Bloomberg Barclays Municipal Indices Monthly

April 2021

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Key Performance Highlights Bloomberg Barclays Municipal Indices

- The Bloomberg Barclays Municipal Index, a flagship measure of the US municipal tax-exempt investment grade bond market, entered positive territory for the year with a 0.84% return in April, bringing its YTD return to 0.48%. Its volatility dipped in April, after continued increases in every month of the last quarter. See Figure 2.
- On a maturity spectrum, the longer term bonds significantly outperformed the shorter maturities. 1-2 year and 22+ year municipal bonds posted returns of 0.07% and 1.39% respectively in April, bringing their YTD returns to 0.27% and 0.91%.
- On a quality basis, the lower rated bonds outperformed the higher rated ones. Aaa and Baa posted 0.74% and 1.26% respectively in April, bringing their YTD return to -0.17% and 2.55%.
- With positive momentum in April, nearly every US state and territory is now in positive territory YTD. While the lowest return YTD was posted by Maryland (-0.04%), the highest return was posted by New Hampshire (3.30%). The largest three components, California, New York and Texas (which collectively account for over 40% of the Municipal Index), posted 0.80%, 1.08% and 0.72% respectively this month, bringing their YTD returns to 0.12%, 0.69% and 0.08% respectively.
- On a sector basis, Revenue bonds drove the positive returns for tax-exempt municipal bond market with 0.94% in April and 0.65% YTD. In comparison, General Obligation (0.19% YTD) and Prerefunded (0.03% YTD) bonds had modest returns. Both Transporation and Hospital posted 1.11% YTD, which was the highest return among the Revenue bonds.
- On an issuer basis, while Development Authority of Augusta, Georgia Revenue Bonds posted the lowest return (-2.49%), Connecticut Airport Authority (6.22%) and Newark Housing Authority Port Newark Marine Terminal¹ (5.24%) posted the highest returns in April.

Figure 1

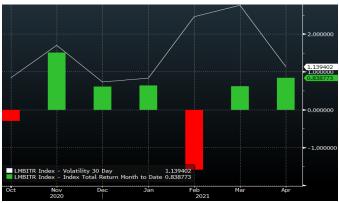
April 2021 returns of Bloomberg Barclays Municipal Index

index Name	Ticker	1D Rtn	MTD Rtn	YTD Rtn
Municipal Bond family				
■ Main Indices				
Municipal Bond Index	LMBITR	0.00%	0.84%	0.489
Maturity				
Purpose Type				
■ GO Bond Index	I00739US	0.00%	0.73%	0.199
Revenue Bond Index	I00749US	0.00%	0.94%	0.659
Prerefunded Index	I00758US	0.00%	0.16%	0.039
C Quality				
Custom				
Muni High Yield (non-Investment Grade)	I22329US	0.00%	1.46%	3.619
■ Composites				
■ Maturity				
HY 1 Year (1-2)	I14023US	0.00%	0.32%	1.609
HY 3 Year (2-4)	I14024US	-0.01%	0.47%	1.67
HY 5 Year (4-6)	I14025US	0.00%	0.82%	2.409
HY 7 Year (6-8)	I14026US	0.00%	1.24%	3.919
HY 10 Year (8-12)	I14027US	-0.01%	1.15%	3.119
HY 15 Year (12-17)	I14028US	0.03%	1.24%	2.719
HY 20 Year (17-22)	I14029US	-0.01%	1.45%	3.489
HY Long (22+)	I14030US	0.00%	1.75%	4.318

Source: Bloomberg Index

Figure 2

Monthly Returns and 30-Day Volatility (Oct 2020-Apr 2021)



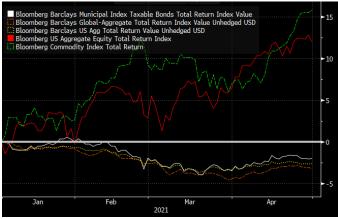
Source: Bloomberg Index

¹ The ultimate borrower is Port Authority of NY/NJ

- The Bloomberg Barclays Municipal High Yield (HY)
 Index, a flagship measure of US municipal tax-exempt
 high yield bond market, posted a strong performance
 (1.46%) in April, bringing its YTD return to 3.61%. It
 significantly outperformed both the US Corporate HY
 (1.95%) and Global HY (0.93%) YTD.
- On a maturity basis, longer maturity bonds drove the HY returns with 22+ year posting 1.75% in April and 4.31% YTD. On a sector basis, Transportation (3.02%) posted the highest return in April, while Electric (0.64%) posted the lowest return for the month. While Lease bonds posted modest returns in April (1.69%), they are the top performing sector on YTD basis (7.78%).
- The Bloomberg Barclays Municipal Taxable Bond Index, a flagship measure of the US municipal taxable investment grade bond market, posted strong positive returns in April (1.52%), after posting negative returns every month last quarter. With its YTD return of -2.01%, the taxable municipal bond market outperformed both the Bloomberg Barclays Global Aggregate (-3.25% YTD) and US Aggregate (-2.61% YTD). The negative performance of these fixed income segments is a significant contrast to the strong positive performance of the Equity and the Commodity markets, as represented by the Bloomberg US Aggregate Equity Index (11.93% YTD) and the Bloomberg Commodity Index (15.78% YTD) respectively.

Figure 3

Diverging performance of Fixed Income vs. other Asset Classes (January - April 2021)



Source: Bloomberg Index

Index Rebalance Highlights

 The market value and bond count of the Municipal Index increased from \$1.67tn and 55,850 respectively in March, to \$1.69tn and 56,071 respectively in April. 643 bonds entered, 422 bonds exited and 169 bonds had their amount outstanding adjusted in the index.

Figure 4

Additions and Removals from Municipal Index (April 2021)

LMBITR Inde	ex	Display →	Alert	Exp	ort •				Z	Membe	r Weightings
		al Bond Index Tot	al Return Inde	ex Valu	e Unhed	ged U	SD				
	ndex Turnover										
		56071 Securities i	n Statistics Ur	niverse						As of	04/30/2021
Summary Statistics			Nun	nber o	f Issues	N		alue Pe ISD)	rcent of Index		
Securities Entering the Index					643		+22,158,	091	1.3135%		
Securities Exiting the Index					422		-11,754		-0.6968%		
Issues Continuing - Amount Outstanding Changes in the Index					169				-0.0081%		
ISIN	Descripti	ion	Par \	/alue F	Par Valu	e End	Market	Value	Market	Value 1	Market Value
				Begin			Begin	(USD)	End	(USD)	Change
 643 Securitie 	es Entering th	e Index									
US287281XT11	287281X	T1				7,305				7,336	+7,336
US649451FU07	649451FI	UO				9,150				7,453	+7,453
US20775HKK85	20775HK	K8				7,590				7,525	+7,525
US275282QQ74	275282Q	Q7				7,320				7,547	+7,547
US073900P487	073900P	48				7,500				7,568	+7,568

Source: Bloomberg Index

- The Yield to Worst (YTW) of the Municipal Index at April month-end (1.04%) inched towards its historical low of 0.95% that was reached in January 2021. Its yield was below both the US Aggregate (1.51%) and the Global Aggregate (1.13%). On a sector basis, yields decreased across the spectrum with GO, Revenue and Prerefunded sectors yielding 0.89%, 1.18% and 0.29% respectively in April, compared to 1.00%, 1.32% and 0.33% respectively in March. Across the states and territories, while Virgin Islands (4.43%) continued to post the highest yield, Kansas (0.73%) continued to post the lowest yield.
- The Municipal High Yield Index increased from \$148bn and 4,982 bonds in March, to \$151bn and 4,991 bonds in April. Its yield decreased to 3.44% in April, from 3.64% in March. Among sectors, Resource Recovery (6.59%) continued to post the highest yield, while Water & Sewer (1.73%) posted the lowest yield.

Figure 5
Key analytics associated with Muni Indices (April 2021)

Index Name	Ticker	YTW	Mod Dur
■ Municipal Bond family			
Municipal Bond Index	LMBITR	1.04	4.78
Purpose Type			
GO Bond Index	I00739US	0.89	4.75
■ Revenue Bond Index	I00749US	1.18	
➡ Prerefunded Index	I00758US	0.29	2.35
Quality			
Managed Money			
Custom Cu			
Muni High Yield (non-Investment Grade)	I22329US	3.44	5.43
HY 1 Year (1-2)	I14023US	2.14	1.21
HY 3 Year (2-4)	I14024US	2.68	
HY 5 Year (4-6)	I14025US	3.05	
HY 7 Year (6-8)	I14026US	3.35	
HY 10 Year (8-12)	I14027US	2.84	4.74
HY 15 Year (12-17)	I14028US	3.22	4.41
HY 20 Year (17-22)	I14029US	3.29	4.95
HY Long (22+)	I14030US	3.75	6.55

Source: Bloomberg Index

For further details on the sub-indices within the Bloomberg Barclays Municipal Indices, please refer to IN <GO> on the Bloomberg Terminal (screenshot of April performance of the Municipal Index is in Figure 1 and April analytics in Figure 5). The monthly returns and 30-day volatility is using G <GO> (Figure 2), comparison across asset classes using COMP <GO> (Figure 3) and index turnover using MEMB <GO> (Figure 4) on the Terminal.



Eric Kazatsky - US Municipals, Strategist

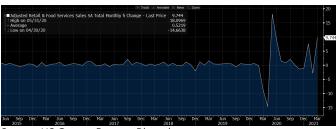
Bloomberg Economics

While rates appeared to have peaked at the end of March and a rallying tone took over the fixed income space, the last week of April threw those plans out of the window. Much of the negative price action came over the span of the last week of the month as the Federal Reserve continued their accommodative approach and the theme of economic optimism continued, following improving figures for GDP and initial jobless claims data. All of these factors served to unwind the pre-FOMC rallying and sent longer US Treasury rates up almost 10bps on the week.

Despite the improving economic outlook with US GDP expected to exceed its pre-pandemic levels in the second quyarter, there remains a palpable concern of inflation from many market professionals. While Jerome Powell does acknowledge inflationary data in the market, he is steadfast on considering the rise in inflation to be transitory. However, the change of pricing for what many consider essential items such as transportation, food and energy, could potentially be a headwind to a rise in consumer spending as the summer season approaches and a larger vaccinated population wades back into the economy.

Figure 6

Adjusted Retail & Food Services Sales



Source: US Census Bureau, Bloomberg

Bloomberg Intelligence

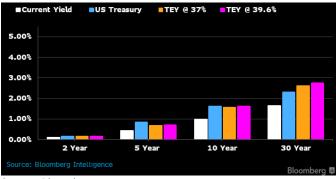
Thanks to technical pressures and a healthy dose of fear over rising tax rates, both on the state and federal levels, tax-free municipal bonds put in their best monthly performance for 2021 and the best April performance since 2014.

While far from an official change in tax law, the Biden administration is considering raising the tax rates on capital gains, as well as increasing the marginal income tax rate to 39.6% from 37%. The latter would help spur additional demand for tax-free bonds, forcing valuations even higher for a sector already experiencing several tailwinds. Using current rates, the affect of a higher marginal tax rate would have varied implication based on what portion of the yield curve the investor is buying.

The greatest change would be in the 30-year portion of the curve, where an after-tax muni rate of 2.73% at a 39.6% tax

rate would best the yield on U.S. Treasuries by 41 bps, an 11-bp improvement from the current 37% tax.

Figure 7 **Taxable Equivalent Muni Yields**



Source: Bloomberg

While Figure 6 uses Adjusted Retail & Food Services SA Total Monthly % Change, Figure 7 uses UST and AAA rates to the afte tax rates for investors.

Simone Andrews - ESG Analyst

Bloomberg Intelligence ESG

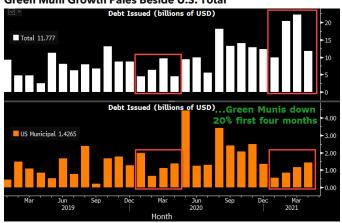
President Joe Biden's ambitious 2030 emissions target and proposed \$2.25 trillion infrastructure package may spark green municipal-bond sales in 2H. Muni green-sales growth has trailed the broader U.S. market for environmental financing this year. Green credit represents less than 3% of the Bloomberg Tax-Exempt Market Index, leaving ample room for growth.

Though U.S municipal green-labeled issuance was slow in the first four months of the year, we expect 2H will be livelier amid the prospects of new federal aid for sustainable infrastructure. Biden's \$2.25 trillion "American Jobs Plan" and higher-than-projected revenue for some state and local governments could entice borrowers to ramp-up green financing. Green muni supply totaled about \$4 billion through April, a 20% drop in issuance volume vs. the similar period last year, likely due to stimulus uncertainty. By comparison, U.S. green corporate, asset-backed and other governmental bond sales totaled \$64 billion through April, a 150% increase.

Top issuers this year include the Denver Regional Transportation District, San Diego Country Water Authority and New York Metropolitan Transportation Authority.



Figure 8 **Green Muni Growth Pales Beside U.S. Total**



Source: Bloomberg Inteliigence

Green muni credit represented about 2.7% of securities in the Bloomberg Barclays Tax-Exempt Bond Index (LMBITR) and 2.8% of the weight of the index on April 30. By using MEMB <GO>, clients can find the weighting of the members of the index and use the "green bond indicator" field to calculate their total. Out of 55,850 securities in the index, the number of green securities decreased slightly to 2.7%, despite an April sales rise. The majority of green municipal bonds are tax-exempt issues, with investors in high-cost states like California and New York looking to realize tax savings and sustainability objectives.

At a weighting of 1.7%, taxable green municipal credit remains a small portion of the Bloomberg Barclays Taxable Bond Universe (BTMNTR), lagging behind the tax-exempt sector.

Figure 9

LMBITR and BTMNTR Green Weighting: April 2021

	I05486CA Index	LCANTRDU Index
Total # of Securities	1,423	920
Total # Green Securities	40	17
Green Securities in Index (%)	2.8%	1.8%
Total Green Weight of Index (%)	1.2%	1.4%

Source: Bloomberg Inteliigence

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