |
| $\begin{aligned} & \text { Us Stock } \\ & -2.10 \% \end{aligned}$ | Convertible $-2.02 \%$ | $\begin{gathered} \text { Muni Bond } \\ -6.20 \% \end{gathered}$ | $\begin{aligned} & \text { Muni Bond } \\ & -3.31 \% \end{aligned}$ | Investment Grade $0.23 \%$ | $\begin{gathered} \text { Muni Bond } \\ -0.53 \% \end{gathered}$ | Preferred $2.87 \%$ | HY Bond $-0.63 \%$ | $\begin{gathered} \text { MLP } \\ -4.54 \% \end{gathered}$ | Preferred $-6.89 \%$ | HY Bond -4.84\% | Muni Bond $-2.90 \%$ |
| World Stock $-2.70 \%$ | $\begin{gathered} \text { Senior Loan } \\ -2.75 \% \end{gathered}$ | Preferred $-8.28 \%$ | Preferred $-4.24 \%$ | $\begin{gathered} \text { Senior Loan } \\ -0.02 \% \end{gathered}$ | $\begin{gathered} \text { Senior Loan } \\ -1.27 \% \end{gathered}$ | $\begin{gathered} \text { Muni Bond } \\ 1.99 \% \end{gathered}$ | Investment Grade $-2.92 \%$ | Investment Grade $-4.93 \%$ | Convertible $-7.98 \%$ | $\begin{gathered} \text { MLP } \\ -5.05 \% \end{gathered}$ | Preferred $-3.62 \%$ |
| $\begin{gathered} \text { Muni Bond } \\ -2.74 \% \end{gathered}$ | $\begin{gathered} \text { Muni Bond } \\ -3.11 \% \end{gathered}$ | $\begin{gathered} \text { Convertible } \\ -8.66 \% \end{gathered}$ | World Stock $-5.31 \%$ | Covered Call $-1.97 \%$ | $\begin{aligned} & \text { Preferred } \\ & -\mathbf{- 1 . 6 1 \%} \end{aligned}$ | $\begin{gathered} \text { BDC } \\ 0.81 \% \end{gathered}$ | $\begin{aligned} & \text { Muni Bond } \\ & -3.65 \% \end{aligned}$ | $\begin{aligned} & \text { Muni Bond } \\ & -6.40 \% \end{aligned}$ | $\begin{gathered} \text { BDC } \\ -8.61 \% \end{gathered}$ | $\begin{aligned} & \text { Covered Call } \\ & -7.39 \% \end{aligned}$ | $\begin{gathered} \text { Senior Loan } \\ -4.85 \% \end{gathered}$ |
| Covered Call $-3.34 \%$ | HY Bond $-3.25 \%$ | World Stock -8.85\% | $\begin{gathered} \text { Convertible } \\ -6.25 \% \end{gathered}$ | $\begin{gathered} \text { Convertible } \\ -\mathbf{- 2 . 0 9 \%} \end{gathered}$ | $\begin{gathered} \text { Convertible } \\ -2.40 \% \end{gathered}$ | $\begin{gathered} \text { Senior Loan } \\ -0.37 \% \end{gathered}$ | Preferred $-3.83 \%$ | $\begin{gathered} \text { Senior Loan } \\ -6.49 \% \end{gathered}$ | Covered Call -8.11\% | $\begin{gathered} \text { Senior Loan } \\ -8.75 \% \end{gathered}$ | Convertible -5.21\% |
| $\begin{aligned} & \text { MLP } \\ & -\mathbf{- 3 . 5 2 \%} \end{aligned}$ | World Stock $-3.37 \%$ | $\begin{gathered} \text { US Stock } \\ -8.86 \% \end{gathered}$ | Covered Call -7.30\% | Preferred $-2.55 \%$ | $\begin{gathered} \text { BDC } \\ -2.92 \% \end{gathered}$ | $\begin{aligned} & \text { Convertible } \\ & -3.25 \% \end{aligned}$ | $\begin{aligned} & \text { REIT } \\ & -5.65 \% \end{aligned}$ | Covered Call $-6.62 \%$ | HY Bond -8.41\% | $\begin{aligned} & \text { Convertible } \\ & -10.08 \% \end{aligned}$ | $\begin{gathered} \text { BDC } \\ -5.46 \% \end{gathered}$ |
| $\begin{gathered} \text { Senior Loan } \\ -4.68 \% \end{gathered}$ | Preferred $-4.14 \%$ | HY Bond $-10.47 \%$ | $\begin{gathered} \text { Senior Loan } \\ -8.43 \% \end{gathered}$ | $\begin{gathered} \text { BDC } \\ -3.37 \% \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & -4.48 \% \end{aligned}$ | $\begin{aligned} & \text { REIT } \\ & -5.20 \% \end{aligned}$ | $\begin{gathered} \text { Convertible } \\ -6.22 \% \end{gathered}$ | Preferred $-6.73 \%$ | $\begin{gathered} \text { Senior Loan } \\ -8.70 \% \end{gathered}$ | $\begin{gathered} \text { BDC } \\ -10.98 \% \end{gathered}$ | $\begin{aligned} & \text { Covered Call } \\ & -7.16 \% \end{aligned}$ |
| $\begin{gathered} \text { Preferred } \\ -4.82 \% \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & -4.22 \% \end{aligned}$ | $\begin{gathered} \text { Covered Call } \\ -11.45 \% \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & -9.66 \% \end{aligned}$ | World Stock -4.03\% | World Stock $-5.69 \%$ | World Stock -7.47\% | $\begin{gathered} \text { Covered Call } \\ -8.13 \% \end{gathered}$ | World Stock -9.04\% | World Stock $-11.00 \%$ | $\begin{aligned} & \text { US Stock } \\ & -11.47 \% \end{aligned}$ | World Stock -7.54\% |
| Investment Grade $-4.93 \%$ | $\begin{gathered} \text { Covered Call } \\ -4.44 \% \end{gathered}$ | $\begin{gathered} \text { Senior Loan } \\ -11.64 \% \end{gathered}$ | US Stock -10.56\% | US Stock -7.34\% | $\begin{aligned} & \text { Covered Call } \\ & -7.41 \% \end{aligned}$ | $\begin{gathered} \text { Covered Call } \\ -8.83 \% \end{gathered}$ | World Stock $-8.15 \%$ | $\begin{aligned} & \text { US Stock } \\ & -9.63 \% \end{aligned}$ | US Stock -11.00\% | $\begin{aligned} & \text { REIT } \\ & -11.62 \% \end{aligned}$ | $\begin{aligned} & \text { REIT } \\ & -7.71 \% \end{aligned}$ |
| $\begin{aligned} & \text { REIT } \\ & -8.25 \% \end{aligned}$ | Investment Grade $-5.37 \%$ | $\begin{gathered} \text { BDC } \\ -\mathbf{1 8 . 2 3 \%} \end{gathered}$ | $\begin{gathered} \text { BDC } \\ -\mathbf{3 1 . 7 8 \%} \end{gathered}$ | $\begin{aligned} & \text { REIT } \\ & -9.10 \% \end{aligned}$ | $\begin{aligned} & \text { us Stock } \\ & -8.27 \% \end{aligned}$ | $\begin{aligned} & \text { us Stock } \\ & -9.66 \% \end{aligned}$ | $\begin{aligned} & \text { us Stock } \\ & -9.32 \% \end{aligned}$ | $\begin{aligned} & \text { REIT } \\ & -\mathbf{- 1 0 . 6 3 \%} \end{aligned}$ | $\begin{gathered} \text { REIT } \\ -\mathbf{- 1 2 . 2 1 \%} \end{gathered}$ | World Stock $-12.44 \%$ | US Stock $-8.74 \%$ |

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

## 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\% | 47.3\% | 78.4\% | 76.4\% | 36.7\% | 71.8\% | 46.3\% | 65.6\% | 69.6\% | 66.2\% | 48.6\% | 59.4\% |
| BDC | 47.3\% | 100\% | 46.8\% | 42.3\% | 11.6\% | 40.7\% | 12.1\% | 43.5\% | 45.6\% | 39.5\% | 26.1\% | 21.3\% |
| Convertible | 78.4\% | 46.8\% | 100\% | 96.0\% | 50.2\% | 90.4\% | 72.7\% | 92.6\% | 92.1\% | 92.9\% | 76.8\% | 83.7\% |
| HY Bond | 76.4\% | 42.3\% | 96.0\% | 100\% | 55.6\% | 95.0\% | 77.3\% | 87.4\% | 84.0\% | 90.1\% | 83.3\% | 89.4\% |
| Muni Bond | 36.7\% | 11.6\% | 50.2\% | 55.6\% | 100\% | 58.7\% | 47.9\% | 43.0\% | $32.2 \%$ | 34.9\% | 45.3\% | 57.1\% |
| Senior Loan | 71.8\% | 40.7\% | 90.4\% | 95.0\% | 58.7\% | 100\% | 63.5\% | 76.8\% | 73.5\% | 81.2\% | 72.4\% | 77.2\% |
| Preferred | 46.3\% | 12.1\% | 72.7\% | 77.3\% | 47.9\% | 63.5\% | 100\% | 76.5\% | 67.3\% | 81.6\% | 80.3\% | 93.6\% |
| World Stock | 65.6\% | 43.5\% | 92.6\% | 87.4\% | 43.0\% | 76.8\% | 76.5\% | 100\% | 91.5\% | 92.7\% | 74.0\% | 84.9\% |
| Cov Call | 69.6\% | 45.6\% | 92.1\% | 84.0\% | 32.2\% | 73.5\% | 67.3\% | 91.5\% | 100\% | 94.3\% | 76.3\% | 74.2\% |
| US Stock | 66.2\% | 39.5\% | 92.9\% | 90.1\% | 34.9\% | 81.2\% | 81.6\% | 92.7\% | 94.3\% | 100\% | 84.7\% | 86.0\% |
| REIT | 48.6\% | 26.1\% | 76.8\% | 83.3\% | 45.3\% | 72.4\% | 80.3\% | 74.0\% | 76.3\% | 84.7\% | 100\% | 83.0\% |
| Investment Grade | 59.4\% | 21.3\% | 83.7\% | 89.4\% | 57.1\% | 77.2\% | 93.6\% | 84.9\% | 74.2\% | 86.0\% | 83.0\% | 100\% |

[^1]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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# Trad CEF - Total Return <br> January 1, 2007 - December 30, 2016 



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.

## Trad CEF - Average Discount / Premium <br> January 1, 2007 - December 30, 2016



## BDC Debt - Total Return <br> January 1, 2007 - December 30, 2016`



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
January 1, 2007 - December 30, 2016


# Municipal Bonds - Total Return January 1, 2007 - December 30, 2016 



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

## Municipal Bonds - Average Discount / Premium

January 1, 2007 - December 30, 2016



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.


# Current Closed-End Fund/BDC Options \& Assets 

## 4Q 2016 Ended with 533 US Traditional Closed-End Funds 52 Business Development Company CEFs

- 31 (-1) US Equity CEFs
- 114 (-2) Specialty Equity CEFs
- 58 Non US Equity CEFs
- 14 Hybrid / Balanced CEFs 217 Total Equity Traditional CEFs
- 145 (-2) Taxable Bond CEFs
- 90 National Municipal Bond CEFs
- 81 (-2) Single State Municipal Bond CEFs 316 Total Bond Traditional CEFs
- 43 Debt Focused BDCs
- 9 Equity Focused BDCs

52 Total BDC Closed-End Funds

Assets of Closed-End Funds by Type, End of Period Millions of dollars

|  | 4Q 2016 | 2Q 2016 | 4Q 2015 | 2Q 2015 | 4Q 2014 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total Trad CEF Equity | 107,145 | 108,577 | 105,205 | 121,445 | 125,870 |
| U.S. Equity | 18,824 | 18,609 | 18,684 | 20,304 | 20,726 |
| Non U.S. Equity | 12,496 | 12,923 | 13,011 | 15,299 | 14,830 |
| Hybrid/ Balanced | 4,854 | 4,655 | 4,717 | 5,334 | 5,785 |
| Specialty Equity | 70,972 | 72,390 | 68,794 | 80,507 | 84,529 |
| Total Trad CEF Bond | 127,373 | 130,972 | 127,990 | 133,667 | 136,202 |
| Taxable Bond | 63,381 | 60,599 | 61,231 | 68,549 | 69,062 |
| Single State Municipal | 45,959 | 50,466 | 47,834 | 46,649 | 48,140 |
|  | 18,034 | 19,908 | 18,925 | 18,470 | 19,000 |
| Total Traditional CEF | 234,518 | 239,549 | 233,195 | 255,112 | 262,072 |
| Debt Focused BDC | 28,705 | 28,035 | 29,601 | 29,958 | 28,936 |
| Equity Focused BDC | 5,692 | 5,640 | 6,601 | 7,253 | 7,377 |
| Total BDC CEF | 34,398 | 33,675 | 36,202 | 37,212 | 36,312 |
| CEF GRAND TOTAL | 277,126 | 273,224 | 269,397 | 292,324 | 298,384 |

## Traditional \& BDC CEF Overview Data for Major Groups



Source: CEFA's Closed-End Fund Universe 12/30/16 (www.cefuniverse.com)

## CEF Universe Update

| Fund Grouping | Discount / Premium |  | Last Q NAV TR |  | Last Q Price TR |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Discount | Premium | Positive | Negative | Positive | Negative |
| Equity Traditional CEFs | $\begin{gathered} 195 \\ (90 \%) \end{gathered}$ | $\begin{gathered} 22 \\ (10 \%) \end{gathered}$ | $\begin{gathered} 106 \\ (49 \%) \end{gathered}$ | $\begin{gathered} 110 \\ (51 \%) \end{gathered}$ | $\begin{gathered} 89 \\ (41 \%) \end{gathered}$ | $\begin{gathered} 127 \\ (59 \%) \end{gathered}$ |
| Taxable Bond Traditional CEFs | $\begin{gathered} 125 \\ (86 \%) \end{gathered}$ | $\begin{gathered} 20 \\ (14 \%) \end{gathered}$ | $\begin{gathered} 109 \\ (75 \%) \end{gathered}$ | $\begin{gathered} 33 \\ (23 \%) \end{gathered}$ | $\begin{gathered} 92 \\ (63 \%) \end{gathered}$ | $\begin{gathered} 50 \\ (35 \%) \end{gathered}$ |
| Municipal Bond Traditional CEFs | $\begin{gathered} 141 \\ (83 \%) \end{gathered}$ | $\begin{gathered} 30 \\ (17 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 171 \\ (100 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (1 \%) \end{gathered}$ | $\begin{gathered} 169 \\ (99 \%) \end{gathered}$ |
| BDCs | $\begin{gathered} 36 \\ (71 \%) \end{gathered}$ | $\begin{gathered} 15 \\ (29 \%) \end{gathered}$ | $\begin{gathered} 36 \\ (71 \%) \end{gathered}$ | $\begin{gathered} 14 \\ (27 \%) \end{gathered}$ | $\begin{gathered} 42 \\ (82 \%) \end{gathered}$ | $\begin{gathered} 8 \\ (16 \%) \end{gathered}$ |
| ALL CEFs | $\begin{gathered} 497 \\ (85 \%) \end{gathered}$ | $\begin{gathered} 87 \\ (15 \%) \end{gathered}$ | $\begin{gathered} 251 \\ (43 \%) \end{gathered}$ | $\begin{gathered} 328 \\ (56 \%) \end{gathered}$ | $\begin{gathered} 225 \\ (39 \%) \end{gathered}$ | $\begin{gathered} 354 \\ (61 \%) \end{gathered}$ |

## Current Closed-End Discounts

## Avg CEF Discount \% as of December 30, 2016



Source: CEFA's Closed-End Fund Universe (www.cefuniverse.com)

# Closed-End Discount Trends 

## Traditional \& BDC

## 4Q 2016 Ended with an average CEF Discount of -6.75\%

## Main Peer Groups - Average CEF Discount <br> May 11, 2012 - December 30, 2016



Source: CEFA's Closed-End Fund Universe (www.cefuniverse.com)

## Closed-End Discount Trends

## - Average CEF Discount

May 11, 2012 - December 30, 2016


Source: CEFA's Closed-End Fund Universe (www.cefuniverse.com)

## CEF Volume Trends - 3Q 2016

| Fund froving | $\xrightarrow{\text { Anve Vol }}$ |  | Volue |
| :---: | :---: | :---: | :---: |
| US Equity funds | 122,166 | 99,720 | 23\% |
| Non-us Equity funds | ${ }_{64,862}$ | 57,381 | ${ }^{13 \%}$ |
| Speeialty Equiry funds | 173,480 | 144,182 | 20\% |
| Ave Traditional Euutit cef | 131,74 | 111.063 | 19\% |
| Taxable Bond funds | 137,93 | 120,572 |  |
| National Muri Bond funds | 131, 845 | 78,216 | 69\% |
| State Muri Bond funds | 46.640 | 25,736 | ${ }_{81 \%}$ |
| Ave Traditional Bond CeF | 112,826 | 88,061 | $34 \%$ |
| Averse Traditional CeF | 120,516 | 95,062 | 27\% |
| Deeb Focused BCC Funds | 315,500 | 279,57 | ${ }^{13 \%}$ |
| Equitr Focused BCC F funds | 355,01 | 186,263 | 75\% |
| Average BDC | 377,195 | 263,43 | 20\% |
| Averge forall cefs | 137,691 | 109,852 |  |

## Current Major CEF/BDC Sectors Yield



## Traditional Closed-End Funds: By Yield



Note: 533 Traditional CEFs; data as of 12/30/2016 , cefdata.com

## Debt Focused BDCs: By Yield



Note: 42 Debt Focused BDCs; data as of 12/30/2016 , cefdata.com

## Income Only Yield For Closed-End Funds

## Main Peer Groups - Historical Dividend - Income only Yield May 11, 2012 - December 30, 2016



# Relative UNII for Traditional CEF Municipal Bond Funds 

Nat Muni Bond - Relative UNII
May 11, 2012 - December 30, 2016


## Earnings Coverage Ratio For Closed-End Funds



Source: CEFA's Closed-End Fund Universe (www.cefuniverse.com)

## Return of Capital (90 Day) For CEFs

## Main Peer Groups - Historical ROC <br> May 11, 2012 - December 30, 2016



Source: CEFA's Closed-End Fund Universe (www.cefuniverse.com)

## Debt-Focused

## Business Development Companies (BDCs)

I. All Debt Focused BDCs

Home C-View PM-View Edit Aome
Data ns of Jnuakr 10, 2017 . Portrouo Holdings: 43 . Lest Modice: Jmunery 11, 2017

## Data Defimons



| INCOME |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Pending Distribution$0.26 \%$ |  |  |  |  |  |
| Top Ten Portfolio Companies Weighted Average Data |  |  | Top Ten States Weighted Average Data |  |  |
| 1 | U.S. Treasury Bill | 2.4\% | 1 | CA | 10.7\% |
| 2 | Medallion Bank | 0.8\% | 2 | TX | 10.2\% |
| 3 | Various New York | 0.7\% | 3 | NY | 7.5\% |
| 4 | 1-45 SLF, LLC | 0.5\% | 4 | FL | 5.2\% |
| 5 | Senior Secured Loan Fund LLC | 0.5\% | 5 | MA | 4.9\% |
| 6 | Cash and Cash Equivalents | 0.5\% | 6 | IL | 3.6\% |
| 7 | Pre-Paid Legal Services, Inc. | 0.5\% | 7 | GA | 3.3\% |
| 8 | My Alarm Center, LLC | 0.4\% | 8 | NJ | 3.2\% |
| 9 | Merx Aviation Finance, LLC | 0.4\% | 9 | PA | 2.8\% |
| 10 | Castex Energy 2005, LP | 0.4\% | 10 | WA | 2.4\% |

## ASSET ALLOCATION, Weighted Average Data <br> INDUSTRY EXPOSURE, Weighted Average Data



Healthcare \& Pharmaceuticals - IT Software, Services \& Equip. - Consumer Products \& Services - Other Products \& Services

- Financial Services
- Manufacturing
- Business Services
- Other (under 25)
- Energy, Oil, Gas \& Related Ser. - Media / Advertising / Mass M - Retail


# Destructive Return of Capital (3YR DRoC) 

(Traditional)

| Fund Grouping | \# Funds with <br> Destructive <br> RoC | \% Funds with <br> Destructive <br> RoC | Average <br> Destructive <br> RoC $\%$ | 1Yr NAV <br> TR vs NAV <br> Yield | TR vs NAV <br> Yield |
| :---: | :---: | :---: | :---: | :---: | :---: |
| US Equity Funds | 4 | $13 \%$ | $29 \%$ | $245 \%$ | $9 \%$ |
| Non-US Equity Funds | 6 | $10 \%$ | $26 \%$ | $179 \%$ | $-165 \%$ |
| Specialty Equity | 9 | $8 \%$ | $46 \%$ | $401 \%$ | $-100 \%$ |
| Funds |  |  |  |  |  |
| Equity CEF | 24 | $11 \%$ | $39 \%$ | $295 \%$ | $-98 \%$ |
| Taxable Bond Funds | 7 | $5 \%$ | $17 \%$ | $82 \%$ | $-45 \%$ |
| National Muni Bond <br> Funds | 0 | $0 \%$ | N/A | $-83 \%$ | $59 \%$ |
| State Muni Bond <br> Funds | 0 | $0 \%$ | N/A | $-93 \%$ | $64 \%$ |
| Bond CEF | 7 | $2 \%$ | $17 \%$ | $-14 \%$ | $15 \%$ |
| Average CEF | 31 | $6 \%$ | $37 \%$ | $108 \%$ | $-29 \%$ |
| FWhitepaper |  | www.CEFadvisors.com |  |  | 30 |

## Municipal Bond Closed-End Fund Universe

|  | National <br> Muni Funds | Single State <br> Muni Funds | Total |
| :--- | :---: | :---: | :---: |
| Number of Funds | 90 | 81 | 171 |
| Net Assets (Total) | $\$ 45,959$ | $\$ 18,034$ | $\$ 63,993$ |
| Net Assets | $\$ 511$ | $\$ 223$ | $\$ 374$ |
| Earnings Coverage Ratio \% | 97.7 | 96.3 | 97.0 |
| Premium / Discount \% | -3.83 | -4.55 | -4.17 |
| Total Mkt Yield \% | 5.46 | 4.85 | 5.18 |
| Leverage Adj NAV Yield \% | 4.01 | 3.45 | 3.74 |
| NAV Volatility | 4.09 | 4.04 | 4.07 |
| Leverage \% | 31.8 | 33.9 | 32.8 |
| Leverage Cost \% | 0.49 | 0.57 | 0.52 |
| Duration | 9.37 | 9.83 | 9.59 |
| Insured \% | 13.9 | 18.9 | 16.3 |
| Investment Grade \% | 85 | 91 | 88 |
| Credit Quality | A | A | A |





Note: Volatility is a one year rolling calculation

## Municipal Bond Closed-End Fund Universe




All Muni Bond Groups - Relative UNII May 11, 2012 - December 30, 2016


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



## CEF Press Release SEC Filings Summary (2393 CEF PRs in 4Q16)

| Announcement Type | 4Q 2016 | 2015 | 2014 | Avg per Q since 2014 |
| :---: | :---: | :---: | :---: | :---: |
| Rights Issue / Offering | 1 | 6 | 9 | 2 |
| Secondary Offering (Trad CEF) | 1 | 2 | 4 | 1 |
| Secondary Offering (BDCs) | 3 | 16 | 16 | 3 |
| $\longrightarrow$ Tender Offer | 7 | 15 | 16 | 4 |
| Distribution Policy Change(Trad CEF) | 2 | 11 | 19 | 3 |
| Distribution Policy Change (BDCs) | 0 | 1 | 1 | 0 |
| 13 Filings (Trad CEF) | 381 | 906 | - | - |
| $\longrightarrow$ New N-2 Filings | 20 | 52 | 31 | 15 |
| - Updated N -2 Filings | 37 | 104 | 52 | 23 |
| Investment Manager / <br> $\longrightarrow$ Advisor Change | 17 | 5 | 20 | 5 |
| Portfolio Manager Change | 4 | 45 | 60 | 12 |
| Leverage Amount / Type Change | 15 | 52 | 47 | 17 |

## CEF \& BDC

## Dividend Increases vs. Decreases

| Dividend <br> Announcement | 4Q 2016 <br> Number of <br> Announcements | 4Q 2016 <br> Average <br> Change | 4Q15-3Q16 <br> Number of <br> Announcements | 4Q15-3Q16 <br> Average <br> Change |
| :---: | :---: | :---: | :---: | :---: |
| Dividend Maintains | $1198(88 \%)$ | N/A | $3662(89 \%)$ | N/A |
| Dividend Increases | $36(2.7 \%)$ | $+8.2 \%$ | $104(2.5 \%)$ | $+4.8 \%$ |
| Dividend Decreases | $123(9.1 \%)$ | $-8.7 \%$ | $347(8.4 \%)$ | $-9.6 \%$ |
|  |  |  |  |  |
| Under 5\% Increase | $14(39 \%)$ | $+2.0 \%$ | $81(78 \%)$ | $+1.8 \%$ |
| Over 5\% Increase | $22(61 \%)$ | $+12.13 \%$ | $23(22 \%)$ | $+15.1 \%$ |
|  |  |  |  |  |
| Under 5\% Decrease | $62(50 \%)$ | $-2.63 \%$ | $120(35 \%)$ | $-2.9 \%$ |
| Over 5\% Decrease | $61(50 \%)$ | $-14.9 \%$ | $227(65 \%)$ | $-13.1 \%$ |

Source: Fund Press Releases

## 4Q 2016 Closed-End Fund Dividend Increases vs. Decreases

Major CEF Groups: Number of dividend decreases / increases Last Quarter \& Previous 1 Year Rolling


Source: Fund Press Releases

# 4Q16 , 2016 and 3Q16 Closed-End Fund NAV / Market Price Performance 

| Fund Grouping | 4Q 2016 <br> NAV | 4Q 2016 <br> Mkt Pr | 2016 <br> NAV | 2016 <br> Mkt Pr | 3Q 2016 <br> NAV | 3Q 2016 <br> Mkt Pr |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US Equity Funds | $2.0 \%$ | $2.2 \%$ | $9.7 \%$ | $10.4 \%$ | $4.9 \%$ | $4.4 \%$ |
| Non-US Equity Funds | $-3.2 \%$ | $-3.7 \%$ | $5.7 \%$ | $10.8 \%$ | $5.1 \%$ | $6.3 \%$ |
| Specialty Equity Funds | $0.2 \%$ | $-1.7 \%$ | $14.6 \%$ | $18.8 \%$ | $3.5 \%$ | $3.7 \%$ |
| Avg Traditional Equity CEF | $-\mathbf{0 . 5 \%}$ | $-\mathbf{- 1 . 6 \%}$ | $\mathbf{1 1 . 2 \%}$ | $\mathbf{1 5 . 1 \%}$ | $4.2 \%$ | $4.6 \%$ |
| Taxable Bond Funds | $1.4 \%$ | $1.0 \%$ | $13.6 \%$ | $18.0 \%$ | $4.7 \%$ | $5.7 \%$ |
| National Muni Bond Funds | $-5.7 \%$ | $-8.7 \%$ | $0.9 \%$ | $1.7 \%$ | $-0.4 \%$ | $-1.2 \%$ |
| State Muni Bond Funds | $-5.5 \%$ | $-9.7 \%$ | $0.3 \%$ | $0.7 \%$ | $-0.8 \%$ | $-0.9 \%$ |
| Avg Traditional Bond CEF | $-\mathbf{- 2 . 4 \%}$ | $-4.6 \%$ | $\mathbf{6 . 4 \%}$ | $8.7 \%$ | $1.9 \%$ | $\mathbf{2 . 0 \%}$ |
| Average Traditional CEF | $-1.6 \%$ | $-3.3 \%$ | $8.4 \%$ | $10.6 \%$ | $2.8 \%$ | $3.1 \%$ |
| Debt Focused BDC | $0.1 \%$ | $0.5 \%$ | $8.8 \%$ | $18.4 \%$ | $2.9 \%$ | $9.2 \%$ |
| Equity Focused BDC | $0.0 \%$ | $0.4 \%$ | $-3.8 \%$ | $-2.7 \%$ | $-1.2 \%$ | $-1.4 \%$ |
| Average BDC | $-1.5 \%$ | $-3.0 \%$ | $8.2 \%$ | $11.0 \%$ | $2.2 \%$ | $7.5 \%$ |

## Closed-End Fund Mergers

(Traditional)

Closed-End Funds Merged into Other Closed-End Funds (December 2016)


Reasons to Merge:
Source: Fund Press Releases

1. Reduce expense ratio
2. Increase liquidity

Avg. - 18.3 per year
3. Reduce bid/ask spread
4. Improve cost of future leverage

# Closed-End Fund Deaths 

(Traditional)

CEF Funds Open-Ended, Liquidated or Converted to ETF


Source: Fund Press Releases
Causes: Open-ending, liquidation \& conversion. (8.8 per year on average)

# Closed-End Fund Corporate Actions / Activist Update 4Q 2016 

| Month <br> Filed | Filing | Closed-End Fund/BDC | Investor/Who | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dec | 13D/A | AC Convt Sec \& Incm Fd II(AGC) | Saba | Inc(15.28\%) |
| Dec | Merger | American Capital (ACAS), <br> Ares Capital Corp (ARCC) | Public | Approved by 96\% of <br> ACAS shareholders |
| Dec | 13D/A | BR Enh Govt Fd (EGF) | SIT Investment | Inc(35.98\%) |
| Dec | Offering | Eagle Point Cr Co (ECC) | Public | $1,000,000$ shares @ <br> $\$ 17.35$ |
| Dec | 13D/A | JPMorgan China Region Fd(JFC) | City of London | Termination of Advisory <br> and Mgmt Agrements <br> proposal |
| Dec | 13D/A | Korea Eq Fd(KEF) | Bulldog | Inc (6.73\%) |
| Dec | 13D/A | Swiss Helvetia Fd (SWZ) | Bulldog | Inc (5.36\%) |
| Liquidation / Open- |  |  |  |  |
| Ending Proposal |  |  |  |  |

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

| Month <br> Filed | Filing | Closed-End Fund/BDC | Investor/Who | Notes |
| :---: | :---: | :---: | :---: | :---: |
| Nov | Offering | Fidus Investment Corp (FDUS) | Public | $2,800,000$ shares @ <br> $\$ 16.65$ |
| Nov | 13D/A | MFS Charter Incm Tr MCR) | Relative Value Partners | $8.56 \%$ <br> Open-End Proposal |
| Nov | 13D/A | Pacholder Hi Yld Fd (PHF) | Bulldog | $9.99 \%$ <br> Liquidation / Open- <br> Ending Proposal |
| Nov | Proxy | Virtus Glbl Div \& Inc Fd (ZTR) | Public | Director Appointed and <br> Advisory Agreement |
| Nov | 13D/A | WF Mlt-Sctr Incm Fd |  |  |
| (ERC) |  |  |  |  |

# CEF Institutional Holdings 

## (Traditional CEFs 4Q 16)

Increase: 153 funds
Decrease: 259 funds

Trad CEFs Groups - \% Shares Owned by Institutions January 18, 2013 - December 30, 2016


Source: CEFA's Closed-End Fund Universe (www.cefuniverse.com)

# CEF Activist Holdings 

 (Traditional CEFs 4Q 16)
## Activist <br> Holdings Trends

Increase: 96 funds Decrease: 112 funds

Trad CEFs Groups - \% Shares Owned byActivists
January 25, 2013 - December 30, 2016


Source: CEFA's Closed-End Fund Universe (www.cefuniverse.com)

## Traditional Closed-End Fund Historical IPOs (4Q 16)

|  | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of <br> IPOs | 8 | 8 | 9 | 25 | 23 | 19 | 17 | 13 | 2 | 40 | 21 |
| Average <br> Assets <br> In \$ millions | $\$ 225$ | $\$ 291$ | $\$ 469$ | $\$ 580$ | $\$ 517$ | $\$ 316$ | $\$ 451$ | $\$ 200$ | $\$ 131$ | $\$ 690$ | $\$ 506$ |
| Total New <br> CEF IPO <br> Assets in \$ <br> Billions | $\$ 1.8 B$ | $\$ 2.3 B$ | $\$ 4.2 B$ | $\$ 14.5$ | $\$ 11.9$ | $\$ 6.0$ | $\$ 7.7$ | $\$ 2.6$ | $\$ 0.3$ | $\$ 27.6$ | $\$ 10.6$ |

10 Year Average: 16 Funds per year, $\$ 387 \mathrm{MM}$ Ave Fund, $\$ 7.8$ Billion Per Year

## BDC Historical IPOs (4Q 16)

|  | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of <br> IPOs | 1 | 6 | 4 | 5 | 7 | 5 | 1 | 1 | 5 | 1 |
| Average <br> Assets <br> In \$ millions | $\$ 120$ | $\$ 575$ | $\$ 78$ | $\$ 96$ | $\$ 101$ | $\$ 98$ | $\$ 87$ | $\$ 141$ | $\$ 138$ | $\$ 203$ |
| Total New CEF <br> IPO Assets in \$ <br> Billions | $\$ 0.1$ | $\$ 3.5$ | $\$ 0.3$ | $\$ 0.5$ | $\$ 0.7$ | $\$ 0.5$ | $\$ 0.1$ | $\$ 0.1$ | $\$ 0.7$ | $\$ 0.2$ |

10 Year Average: 3.6 Funds per year, \$164M Ave Fund, \$0.7 Billion Per Year

## 2016 IPO Details 4Q 2016

## Invsc Hi Incm 2023 Tgt Trm Fd (IHIT) - Taxable Bond Funds -

IPOed on November 23, 2016
IPO Price: $\$ 10.00$
Price as of $12 / 30 / 16: \$ 10.05$

IPO Assets: $\$ 216 \mathrm{M}$
Disc/Prm as of 12/30/16: 1.21\%

## FT Sr Flt Rt 2022 Tgt Trm Fd (FIV) - Taxable Bond Funds -

 IPOed on December 21, 2016IPO Price: \$10.00
Price as of $12 / 30 / 16$ : $\$ 10.12$

IPO Assets: \$325M
Disc/Prm as of 12/30/16: 3.16\%

# IPOs during 1Q 2016-3Q 2016 Current Discount / Premium 

| IPO Date | Ticker | Fund Name | Type | Current Disc/Prm | Current Price | IPO Price | Curr vs IPO |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1Q 2016 | NHA | Nuv Muni 2021 Tgt Trm Fd | Traditional | $5.42 \%$ | $\$ 9.92$ | $\$ 10.00$ | $99.20 \%$ |
|  | JHD | Nuv Hi Incm Dec 2019 Tgt Trm Fd | Traditional | $-0.49 \%$ | $\$ 10.10$ | $\$ 10.00$ | $101.00 \%$ |
|  | EHT | EV Hi Incm 2021 Tgt Trm Tr | Traditional | $-2.75 \%$ | $\$ 9.92$ | $\$ 10.00$ | $99.20 \%$ |
| 3Q 2016 | JHB | Nuv Hi Incm Nov 2021 Tgt Trm Fd | Traditional | $-0.40 \%$ | $\$ 9.88$ | $\$ 10.00$ | $98.80 \%$ |
|  | OPP | RiverNorth DbLin Stgc Opp Fd | Traditional | $-6.16 \%$ | $\$ 18.44$ | $\$ 20.00$ | $92.20 \%$ |
|  | GGO | Gabelli Go Anywhere Tr | Traditional | $11.74 \%$ | $\$ 21.03$ | $\$ 20.00$ | $105.15 \%$ |

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

| Fund Grouping | Correlation <br> 4 Q 16 | Correlation <br> $3 Q$ | Correlation <br> Trend |
| :---: | :---: | :---: | :---: |
| US Equity Funds | $80.5 \%$ | $84.0 \%$ | $-3.50 \%$ |
| Non-US Equity Funds | $85.0 \%$ | $84.8 \%$ | $0.20 \%$ |
| Specialty Equity Funds | $81.6 \%$ | $70.0 \%$ | $11.60 \%$ |
| Ave Equity CEF | $82.3 \%$ | $76.7 \%$ | $5.60 \%$ |
| Taxable Bond Funds | $65.7 \%$ | $66.5 \%$ | $-0.80 \%$ |
| National Muni Bond Funds | $91.8 \%$ | $54.3 \%$ | $37.50 \%$ |
| State Muni Bond Funds | $89.9 \%$ | $47.1 \%$ | $42.80 \%$ |
| Ave Bond CEF | $79.5 \%$ | $58.0 \%$ | $21.50 \%$ |
| Average CEF | $80.6 \%$ | $65.6 \%$ | $15.00 \%$ |
| Ave |  |  |  |

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

Trad CEFs Groups - 90 Day NAV/Price Correlation June 22, 2012 - December 30, 2016


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



## CEFA's Outlook for 1Q and 2017

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

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


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

(March 2004 to September 2007)

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

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

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

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

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


## CEFData.com

> Launched CEFDATA.COM - Data Updates Daily and Live with Analysis Updates
$>$ Free Public CEF/BDC Profiles
> Watchlists, Models, Portfolio
$>$ Show how portfolio/model changes with swaps or allocation changes
$>$ View and Summary Reports
$>$ Fund Sponsor Modules
$>$ Compare a Fund to Dynamic Peer Groups and Selected Peers
$>$ Expecting to add 1-2 modules per month: List on www.CEFdata.com
30 Day Free Trial and free CEFU/DA while in development with guaranteed renewals at 20\% off through March 30, 2017 for Q Webinar Attendees

Pricing per Quarter is $\$ 1 \mathrm{~K}$ (Individual) $\$ 2 \mathrm{~K}$ (Small RIA/FA) \$3K Large RIA/Hedge Fund, $\$ 4 \mathrm{~K}$ Fund Sponsor/Product Sponsor. We always offer prorated refunds and include 30 minutes per quarter free consulting time with John Cole Scott for paid subscribers.

## CEF Heat Map (Nota cef Advisors website)

## https://cefanalyzer.com/treemap (Example, not a recent day)


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## Traditional Closed-End Funds: By Average Daily Liquidity (thousands)



Note: 540 traditional closed-end funds; data as of 12/30/16, Source: CEFA's Closed-End Fund Universe (www.cefuniverse.com)

## BDCs : By Average Daily Liquidity (thousands)



Note: 52 business development company CEF; data as of 12/30/16, Source: CEFA's Closed-End Fund Universe (www.cefuniverse.com)

## 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
CEFAnalyzer LLC: http://CEFanalyzer.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

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

## CEF Advisors' Model Portfolio Offerings

| Portolio | Discount | 1 Yr Avg Discount | 3 Yr Avg Discount | Rel Disc Range(3yr) | $\begin{aligned} & \text { Mk } \\ & \text { Yield } \end{aligned}$ | $\begin{aligned} & \text { Lev Adj } \\ & \text { NAV } \\ & \text { Yield } \end{aligned}$ | After Tax Yield | Tax Friction | $\underset{\text { RoC\% }}{1 \mathrm{H}}$ | 3Yr <br> Dest <br> RoC\% | Lev\% | Estlev Cost | Non Lev Expense Ratio | 3 Yr NAV Volatility | $\left\lvert\, \begin{gathered} 3 \mathrm{Yr} \\ \text { NAVTR } \end{gathered}\right.$ | Purchases Turnover | Sales Turnover | \% Equity Exposure | \% Bond Exposure | Holdings | Cash Weighted Duration | Beta <br> (2yr) | $\begin{aligned} & \text { Comp } \\ & \text { NAVTR } \end{aligned}$ | Comp Discount |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. CEFA International Opoortunity | -1227 | -13.19 | -1175 | 44.05 | 7.02 | 5.42 | 5.89 | 1.13 | 24.8 | 15.0 | 126 | 0.25 | 1.39 | 14.40 | 5.39 | 55.42 | 58.12 | 64.26 | 31.64 | 29 | 1.70 | 0.72 | 0.48 | -3.07 |
| 2.CEFA Diversified Hish Beta | -11.59 | -1387 | -1141 | 43.06 | 8.16 | 5.91 | 7.04 | 1.12 | 35.3 | 26.2 | 20.6 | 0.89 | 1.93 | 18.82 | 1.52 | 46.54 | 53.85 | 79.66 | 16.69 | 28 | N/A | 1.22 | 3.18 | -3.30 |
| 3 CEFA Diversified Growth | -1124 | $-1390$ | -1335 | 49.42 | 7.49 | 5.50 | 6.06 | 1.43 | 13.7 | 10.7 | 19.7 | 1.11 | 2.15 | 14.50 | 13.49 | 53.86 | 59.19 | 65.11 | 30.82 | 28 | 0.61 | 0.85 | 3.01 | -1.38 |
| 4. CEFA Hybrid (Hisht J ncome | -7.43 | -9.50 | -857 | 52.99 | 10.73 | 7.70 | 8.91 | 1.82 | 31.9 | 22.2 | 29.5 | 1.34 | 2.65 | 12.81 | 6.94 | 63.06 | 65.24 | 45.66 | 52.03 | 27 | 0.77 | 0.89 | 2.63 | -1.28 |
| 5. CEFA. Hybrid (Histh) Incoms Monthly | -878 | -1159 | -10.97 | 63.20 | 9.60 | 6.91 | 7.87 | 1.73 | 25.3 | 13.7 | 28.2 | 1.23 | 2.36 | 10.41 | 10.45 | 62.26 | 65.10 | 43.50 | 52.35 | 23 | 1.56 | 0.72 | -0.67 | -2.26 |
| 6 6.CFFA Alternative Income | -950 | -11.10 | -1227 | 61.76 | 8.40 | 6.15 | 6.78 | 1.62 | 14.3 | 8.3 | 240 | 1.17 | 2.44 | 12.45 | 18.55 | 42.49 | 4273 | 50.03 | 47.21 | 21 | 1.19 | 0.59 | 0.56 | -3.87 |
| 7.CEFA Discount Opportunity | -14.36 | -15.43 | -13,38 | 43.16 | 6.99 | 4.90 | 5.78 | 1.21 | 20.4 | 11.8 | 21.9 | 0.83 | 1.78 | 13.53 | 10.35 | 62.81 | 67.48 | 60.98 | 35.85 | 39 | 1.60 | 0.78 | -0.32 | -6.48 |
| 8. CEFA Foundation/Balansed | -7.88 | -1050 | -10.19 | 60.24 | 8.17 | 6.09 | 6.73 | 1.44 | 14.9 | 8.1 | 24.6 | 0.95 | 2.00 | 12.06 | 16.81 | 49.89 | 52.02 | 49.54 | 48.26 | 28 | 1.73 | 0.74 | 1.65 | -1.42 |
| 2. CEFA Foundation/Balanced - Tas Advantaged | -1006 | -1044 | -888 | 43.48 | 7.69 | 5.76 | 7.24 | 0.45 | 55.1 | 40.2 | 21.1 | 0.66 | 1.39 | 15.37 | 4.40 | 60.78 | 66.55 | 60.75 | 37.78 | 28 | 2.51 | 0.84 | -0.12 | -2.66 |
| 10.CEFA Diversified Low Peta | -8.48 | -1043 | -10.44 | 61.42 | 7.11 | 5.01 | 6.00 | 1.11 | 21.5 | 10.1 | 22.1 | 1.04 | 2.14 | 11.08 | 15.98 | 60.96 | 64.31 | 44.83 | 53.02 | 24 | 0.75 | 0.50 | -0.39 | -0.67 |
| 11. CEFALowCorrelation | -5.21 | -7.80 | -8.92 | 73.53 | 7.34 | 5.66 | 621 | 1.13 | 20.0 | 11.3 | 23.7 | 0.90 | 1.85 | 10.66 | 16.36 | 47.02 | 48.20 | 44.55 | 53.36 | 27 | 2.79 | 0.56 | -0.43 | -0.13 |
| 12. CEFALow Carrelation-IRA | -3.98 | -6.76 | -7.97 | 73.00 | 7.76 | 5.93 | 6.59 | 1.17 | 18.7 | 11.2 | 26.1 | 1.04 | 1.99 | 10.77 | 16.68 | 45.50 | 46.74 | 38.30 | 59.76 | 23 | 3.34 | 0.54 | -0.91 | 1.05 |
| 13. CEFA Taxable Bond\& BDC | -8.16 | -1148 | -11.39 | 72.78 | 8.28 | 5.83 | 6.49 | 1.79 | 9.5 | 4.6 | 30.7 | 1.41 | 2.58 | 6.15 | 15.21 | 51.47 | 52.92 | 6.49 | 88.32 | 21 | 3.63 | 0.40 | -0.15 | -3.43 |
| $\frac{\text { 14. CEFA Div Tax.Sensitive locomes }}{\text { (Eq.Wt) }}$ | -7.05 | -7.37 | -7.35 | 52.56 | 7.75 | 6.03 | 7.43 | 0.32 | 53.2 | 34.0 | 228 | 0.86 | 1.35 | 15.34 | 6.88 | 40.87 | 49.11 | 53.61 | 45.03 | 20 | 2.70 | 0.76 | -2.58 | -1.81 |
| 15. CEFA Div Tax-Sensitive Income (MuniOW) | -6.42 | . 6.68 | $\cdot 7.17$ | 56.33 | 7.36 | 5.82 | 7.10 | 0.26 | 39.5 | 26.9 | 23.9 | 0.71 | 1.23 | 11.26 | 12.86 | 32.78 | 37.36 | 41.25 | 57.39 | 20 | 4,04 | 0.50 | -2.07 | -1.70 |
| 16. CFFA BDC Select | -0.36 | -1001 | -8.46 | 77.39 | 9.52 | 6.65 | 7.14 | 2.38 | 0.0 | 0.0 | 42.4 | 3.84 | 4.59 | 2.74 | 25.88 | 28.84 | 28.84 | 5.86 | 90.99 | 13 | N/A | 0.72 | 0.47 | 3.28 |
| 17. CEFABDCMcothly licome | 1.87 | -755 | -5.40 | 78.74 | 9.50 | 6.89 | 7.13 | 2.37 | 0.0 | 0.1 | 37.4 | 3.71 | 3.86 | 3.62 | 21.03 | 21.88 | 2188 | 7.22 | 85.42 | 8 | N/A | 0.75 | -0.42 | 5.50 |
| 18.CEFABDC-Low Beta | 2.58 | -6.31 | -7.23 | 77.78 | 8.88 | 6.29 | 6.67 | 2.21 | 0.0 | 0.0 | 44.3 | 4.14 | 4.66 | 2.72 | 26.46 | 32.09 | 3209 | 7.62 | 88.65 | 10 | N/A | 0.63 | 0.64 | 6.22 |
| 12. CEFA BDC Premium | 10.12 | 1.67 | 4.52 | 74.93 | 8.86 | 6.90 | 6.64 | 2.22 | 0.0 | 0.0 | 410 | 3.22 | 4.16 | 2.43 | 28.20 | 28.91 | 28.91 | 6.26 | 92.68 | 11 | N/A | 0.82 | 287 | 13.75 |
| 20.CEFA Seleat Muricioal | - 4.70 | 4.13 | -6.96 | 60.60 | 5.59 | 3.93 | 5.52 | 0.07 | 0.0 | 0.0 | 358 | 0.66 | 1.04 | 3.48 | 25.40 | 19.03 | 18.31 | 0.00 | 99.74 | 13 | 9.04 | -0.04 | 0.57 | -1.53 |
| 21 CEFALow Duration Munikipal | -170 | . 248 | -3.67 | 49.91 | 3.51 | 2.97 | 351 | 0.00 | 0.0 | 0.0 | 15.9 | 0.33 | 0.76 | 2.33 | 14.55 | 90.78 | 16.42 | 0.00 | 99.73 | 6 | 4.20 | -0.03 | -0.44 | 0.77 |

[^2]
## Current CEFA Portfolio Modes

CEFA Portfolio Models' Investment Objectives. Diversified models hold 15-30 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 focusing on non-US and global sector of closed-end funds. We seek to blend our global market outlook with the ability to buy these funds, often at significant discounts to NAV while having the opportunity for discount narrowing over time if the countries or regions become more popular by investors. 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 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 0.90 .
2. Diversified High Beta: Diversified portfolio seeking $65 \%$ to $85 \%$ equity exposure and $15 \%$ to $35 \%$ debt exposure. The Beta to the S\&P 500 is expected to be 1.25 to 1.50 . 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. 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.
6. 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.
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

## Closed-End Fund Advisors

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

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 F/B model and $1 / 3$ invested in non-traditional asset classes using ETFs and open-end funds to reduce the expected volatility over time.
8. 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.
9. 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.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.
11.Diversified Tax-Sensitive Income: Designed to maximize after-tax yield for high income investors seeking little-to-no tax friction. Focuses on equal weight exposure to three CEF sectors whose net asset values (NAVs) historically have low correlation: municipal bonds, master limited partnerships and tax-advantage equity funds (primarily covered call CEFs). Muni's, the most common tax-avoidance sector for many investors has a $38.6 \% 10 \mathrm{Year}$ NAV correlation to MLPs and a $33.3 \%$ correlation to Covered Call Funds. Covered Call funds have only a $69.8 \%$ 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 $6.25 \%$ to $7.25 \%$. Cash-weighted duration is expected to be under 3 . We also offer a Municipal bond overweight version of this model where $50 \%$ of the portfolio is Muni bond CEFs.
12. Business Development Company Select: A focused but diversified portfolio of BDCs ("top quartile") with strong fundamental research on each BDC's portfolio and management. Seeking BDCs exposure with above average (better) dividend sustainability, NAV (portfolio) performance, variable and senior secured loan exposure as well as low non-accruals (defaults). We look for sector and geographic diversity and use a target of 1000 combined holdings. 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, $12.8 \%$ for preferred equity and $27.4 \%$ to REIT CEFs. Also, only $40 \%-43 \%$ correlation to high yield and Sr. loan CEFs. We offer a " $100 \%$ monthly paying only", "low Beta" and Premium BDC version of this model.
13. 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

## CEFA Portfolio Model Summary Performance

## CEFA Composite Performance (Net)* As of September 30, 2016

| Investment Portfolio Model | QTD | YTD | 1 Year | 3 Year | 5 Year | 10 Year | Since Inception | Inception Date | Benchmarks | QTD | YTD | 1 Year | 3 Year | 5 Year | 10 Year | Since Inception | Inception Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Conservative Diversified | 3.33\% 10.45\% 10.77\% |  |  | 2.79\% | 4.69\% | N/A | 5.58\% | 5/1/2009 | $\begin{aligned} & \text { S\&P } 500 \\ & \text { Total Return } \end{aligned}$ | 3.85\% | 7.84\% | 15.43\% | 11.16\% | 16.37\% | 7.24\% | 5.22\% | 1/31/1999 |
| Foundation/Balanced | 4.55\% | 10.22\% | 12.04\% | 4.14\% | 7.64\% | N/A | 6.93\% | 9/1/2009 | Barclays Capital Global Aggregate Bond | 0.82\% | 9.85\% | 8.83\% | 2.13\% | 1.73\% | 4.26\% | 4.42\% | 1/31/1999 |
| Global Growth \& Income | 5.00\% | 10.25\% | 10.00\% | 2.40\% | 5.87\% | 1.74\% | 3.93\% | 1/31/1999 |  |  |  |  |  |  |  |  |  |
|  | 4.73\% | 6.88\% 13.62\% |  | 4.55\% | 9.06\% | 3.45\% | 5.63\% | 1/31/1999 | MSCI World (Ex-US) | 6.29\% | 3.12\% | 7.16\% | 0.33\% | 6.88\% | 1.88\% | 7.32\% | 1/1/2002 |
| Globally Diversified Growth |  |  |  | Barclays Municipal Bond |  |  |  |  | -0.30\% | 4.01\% | 5.58\% | N/A | N/A | N/A | 4.65\% | 8/1/2014 |  |
| Hybrid Income | 6.04\% | 12.33\% | 13.39\% |  | 5.98\% | 9.65\% | N/A | 5.04\% |  |  |  |  |  |  |  |  | 12/1/2006 |
| International Equity | 4.70\% | 4.77\% | 5.09\% | 0.10\% | 5.40\% | 1.90\% | 8.19\% | 11/1/2002 | Thomson Taxable Fixed Inc CEF TR | 2.76\% | 9.38\% 10.25\% |  | 3.64\% | 4.72\% | 5.06 | 4.83\% | 12/1/2006 |
| Business <br> Development Companies | 8.61\% | 13.30\% 11.02\% |  | N/A | N/A | N/A | 5.28\% | 1/1/2015 | Thomson All Equity CEF TR | 3.12\% | 8.51\% 10.99\% |  | 2.66\% | 6.94\% | 4.56\% | $3.97 \% \text { 12/1/2006 }$ |  |
| Managed Municipal |  | 8.95\% 14.90\% |  | N/A | N/A | N/A | 10.55\% | $8 / 1 / 2014$ | Wells Fargo BDC TR | 8.51\% | 18.02\% | 22.61\% | N/ | N/A | N/A | 7.32\% | 1/1/2015 |
| Bond CEFs | -0.39\% |  |  | 60/40 S\&P <br> 500/Barclays Bond |  |  |  |  | 2.64\% | 8.64\% 12.79\% |  | 7.55\% 10.51\% |  | 6.05\% | 4.90\% 1/31/1999 |  |  |
| Special Opportunities | 5.73\% | 16.87\% | 16.67\% |  | 10.64\% | N/A | N/A | 9.21\% |  |  |  | 6/1/2013 |  |  |  |  |  |  |

Growth of \$1,000,000 Invested CEFA's Globally Diversified Growth model on January 31, 1999*

| Globally Diversified Growth | $\$ 2,634,510$ |
| :--- | :--- |
| S\&P 500 Total Return | $\$ 2,459,345$ |
| Barclays Capital Global Agg Bond Total Return | $\$ 2,234,018$ |
| $60 / 40$ S\&P 500/Barclays Bond | $\$ 2,330,334$ |

Disclosure: See full portfolio disclosures at the end of this presentation

## Principals' Biographies

## George Cole Scott

Sr. Portfolio Manager, President of Closed-End Fund Advisors

George's investment career started in 1969 after joining a regional brokerage firm after a journalism career. In 1976 he and a client bought control of a deeply discounted CEF which became Bergstrom Capital. He served on the board of the fund for 27 years. In 1987 he founded The Scott Letter: Closed-End Fund Report which was a well regarded print newsletter ending the publication when he became a shareholder of CEF Advisors in 1996. In 1991 he co-authored the only hardback book on CEFs with a finance professor. He is a graduate of The University of Washington, holds the FINRA 66 License and is a long time member of The CFA Society and CFA Virginia. He has been widely published and interviewed and has worked with closed-end funds on a consulting basis. George is one of two CEF specialists, that we know of, with more than four decades CEF expertise.

## John Cole Scott, CFS

Chief Investment Officer of Closed-End Fund Advisors

John has worked at the firm since 2001. He is a graduate of The College of William \& Mary, has been quoted widely in the financial press and presented at conferences and for investment groups on more than 45 occasions. He manages 19 portfolio models for CEF advisors'. In 2008 John founded CEFA's Closed-End Fund Universe, a comprehensive weekly data service covering all US listed CEFs and Business Development Companies (BDC). He manages BDCUniverse.net powered by CEFData.com and containing the only free public BDC Fund profiles and peer group data to our knowledge. He founded and manages The CEF Network group on Linkedln and is editor of CEFAdvisors' blog. The firm has portfolio models on Covestor.com and a BDC UIT with their partner, SmartTrust, John serves on the Investment Committee for The NY State Society of The Cincinnati and on the Advisory Board of Oxford Lane Income Partners, and Chicago based hedge fund where CEF Advisors is a research and data partner.

*DISCLOSURES: The net returns presented above for all of CEFA's composites were calculated on a time-weighted return basis. All dividends, interest and income, realized and unrealized gains and losses, brokerage and custodial fees are fully reflected. CEFA advisory fees are fully detailed in its ADV Part 2, which is available upon request by calling John Cole Scott at (804) 288-2482. The CEFA composite includes all actual fee-paying and non-fee-paying, fully discretionary accounts in this investment strategy that have been under CEFA management for at least three months.

Diversified Growth and Growth \& Income Models: These accounts are managed by both John Cole Scott and George Scott. John Cole Scott began managing accounts in the composite $06 / 31 / 2009$. The founder of CEFA, George Scott has been managing accounts since the composites inception. As of December 31, 2013, the percentage of non-fee-paying CEFA accounts in this strategy was $10 \%$ Growth and $11 \%$ Growth \& Income. The inception date of both the Globally Diversified Growth and Growth and Income composite is January 31, 1999. Hybrid Income Model: As of December 31, 2013, the percentage of non-fee-paying CEFA accounts in this strategy was $0 \%$. The inception date of the Hybrid Income composite is November 1, 2006. International Opportunity: These accounts are managed by both John Cole Scott and George Scott. John Cole Scott began managing accounts in the International composite 12/31/2010. The founder of CEFA, George Scott has been managing accounts since the composites inception. As of December 31,2013 , the percentage of non-fee-paying CEFA accounts in this strategy was $11 \%$. The inception date of the International Equity (formerly called International Equity and International REIT) composite is November 1, 2002. Foundation Balanced, Conservative Diversified and Special Opportunities: CEFA composites include all fee paying and nonfee paying clients in the model that have given CEFA full discretion and managed only by John Cole Scott. The percentage of non-fee-paying CEFA accounts these models is 0\%.

The results for individual accounts at different periods may vary. Investors should not rely on prior performance as a reliable indication of future results. These figures are unaudited and may be subject to change. The information provided should not be considered as a recommendation to buy or sell any particular security outside of a managed account. CEFA reserves the right to modify its current investment strategies and techniques based on changing market conditions or client needs. The S\&P 500 and DJ World Stock (excluding U.S.) indices were calculated using total return analysis with dividends reinvested. These indexes have not been selected to represent an appropriate benchmark to compare an client's performance, but rather is disclosed to allow for comparison of the client's performance to that of a certain well-known and widely recognized index.

$$
\begin{aligned}
& \text { Closed-End Fund Advisors, Inc. } \\
& 7204 \text { Glen Forest Drive, Suite \#105 } \\
& \text { Richmond, Virginia } 23226 \text { U.S.A } \\
& \text { (800) } 356-3508 \text { / (804) } 288-2482 \\
& \text { www.CEFadvisors.com } \\
& \text { www.CEF-Blog.com }
\end{aligned}
$$

# Domestic General Equity Funds Average Premium / Discount 

## Domestic Equity - Average CEF Discount

May 11, 2012 - December 30, 2016


## World Equity Funds Average Premium / Discount

## World Equity - Average CEF Discount <br> May 11, 2012 - December 30, 2016



# Domestic Specialty Equity Funds Average Premium / Discount 

## Domestic Special Equity - Average CEF Discount May 11, 2012 - December 30, 2016



## Taxable Bond Funds Average Premium / Discount

Taxable Bond - Average CEF Discount<br>May 11, 2012 - December 30, 2016



# Municipal Bond Funds Average Premium / Discount 

All Muni Bond - Average CEF Discount<br>May 11, 2012 - December 30, 2016



> All Equity - Total Return
> January 1, 2007 - December 30, 2016
$\longrightarrow$ NAV TR Price TR


# All Bond - Total Return <br> January 1, 2007 - December 30, 2016 

——NAV TR ——Price TR


## Taxable Bonds - Total Return <br> January 1, 2007 - December 30, 2016



> US Equity - Total Return
> January 1, 2007 - December 30, 2016
$\longrightarrow$ NAV TR Price TR


## Non US Equity - Total Return January 1, 2007 - December 30, 2016

$\longrightarrow$ NAV TR $\quad$ Price TR


> High Yield Bond - Total Return January 1, 2007 - December 30, 2016


## Convertible - Total Return

January 1, 2007 - December 30, 2016
$\longrightarrow$ NAV TR Price TR


Senior Loan - Total Return
January 1, 2007 - December 30, 2016
$\longrightarrow$ NAV TR $\quad$ Price TR


## Preferred Equity - Total Return <br> January 1, 2007 - December 30, 2016



## US REIT - Total Return <br> January 1, 2007 - December 30, 2016

$\longrightarrow$ NAV TR Price TR


## Covered Call - Total Return

 January 1, 2007 - December 30, 2016$\longrightarrow$ NAV TR Price TR


## All Equity - Average Discount / Premium

January 1, 2007 - December 30, 2016


All Bond - Average Discount / Premium
January 1, 2007 - December 30, 2016


## Taxable - Average Discount / Premium <br> January 1, 2007 - December 30, 2016



## US Equity - Average Discount / Premium <br> January 1, 2007 - December 30, 2016



## Non US Equity - Average Discount / Premium

January 1, 2007 - December 30, 2016


High Yield Bond - Average Discount / Premium January 1, 2007 - December 30, 2016


## Convertible - Average Discount / Premium

January 1, 2007 - December 30, 2016


## Senior Loan - Average Discount / Premium

January 1, 2007 - December 30, 2016


Preferred - Average Discount / Premium
January 1, 2007 - December 30, 2016


## US REIT - Average Discount / Premium <br> January 1, 2007 - December 30, 2016



Covered Call - Average Discount / Premium
January 1, 2007 - December 30, 2016



[^0]:    Historical Premium / Discount expressed as average value over each year. 2016 Premium / Discount average value as of December 30, 2016. "2007 - 2016" column shows yearly average for each sector.

[^1]:    Correlation of 3 Month NAV Total Return values between 12/31/2006 and12/31/2016.

[^2]:    
    

    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.
    
     ees (i.e. commissions, custodial fees, etc.).
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