16TH AMENDMENT ADVISORS LLC℠

COVID-19 and Municipals

The impact of COVID 19 has created a tsunami across all asset classes in the financial markets, and municipal bonds were not spared. The fear of an economic recession/depression and the possible impact to municipalities as the frontline defenders in the COVID 19 pandemic has some investors worried about budget shortfalls and downgrades in the municipal market. Like other fixed income markets, municipals also experienced the pressures of overnight and short term illiquidity. In municipals, this is the VRN (Variable Rate Notes) and VRDO (Variable Rate Demand Obligations) markets, which reset their rates either daily or weekly. Much like 2008, mutual fund de-leveraging played an important role as mutual funds had to unwind their tender option bond programs ("TOB"). These "TOB" programs issue floating-rate notes to money-market funds and use the cash to buy higher-yielding longer-term bonds and pocket the difference in yield between the two. This strategy works well and may increase returns for the funds when markets are calm but the strategy can quickly backfire when investors rush to pull cash out of money-market funds during times of panic. The banks/liquidity providers are then stuck holding the notes and in order to clear these securities off their balance sheets, banks set the rates high enough to attract in buyers. This has caused mutual funds to sell municipal bonds at a record pace. To provide some perspective, according to JP Morgan, in only three weeks in March 2020, the total mutual fund outlows of $14.2 billion is larger than the entire outflow cycle of 2008 during the financial crises, which lasted four months (as opposed to three weeks!).

VIOLENT CHANGES IN RATIOS AND SPREADS

The change in yields, spreads and ratios was violent, and the recovery, thus far, has been swift, although incomplete.

MONDAY MARCH 2ND, 2020					MONDAY MARCH 23RD, 2020					CHANGE V MARCH 2, 2020			
YEAR	TREASURY YIELD	MMD	MUNI/ TREAS RATIO	SPREAD TO TREAS	YEAR	TREASURY YIELD	MMD	MUNI/ TREAS RATIO	SPREAD TO TREAS	TREAS YIELD CHG.	MMD YIELD CHG	RATIO CHANGE	SPREAD CHANGE
2 yr	0.90	0.69	77%	(21)	2 yr	0.33	2.52	764%	219	-0.57	1.83	687%	240
5 yr	0.94	0.69	73%	(25)	5 yr	0.51	2.56	502%	205	-0.43	1.87	429%	230
10 yr	1.16	0.93	80%	(23)	10 yr	0.85	2.79	328%	194	-0.31	1.86	248%	217
30 yr	1.72	1.52	88%	(20)	30 yr	1.43	3.37	236%	194	-0.29	1.85	147%	214

WEDNESDAY MARCH 25TH, 2020					CHANGE V MARCH 23, 2020			
YEAR	TREASURY YIELD	MMD	MUNI/ TREAS RATIO	SPREAD TO TREAS	TREAS YIELD CHG.	MMD YIELD CHG	RATIO CHANGE	SPREAD CHANGE
2 yr	0.33	1.62	491%	129	0.00	-0.90	-273%	(90)
5 yr	0.55	1.68	305%	113	0.04	-0.88	-197%	(92)
10 yr	0.87	1.94	223%	107	0.02	-0.85	-105%	(87)
30 yr	1.44	2.52	175%	108	0.01	-0.85	-61%	(86)

Source: Bloomberg and MMD

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Municipal market convention is to view the relationship between high grade municipals and US Treasuries as a "ratio," that is municipal yield divided by treasury yield. During periods of crises (think 2008), municipal yields can trade higher than US Treasuries for even AAA securities. This is generally a function of the US Treasury being deemed a flight to quality asset and AAA municipals as a good source of liquidity for investors. On March 2, across the yield curve, municipals traded at ratios of US Treasuries. Three weeks into March, US Treasury yields fell while municipal bond yields rose at record paces in each direction. To take one data point, the 10-year sector, on March 2, the muni/treasury ratio as 80%. By March 23, this ratio surged to 328% or 194 points above the 10-year UST, a total swing of 217 basis points. By way of comparison, the peak 10-year ratio in 2008 was 184%. The mark-to-markets were significant. It was not uncommon to see many mutual funds with MTD returns of -10% and in the high-yield sector, these figures were -20% or even more.

Over the past week, with the introduction of Federal Reserve intervention in the short term markets (US Treasury, mortgages, corporates and municipals) the market began the initial stages of a recovery. Returning to the chart above, the 10-year part of the curve witnessed municipal yields contract over two days (March 24 and March 25) by a total of 85 basis points. On a day-to-day basis during normal times, the change in MMD is in the low single digits (i.e. 1 or 2 or 3 basis points). At the start of business on March 26, 10-year MMD was 107 basis points above the 10-year UST. This is an implied ratio of 223%.

COMPARATIVE PERFORMANCE

Despite the volatility, we are generally pleased with how our portfolios have performed. Below is a snap shot comparison of our three composites versus some recognizable indices through March 25. These figures are estimates. All figures are gross of fees for ease of comparison.

AS OF MARCH 25, 2020

16TH AMENDMENT	YTD TOT RET
Long Relative Value Composite	-2.0%
Long Performance Composite	-1.9%
Ladder Composite	-3.1%

MARKET INDICES	YTD TOT RET
Barclays Managed Account (Intermediate)	-3.2%
Barclays Managed Account (Long)	-3.5%
Barclays AA Rated	-3.1%
Barclays A Rated	-4.1%
Baralays BAA Rated	-7.9%
Barclays 10 Year	-3.8%
Barclays 20 Year	-3.9%

Barclays figures from Bloomberg. 16th Amendment figures internal.

NEAR TERM OUTLOOK

While we are certainly buyers of municipals at these elevated spreads, we do believe there may be short term risks associated with the possibility of continued municipal bond fund outflows. We also see the new issue calendar building which might put supply pressure on the market. Nonetheless, we believe at these current levels (absolute yields and as percentage of treasuries), municipal bonds look more attractive then they have been in years.

16th Amendment's portfolios are generally structured with maturities in the belly of the curve (5-15yrs) with most bonds being 5% coupons and of the highest credit quality. Most bonds are rated AA or higher. We believe our portfolio is positioned defensively to withstand any short term municipal market volatility. We believe when adding any additional positions to the portfolios it will be important to choose credits selectively however, and stay away from credits that may be more negatively impacted by this economic crisis. We favor adding positions in high rated general obligation bonds, and essential service revenue bonds during this sell-off. These bonds should be well insulated if the current economic slowdown were to persist longer than is forecasted.

We are happy to get on the phone with anyone interested in further market information.

GIPS COMPLIANCE

One final note, earlier this year, we as a firm became GIPS verified. While this does not change how we manage the portfolios, it does provide assurance that we are following procedures adopted by the Global Investment Performance Standards and our composite returns have been verified. Accompanying this note, is a fact sheet of Long Relative Value and Long Performance. This will be the form we will use going forward.

Disclosure

The composite performance results displayed herein represent the investment performance record of 16th Amendment Advisors LLC ("16th Amendment"), an SEC Registered investment firm. 16th Amendment claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS Standards. 16th Amendment has been independently verified for the periods June 1, 2009 to December 31, 2019. The GIPS verification report is available upon request.

16th Amendment figures are presented gross and net of the maximum management fee (0.40%) annually pro-rated for each monthly period. Client fees may vary. The performance is compared to the Bloomberg Barclays Managed Money Intermediate Municipal Bond Index as well as the Morningstar Municipal Intermediate Fixed Income Index. Indexes are not subject to fees and expenses typically associated with separately managed accounts nor are indexes investable. It should not be assumed that an investor's account holdings will correspond directly to any comparative index or to other accounts managed by 16th Amendment. Due to various factors, including changing market conditions, the content may no longer be reflective of current opinion or positions

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