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THE SCOTT LETTER:
CLOSED-END FUND REPORT

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THE SCOTT LETTER is intended to educate global investors about closed-end funds. Closed-end funds can be a valuable and profitable investment tool. To learn about closed-end funds, visit our web site, www.CEFAdvisors.com, and in particular, read our article, What Are Closed-End Funds.

Feel free to forward this news-letter to anyone who you believe could benefit from information on closed-end funds or global portfolios.

We are pleased to announce a free Business Development Company (BDC) data website that is the first we know to exist to cover the sector. It is powered by our CEF Data Project and offered to help give a centralized place to go for information on all public BDCs. The link is http://www.BDCUniverse.net and we encourage your feedback as we improve the resource.

CEF Advisors now offers free public BDC/CEF Fund profiles at www.CEFData.com.

– George Cole Scott, Editor-in-Chief

– John Cole Scott, Contributing Editor

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Nuveen's Tax-Free Bond Closed-End Funds: Municipal Outlook in a Post-Trump Economy and Rising Rates

NUVEEN

As many of our readers may know, 171 of the 570 closed-end funds (30%) and $64 Billion of the $264 Billion (24%) in the closed-end fund universe is made up of municipal bond CEFs as of December 31st, 2016. Nuveen has 74 closed-end funds with gross assets of $59.6 Billion according to CEFdata.com. The majority of these (44 funds) are in the municipal bond sector ($40.8 billion) and while Nuveen has funds across many equity and bond sectors they are known for their "DNA" to be based on municipal bond investments.

Paul Brennan

In this interview we did not focus on any particular fund as we were seeking commentary on the recent mergers of Nuveen's municipal funds and the outlook for the municipal market in 2017 as we face a potential steady increase in interest rates and a Trump presidency. For reference, we included data on eight of Nuveen's most liquid National Municipal Bond Funds in a table on page 3. These include NAD, NEA, NEV, NID, NMZ, NUV, NVG and NZF. If you would like to see more information on these or other Nuveen funds, please visit our free public CEF profiles at www.CEFdata.com powered by our internal CEF/BDC data team.

John Molloy

We interviewed Paul Brennan, Senior Vice-President, CFA, CPA, and John Molloy, Vice-President, of Nuveen Asset Management, LLC on December 9th. Michael Taggart, CFA with Nuveen also joined us for the interview.

SL: Paul and John, give a little bit of your background, how you got into the municipal bond sector.

John: I had a background in investment consulting. I went to business school and wound up at Nuveen working with the closed-end group in investment services. We dealt with product management and product development, working across the product structures and were liaisons with the product team between the product group and the investment managers. I did leave for a brief time. I was at Calamos doing product development and product management, and I came back in 2008 to work in this group and I've been in this role since. I wasn't always focused on munis, but now I am focused on munis and taxable fixed income.

Paul: I used to work at one of the very large accounting firms, and one of our audit clients that I was on was Flagship Financial, which was a firm based in Dayton, Ohio that had a number of tax-exempt municipal funds. Through the relationship there, I went to work for them, starting on the credit research side and then transitioning to portfolio management responsibilities.

Then Nuveen purchased Flagship in 1997, and I came over to the Nuveen side through the acquisition and have been running muni funds ever since, either SMA accounts or mutual funds. If you count my tenure with Flagship, it's been about 25 years in the muni

business doing research and/or portfolio management.

SL: Let's talk about the fundamental municipal sector, how it's done recently. Where do you see the fundamentals of the tax-free bond market going post-Trump?

Paul: Most financial markets were assigning very low probabilities to a Trump victory, and obviously when Trump was declared the winner, the market immediately went into a change in outlook with regards to economic policies, fiscal policies, essentially even monetary policies. Definitely, on the fiscal side and that economic side, the market really started to price in what essentially was a very pro-growth Trump Administration. It looks like there will be a lot of pro-growth policies and initiatives that will hopefully spur job growth, accelerate economic growth.

One of the issues leading up to Trump's election has continued to be very slow, lagging economic growth that's been occurring here in the US, so with the prospect of a Trump Administration and very different pro-growth policies, the market has certainly revised its outlook. We will see accelerated growth and potentially see some pressure on inflation.

In the fixed-income world, that led to almost immediate re-pricing of a market that's all about rates. We have seen rates move up very sharply since the election, with the curve steepening on the expectations of rises in growth and inflation and the likelihood that the Fed will probably also raise rates at the next meeting. *Editor's Note: Which it did.*

SL: Isn't the number estimated at a 99% chance that it's going to happen?

Paul: Yeah. The Fed is ready, and a lot of their rhetoric has already been telling the market, "Hey, expect the rate increase." They really wanted to pull the trigger at their September meeting and basically said, "Well, it's time to raise rates, but we're going to wait another month or two to watch the data just to be really certain." I don't think there have been any changes in the data that would suggest that it would not, even putting the election aside. But I think, post-election, it's even easier for them to raise rates.

The market has priced a lot of that in, and, of course, the munis really take their cue from what's going on in the rates markets, particularly the Treasury market. So, the muni market has also moved lower in price, higher in yield. Also, munis have probably been hit a little harder because of expectations with regards to a couple of other factors that could be very prominent in the Trump Administration—tax reform and infrastructure.

On the tax side, there's obviously a concern that rates could come down. There could be other reforms put in place that could affect the tax treatment of munis, and so the muni market is being penalized a little more harshly for the uncertainty. With regards to the infrastructure spending, there's also a lot of concern that we could see a significant spike in new money bond issuance to bond projects. The market, again, has kind of priced in "worst-case scenarios" with regards to tax reform, issuance, and what have you, so munis have sold off even more than their taxable counterparts, which is kind of against the grain of what we usually see when we see rates rise. Munis tend historically to outperform in a rising rate environment, and in this case we're actually seeing the opposite—they've underperformed given some of these concerns with regards to the incoming Trump Administration.

> ***"The muni market is being penalized a little more harshly for the uncertainty. With regards to the infrastructure spending, there's also a lot of concern that we could see a significant spike in new money bond issuance to bond projects"***

SL: Does your comment on the different taxation mean possibly changing the pricing for the bonds? Lower rates for a tax-equivalent yield for tax-driven investors, or are you thinking that there might be even more change to what could price munis in the market?

Paul: We think there will likely be tax reforms. We think it's going to be more focused on the corporate side, but there's always the risk that munis could get impacted by that.

There have been, in the past, proposals in Congress and through Commissions where the muni exemption has been threatened. The market is clearly concerned about that. Future tax policies tend to lead to steeper muni yield curves as well.

We're seeing forced selling in the market from shareholder redemptions. There's really nothing going on fundamentally that's different about muni bonds and muni credit post-election. I guess this is all a lot of concern about what's going to happen with a Trump administration.

We're not seeing a problem with credit. In fact, you can make a strong argument that a better-growing economy is good for credit, because that's going to generally lead to better tax revenue growth, which tends to lead to better credit metrics.

SL: From my understanding, the SIFMA (the reference rate used to price muni leverage costs) was pushed higher because of money market reform recently. One of the arguments we heard from you in September was that the raising of short-term rates wouldn't affect closed-end fund leverage, because rates were already kind of unnaturally high for other reasons. Is that still the case?

Paul: Yeah, that's a good point. Almost since the effective date of the various money market reforms, we have seen the SIFMA index retrace. I think it peaked at 87 basis points right around early October, and we're down I think around the low 50s right now. That, when you compare it to the LIBOR rate, does seem still a little cheap, and so the impact of a Fed increase is probably already priced in. There is no guarantee that that will change, but it does mean it's likely that the December rate hike has already been factored in the tax-exempt side as well. The SIFMA still is a little bit elevated relative to, say, LIBOR, but it has come down obviously since the reforms were put in place.

SL: You mentioned that there's more supply in the market of muni bonds; that could be a little bit of drag in the sector, but I was under the impression that there's been a deficit for a long time. How much supply do you think is likely versus how much deficit there's been over the last couple of years?

Paul: We're going to finish the year pretty strong on growth issuance, but the real story is that issuance has actually been declining. That has been declining for about five years now because local borrowers have been very aggressive and because rates have been so low.

The game plan is restructuring old debt and replacing it with new debt—essentially like the refinancing of mortgages. Roughly half of all debt issues over the last four or five years have been in the form of refunding issues, and so essentially these refunding deals are simply borrowing new money and taking the proceeds and retiring that old debt. So,

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we're actually seeing net amount of bonds outstanding declining, and that's been going on for about five years now.

That has actually created somewhat of a light amount that hasn't been sufficient enough to cover all the demand that's been in the marketplace the last few years. Even if you say Trump is going to spend trillions and trillions on infrastructure, it's not likely we're going to see any spike in issuance in the near term on the muni side. These projects aren't even ready yet, they're not close to ready.

The issuance related to those projects could be farther down [the line] and go farther into the future. Also, going forward, there's actually going to be a decline in old bonds that could be refunded to the new—if you remember, back in 2008, Congress passed the Build America program, which allowed issuers to issue taxable debt for specific projects that would qualify for that program, so we actually saw a lot of municipal bond issuers get hammered from the traditional tax-exempt side to a taxable side in '09.

We're getting up to almost the 10-year anniversary of that period, and a lot of that debt that was issued in '08–'09 is not going to be refundable, at least through tax-exempt debt. We actually could see a further decline in issuance as refunding deals decline. We're erasing a lot of debt; '07 issues already have been advance refunded. Unless we get an increase in new-money issuance for new projects, we're actually going to see probably a decline in issuance even on a gross basis, and probably a net basis as well, so the technicals on that front are still going to be pretty favorable for the muni market as a whole.

SL: Maybe you can give a little bit of insight into the closed-end funds' side of the business. From our data, there's about 21% turnover annualized for purchases, about 15% for sales—so, not a heavy turnover portfolio, but obviously changing. Talk about adding and replacing bonds inside that closed-end fund wrapper. How does it work on a typical monthly and quarterly basis?

Paul: Turnover does really wax and wane. I think one of the factors, at least in open-end funds, is shorter flows. That's the big driver of activity at the fund level. At the portfolio level (in the closed-end funds space, obviously), the portfolios generally don't have shareholder flows in or out.

So, a lot of our portfolio structure and the reconstruction efforts are really driven by our investment process. We're always looking to invest in credits that we think over time have

Nuveen's National Municipal Bond Closed-End Funds

Ticker	Disc %	Disc % (3yr)	Lev Adj NAV Yield	Yield	Lev%	Non Lev Exp Ratio	3 Mo NAV TR	3 Yr NAV TR	Duration	% Investment Grade	% Non Investment Grade	% AMT
NAD	-7.93	-8.41	4.01	6.06	39.26	1.03	-7.85	22.57	12.91	89.3	8.8	6.00
NEA	-7.85	-8.93	3.75	5.66	38.99	0.99	-7.91	23.67	12.87	90.5	7.9	0.00
NEV	-3.79	-1.97	4.16	5.84	34.97	0.92	-7.27	25.56	11.39	83.8	10.1	3.07
NID	-3.19	-7.23	3.66	5.18	37.02	0.90	-6.39	20.18	7.12	55.5	25.8	8.60
NMZ	-0.24	-0.35	4.68	6.37	35.87	1.04	-7.09	27.04	12.54	52.2	19.7	5.33
NUV	-4.33	-3.21	3.87	4.11	1.49	0.50	-4.93	17.90	7.62	88.1	10.5	3.14
NVG	-7.57	-10.83	4.10	6.19	39.55	0.98	-9.52	24.00	14.43	80.0	15.3	0.00
NZF	-7.49	-10.71	4.27	6.42	38.90	1.00	-9.48	23.19	13.85	75.5	16.8	7.69
National Muni Bond Funds	-5.30	-6.46	4.06	5.73	33.26	0.92	-7.56	23.01	11.59	76.9	14.4	7.92
Weighted Av	-5.30	-6.46	4.06	5.73	33.26	0.92	-7.56	23.01	11.59	76.9	14.4	5.6

Note: All Nuveen National Municipal Bond Funds with over $1MM a day in average trading volume (past 90 days) on CEFData.com. Data as of December 19, 2016.

the ability to outperform the market as a whole or outperform bonds and credit ratings with the overall goal of the portfolio outperforming its respective benchmark. We really utilize our investment process, which is always attempting to identify opportunities to enhance the total return and income-producing capabilities of our funds and the portfolios therein.

The opportunity to invest in current bonds at yields that are 50–75 basis points and more yield than they were just a couple of months ago is opening up some opportunities for us to do a lot more swaps within the portfolio, to sell some bonds that were bought at lower yields and replace them with bonds that have higher yields. That gives us the ability to then strengthen the dividend or the earnings of the portfolio, which obviously will support the dividends going forward. There are a lot of opportunities now we're pursuing across the board to try to enhance the portfolio-level earnings, because we're able to identify a lot of bonds that we can replace ourselves and replace them with different bonds that are going to enhance the strength and the earnings potential for the portfolio. This little "back up in rates" [situation] is really opening up a lot of opportunities for us to engage in those types of trades.

So, we've been pretty active since the election, pursuing a lot of opportunities, and, again, there's also been a lot of selling. A lot of the selling pressure in the muni market has been coming more from high-yield products, where high-yield funds are having a greater proportion of shareholder redemption, and so they're forced sellers and they're selling bonds that are generally lower rated, higher yielding, in many cases less liquid, and there's a more limited audience for that type of paper.

That's been a really good target market for us in pursuing some of these lower-rated securities that we already know—in most cases, that we already own, we already track, we already follow—and particularly for a fund like NVG, those are the types of bonds we're really trying to source, because the fund has a little bit of a high-yield bent to it.

So, it has been a really good opportunity for us just to buy some low-rated bonds, A-rated or lower, triple-B, and sell some higher-quality bonds and pick up incremental yields, which we think will help the portfolio's sustainable income going forward. That's been an area that we're focused on.

SL: You've done a lot of mergers. Let's focus on the national mergers that you've had this year. Talk about what drove the creation of the new line-up for muni funds that you have and what drove it in the market, what drove it as a benefit to shareholders.

John: Just to give a quick background: We wound up with close to 20 nationally leveraged muni funds that were of decent scale a few years ago as a result of over two-plus decades of issuing funds when there was an opportunity in the capital markets. Over time, we were in the market with 20 or so funds that had normalized management of the funds. Over time, you had turnover in the funds, and they became redundant portfolios.

We had two issues that we were really looking to solve. We started this process with the portfolio managers really looking at these funds two years ago, and it was a redundancy issue. So, when someone like yourself calls in and wants to know what the difference is between one nationally leveraged fund and the other.… I mean, there really wasn't any as far as how they were managed.

The second issue we were looking to deal with was we had some funds that—just because of when they came out, some of them were formally insured funds—were lagging their peers in terms of performance. So, we, over probably a year-long period, met multiple times and looked at the market, looked at competitive analysis, and decided that we would break out the universe into three credit tiers: high yield, which we had; investment grade, which we had but maybe needed to be modernized a bit; and then a medium-grade credit offering in the market.

Through a lot of discussions—beyond Nuveen, in the industry—we came to the conclusion that there was an appetite for that. We decided to attempt to break out our muni offerings into those three distinct credit tiers. So, you would have high yield, you would have a medium grade (which we're calling credit), and you would have the investment grade, which we altered from the old 20% bucket of double-B and below to be up to 35% triple-B and below. We did the same with the mid-tier, up to 55% triple-B and below, and we really did that just to create clear distinctions between these three tiers.

Mike: It's important to point out that those percentages for triple-B and below that we modernized the mandates to are what we see as typical now in competitors' national municipal closed-end funds. So, yes, we increased the triple-B-and-below allocation, but we're not doing anything out of the ordinary. We're just bringing it up to what most of our competitors already do. The other thing is, these product actions created a differentiated product for us and our shareholders because, as John was saying, we ended up, over two-plus decades, with 20 leveraged national muni funds. At the end of the day, the main differentiator was the discount instead of the actual investment mandate, and that's not beneficial. We want investors to be able to differentiate our products based on their objectives and their mandates. By having larger funds, we are able to scale the costs, so it helps with the expenses of the fund—which then, in turn, helps with the earnings of the fund, which then helps the distribution of the fund, and the scale also helps the liquidity of the fund. By having these multi-billion-dollar national municipal funds, advisors and investors are able to easily buy and sell them instead of as with a lot of the smaller muni closed-end funds, where it's kind of "trading by appointment" or being afraid to move the market or, if it's going to use the limit orders, it takes days to fill an order. Those are two tangible benefits for our investors in addition to the investment mandate changes.

> ***"By having larger funds, we are able to scale the costs, so it helps with the expenses of the fund--which then, in turn, helps with the earnings of the fund, which then helps with the distribution of the fund"***

John: To add on to what Mike said, as far as modernizing the investment grade, they had the ability because we were previously limiting double-B and below to 20%. We're looking at a target of 25% for triple BBB and below, so they still had the ability to do that. It's just that we've changed how we were monitoring, how we were studying the investment guidelines so as not to limit ourselves as far as competitiveness in the marketplace. We started off restructuring and modernizing with the medium grade: (NVG and NZF) in April of this year. In September, we finished the restructuring and modernizing of our investment grade offerings (NED and NEA).

I think that, over time, you'll see much more differentiation in the earnings of these groups. But because the transition took place just over the last nine months, it's not yet as differentiated as it will be in the future.

Paul: The opportunities during the last month or two have definitely gotten better. Not just higher yields but actual availability, too. We talked about the supply challenges. That`s created a real challenge to source bonds, and there was, obviously, growth in high yields from fund shareholders, so that was competing with a lot of other funds out there to source bonds.

SL: Looking at the call risk in the market, it looks like your funds average around 17% per year. Is that 17% expected call driving a lot of the turnover? How much of the change do you expect in the next one or two years being called maturity reallocation versus trading?

Paul: Well, this gets back again to issuers and borrowers, who have been very, very focused and aggressive on refunding their old debts. So, essentially, for nearly every bond that's been callable, once you get close to the current call date, the issuers are calling them.

So, that has the effect of monetizing your positions, because they got called before they matured. Therefore, you have these proceeds from the call redemption, and in a sense that's been a source of liquidity in our market; because all of these funds are getting called, investors have proceeds from the calls, and they are fixed staying with the market, so they're going to reinvest in bonds.

That has been a big driver of activity in our marketplace. That's where you get these proceeds that are looking to reinvest back in the market. That has impacted us as well—we're then much more active because of the elevated call activity.

In a lot of cases, we'd rather not have seen these bonds get called because these were bonds that were purchased 8, 9, 10 years ago that went on the books 5% to par (or those types of levels), and you were having to reinvest in new bonds that are yielding much less. Before the election, if you had a long, 30-year bond, you're investing in three, three fifty type of deals, and so you'd rather not have that old bond get called. But it was certainly advantageous for the borrower to do that, because they could replace old higher-coupon debt with lower-coupon debt.

That has been a big driver of activity, particularly in the closed-end funds but also in the open end funds. We're just continuing to get new shorter flows, so they've been very active as well. (I'm speculating; the buy/sell ratio last year before the election was probably 3:1 for the typical fund.) The turnover, though, actually looks very low, because the turnover that's reported in the annual reports and the shareholder reports is always the lower of sales or buys as a percent of assets.

SL: Well, we didn't like that, so in our data facility, we collect both. Obviously, we've talked to people that aren't all closed-end fund based. What is your perspective on the ongoing conversation of buying individual bonds? Buying into a more unlevered access point to this sector? Will they be open-end funds or closed-end funds? Or buying the five- and mid-change-levered muni? What's the

advice you want to give to the average advisor to pass on to his or her clients about how to position these best in the client portfolio?

Paul: Well, I think a lot of it comes down to the individual client's needs. I think the typical closed-end levered fund is generally most suitable for the investor who has a longer-term horizon, is in a higher tax bracket, really likes income, and has the ability or willingness to tolerate some volatility in the share price because, obviously, that does happen with the closed-end levered funds.

So, investors who have much more longer-term focus and have a need for income tend to really gravitate to the closed-end leveraged funds. Now, there are also some investors who look at it purely on a role-evaluation basis and say, "If I can buy these funds at these discounts, that's attractive to me as well. I want to be in the muni market. I want to have access to this income." The closed-end fund is sometimes the cheapest entry point, and we'll see a lot of investors who also will go in that type of trade as well where they're looking at cash bonds and they're saying, "Well, if I can buy packets of bonds well below their intrinsic value…." We get a lot of investor interest from that front as well.

SL: One of the data points we look at is three-year NAV return. We also look at total return, because that's your performance measurement for a manager, but every single fund you have in this space has a positive three-year NAV return.

Paul: Right.

SL: And even with the pullback of about 8%, you've got a 21% average 3-year NAV total return. So, I feel like we get kicked in the knees, but as long as you didn't buy it 90 days ago, you are probably fine.

Paul: Right. The other metric I see a lot of people look at, particularly more institutional or sophisticated types of investors, is the spread on the yield on the fund versus the cash market as a whole, and [they see] that spread is still very wide. The standard deviation is still wider than this on average, so they'll look at that. They'll say, "Wow! I'm getting a lot of yield compensation for owning the closed-end fund product!" And now I have to maybe accept a little volatility, because they're levered and sometimes the share price will trade in line with NAVs but be tilted on the income side of things, which, over the long run, is really where most of your return comes from. So a lot of investors will look at it that way, too: They look at what the spread differential is, comparing the cash market and the yield on the closed-end fund product.

SL: In September, you estimated a certain percentage of savings across the board for the average fund, but the savings typically ends up being noticeably more.

John: I can tell you that we're actually working on something right now where we are trying to produce a written piece to the public that shows the actual savings of what we were experiencing before the mergers and then after. But I can tell you that, from what I've seen, the savings are almost always much more than what is predicted, because we're just bound by certain accounting rules when we're estimating savings, and they just don't really take into account what we really see when we do it.

"I think the typical closed-end levered fund is generally most suitable for the investor who has a longer-term horizon, is in a higher tax bracket, really likes income, and has the ability or willingness to tolerate some volatility"

SL: Tell me anything new you guys are working on that you'd like to let the readers know about.

John: It's not really exotic, but we'll be changing the names of a number of funds, just to normalize our naming conventions so that you can more readily, just by looking at the names, know what the fund does. [Editor's Note: These changes took effect on December 28, 2016, following the interview date.]

SL: It seems like you guys typically don't hedge interest rate risk; you just kind of allocate credit and duration and go to that side of the muni bond experience. Some of your peers have done that. Is that something that you've considered doing in one of your funds in the future? Or is there a way of having that as an option in the mix?

Paul: Well, I can tell you that with the last public report of any information we have, we did have a swap in place on NVG. As a way to mitigate some interest-rate risks so that we do manage the fund interest-rate volatility or duration pursuant to internal guidelines, when a fund or portfolio is getting to be at or outside of the guidelines, whether it's on the high side or the low side, we can adjust it through an interest-rate swap or deploying futures, those types of tools, to effect the change and the duration that we're trying to achieve.

In NVG, the swap was put in place to reduce the volatility a little bit. The interest rate and the volatility of the duration of the fund got to a point where it was above our limit, and we felt that [those methods were] some of the most effective ways at the time to deal with that.

Thank you for your time and perspctive on the funds. I hope this new Scott Letter format with the added perspective from a CEF sponsor was helpful. As usual, please call or email us with your feedback and questions.

We will publish an interview with Dr. Mark Mobius of Franklin Templeton Investments in the February issue of The Scott Letter.

Editor's Note: For 2017 we have launched 15 CEF/BDC indexes which you can read about in an upcoming press release. One index is an equal-weight National Municipal Bond Index comprised of the top third of funds in the grouping by 90-day average trading liquidity. The index launch date is 12/31/16 and we will reset and rebalance it quarterly. It ended 2016 with a -3.59% discount (vs. 3 year average -5.00%), 5.80% market yield, earnings coverage of 96.1%, 85% investment grade bonds and a duration of 10.0.

The index currently has 37 constituent funds. Its 2016 market price total return was +1.95% and a 2016 net asset value (NAV) total return or +0.67%. For the three years ending 12/31/16 its market price total return was +30.45% and NAV total return was +26.12%. However, remember that past performance is not indicative of future results. Investment may lose principal and a closed-end fund's market yield is not guaranteed.

Disclosure: As of 12/31/16, clients and or family of CEF Advisors have positions in the following funds: NMZ, NEA, NID, and NZE. We will not make any buy or sell trades in these funds until 72 market hours after this interview is publicly released.

Portfolio Managers' Review

2016 was an interesting and volatile year for CEFs. The diversified CEF focused funds (CEF/ETF/OEF) were up between +12.17% to +17.13%. They include FOF, RIV, PCEF, YYY, VHFIX, RNCOX and MDCEX. This was a welcome change from the under-performance we saw in much of the Universe for 2015.

CEFA recently launched 15 CEF/BDC indexes to help benchmark our portfolio, peers and the sector in general. For 2016 on a total return basis, our **12 Major CEF Sectors** were up +14.5%. Our **International** was up +6.2%, **US Equity** was up +8.5%, **Global Equity** was up +9.0%, **High Income** was up +17.0%, **Equity Income** was up +10.8%, **60% Equity / 40% Bond** was up +13.4%, **Tax-Sensitive Income** +12.8%, **Taxable Bond and BDC** was up +16.2%, **Debt-Focused BDC** was up +22.4% and **National Municipal Bond** was up +2.0%.

Look for a detailed press release on the indexes in the next few weeks. We will post the rules, constituents, NAV, market price, discount, market yield and other information publicly on CEFdata.com later this month.

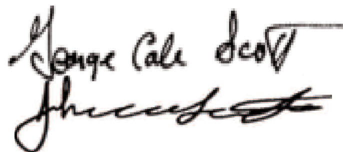
17 Funds ended the year at the highest market prices they had seen all year with most of these funds being in the Sr. Loan and High Yield sectors. All 7 of the funds that ended the year with the lowest price they had seen were in the municipal bond categories. This was a good indicator of which funds did the best and worst during the year. Looking into the major groups of funds, **Equity Funds** ended the year at -9% discounts and 7.5% indicated yields. **Taxable Bond CEFs** ended the year at -4.9% discounts and 8.0% indicated yields. **National Municipal Bond CEFs** ended the year at -3.83% discounts and 5.5% indicated yields. **Debt-Focused BDCs** ended the year at -5.67% discounts and 10.3% indicated yields.

For 2017 we think municipal CEFs will deliver 2%-8% total returns as we think duration fears are overdone but still will govern the outcome for the sector. BDCs will likely perform 8%-12% with small NAV increases for the sector, dividend levels for many funds at current levels and discounts should narrow to small premiums. MLP and Preferred funds are likely to trade at better discount levels, but we feel it is hard to determine their performance outcomes with so many variables still yet to be determined. We think High Yield, Convertible, Senior Loans and Global Equity funds will also have solid years with 7%-10% returns possible.

We believe it is a good year to focus on the Beta's, cash-weighted duration (portion of the portfolio reporting duration multiplied by the weighted duration figure), after-tax income and taking tactical and opportunistic approach to selected and trading your CEF portfolio. Selling when a fund narrows its discounts and buying wider than normal discounts seems even more important when there are few super-wide discounts and sectors to focus your research on this year.

We think discount volatility will continue to be above average as the market push/pulls on the fears over credit risk (a recession) vs. duration risk (rising rates). Diversification is a useful tool, but we believe if you own more than 50 CEFs/BDCs in a portfolio you should consider one of the Diversified 40 -Act funds mentioned previously, as you have removed the likelihood of your research / selection impacting your performance positively in our experience. We tend to manage our diversified models with 20-35 funds per portfolio. You can review our 22 models at www.cefdata.com/portfoliocomp.

Please look for our quarterly research review and outlook for CEFs and BDCs next week. If you miss the session, we always post the slides and replay to our website.



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Note: All data referenced is from CEFA's CEF Universe data dated December 19, 2016 unless otherwise stated.

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