

2021 Municipal Bond Market Insights: Mid-year update

“Resilience”

July 2021

From **MacKay Municipal Managers™** The Minds Behind Munis

Consistent with **MacKay Municipal Managers’** forecast in our 2021 Insights, the municipal market demonstrated significant resilience in the first half of 2021 reinforcing its historic adaptability. Through the first six months of the year, the Biden Administration’s policy agenda began to materialize resulting in a large stimulus package. This coupled with domestic improvements related to the COVID-19 pandemic, vaccine developments and efficacy improved the nation’s economic outlook. Better than expected tax revenues boosted further by the economic stimulus has strengthened credit fundamentals within the municipal market. The 2021 **MacKay Municipal Managers™** theme of “resiliency” speaks to the essentiality of the municipal market, the reliability of sustained revenue streams, and the market’s ability to withstand and adjust to the unexpected.

Top Five Municipal Market Insights for 2021 – “Resilience”

Theme	Rationale	Portfolio in Action	Mid-Year Status
1 Policy: The Biden Administration makes an impact	The Biden Administration’s policies are expected to positively impact the municipal market in multiple ways. Anticipated initiatives include infrastructure spending, increasing employment opportunities and addressing climate change. These objectives likely coalesce in a higher volume of infrastructure-related municipal issuance that will become more recognized by impact-oriented investors for its strong ESG aspects. We expect a broad array of municipal projects will be climate friendly, supportive of increased employment development and will carry the dual oversight of both federal and state governments. In addition, investor anticipation of the Biden Administration pushing taxes higher (more likely a 2022 event) increases the value of tax exemption and municipal demand.	Based on the expectation that Biden Administration’s policies would be a positive for municipal fundamentals, we continue to favor credit. Thus far, fiscal stimulus has been beneficial to state and local governments, and other municipal credits. Looking ahead, we expect a broader array of municipal investment opportunities focused on climate and employment as an outcome of these policies. There is positive momentum within the bipartisan infrastructure framework towards Electric Vehicle infrastructure, resilience infrastructure (which focuses on climate-related upgrades) and environmental remediation.	On Target Federal stimulus measures have put additional dollars in the economy, which has helped with state revenue losses, as well as already strong personal income tax collections. In aggregate, across the March 2020 CARES Act, the December 2020 stimulus and the \$1.9TR American Rescue Plan, there has been an estimate of \$1.2TR of municipal related provisions and aid across the various sub-sectors. The American Rescue Plan alone has an approximate of \$650B in municipal related support. (source: JPM, June 2021) The additional aid has led to improvement in credit especially some of the distressed segments. For example, credit spreads have tightened in states like IL and NJ which were in crisis prior to the pandemic. YTD Index returns as of 6/30/21: Bloomberg Barclays Municipal Bond Index: 1.06%, Bloomberg Barclays Municipal Bond Illinois: 3.55%, Bloomberg Barclays Municipal Bond New Jersey: 2.50%.



INVESTMENTS

Not FDIC/NCUA Insured	Not a Deposit	May Lose Value
No Bank Guarantee	Not Insured by Any Government Agency	

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<p>2 Stamina: Key sectors withstand the COVID shutdown</p>	<p>We expect to see excess return opportunities in the COVID-impacted healthcare, transportation and travel-related municipal sectors. COVID-induced wider credit spreads on select issuers should continue into 2021, and the risk for investors to avoid are those securities with perceived credit weakness. However, a subset of those issuers have access to a broad array of policy and financial tools that should aid them in surviving the current crisis. We believe strategies employing an active, relative value approach focused on understanding credit fundamentals, liquidity and the political landscape can better identify those bonds that represent value. However, because politics play a role and outcomes are likely uneven, investing agility is also essential.</p>	<p>Amidst the dislocation, MacKay Municipal Managers identified opportunities in “frontline COVID credits” including transportation, healthcare and dedicated tax returns. We have maintained an overweight exposure to these sectors.</p> <p>Fundamental analysis and relative value security selection has been of the utmost importance within these sectors.</p>	<p>On Target</p> <p>Healthcare and transportation are the best performing revenue backed sectors YTD, with Bloomberg Barclays Municipal Bond: Hospital Index returning 2.15% and Bloomberg Barclays Municipal Bond: Transportation Index returning 1.93%, vs. the Bloomberg Barclays Municipal Bond Index at 1.06% as of 6/30/21.</p> <p>The stamina of these sectors can be illustrated via the following: The scale of downgrades for airport ratings was lower than what was anticipated, as ratings for 88% of the bonds in the Bloomberg Barclays Municipal Bond: Airport Index were unchanged over the past year (source: CreditSights, 6/24/21). Among hospitals, number of upgrades has exceeded number of downgrades YTD as of 6/14/21. (source: FitchRatings)</p>
<p>3 Resurrection: Puerto Rico rises while high risk deal bond prices decline</p>	<p>We believe that the long-awaited final chapters in the restructuring of Puerto Rico debt will provide investors an attractive relative value opportunity in the Territory’s credits. Ultimately, a combined \$11 billion of Puerto Rico related debt could restructure out of default in 2021 and resume paying interest. We anticipate demand for these bonds will be strong. The opportunity in Puerto Rico credits stands out relative to much riskier, primarily single site, project finance municipal credits that are prevalent in some high yield portfolios. We anticipate those highly leveraged and illiquid bond financings could face significant spread widening as project revenues fall short of original projections and investors, facing potential restructurings, attempt to sell their positions.</p>	<p>Puerto Rico securities have played an important role in alpha generation for our portfolios over the years. Where guidelines permit, we have taken a dynamic approach within this sector.</p> <p>During the first half of 2021, Puerto Credits have been a large contributor in our portfolios.</p> <p>We have maintained our rigorous underwriting standards and avoided the speculative parts of the high yield market.</p>	<p>On Target</p> <p>The restructuring of Puerto Rico debt is expected to occur later this year and \$7.4Bn of central government debt is now expected to be back on accrual per the Federal Oversight and Management Board’s Commonwealth Plan of Adjustment. (Source: Bloomberg News, 7/7/21)</p> <p>The bonds that are expected to restructure, General Obligation bonds, Public Buildings Authority (PBAs), and Puerto Rico Electric Power Authority (PREPAs) have returned in the range of 12-20% YTD as of 6/30/21 (Source: MSRB, ICE, Bloomberg). The Bloomberg Barclays High Yield Muni Index has returned 6.13% YTD.</p> <p>While defaults in the overall municipal market remain low, more than 80% of the defaults YTD have been concentrated in retirement (senior living, assisted living centers) and project financing (single-site project finance deals) (source: MMA Trends as of 6/30/21). We believe positive technicals of the current market may be delaying spread widening in the highly leveraged and illiquid bond financings.</p>

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<p>4 Oasis: Taxable municipal bonds in a global fixed income world</p>	<p>We believe taxable bond investors, in recognition that corporate bond yields do not adequately compensate them for their relative risk, add to their taxable municipal holdings. When compared to corporate bonds, we believe taxable municipal bonds’ stronger credit quality, higher yields, and risk benefits offer better value for investors with tax-free accounts. In 2020, corporate bonds yields fell to record lows while their interest rate risk, as measured by the duration of the ICE BofA US Corporate Index, had the largest single-year extension in over 30 years. In contrast, taxable municipal risk adjusted yields are the cheapest they have been in more than a decade when compared to investment grade corporate bonds.¹ Tax-exempt investors will likely benefit as strong demand for taxable municipal bonds spurs issuance and reduces tax-exempt supply.</p>	<p>MacKay Municipal Managers runs dedicated taxable municipal strategies and advocates the use of taxable municipals in accounts where appropriate. Based on our relative value analysis, we have increased taxable municipal exposure in tax-exempt portfolios where guidelines permit.</p> <p>With the organic level of growth in this market, we have also seen growth in the number of taxable municipal accounts as attributes of the asset class continue to resonate with retail and non-traditional buyers.</p> <p>With the expectation of an Infrastructure bill passing and an evolution with a greater breadth of supply, we believe in the longevity of this asset class within municipals.</p>	<p>On Target</p> <p>Using Morningstar’s Intermediate Core category as a proxy, Taxable Municipals have returned 0.30% YTD as of 6/30/21, while US treasuries (Bloomberg Barclays U.S. Treasury Index), IG corporates (Bloomberg Barclays U.S. Corporate Investment Grade Index), and securitized debt (ABS and MBS) (Bloomberg Barclays U.S. Asset Backed Securities Index/Bloomberg Barclays U.S. Mortgage Backed Securities Index), have returned -2.58%, -1.27% and 0.18%/-0.77% respectively.</p> <p>YTD taxable issuance, \$65B is approximately 30% of total municipal issuance, \$238B. (source: Bloomberg, 6/30/21)</p> <p>There is an upward trend year over year for municipal allocation within non-US portfolios. (source: FRED economic data as of 3/31/21)</p>
<p>5 Essentiality: Municipal bonds outlast the headlines</p>	<p>We believe that tax-exempt bonds from municipal issuers providing essential services will outperform other fixed income asset classes due to their favorable, intrinsic credit characteristics. While we understand municipal bond investor uncertainty is due to weak economic conditions, low yields and negative news coverage on the sector, investors should focus on what we believe is the inherent stability of municipal revenue streams sourced from municipal services that are essential to our everyday lives. They should find confidence in select local government bonds supported by property taxes that continue to be paid, income taxes collected and sales taxes withheld. Those revenue streams support many forms of state-level debt. Although we expect the economy to recover, thoughtful, research-driven credit selection is also essential to differentiate among issuers.</p>	<p>Despite headline news regarding COVID cases, state budgets and the like, MacKay Municipal Managers continued to focus on relative value analysis to find opportunities in the municipal market. The essentiality of the market has sustained as the economy came to halt and has slowly recovered since.</p> <p>We continue to favor municipals in this environment. Strong mutual fund flows and oversubscribed deals in the primary market are evidence of the stability and the perseverance of the asset class.</p>	<p>On Target</p> <p>Given the essential nature of the municipal market, issuers were able to secure significant federal assistance through the American Rescue Plan (ARP) to fund necessary services such as airports, transit and education.</p> <p>According to Bloomberg data tracking of Fitch and S&P rated bonds, when comparing market value of upgrades, year to date, 2021 has seen a 6x increase compared to 2020. We would attribute this primarily due to improved financial picture after better than expected tax collections and infusion of federal aid.</p> <p>According to the Census data as of 3/31/21, the states’ tax collections grew by 9.6% year over year, general sales and gross receipts taxes increased 3.5%, individual income taxes ballooned by 18.6%, and corporation net income tax collections were up 33.1%.</p> <p>According to MMA, there have been 30 new municipal defaults through 6/30/21 which is down 20% from the same timeframe last year. Overall, however defaults remain low in the municipal market.</p>

1. As of 12/2020 – Comparing yield to worst divided by modified duration to worst for the ICE BofA Broad US Taxable Municipal Securities Index and the ICE BofA US Corporate Index over the last 10 years. Past performance is no guarantee of future results, which will vary. It is not possible to invest directly in an index.

All investments are subject to market risk, including possible loss of principal.

Municipal bond risks include the ability of the issuer to repay the obligation, the relative lack of information about certain issuers, and the possibility of future tax and legislative changes, which could affect the market for and value of municipal securities. Investing in below investment grade securities may carry a greater risk of nonpayment of interest or principal than higher-rated securities. Bonds are subject to interest rate risk and can lose principal value when interest rates rise. Bonds are also subject to credit risk which is the possibility that the bond issuer may fail to pay interest and principal in a timely manner.

Diversification does not assure a profit or protect against loss in a declining market.

Active management is the use of a human element, such as a single manager, co-managers or a team of managers, to actively manage a fund's portfolio. Active management strategies typically have higher fees than passive management.

Alpha measures a fund's risk-adjusted performance and is expressed as an annualized percentage. **Credit spread** reflects the difference in yield between a treasury and corporate bond of the same maturity. **Duration** is a measure of the sensitivity of the price of a bond to a change in interest rates. **Interest rate risk** is the potential that a change in overall interest rates will reduce the value of a bond. **Modified Duration** is inversely related to the approximate percentage change in price for a given change in yield. **Duration to Worst** is the duration of a bond, computed using the bond's nearest call date or maturity, whichever comes first. This measure ignores future cash flow fluctuations due to embedded optionality. **Spread widening** means that the difference between two bonds is increasing. **Yield to worst** is a measure of the lowest possible yield that can be received on a bond that fully operates within the terms of its contract without defaulting. The yield-to-worst metric is used to evaluate the worst-case scenario for yield at the earliest allowable retirement date.

Bloomberg Barclays Municipal Bond Index: A rules-based, market-value-weighted index engineered for the long-term tax-exempt bond market. To be included in the index, bonds must be rated investment-grade (Baa3/BBB- or higher) by at least two of the following ratings agencies: Moody's, S&P, Fitch. If only two of the three agencies rate the security, the lower rating is used to determine index eligibility. If only one of the three agencies rates a security, the rating must be investment-grade. They must have an outstanding par value of at least \$7 million and be issued as part of a transaction of at least \$75 million. The bonds must be fixed rate, have a dated-date after December 31, 1990, and must be at least one year from their maturity date. Remarketed issues, taxable municipal bonds, bonds with floating rates, and derivatives, are excluded from the benchmark. The index has four main sectors: general obligation bonds, revenue bonds, insured bonds (including all insured bonds with a Aaa/AAA rating), and pre-refunded bonds. Most of the index has historical data to January 1980. In addition, sub-indices have been created based on maturity, state, sector, quality, and revenue source, with inception dates later than January 1980. **Bloomberg Barclays Municipal High Yield Index:** An unmanaged index of municipal bonds with the following characteristics: fixed coupon rate, credit rating of Ba1 or lower or non-rated using the middle rating of Moody's, S&P, and Fitch, outstanding par value of at least \$3 million, and issued as part of a transaction of at least \$20 million. In addition, the bonds must have a dated-date after December 31, 1990 and must be at least one year from their maturity date. **Bloomberg Barclays Municipal Bond Illinois Index** is a sub-index of the Bloomberg Barclays Municipal Bond Index and represents Illinois municipal bonds. **Bloomberg Barclays Municipal Bond New Jersey Index** is a sub-index of the Bloomberg Barclays Municipal Bond Index and represents NJ municipal bonds. **Bloomberg Barclays Municipal Bond Hospital Index** is a sub-index of the Bloomberg Barclays Municipal Bond Index and represents hospital municipal bonds. **Bloomberg Barclays Municipal Bond Transportation Index** is a sub-index of the Bloomberg Barclays Municipal Bond Index and represents transportation municipal bonds. **Bloomberg Barclays Municipal Bond Airport Index** is a sub-index of the Bloomberg Barclays Municipal Bond Index and represents airport municipal bonds. **Bloomberg Barclays Taxable Municipal Index** is a rules-based, market-value-weighted index engineered for the long-term taxable bond market. **Bloomberg Barclays U.S. Treasury Index** measures the public obligations of the US Treasury with a remaining maturity of one year or more. Must be a US Treasury security. Must have at least \$300 million par amount outstanding. Must be rated investment-grade (Baa3/BBB- or higher) by at least two of the following ratings agencies: Moody's, S&P, Fitch. Must be fixed rate. Must be dollar-denominated and non-convertible. **Bloomberg Barclays U.S. Corporate Investment Grade Bond Index** measures the investment grade, fixed-rate, taxable corporate bond market. It includes USD denominated securities publicly issued by US and non-US industrial, utility and financial issuers. **Bloomberg Barclays Asset Backed Securities Index** is a subset of the Barclays U.S. Aggregate Bond Index and tracks asset-backed securities with maturities of at least one year. **Bloomberg Barclays U.S. MBS Index** measures the performance of investment grade fixed-rate mortgage-backed pass-through securities of GNMA, FNMA, and FHLMC. **ICE BofA U.S. Corporate Index:** tracks the performance of U.S. dollar-denominated investment-grade corporate debt publicly issued in the U.S. domestic market.

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800-624-6782

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