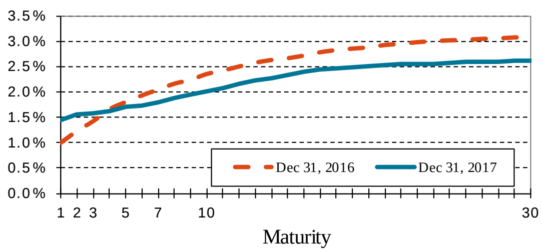
Baird Advisors
Municipal Fixed Income Market Commentary
2017 – Year in Review

Impressive Resilience to a Changing Tax-Free Landscape

There were more than enough challenges for the municipal market to overcome in 2017, yet the market proved resilient throughout the year, ultimately providing investors with solid returns with relatively modest yield volatility. From start to finish, the political environment played a central role in driving sentiment and influencing tax-free valuations. The year began with municipal prices stabilizing after the post-election run-up in rates and especially heavy selling of tax-free bonds. President Trump's pro-growth plans heightened uncertainty in the tax-free market, which created attractive tax-free valuations at the start of the year. Buyers recognized the value and returned, providing relatively consistent support as municipal funds experienced inflows in 40 of the 52 weeks last year. Healthcare reform was the first big GOP legislative focus, but the inability to "repeal and replace" the Affordable Care Act allowed nonprofit healthcare providers the opportunity to continue to generate reasonable margins. Ironically, the lack of progress on healthcare proved to be the catalyst for unifying a GOP coalition on tax reform. Despite repeated assurances from key participants in the tax reform negotiations that municipals were "safe," it was evident once the House version of the tax bill was released that changes were likely to impact the municipal market, specifically limiting the volume of new tax-free supply going forward (see details below). The result was a rush to market by municipalities, boosting November supply 30% above the prior year and causing a record $62.5B of issuance in December. Because of the year end supply boost, total supply for 2017 of $436B was just 3% below the record issuance of 2016.

AAA Municipal Yields



Maturity	Dec 31, 2016	Sep 30, 2017	Nov 30, 2017	Dec 31, 2017	1Mo Change	3Mo Change	2017 Change
1	1.00%	0.92%	1.32%	1.44%	0.12%	0.52%	0.44%
2	1.23%	1.02%	1.52%	1.56%	0.04%	0.54%	0.33%
3	1.43%	1.13%	1.61%	1.59%	-0.02%	0.46%	0.16%
5	1.80%	1.37%	1.78%	1.70%	-0.08%	0.33%	-0.10%
7	2.05%	1.64%	1.96%	1.80%	-0.16%	0.16%	-0.25%
10	2.35%	2.00%	2.21%	2.01%	-0.20%	0.01%	-0.34%
30	3.08%	2.90%	2.86%	2.62%	-0.24%	-0.28%	-0.46%

Strong Demand Leads to Flatter Yield Curve

Investor demand rose to meet the record supply at year end, which helped to push yields lower across most of the curve in December (see 1-Month Changes above). For the full year, the yields on municipal maturities of 5-years and longer fell while short-term yields rose, leading to significant flattening of the yield curve. For example, the yield difference between the 2-year and 10-year maturities narrowed 24 bps in December alone, which was a good share of the full 67 bps narrowing for the year (from +112 bps to +45 bps). A similar but even greater flattening occurred across the entire yield curve, as the yield gap between the 2-year and 30-year maturities narrowed by 85 bps. The result of the 2017 yield changes is the flattest tax-free yield curve since before the financial crisis. While some fear a flatter curve signals an impending economic slowdown, in this cycle the shift may instead be driven by the gradual, yet steady normalization in the Fed's monetary policy combined with moderate inflation and strong demand for bonds, particularly from the ageing baby boomers seeking supplemental income in retirement.

Tax Reform Impact on Municipals

The new "Tax Cuts and Jobs Act" will impact both the demand for and supply of municipal debt going forward. In the near-term, the net effect of the tax changes is positive for investors, but the long-term impact is mixed. Demand from individuals for tax-free bonds is expected to remain strong as the top marginal income tax rate fell only modestly to 37% from 39.6%. Demand from investors in higher tax states should increase since the value of the exemption rises now that deductibility of state and local taxes (SALT) is capped at $10,000 under the new law. Offsetting this will be less demand from corporate investors with the new corporate rate at 21%, down from 35%. According to the most recent Federal Reserve data (Q3 2017), corporations (primarily banks and insurance companies) held 30% of all outstanding municipal debt. Importantly, the data also show that corporate purchases of municipal debt in 2017 was relatively modest, so the near-term impact may be less significant, particularly since there is little question that supply levels will decline in 2018. New issuance is expected to fall by approximately 20% from 2017 levels since the new law prohibits municipalities from advance refunding their debt in the tax-exempt market (an advance refunding is any refinancing that occurs more than 60 days prior to the call date). Despite the primarily positive impact in the near-term from the tax changes, longer term questions remain. For example, it remains to be seen how less corporate demand may impact the slope of the yield curve and whether banks and insurers, which typically buy longer maturity debt (beyond 10 years), will be fully replaced by individual buyers and mutual funds. It is also uncertain how much more difficult it may be for municipalities to raise taxes in the future, given the new cap on SALT deductibility and the increased taxpayer awareness of their tax burden. For sure, the municipal market has adapted to tax changes in the past and will do so once again. Yet, the long-term effects, both on supply/demand conditions as well as credit implications will require close monitoring over the course of 2018.

2017 Key Municipal Credit Events

- Illinois finally reached a budget agreement after two years of political stalemate. The legislature overrode the Governor's veto to raise both corporate and personal income taxes while also cutting spending. All of the rating agencies affirmed the state's rating within the lowest tier of the investment grade category and the state was able to borrow in the municipal market to pay down their large backlog of unpaid bills.
- The agreement at the state level also allowed for the near-term stabilization of both the City of Chicago and Chicago Board of Education credits. The City successfully securitized a portion of their sales tax revenue in a new security AAA-rated structure which allowed them to lower their cost of borrowing and the ability to repay some of their higher cost GO debt. Longer-term challenges remain for both of these credits as unfunded pension liabilities are very large.
- The U.S. suffered a string of natural disasters that proved costly to all levels of government, local, state and federal. Three Category 4 hurricanes hit the U.S. coast, with Texas, Florida, and Puerto Rico being the hardest hit. The strong fiscal position of Texas and Florida, along with significant federal support, minimized any long-term damage to these states or local communities. Puerto Rico's damage was more severe and long lasting; with nearly 50% of the island still without power, over three months after the storm struck the island. Puerto Rico's GO debt traded to the low-$20's as economic uncertainty rose and bondholder recovery expectations were reevaluated.
- Hartford, CT averted a threatened bankruptcy filing after the state reached a budget agreement that provided additional support for the state's capitol. Among Hartford's challenges is that nearly one-half of city parcels are exempt from property tax, limiting the options to increase revenues at the local level.
- While unfunded pension and related liabilities remain a long-term challenge for many municipalities, caution and frugality is evident across the majority of state budgets. According to a National Association of State Budget Officers (NASBO) Fiscal Survey of States, 26 states are increasing FY2018 spending by less than 2%, and another 15 states are cutting spending year-over-year. At the same time, state general fund revenues are expected to rise by 4%, allowing at least 25 states to project increases in reserves this fiscal year in preparation for the next economic slowdown.

Solid Returns to Finish a Strong Year

December performance provided a solid finish to a strong year of returns for the municipal market, in spite of record year end supply. Returns for the month were indicative of the full calendar year in which both curve and credit risk were rewarded. In 2017, longer maturities outperformed intermediate and shorter segments of the curve by a significant margin. The difference in returns between lower quality credit and higher quality was also meaningful, with High Yield municipals outperforming all other categories. Not surprisingly, the higher-quality Prerefunded sector lagged both General Obligation and Revenue sectors in 2017.

Total Returns of Selected Barclays Municipal Indices and Subsectors

Bloomberg Barclays Index/Sector	December	3Mo	2017	Bloomberg Barclays Quality	December	3Mo	2017
Municipal Bond Index	1.05%	0.75%	5.45%	AAA	1.01%	0.51%	4.45%
General Obligation bonds	1.01%	0.56%	5.24%	AA	1.02%	0.65%	4.96%
Revenue bonds	1.14%	0.96%	6.00%	A	1.08%	0.89%	6.16%
Prerefunded bonds	0.24%	-0.54%	1.37%	BBB	1.20%	1.41%	8.74%
Long maturities (22+ yrs.)	1.55%	2.23%	8.19%	High Yield	1.30%	1.83%	9.69%
Intermediate maturities (1 - 17 yrs.)	0.83%	0.15%	4.33%	HY, ex-Puerto Rico	1.36%	2.28%	12.86%
Short maturities (1 - 5 yrs.)	0.20%	-0.65%	1.61%				

2018 Outlook

The outlook for the municipal market in 2018 is positive, due to expectations of relatively light new supply, primarily due to the lack of advance refundings but also because some 2018 supply was also pulled into 2017. Yet, individual investor demand should remain steady. The favorable technical outlook is enhanced by the solid fundamental fiscal position of most municipalities. Municipal credit spreads, while narrower than they were a year ago, are still sufficiently wide on select A and BBB rated issues to expect outperformance once again relative to higher quality issues. Revenue-backed issues, which tend to have less political and pension-related risk than the typical General Obligation issues continue to warrant an overweight allocation. The Prerefunded sector should benefit from a gradually shrinking supply of outstanding issues, but year-end valuations already largely reflect this. Like any outlook, however, there is uncertainty around this base case scenario. First, the year begins with a new tax policy that impacts both personal and corporate spending and investing behavior. It is unknown the extent to which economic growth and inflation will be affected by the lower tax rates, but a modest boost to each would be welcomed by investors and policy makers alike. Slightly faster growth and higher inflation would most likely also put modest upward pressure on municipal yields – a risk, but something that many investors would also welcome. A second uncertainty centers on the aforementioned question regarding corporate interest in the municipal market. While we expect the curve flattening trend to continue, a resteepening of the curve or at least a slower pace of flattening may instead be the result of the corporate tax change. Finally, President Trump continues to promise an infrastructure plan, which could change the supply outlook if municipalities were incentivized to borrow. This risk is modest and would certainly be more of a second half concern. The challenge in passing an infrastructure plan is not agreeing on the need, but rather on the funding. The infrastructure funding hurdle got even higher with the passage of the tax bill which already adds to the federal budget deficit.

Disclosures

This is not a complete analysis of every material fact regarding any company, industry or security. The information has been obtained from sources we consider to be reliable, but we cannot guarantee the accuracy.

Fixed income is generally considered to be a more conservative investment than stocks, but bonds and other fixed income investments still carry a variety of risks such as interest rate risk, credit risk, inflation risk, and liquidity risk. In a rising interest rate environment, the value of fixed-income securities generally decline and conversely, in a falling interest rate environment, the value of fixed-income securities generally increase. High yield securities may be subject to heightened market, interest rate or credit risk and should not be purchased solely because of the stated yield.

Indices are unmanaged, and are not available for direct investment. *Past performance is not a guarantee of future results.*

The Bloomberg Barclays Aggregate Bond Index is an index comprised of approximately 6000 publicly traded bonds including U.S. Government, mortgage-backed, corporate, and Yankee bonds with an average maturity of approximately 10 years.

The Bloomberg Barclays Government/Credit Index is a combination of the Government Index which measures government-bond general and Treasury funds, and the Credit Bond Index, which is a market value-weighted index which tracks the returns of all publicly issued, fixed-rate, nonconvertible, dollar-denominated, SEC registered, investment grade Corporate Debt.

The Bloomberg Barclays Intermediate Government/Credit Index is a combination of the Government Index which measures government-bond general and Treasury funds, and the Credit Bond Index, which is a market value-weighted index which tracks the returns of all publicly issued, fixed-rate, nonconvertible, dollar-denominated, SEC registered, investment grade Corporate Debt with maturities between one and ten years.

The Bloomberg Barclays Government/Credit Intermediate Index (1 – 3 yr.) is a combination of the Government Index which measures government-bond general and Treasury funds, and the Credit Bond Index, which is a market value-weighted index which tracks the returns of all publicly issued, fixed-rate, nonconvertible, dollar-denominated, SEC registered, investment grade Corporate Debt with maturities between zero and three years.

The Bloomberg Barclays U.S. Treasury Index includes public obligations of the U.S. Treasury. Treasury bills are excluded by the maturity constraint of at least one year but are part of a separate Short Treasury Index. In addition, certain special issues, such as state and local government series bonds (SLGs), as well as U.S. Treasury TIPS, are excluded. STRIPS are excluded from the index because their inclusion would result in double-counting. Securities in the Index roll up to the U.S. Aggregate, U.S. Universal, and Global Aggregate Indices. The U.S. Treasury Index was launched on January 1, 1973.

U.S. Agency: This index is the U.S. Agency component of the U.S. Government/Credit index. Publicly issued debt of U.S. Government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the U.S. Government (such as USAID securities). The largest issues are Fannie Mae, Freddie Mac, and the Federal Home Loan Bank System (FHLB). The index includes both callable and non-callable agency securities.

U.S Corporate – Investment Grade: This index is the Corporate component of the U.S. Credit index. It includes publicly issued U.S. corporate and specified foreign debentures and secured notes that meet the specified maturity, liquidity, and quality requirements. To qualify, bonds must be SEC-registered.

CMBS (Commercial Mortgage-Backed Securities): This index is the CMBS component of the U.S. Aggregate index. The Bloomberg Barclays CMBS ERISA-Eligible Index is the ERISA-eligible component of the Bloomberg Barclays CMBS Index. This index, which includes investment grade securities that are ERISA eligible under the underwriter's exemption, is the only CMBS sector that is included in the U.S. Aggregate Index.

MBS (Mortgage-Backed Securities): This index is the U.S. MBS component of the U.S. Aggregate index. The MBS Index covers the mortgage-backed pass-through securities of Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC). The MBS Index is formed by grouping the universe of over 600,000 individual fixed rate MBS pools into approximately 3,500 generic aggregates.

ABS (Asset-Backed Securities): This index is the ABS component of the U.S. Aggregate index. The ABS index has three subsectors: credit and charge cards, autos, and utility. The index includes pass-through, bullet, and controlled amortization structures. The ABS Index includes only the senior class of each ABS issue and the ERISA-eligible B and C tranche. The Manufactured Housing sector was removed as of January 1, 2008, and the Home Equity Loan sector was removed as of October 1, 2009.

Corporate High Yield: The Bloomberg Barclays U.S. High Yield Index covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included. Original issue zeroes, step-up coupon structures, 144-As and pay-in-kind bonds (PIKs, as of October 1, 2009) are also included.

The Bloomberg Barclays Municipal Bond Index is a broad-based, total-return index. The bonds are all investment-grade, tax-exempt, and fixed-rate securities with long-term maturities (greater than 2 years). They are selected from issues larger than $50 million.

The Bloomberg Barclays TIPS Index consists of Treasury Inflation Protected Securities (TIPS). TIPS are securities whose principal is tied to the Consumer Price Index. TIPS pay interest semi-annually, based on the fixed rate applied to the adjusted principal.

Ratings are measured on a scale that ranges from AAA or Aaa (highest) to D or C (lowest). Investment grade investments are those rated from highest down to BBB- or Baa3.