
## August 2018 Muni Market Monthly Report – "What Coupon of Choice? Part 4"

The big news in August 2018? ***Mainline West Tax Advantaged Opportunity Fund III was successfully wound down to a 10.49% IRR (16.35% tax equivalent)!*** Otherwise, August was another slow month for munis, as yields were virtually unchanged with the slight rally in taxable yields. The liquidation of Fund III in August comes as we see negative technicals over the next 30 to 60 days for munis. We still see munis on solid ground, but we can't outperform every month!

This month, in our credit review, we look at round four of our *"which coupon is best for you"* study. We present a time-series analysis on OAS (Option Adjusted Spread) and total return results for 5%, 4%, and 3% coupon bonds over six-month and life-to-date time frames. Once again, the results stay consistent. Whether this means we have unraveled the secret to the best coupon, or have not had big enough market changes since 2015 to unravel our conclusions, we share our thoughts on which coupon is right for you.

## Muni Market Review

In August, the muni market was virtually unchanged once again, but finally underperformed taxables. This has been the summer of snooze. Highlights as follows:

- Muni yields since May 31, 2018 have changed as follows:
  - 5 year yields up 3 bps
  - 10 year yields up 3 bps
  - 15 year yields up 10 bps
  - 30 year yields up 15 bps
- Yield changes for munis for the month of August were up 5 to 1 bps with curve flattening.
- Yield changes for taxable yields for the month were down 10 to 9 bps with the curve steepening slightly.
- Year-to-date, muni issuance is starting to pick up, but still lags 2017's by 13.8%. This has caused munis to be less volatile and perform well, year-to-date.
- The supply/demand technicals over the next 30 to 60 days are negative and could cause some underperformance, but we don't think munis are primed for any big negative moves.

*In MainLine West news, **the MainLine Tax Advantage Opportunity Fund III has been fully wound down.** Over its five year life the Fund posted a **10.49% IRR (16.35% tax equivalent)**. This far exceeds its investment objective of 6 to 8%.*

## Market News and Credit Update

In a recent Wall Street Journal article, concern was cited for an increase in VRDO rates, as some major brokerage firms will no longer sweep customers cash into money-market mutual funds. If this happens as cited in the article, this would increase the funding costs on the Mainline West Tax Advantage and lower its payout. We disagree VRDO rates will rise for several reasons:

- The sweep vehicle being provided by the brokerage in place of the money funds is right now 150 bps lower in yield. This does not seem right and only represents the best interest of the brokerage firms, not the customers. How many investors will stand for that?
- It appears that only a small percentage actually use broker sweep accounts. At Merrill, only 4% of the accounts would be impacted.
- Lastly, the supply of VRDO's has been declining, as short rates have moved up. Year-to-date issuance is down 32%. This will have a bigger impact on VRDO rates by lowering supply and, therefore, lowering rates than the selfish overnight sweep changes being made by the Brokerage firms.

**A recent study by Moody's cites big concerns for the credit quality of non-profit hospitals.** The current financial path is unsustainable, as expenses are rising much faster than revenues. Of the 6,000 non-profit hospitals studied, 18% are at risk of closure. There will need to be some consolidations and improved efficiencies to help change this trend. MainLine will continue to monitor this sector and actively manage any concerns that may arise.

**As of August 31, munis are now considered a liquid asset by the large banks**. There are a lot of critics of this change. This in not because there are concerns with muni defaults, but because munis can be illiquid at times. We here at MainLine are happy to see the additional demand for munis, but, as our Tax Advantaged Funds show, illiquidity exists and provides us the opportunity to make the trade work.

# What's Your Coupon of Choice? Part IV

This is round four of our ***"which coupon is the best for you"*** study. We first published this analysis in our monthly review for October 2015, and have continued to update investors annually. We review it again now and continue to look at the trend of the performance of the various coupons as time goes by. Our objectives for this study remain the same:

- Which coupon prices cheaper using OAS (Option Adjusted Spread) analysis, and how does this affect the bond's return?
- Which coupon shows the best return in the short-run (6 months) as it gets acclimated to the market, and which coupon preforms the best over the long-term (life of bond)?

**Refreshing the Background Data:**

We understand investors have different investment objectives and, for some of them, this includes coupon preference. For this study, assuming the investors does not have a coupon preference, we step back to look at how the coupon impacts the bonds return. From there, we identify which coupon fits which type of investor.

We continue to age the same bonds from the first study, as we believe a time series analysis comparing the total returns and OAS's (see appendix for description of this analysis) on different coupon bonds from the same issuer with roughly the same maturities is the only way to see the performance characteristics of a coupon. Yet we also add in new ones each year to capture different markets and see how that may influence the data.

**Data Review:**

Below is a chart with the findings for bonds we started tracking in the spring of 2015 until August 15, 2018. There are 60 bonds:

- 28 of them 5% coupon or greater
- 23 of them 4% coupon
- 9 of them 3% to 3.625% coupons

# What's Your Coupon of Choice? Part IV (cont'd)

*Chart #1* shows the change in OAS and total return for the life of the bond. This shows the long-term performance of the coupon. I have included the same charts from the analysis in October 2017.

| Chart #1 –Life of Bond October 2017 | | | | | |
|---|---|---|---|---|---|
| Cpn | Purch Yield | Beginning OAS | Current OAS | OAS Change | Total Return as of 9/29/17 |
| 5% or greater Cpn | 3.29% | 112 | 97 | -15 | 4.53% |
| 4% Cpn | 3.51% | 104 | 88 | -16 | 4.40% |
| 3% to 3 5/8% Coupon | 3.61% | 89 | 88 | -1 | 1.10% |

| Chart #1 –Life of Bond August 2018 | | | | | |
|---|---|---|---|---|---|
| Cpn | Purch Yield | Beginning OAS | Current OAS | OAS Change | Total Return as of 8/15/18 |
| 5% or greater Cpn | 3.24% | 107 | 75 | -32 | 3.16% |
| 4% Cpn | 3.30% | 99 | 69 | -30 | 2.74% |
| 3% to 3 5/8% Coupon | 3.36% | 79 | 68 | -11 | -.53% |

*Chart #2* shows the same bonds, but the change in OAS and total returns for just the first six months after issuance. Once again I have included the October 2017 data.

| Chart #2 - First 6 Month Horizon August 2018 | | | | |
|---|---|---|---|---|
| Coupon | Beginning OAS | Current OAS | OAS Change | Total Return |
| 5% or greater Coupon | 107 | 106 | -1 | 5.19% |
| 4% Cpn | 99 | 94 | -5 | 6.39% |
| 3% to 3 5/8% Coupon | 79 | 90 | 11 | -3.18% |

| Chart #2 - First 6 Month Horizon October 2017 | | | | |
|---|---|---|---|---|
| Coupon | Beginning OAS | Current OAS | OAS Change | Total Return |
| 5% or greater Coupon | 112 | 111 | -1 | 5.23% |
| 4% Cpn | 104 | 97 | -7 | 6.59% |
| 3% to 3 5/8% Coupon | 86 | 105 | 16 | -2.23% |

## Observations/Conclusions:

The results keep looking the same, but let's repeat them:

***5% coupons*** *consistently priced cheaper on an OAS basis than 4% or 3% coupons and it appears, over time, are outperforming.* **5% coupons remain our pick for a buy and hold strategy**.

***4% coupons*** *show strong 6-month performance (as they get acclimated and marked-up in the market) but, as time goes by, it appears (over time) total return is not as strong as the higher coupon 5%.* Investors are rewarded at issuance with more yield on the 4% bond, but over time this does not appear to be enough to offset the additional coupon of the 5% and its pricing performance. **Our pick for a short-term total return trading strategy remains the 4% coupon**.

***3% coupons*** *price the richest on an OAS basis, and appears to be the underperformer.* **This coupon is our pick to trade, as it falls in and out of favor**. Investors are not provided enough yield at issuance to make up for the lower coupon and weak price performance of the discount bond.

We may take a year off on reporting these results, unless something changes. We will continue to follow the bonds and see how the results look each another year.

We understand that this study is not all inclusive and there are a lot of factors that can influence a bond's return. It is intended to be more of a point of discussion and not our way of telling you our investor ***"what is your best coupon".***

## Appendix:

### Option Adjusted Spread Analysis (OAS):

OAS is a common analysis that allows fixed income managers to price the value of a bond after adjusting for the probability it being called. It uses an option-based pricing model to calculate the value of the call risk in basis points. More specifically, it identifies the basis point spread a bond is earning above and beyond an AAA non-callable bond (with the same maturity) after taking out the cost of call. Another way to look at it is to view it as the credit spread of the bond versus an AAA-rated bond. The higher the OAS, the more yield being earned by the investor that can be associated with credit risk and not call risk. Therefore, in analyzing two bonds from the same issuer, the OAS (credit risk) should theoretically be the same. If the OAS is different between bonds, then an investor can assume the value of the call risk between the two bonds has been priced incorrectly. When comparing two bonds, the bond with the higher OAS is considered the cheaper bond (more basis points of income for the same credit risk).