

Muni New Issue Notes: Week of December 13, 2021



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10 Dec 2021, 3:29 AM

Executive Summary

- **The year is running down, but there are still some interesting deals scheduled to be in the market next week as the preliminary calendar totals \$7 bn, of which \$1.5 bn will be taxable.**
- **Several deals caught our attention:**
- **\$800 mn State of Connecticut, General Obligation Bonds (Aa3/AA-/A+)**
- **\$490 mn Broward County (FL), Tourist Development Tax Revenue Bonds (Aa3)**
- **\$475 mn City of Quincy (MA), General Obligation Pension Bonds (Taxable) (S&P: AA)**
- **\$47 mn Michigan Finance Authority (Albion College), Revenue Bonds (S&P: BBB+)**

Relative Value

Municipal Credit Spreads													
	12/31 2019	12/31 2020	Sun 10/31	Tue 11/30	Fri 12/3	Wed 12/8	3-Yr Avg	Start	Max	Avg	Min	End	Δ
AA	+11	+21	+9	+7	+7	+8	+15	+11	+26	+16	-1	+8	-3
A	+45	+71	+30	+28	+27	+28	+57	+45	+113	+62	+27	+28	-17
BBB	+87	+130	+61	+53	+51	+51	+112	+87	+252	+119	+50	+51	-36
HY Index	+149	+228	+136	+125	+125	+124	+198	+149	+341	+204	+115	+124	-25
BB	+129	+210	+114	+100	+104	+104	+167	+129	+317	+184	+100	+104	-25
B	+153	+228	+142	+123	+132	+128	+216	+153	+417	+218	+97	+128	-25
CCC	+202	+346	+261	+257	+271	+264	+297	+202	+504	+297	+37	+264	+62

Effective Yields versus the Triple-A Index (U0A1). Source: ICE BofAML Municipal Bond Indices, as of Wednesday December 8, 2021. Spreads are calculated to 1/10th of a basis point and rounded, thus some changes may not add up precisely as shown.

Municipal bond prices have weakened slightly since last Friday's close. Triple-B and High Yield credit spreads have remained steady, and meanwhile spreads for the Single- and Double-A Indices have both widened by 1 bp.

CONNECTICUT GO

Summary View: We are revising our rating on Connecticut GOs to market outperform. The state's credit continues to improve. Strong revenues and fiscal discipline has led to surpluses which have both fully-funded reserves and allowed for sizable additional deposits into pension funds. The ongoing economic recovery is also credit positive, and the state forecasts surpluses over the next few years. Improvements to published ratings and/or

outlooks is likely over the next year. We expect spreads to modestly tighten from the current +19 (to the AAA in 10-years, per BVAL), as the state credit normalizes towards other states. Supply trends are also supportive: Connecticut issuers, including the state, have also slowed debt issuance and amortized more than they've issued this year. Get that Connecticut tax-exempt paper while you can!

Sale Details: The state will sell two series of tax-exempt GOs for new money. The 2022 Series A is \$500 mn and matures 2023-35. The 2022 Series B is \$300 mn and matures 2035-42. (Closing is January 6, 2022, which is why they are named Series 2022). Series B is labeled "Social Bonds," and will fund new school construction projects. The state says that the designation is per International Capital Market Association standards. In support of this designation, the offering document points out that the state pays higher construction reimbursement for less wealthy communities.

Credit Overview: Connecticut's credit standing has improved over the last several years as a result of governance reforms, reserve accumulation, and better pension funding discipline. The state also received nearly \$2.9 bn from the American Rescue Plan.

State revenue performance has been strong, leading to surpluses. Net tax revenues for fiscal 2021, which ended June 30, were \$18.7 bn, up nearly 12% from fiscal 2020 and more than 8% above the 2019 peak. A surplus of \$476 mn was earned. All major taxes boomed in fiscal 2021: income tax up 10%, sales tax up 11%, and corporate business tax up 23% over fiscal 2020. Total revenues for fiscal 2022 are expected to rise another 5%, with a year-end surplus of nearly \$900 mn expected.

Connecticut's reserves are capped at 15% of the budget and amounts above that trigger additional deposits into pension funds to pay down unfunded liabilities. This caused extra contributions of \$62 mn in fiscal 2020 and \$1.6 bn in fiscal 2021 to be made. The state's November forecast projects that the state will make surplus contributions totaling nearly \$8 bn in fiscal 2021-26, which would be a big positive for the state's credit. *(Edited 3pm 12/13/2021. Previous version said "fiscal 2022-26." Offering documents contained this error.)*

Pension costs are a high burden on the state, but we see reason for hope. Funding levels at June 30, 2020 was 39% in the state employees retirement system and 51% in the teacher's system. This meant the total net pension liability was \$43 bn, but this is likely to shrink for fiscal 2021 given strong investment returns and the state's extra contributions. The state has made positive changes over the last five years including reducing investment assumptions to 6.9% and revising other actuarial rules to make them more conservative. Connecticut also introduced a new, lower benefit tier in 2017. General fund pension contributions for fiscal 2021 were \$2.6 bn (before the additional contribution), with retiree health costing an additional \$779 mn. Together, this amounts to a high level of over 17% of state spending. For fiscal 2022, pension contributions are set to go up by another \$345 mn. Given recent changes, investment returns, and the state's extra contributions, we expect required pension contributions to level out in the coming years.

Connecticut has high debt levels, but a conservative debt structure and reduced issuance tempers our concern. State debt includes nearly \$19 bn (post-sale) of general obligation bonds and over \$7 bn of special tax bonds, which together are equivalent to a high 9% of the state's GDP. General fund debt service in 2021 was over 11% of state spending, also high. Yet debt amortizes rapidly, with 20-year final maturities, and is 96% fixed rate. Connecticut went on a "debt diet" about five years ago, and since 2018, outstanding GO bonds have shrunk. Finally, the state correctly points out in its disclosure that since the state funds a large share of local capital projects, there is relatively little local debt in the state, resulting in a more moderate combined state and local debt burden.

The Nutmeg State's economy has steadily improved this year. Job losses reached 17.2% in April 2020, and January 2021 was still 7.3% off-peak. By November, the state had recovered to -4.7% since the February 2020 peak. We expect additional improvement this winter. Connecticut is still home to the nation's highest per capita personal income levels, driven by wealthy New York City suburbs. Yet the state's economic growth lagged the region and nation over the last decade as manufacturing declined and young talent and corporations favored the urban centers that Connecticut lacks. Pandemic era trends towards office workers staying at home are positive for this leafy state.

Relative Value Context: There are \$78.5 bn of municipal bonds outstanding from issuers in the state of Connecticut, and the State is the largest issuer, with \$13.8 bn outstanding.

So far this year, Connecticut issuers have borrowed less than they have paid down. The YTD new issue volume of \$6.4 bn (as of 12/8/21) is \$523 mn less than the \$6.9 bn that is scheduled to have matured or get called this year. There are already \$5.3 bn of bonds scheduled to be redeemed next year, and that is very likely to grow as additional bonds get refinanced. (All data from Bloomberg).

Municipal Yield Spreads: 10-Year G.O. vs Triple-A Benchmark as of Wednesday, December 8

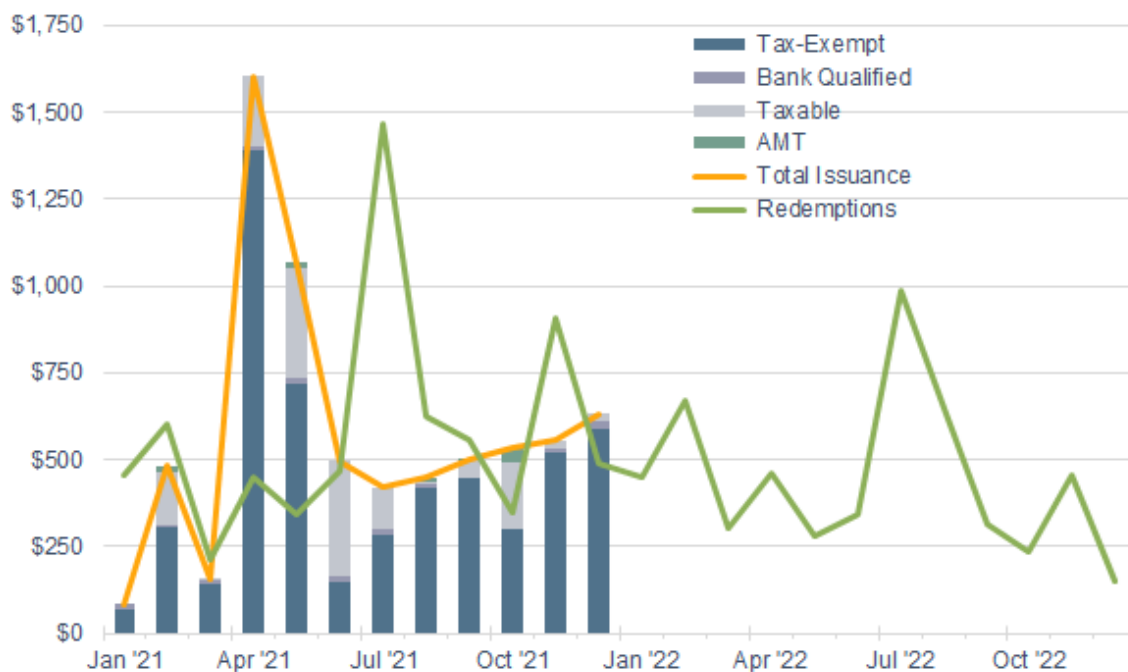


Spread in basis points. Daily data from Dec 31, 2019 - Dec 8, 2021. Sources: CreditSights, yields based on Bloomberg BVAL. Composite ratings from ICE BofAML Indices as of 12/1/21.

Municipal Yield Spreads: 10-Year State G.O. vs Triple-A Benchmark as of Wednesday, December 8														
Comp	Rtg	Last Yield	Spread	3-Yr Avg	Since 12/31/19						Sep 30	Oct 29	Nov 30	Dec 8
					Start	Max	Avg	Min	End	Δ				
FL	AAA	1.11%	+5	+6	+7	+22	+6	-1	+5	-2	+12	+6	+1	+5
GA	AAA	1.05%	-1	+1	-0.3	+12	+2	-35	-1	-1	+7	-1	+1	-1
MD	AAA	1.06%	-0.4	+5	+7	+12	+5	-9	-	-7	+9	+5	+1	-0.4
MN	AAA	1.07%	+	+3	+5	+17	+3	-7	+	-5	+3	+3	+0.	+0.5
NC	AAA	1.11%	+5	+1	+0.1	+9	+3	-11	+5	+4	+7	+4	+6	+5
SC	AAA	1.08%	+1	+5	+3	+16	+7	-3	+1	-2	+9	+11	+6	+1
TN	AAA	1.15%	+8	+3	-2	+20	+5	-9	+8	+10	-1	+8	+6	+8
TX	AAA	1.16%	+10	+11	+10	+36	+11	-3	+10	+	+12	+18	+12	+10
VA	AAA	1.08%	+1	-1	+1	+9	+1	-21	+1	+	-	-	+3	+1
MA	AA1	1.07%	+1	+9	+5	+30	+9	-10	+1	-4	+9	+11	+2	+1
NY	AA1	1.06%	-0.3	+2	-6	+47	+6	-13	-	+6	-6	-7	-	-0.3
OH	AA1	1.09%	+3	+10	+10	+27	+9	-5	+3	-7	+9	+14	+5	+3
WA	AA1	1.12%	+6	+12	+13	+32	+10	-2	+6	-7	+12	+11	+8	+6
WI	AA1	1.05%	-1	+9	+8	+25	+8	-4	-1	-9	+6	+10	-1	-1
CA	AA2	1.11%	+5	+9	+2	+46	+11	-4	+5	+3	+13	+11	+6	+5
MI	AA2	1.13%	+6	+13	+6	+31	+12	-1	+6	+	+9	+11	+7	+6
CT	AA3	1.25%	+19	+48	+45	+111	+42	+9	+19	-26	+20	+21	+24	+19
PA	AA3	1.24%	+17	+31	+27	+75	+28	+10	+17	-10	+19	+26	+20	+17
NJ	A3	1.39%	+33	+54	+48	+134	+55	+17	+33	-15	+27	+39	+34	+33
IL	BBB2	1.61%	+54	+171	+128	+442	+176	+53	+54	-74	+71	+90	+73	+54

Sources: CreditSights, yields from Bloomberg BVAL as of December 8, 2021, composite ratings from ICE BofAML Indices as of 12/1/21.

Connecticut Market: Additions & Subtractions



In millions. Source: CreditSights, Bloomberg. Updated 12/9/21.

BROWARD COUNTY, FLORIDA

Summary View: The bonds are strongly secured by a hotel tax that, even in the pandemic-scarred fiscal 2021, provided nearly 1.4 times planned maximum annual debt service. We see hotel taxes, even from a large county with a robust tourism business like Broward, as a thin pledge. Climate and disaster risk is also elevated. The AA category

rating seems rich to us. The Bloomberg generic 10-year AA-rated revenue bond yield was +12 wide of the triple-A benchmark as of Wednesday's close. In our view, these bonds should be priced behind that level, and in the neighborhood of +20 feels like fair value.

Sale Details: The county will sell one series of tax-exempt (Non-AMT) bonds, due 2023-51. The bonds will fund design, development, construction, and equipment of convention center expansion. Part of the proceeds will pay off a \$227 mn Bond Anticipation Note which was sold in 2020 and was used to begin construction. The bonds are secured by net tourist development tax revenues. There is a debt service reserve equal to maximum annual debt service and a 1.25 times coverage additional bonds test.

Credit Overview: Broward County, on Florida's Atlantic coast, sits between Miami-Dade County to the south and Palm Beach County to the north. The county had 1.94 mn people in 2020, the 17th largest US county. The county's tourism infrastructure is considerable: Broward hosts the Fort Lauderdale-Hollywood International Airport and the Port Everglades cruise terminal. The airport saw traffic double from 2003-19 and the cruise ship terminal is building a \$1.6 bn expansion. Disney Cruise line executed a 15-year agreement to use starting as early as October 2023. It has guaranteed 400,000 passengers a year for the first two years of service, rising to 750,000. Hotel inventory continues to rise, reaching an average supply of 35,500 rooms this year, up from just over 30,000 five years ago. Seven hotels with 829 rooms are under construction.

Florida law allows counties to charge a tax of up to 6% on visitor accommodations, with conditions and restrictions differing for each cent of tax. Broward County first began charging the tax in 1980, and by 2017 it began charging the full six cents. Bondholders are pledged the receipts from the first, second, and sixth cent. Net revenues from this tax, after deducting for administrative fees, were \$40.8 mn in fiscal 2018, rose 5.1% in fiscal 2019, then fell 24% in fiscal 2020 amidst the pandemic, then recovered to \$40.5 mn in fiscal 2020, down just 0.7% over 2019. Fiscal 2022 is poised for growth, and through November, each month of the fiscal year is ahead of the fiscal 2019 peak. Based on fiscal 2021 revenues, pro-forma maximum annual debt service would have been 1.37 times.

The county opened a convention center in 1991, expanded it to 600,000 total square feet in 2002. This expansion will grow the center to 1,200,000 square feet, to accommodate larger conferences and trade shows. Construction began in the summer of 2019, and in February 2020, the center was closed for construction with plans for phased-in reopening as work was complete. Following COVID-related delays, the center partially reopened in October 2021. Full completion is expected in late 2024 with a total project cost pegged at \$705 mn. Broward also plans to construct a new 800-room hotel designed to be the Convention Center headquarters. The hotel, expected to cost \$581 mn, will meet "Four Diamond" standards and will be on the Intracoastal Waterway. Financing is planned for calendar 2022, with a cash contribution from the county and revenues pledged that are separate from this bond issue.

The county, former home to our own Pat Luby, provides investors considerable information on climate change. Broward, along with neighboring counties, project a 3.3 foot rise in sea level from 2000 through the 2070 planning horizon. It is updating its flood maps and will require new finished floor elevations to be above flood elevations projected in 2070. The county will require drainage to be designed for projected 2070 groundwater tables, and it has proposed a regional resilience standard for seawalls under 2070 projected conditions. We did find the disclosure lacking in specific information on the vulnerability of the convention center, which sits right by the water, and the hotels that provide the pledged revenues. Information on how the convention center is being built to reduce climate risk would be useful. Even absent climate change, disaster risk is elevated, as a severe hurricane could negatively impact hotel revenues. The debt service reserve is an important mitigant.

Relative Value Context: The spread between the Bloomberg generic 10-year AA-rated revenue bond yield and the triple-A benchmark was +12 as of Wednesday's close. In our view, these bonds should be priced behind that level. The single-A benchmark revenue bond yield was +28 on Wednesday. We like this project and the credit, and even though revenues did well through the pandemic, the project and hotel revenues are exposed to economic cycles and elevated disaster risk. If the bonds are priced closer to single-A spreads, there may be some modest room for tightening as the economy (and business travel) continues to improve. If the 10-year bonds are priced tighter than +20, we would expect them to perform in-line with the market.

QUINCY, MASSACHUSETTS

Summary View: Quincy is selling pension obligation bonds (POB) that will roughly double its debt. The city was downgraded by S&P last spring, and we can see why. Quincy is prosperous and growing, but debt is high for the rating level, and fund balances are low. The POB transaction is largely credit neutral, but it does stretch out amortizing the liability by three years, and the city seems motivated by immediate budget savings, which both raise some concern. Finally, we fear the 7.25% assumed pension return is too high and poor returns could cause an unfunded liability to reemerge. We see the 10-year taxable bonds coming in the high +60s to Treasuries. Wide of that would give us some enthusiasm.

Sale Details: Quincy will sell one \$475 mn series of GO pension obligation bonds. These are federally taxable and subject to the Massachusetts income tax for residents of the Bay State. Final maturity is in 2039. The bonds are secured by a full faith and credit pledge and taxes that may be levied on taxable property in the city, subject to state limits. The city will establish a contingency reserve fund for the bonds with the savings from the deal, funded at least \$5 mn per year until the fund reaches \$30 mn. These funds are not pledged to bondholders and there is no formal covenant, but the reserve commitment is additive in our view.

Credit Overview: Quincy is a city of 102,000 on the Atlantic Ocean, about 10 miles south of Boston. Quincy's population grew over 10% since the 2010 census, not bad for an area settled in 1625. Quincy is mixed as a residential suburb (connected to Boston by commuter rail) with industrial and commercial uses. The city was once home to a large shipyard but today the largest private employers are State Street Bank and Trust, Granite Telecommunications, and Boston Financial Data Services. Local income levels are below state averages, but above the nation. Education levels are higher and poverty levels lower than the nation.

Assessed value reached a large \$17.9 bn for fiscal 2021. AV has grown impressively, up 37% from fiscal 2017. 86% of the tax base is residential. The city taxes residential property at \$12.14 per \$1,000 of valuation, down nicely from \$14.17 in fiscal 2017, aided by the valuation growth. The tax base shows good diversity: the top sixteen taxpayers make up 13% of AV, and the top five are wo utilities, two apartment complexes, and offices. Quincy has \$351 mn in long-term GO bonds outstanding, amounting to nearly 2% of equalized valuation. This deal will more than double that level, raising debt to high levels as it eliminates the unfunded pension liability. The city also has \$275 mn of bond anticipation notes.

Quincy has its own pension system. State law requires full funding by 2040, yet Quincy makes payments towards a 2036 full funding. The system had a \$427 mn actuarial liability at the last full valuation on January 1, 2020, using a 7.25% assumed rate of return. The actuary stated the liability at \$446 mn as of July 1, 2021. City pension contributions are \$31 mn for fiscal 2022, but an ascending actuarial schedule has them forecast for \$67 mn by 2036. Debt service on the bonds stretches four years longer, to fiscal 2040, using level debt service. Quincy states that pro-forma debt service will now be less in each year than the projected pension payment, which is due to stretching the amortization and an assumption that the investment return rate of 7.25% will be higher than the cost of servicing the

debt. In 2020 the pension system was victim of a cybersecurity attack that forced a \$3 mn transfer of assets from one of the system's investment managers. The system is attempting to recover the funds from the manager, and it reports it is implementing more robust controls.

We found the city's fiscal information limited and dated. Fiscal 2021 audited financials are not yet available. For June 30, 2020, the city's general fund had a modest \$23 mn of fund balances on its \$331 mn budget. In fiscal 2020 the city ran a \$1.6 mn GAAP deficit. The city reported that it closed fiscal 2021 with a surplus. It received \$46 mn in federal stimulus plus \$18 mn from the county.

Quincy has significant Atlantic Ocean coastline and reports it has spent \$10 mn over the last two fiscal years on seawall improvements to protect vulnerable parts of town. It also states that it has prioritized green infrastructure, such as marshes, ponds, and beaches to enhance flood prevention. The city has also recently placed vital utilities underground and dredged ponds to allow more room for flood water. The city's efforts to identify and mitigate risks are important, but we still consider risks elevated, particularly for longer bonds.

Relative Value Context: Less than 20 miles away is the City of Brockton, Massachusetts, which sold taxable GO pension bonds on October 20 of this year. The issue was rated A1/AA-. The 10-year non-callable bonds (2.558% 11/1/31) were priced at +92 and were evaluated by BVAL as of Thursday's close at +73. As a slightly stronger credit, Quincy could be priced around 5 bp tighter than Brockton; any wider than that would be attractive. We do note that the taxable muni market has been much more volatile than the tax-exempt market. See Monday's [Muni Catch Up](#) for end-of-the-week taxable muni spreads.

ALBION COLLEGE

Summary View: It's hard not to like a school with a generous donor base and a \$200 mn endowment supporting just 1,500 students. Yet, we see troubling signs at Albion that would have us looking for more spread than the BBB+ indicates. (BBB+ higher education is +82 to the AAA per BVAL). Albion's enrollment is steady, but only because of a sky-high and rising discount rate. The President is earning bad publicity, and cash and unrestricted assets are being drained to subsidize operations. Finally, the deal adds leverage and pushes debt service out to free up funds in the near-term.

Sale Details: The college will sell one \$47 mn tax-exempt series of bonds. Proceeds will refund a previous bond issue, a Bond Anticipation Note, pay down a line of credit, and new money for a 300-bed dorm. The offering documents unfortunately have little information on the new housing. The first principal will not amortize until December 1, 2027, providing some near-term fiscal relief. There is a 1.1 times debt service covenant, but no debt service reserve or mortgage.

Credit Overview: Albion is an undergraduate, liberal arts focused, Methodist-affiliated college founded in 1835. The college is on 574 acres in south central Michigan. The City of Albion has nearly 8,000 residents, and it lies just off of I-94, the main Chicago - Detroit route. The college hired Dr. Matthew Johnson, a former associate dean at Brown University, on July 1, 2020 as President. President Johnson has run into controversy at Albion, where nearly 1,800 students, alumni, and staff signed a petition demanding his resignation over accusations of bullying and racial insensitivity. The college claims the petition is a result of misinformation. The allegations are easily found online and hard for us to assess, yet we worry it could impact recruiting and philanthropy.

Albion offers 59 majors and enrollment was 1,523 for this fall, up a touch from 1,506 last fall, but down from 1,568 in fall 2017. (By headcount, the offering documents did not include FTE information). 70% of students are from Michigan, a difficult demographic base from which to draw. Albion does not offer graduate programs but it has several partnerships with public universities to provide direct fast-track paths to graduate degrees. Selectivity has

slipped during the pandemic, from an average of 70% accepted in the three years before the pandemic to 75% this fall. Yield was low at just 10%, down from 14-15% the three years prior. Students are required to live on campus unless they live locally and dorm occupancy is 89% this year. The cost of tuition, fees, room, and board is \$66,700 this year, which is higher than other Michigan liberal arts schools and nearly three times the cost of nearby public schools such as Western Michigan or Michigan State. To remain competitive, tuition and fees at Albion was discounted an average of 76% in 2021, up from 73% in 2020. This is an exceptionally high discount rate for an investment grade credit.

The heavy discounting has led to large operating deficits. Net tuition and fees fell from \$20.4 mn in fiscal 2017 to just \$17.5 mn in 2021. Auxilliary enterprises, which largely comes from students, grew a bit, from \$15.1 in 2017 to \$15.7 mn in 2021. Together, student revenues made up 57% of total revenues. Other revenues in 2021 included an impressive \$10.5 mn of private gifts and grants. While total revenues have shrunk, spending has grown, from \$60 mn in 2017 to \$66.5 mn in 2021. For 2021, operating expenses were \$8.4 mn higher than revenues, although this was more than washed out by a \$42 mn investment gain. Albion received federal stimulus in the amount of \$1.8 mn in March 2020, \$2.7 mn in January 2021, and \$4.6 mn in June 2021. All told, net assets grew from \$202 mn to \$239 mn, although assets without donor restrictions declined slightly to \$51.3 mn.

Albion's balance sheet has kept the credit investment grade despite operating deficits. At June 30, 2021, endowment value was \$199 mn, which the college broke down to \$179 mn donor restricted and \$19 mn board designated. The board designated portion has been used in recent years to provide additional operating support, and so it has declined from \$26 mn in 2017. The endowment earned over 30% last year. At June 30, 65% was invested in equities, 26.5% in fixed income, and the remainder in real assets. Fixed assets were \$90.4 mn, down from \$94 mn in 2017, indicating aging of buildings. For fiscal 2022, Albion is budgeting a \$9.7 mn operating deficit, or a \$2.7 mn loss on an EBITDA basis.

Ahead of this bond sale, the school had \$44 mn of bonds outstanding along with a \$2 mn Bond Anticipation note and an \$8.9 mn drawn on a \$9 mn line of credit. The college plans to use \$1.8 mn of bond proceeds to pay down the line. Debt service is expected to be just about \$800 mn for fiscal 2022, step up to \$2.4 mn in 2023-27, then \$3.4 mn in 2028 through final maturity in 2052. We see the back-loading as a sign of weakness. The college has no other debt, but it has a \$9 mn line of credit due December 1, 2022.

Despite the large investment balances, we raise some concern about available cash. Albion has a covenant which requires unrestricted liquid funds available (cash and readily marketable assets) to be at least one times debt outstanding. As of 2021, it was 2.1 to 1. Yet, cash on the balance sheet was just \$4.3 mn, net of a \$9 mn line of credit. The endowment, as noted, had just \$19.4 mn that was not donor restricted.

Relative Value Context: The ICE Triple-B Higher Education Index leads the YTD returns of the investment grade Higher Education indices and is also the only one of the four indices with a YTD positive price return. At +84, the spread for the Triple-B Index is only 5 bp lower than where it was on 12/31/19. In our view, given the current appetite for spread, there is room for the Index to tighten further, but we remain selective.

The 10-year spot on the Bloomberg BVAL BBB+ Higher Education curve (BS1332) started this year at +154 and got as tight as +43 (August 24); it closed Wednesday (12/8/21) at +82. Because of the challenges facing the school, we think it should be priced at least 10 bp cheaper than that, but we would still see them as performing in-line with the market. Albion is a small issuer and so bondholders shouldn't expect much liquidity.

Higher Education Bond Index Total Returns as of December 8, 2021											
	Index	Aug	Sep	Oct	Nov	Dec	YTD Return			Eff Yield	Eff Dur
							Price	Income	Total		
	Muni Index	-0.4%	-0.8%	-0.1%	+0.8%	+0.0%	-1.9%	+3.6%	+1.7%	+1.2%	6.1
	Muni AAA Index	-0.4%	-0.8%	-0.0%	+0.8%	-0.0%	-3.1%	+3.5%	+0.4%	+1.0%	6.3
Higher Education Revenue	Higher Educ	-0.6%	-0.9%	+0.1%	+1.0%	-0.0%	-2.2%	+3.6%	+1.4%	+1.3%	7.5
	1-3 Yrs	-0.0%	-0.1%	-0.0%	+0.0%	-0.0%	-3.9%	+4.0%	+0.2%	+0.4%	6.2
	3-7 Yrs	-0.1%	-0.5%	-0.2%	+0.3%	-0.0%	-4.0%	+3.7%	-0.2%	+0.6%	4.3
	7-12 Yrs	-0.3%	-0.9%	-0.2%	+0.7%	-0.0%	-3.6%	+3.6%	-0.0%	+1.2%	5.9
	12-22 Yrs	-0.6%	-0.8%	+0.2%	+1.0%	-0.0%	-1.9%	+3.7%	+1.8%	+1.5%	6.7
	22+ Yrs	-1.0%	-1.2%	+0.3%	+1.6%	-0.0%	-0.9%	+3.5%	+2.7%	+1.6%	10.1
	AAA	-1.3%	-1.5%	+0.4%	+1.6%	-0.2%	-3.8%	+3.3%	-0.4%	+1.3%	10.6
	AA	-0.4%	-0.7%	+0.0%	+0.7%	-0.0%	-2.3%	+3.7%	+1.4%	+1.2%	6.5
	A	-0.4%	-0.6%	+0.1%	+0.8%	+0.0%	-0.9%	+3.9%	+3.0%	+1.4%	5.9
BBB	-0.6%	-1.0%	-0.2%	+1.4%	+0.1%	+2.1%	+4.0%	+6.1%	+1.9%	8.2	

As of 12/8/21. Sources: CreditSights, ICE BofAML Indices. Period to date returns are not annualized.

Municipal Sector Spreads												
	12/31	12/31	Oct	Nov	Dec	3-Yr	Since 12/31/19					
	2019	2020	31	30	8		Avg	Start	Max	Avg	Min	End
Higher Ed (AA2 comp rtg)	+27	+49	+25	+21	+21	+33	+27	+49	+36	+2	+21	-6
Higher Ed AAA	+13	+23	+25	+22	+22	+19	+13	+38	+23	+4	+22	+9
Higher Ed AA	+20	+40	+14	+11	+11	+24	+20	+41	+25	-10	+11	-9
Higher Ed A	+53	+79	+39	+35	+36	+59	+53	+109	+63	-14	+36	-17
Higher Ed BBB	+89	+184	+96	+85	+84	+124	+89	+215	+138	+73	+84	-5

Effective Yields versus the Triple-A Index (U0A1). Ratings are the composite ratings for the bonds in each index.

Source: ICE BofAML Municipal Bond Indices, as of Dec 8, 2021.

COMMENTS?

We are always interested in your feedback on this and all of our muni reports. Please use the "Ask An Analyst" button to submit feedback.

ADDITIONAL READING

Be sure to see next week's **Muni Catch Up** for late additions to the calendar and tax-exempt and taxable market spreads as of the end of this week.

APPENDIX: Week to Date Returns and Yield Comps

Comparative Total Returns								
	Index	YTD 2021	Monthly:		Week Ended:			This Week
			Nov	Dec	Fri 11/19	Fri 11/26	Fri 12/3	
Muni	Muni IG	+1.69%	+0.82%	+0.01%	-0.04%	+0.10%	+0.23%	-0.03%
	Muni HY	+6.34%	+1.04%	+0.09%	+0.06%	+0.10%	+0.19%	+0.05%
	Taxable Muni IG	+1.71%	+1.34%	-1.18%	+0.38%	+0.75%	+0.97%	-1.86%
Bonds	Treasury	-2.47%	+0.89%	-0.67%	+0.29%	+0.37%	+0.83%	-1.19%
	Corp IG	-1.14%	+0.09%	-0.36%	+0.09%	-0.18%	+0.91%	-0.95%
	Corp HY	+4.65%	-1.02%	+1.19%	-0.37%	-1.22%	+0.70%	+0.73%
Equity	S&P 500	+26.83%	-0.70%	+2.98%	+0.36%	-2.18%	-1.18%	+3.59%
	DJIA	+18.96%	-3.50%	+3.79%	-1.29%	-1.95%	-0.76%	+3.40%
	NASDAQ	+23.27%	+0.34%	+1.62%	+1.27%	-3.52%	-2.60%	+4.65%

As of 12/8/21. Sources: CreditSights, ICE BofAML Indices. Period to date returns are not annualized.

Highest return for each group per period is highlighted in green.

Tax-Exempt Yield Comparisons as of Wednesday, December 8 vs Friday, December 3													
	Issuer	1-Yr		2-Yr		5-Yr Mty		10-Yr		20-Yr		30-Yr	
		Dec 8	Δ	Dec 8	Δ	Dec 8	Δ	Dec 8	Δ	Dec 8	Δ	Dec 8	Δ
General Market	US Treasury	0.29%	+4	0.68%	+9	1.28%	+14	1.52%	+18	1.95%	+19	1.89%	+22
	AAA	0.19%	+2	0.25%	+1	0.61%	+1	1.06%	+1	1.36%	+1	1.55%	+1
	G.O. AA	0.26%	-1	0.34%	-2	0.73%	-3	1.20%	-1	1.51%	+1	1.75%	+4
	G.O. A	0.35%	+0	0.43%	+2	0.86%	+3	1.41%	+2	1.77%	-1	1.93%	+1
	G.O. BBB	1.06%	-1	1.12%	+1	1.48%	+3	1.93%	+3	2.22%	+1	2.41%	+1
	Revenue AAA	0.26%	+3	0.32%	+1	0.67%	+2	1.12%	-3	1.43%	+4	1.63%	+2
	Revenue AA	0.26%	-1	0.32%	-1	0.70%	-1	1.18%	-1	1.54%	+3	1.77%	+7
	Revenue A	0.37%	-3	0.44%	-0	0.85%	-2	1.34%	-4	1.72%	-1	1.92%	+40

Indicative bond yields as of close Wednesday 12/8/21. Source: CreditSights, Bloomberg.

Taxable Yield Comparisons as of Wednesday, December 8 vs Friday, December 3													
	Issuer	1-Yr Mty		2-Yr Mty		5-Yr Mty		10-Yr Mty		20-Yr Mty		30-Yr Mty	
		Dec 8	Δ	Dec 8	Δ	Dec 8	Δ	Dec 8	Δ	Dec 8	Δ	Dec 8	Δ
Taxable Muni	US Treasury	0.29%	+4	0.68%	+9	1.28%	+14	1.52%	+18	1.95%	+19	1.89%	+22
	G.O. AAA	0.43%	+3	0.84%	+10	1.48%	+12	1.92%	+13	2.36%	+20	2.30%	+24
	G.O. AA	0.47%	-7	0.84%	+3	1.53%	+8	2.03%	+3	2.57%	+	2.52%	+4
	G.O. A	0.67%	+3	1.01%	+8	1.71%	+8	2.12%	+6	2.36%	+7	2.31%	+11
	Revenue AAA	0.49%	+3	0.87%	+9	1.54%	+16	1.88%	+13	2.43%	+16	2.53%	+22
	Revenue AA	0.51%	+7	0.91%	+12	1.63%	+18	2.07%	+14	2.49%	+12	2.44%	+16
	Revenue A	0.68%	+4	1.06%	+10	1.69%	+15	2.25%	+11	2.54%	+10	2.48%	+14
	Revenue BBB	1.61%	+3	1.85%	+9	2.56%	+14	2.60%	+15	3.01%	+15	2.95%	+19
Corp	AA	0.51%	+4	0.84%	+7	1.58%	+11	2.19%	+14	2.75%	+15	2.79%	+16
	A	0.58%	+4	0.90%	+7	1.71%	+11	2.35%	+13	2.93%	+14	2.91%	+17
	BBB	0.85%	+6	1.18%	+7	2.03%	+11	2.74%	+12	3.34%	+14	3.22%	+16

Indicative bond yields as of close Wednesday 12/8/21. Source: CreditSights, Bloomberg.

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