Municipal Bond Monthly

NORTH AMERICA
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Special thanks to Monica Guerra for her contribution to this report.

Strategy:

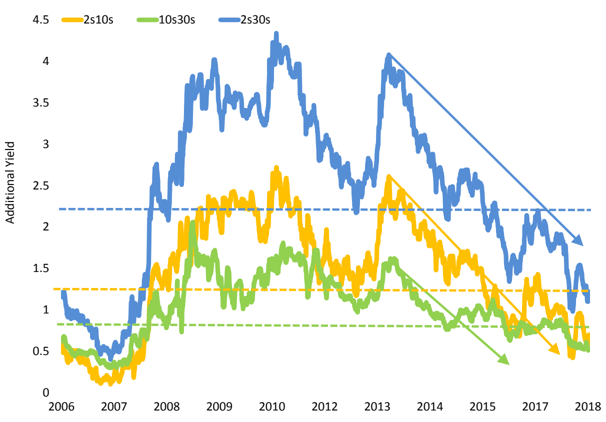
- Cautiously Consider Pre-Summer Entry Points
- Keep It Simple–Focus On Front-End High-Quality
- Systematically Add Exposure; Maintain Allocations

Credit Quality: High

Favored Sectors: Please see our Sector Outlooks Table

Coupon Structure: 4.5% or Higher

Fig 1. "Short, but Sweet" — Additional Yield Declines



Source: Morgan Stanley Wealth Management Municipal Research and Strategy, Thomson Reuters as of 5/22/18

Elegant Simplicity

"Simplicity is the ultimate sophistication"– Keeping any task simple is often easier said than done, but wasn't Leonardo da Vinci right when identifying our natural intuition that something has to be more complicated than it really is? Interestingly enough, those who are often most successful at an endeavor are those who can most efficiently simplify the task to its least-complicated form. Though global monetary policy is tightening and the macroeconomic backdrop is clearly in transition, the repercussions of these dynamics have actually helped to *simplify* our investment decisions throughout the public finance arena. So why complicate them?

There are two important developments that help us to support the aforementioned approach—one of the old and one of the new. Let's start with the most recent development first.

The first dynamic deals with the continued flattening of the US Treasury (UST) and municipal bond yield curves. As many of our readers know, bonds with longer final maturities often yield more than those with shorter redemption dates, as investors often require additional compensation for accepting more interest rate and credit risk. This relationship can change, however, since interest rates rarely transition in a perfectly uniform fashion throughout the curve. Most recently, yields on bonds with shorter maturities have risen faster than those offered by securities with longer redemptions. This dynamic has been predominantly caused by the market's anticipations for future federal funds rate increases, a strategy of monetary policy that often has the most pronounced impact on the short end of the yield curve. As observed in Figure 1, the additional yields earned by extending from 2- to 10-, 10- to 30-, and 2- to 30-year municipals currently stand near the lowest levels recorded since 2008. In summary, participants are receiving some of the best compensation in a decade for "keeping it simple" and investing in bonds with shorter final maturities.

We can now transition our focus from the new to the old—credit spreads. This topic is one that we've discussed quite often, but the dynamic is still undoubtedly important when committing capital. Similar to how interest rate relationships can change throughout maturities, the difference in yields offered between securities of divergent credit qualities can fluctuate as well. These spreads tend to decline, or "tighten," when demand increases and investors are comfortable with taking risk. Conversely, credit spreads tend to "widen" during recessionary periods when a risk-off investor sentiment is apparent. As observed in Figure 3 on page 3, the yield differences between "AAA" and lower-rated securities also hover near the lowest levels recorded since 2008.

In summary, investors are receiving some of the best relative compensation in a decade for keeping it simple by focusing on bonds with high credit qualities (AA- or higher).

Combining the aforementioned dynamics, we would focus on three objectives at this time: (1) cautiously consider entry points while new-issue supply is healthy this spring; (2) keep it simple and maintain a focus on front-end, high credit quality municipals; (3) look to systematically add exposure and maintain appropriate asset allocations.

First, we believe investors looking to add exposure should carefully put some capital to work before the summer. Though each year ushers in its own set of macroeconomic dynamics and market variables, the consistency of seasonal changes in both trading activity and primary market behavior throughout the tax-exempt arena is notable and warrants attention. In fact, new-issue supply increases by an average of 16% between May and June, then declines by 27% in July. This reduction is often accompanied by an increase in redemption-driven reinvestment demand. Recently released ICE Data forecast that redemptions will increase by 61% next month and should remain elevated until autumn. When combining the possibility of stronger reinvestment demand with lower new-issue supply, we believe investors should cautiously put some capital to work this spring. Additionally, the Blue-Sky dynamic of low 2018 supply, mild credit conditions, a flatter yield curve, modest rate stability, and the summer's impending seasonal backdrop may continue to foster a constructive setting for municipals as we journey into the second half of this year. (This dynamic was also discussed by our Morgan Stanley & Co. brethren in Teflon Bond.)

Second, tightening monetary policy and the transitioning macroeconomic backdrop have indeed helped to simplify our investment decisions throughout the public finance arena. As previously discussed, fed funds rate hike expectations have helped yields on shorter maturity securities to rise, causing the slope of the municipal bond yield curve to flatten. Most notably, over 70% of the yield offered throughout the entire curve is now captured in six years. Complementing this development, tight credit spreads indicate that investors are currently compensated less for risk-taking. Should economic challenges surface, these credits are also vulnerable to price depreciation. Importantly, investors are now receiving some of the best relative compensation in a decade for focusing on high-quality bonds with shorter final maturities.

Lastly, when committing capital we would continue to do so gradually throughout the spring—preferably in periodic intervals when healthy issuance creates pockets of underperformance. This cautious approach is important due to the still-lingering presence of catalysts that may incite further fixed income weakness. Though recent municipal rate stability is encouraging, we see many global dynamics that may cause interest rates to rise again. Additionally, the possibility of rising rates and the continued flattening of the yield curve encourage investors to remain mindful of asset allocations and to maintain appropriate exposures to cash.

"Simplicity is the ultimate sophistication." Though global monetary policy is tightening and the macroeconomic backdrop is in transition, household investors are receiving some of the best relative compensation in a decade to "keep it simple" and invest in high-quality bonds with shorter final maturities. When considering the many economic possibilities of the near future (a potential late-cycle economy *with* higher interest rates), why complicate the simplicity?

Monthly Spotlight – Pre-Refunded and ETM Municipal Securities

Short and simple: When discussing high-quality bonds with shorter final maturities, there isn't a more textbook example than pre-refunded (pre-re) and escrowed-to-maturity (ETM) municipal securities.

Pre-refunded and **ETM** bonds are state or local government securities whose future principal and interest payments have already been raised. Consequently, future debt-service allocations are paid from an escrow account until the bonds can be redeemed and are no longer dependent upon future tax collections and/or revenue streams. As a result, the securities are often considered to be of very strong credit quality, as payments are currently "waiting" in an escrow account comprised of high-quality US government investments. The bonds are also generally less volatile due to their high coupon income and shorter redemption dates. (Pre-res are often redeemed at the earliest call date, while ETMs typically remain outstanding until maturity.)

As every investment has its considerations, keep in mind that the securities' typically offer less yield due to their high credit qualities and shorter maturities. Additionally, the relative value of the bonds versus USTs has recently declined after the Tax Cuts and Jobs Act (TCJA) limited the ability of issuers to advance refund outstanding debt (scarcity value). However, keep in mind that higher nominal yields should now help investors to earn more than nearly any period during the last ten years. Interested participants may also wish to contact their Morgan Stanley Wealth Management Financial Advisor to review a bond's collateral and confirm that all redemption provisions have been fully and properly defeased.

Pre-refunded and ETM municipal bonds in our view are an exceptional option for investors searching for securities of strong credit quality that pay above-market coupon income (with potentially short redemption dates). Investors should also watch for periods when the securities yield near, or more than, corresponding USTs; the bonds are often secured by a portfolio of comparable US government investments, but their coupon payments are exempt from federal, and possibly state and local, income taxation.

Municipal Market Data

Fig 2. Relative Value — Ratios Low; "Blue-Sky" Outperformance Continues

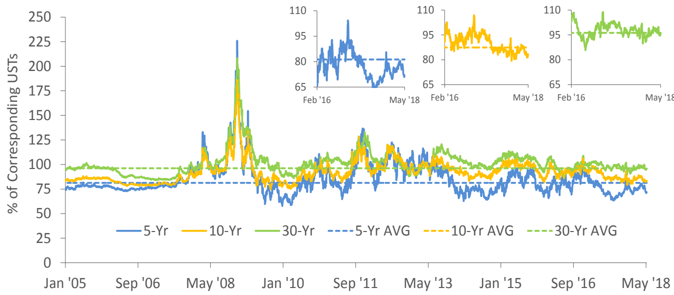


Fig 3. Credit Spreads — Low Compensation for Credit Risk

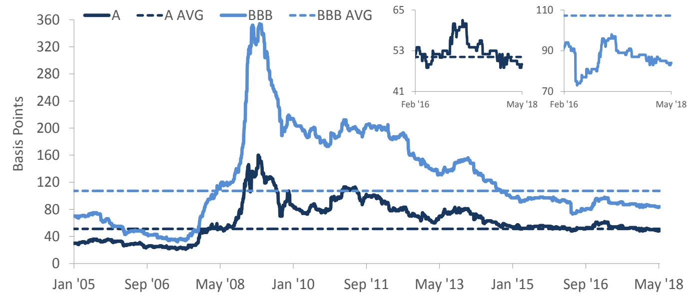


Fig 4. 10-Yr AAA MMD Near One-Year High; Be Cautious Adding Exposure

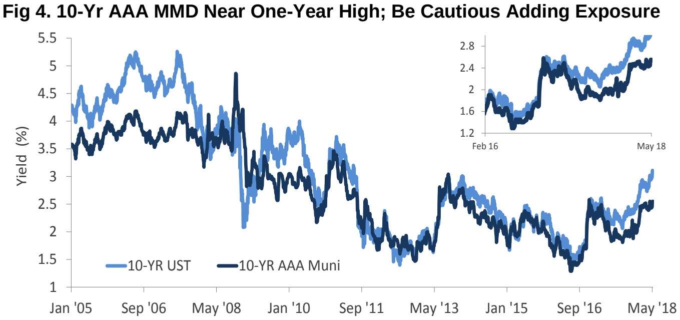


Fig 5. Yield-Curve — Low Compensation for Interest-Rate Risk

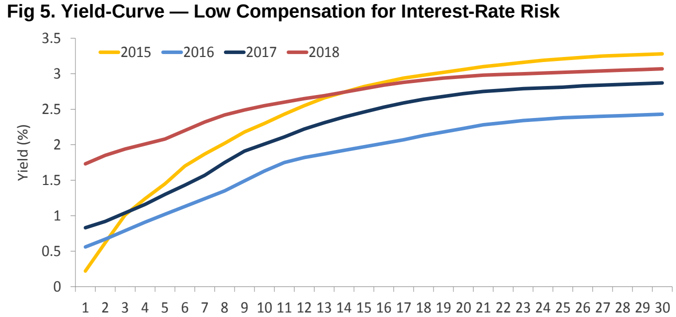


Fig 6. Monthly Supply — Seasonal Factors In Play

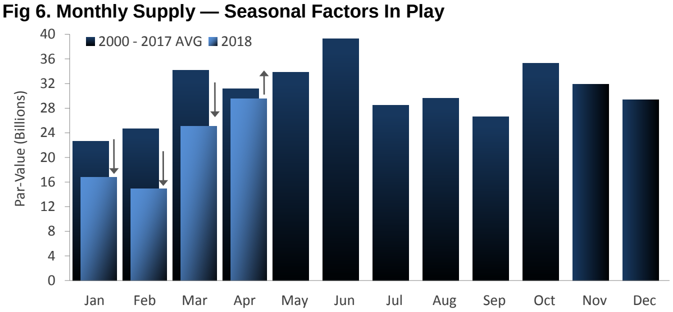
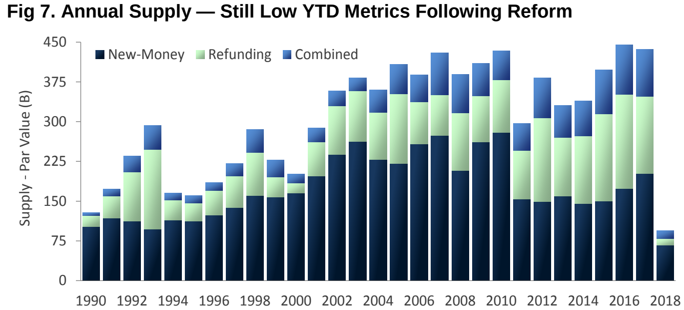


Fig 7. Annual Supply — Still Low YTD Metrics Following Reform



Source: Morgan Stanley Wealth Management Municipal Research and Strategy, Thomson Reuters MMD, Bloomberg, The Bond Buyer as of 5/22/18

Fig 8. Sector Outlooks and Recommended Rating Parameters

Sector	Minimum Rating*	Commentary
State GO & State Appropriated	A1/A+	Pension/OPEB challenges exist. SALT debate challenges high-tax states. Volatility/downgrades continue. Be selective.
Local GO	Aa1/AA+	State aid, pension challenges, and SALT challenges apparent. We strongly advocate selectivity and high credit quality.
Essential Service (Water & Sewer)	A2/A	Essential purpose beneficial, where applicable; capital needs may create select challenges.
US Public Power	A2/A	Favorable non-cyclicality of revenues; evolving power markets and regulation may create select challenges.
State Housing Finance Agencies	Aa2/AA	Exposed to housing market momentum; diversified business models; recession risk; SALT challenges in high-tax states
Higher Education	Aa3/AA-	We recommend higher-rated, well-established institutions due to student selectivity and price sensitivity.
Transportation	A2/A	Bolstered by modest economic growth and still relatively low oil prices. Recession risk exists.
Not-for-Profit Hospitals	Aa2/AA	We recommend larger systems as a conservative choice. The future of the ACA is still unclear.
Tax-Secured / Dedicated-Tax	A1/A+	Generally less political risk. We prefer high-quality income, sales, and utility tax bonds with no commingling of revenues

*Table lists minimum credit rating recommended for buy-and-hold investors. (Please consider referenced rating with a stable outlook and/or higher rating.) Tactical decisions or whether a bond is over/undervalued should be evaluated on a case-by-case basis.

Moody’s and S&P Ratings Scale

	Moody’s	S&P
Investment Grade	Aaa	AAA
	Aa1	AA+
	Aa2	AA
	Aa3	AA-
	A1	A+
	A2	A
	A3	A-
	Baa1	BBB+
	Baa2	BBB
	Baa3	BBB-
High Yield	Ba1	BB+
	Ba2	BB
	Ba3	BB-
	B1	B+
	B2	B
	B3	B-
	Caa1	CCC+
	Caa2	CCC
	Caa3	CCC-
	Ca	CC
	C	C
	WR	D
	NR	NR

Source: Bloomberg

Credit ratings throughout this report are cited from Standard & Poor’s and Moody’s given they are two of the most widely followed credit agencies in the fixed income markets.

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For index, indicator and survey definitions referenced in this report please visit the following:
http://www.morganstanleyfa.com/public/projectfiles/id.pdf

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Bonds are subject to interest rate risk. When interest rates rise, bond prices fall; generally the longer a bond's maturity, the more sensitive it is to this risk. Bonds may also be subject to call risk, which is the risk that the issuer will redeem the debt at its option, fully or partially, before the scheduled maturity date. The market value of debt instruments may fluctuate, and proceeds from sales prior to maturity may be more or less than the amount originally invested or the maturity value due to changes in market conditions or changes in the credit quality of the issuer. Bonds are subject to the credit risk of the issuer. This is the risk that the issuer might be unable to make interest and/or principal payments on a timely basis. Bonds are also subject to reinvestment risk, which is the risk that principal and/or interest payments from a given investment may be reinvested at a lower interest rate.

Bonds rated below investment grade may have speculative characteristics and present significant risks beyond those of other securities, including greater credit risk and price volatility in the secondary market. Investors should be careful to consider these risks alongside their individual circumstances, objectives and risk tolerance before investing in high-yield bonds. High yield bonds should comprise only a limited portion of a balanced portfolio.

Interest on **municipal bonds** is generally exempt from federal income tax; however, some bonds may be subject to the alternative minimum tax (AMT). Also, municipal bonds acquired in the secondary market at a discount may be subject to the market discount tax provisions, and therefore could give rise to taxable income. Typically, state tax-exemption applies if securities are issued within one's state of residence and, if applicable, local tax-exemption applies if securities are issued within one's city of residence. The tax-exempt status of municipal securities may be changed by legislative process, which could affect their value and marketability.

Because of their narrow focus, **sector investments** tend to be more volatile than investments that diversify across many sectors and companies.

Yields are subject to change with economic conditions. Yield is only one factor that should be considered when making an investment decision.

Credit ratings are subject to change.

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	CEF Coverage Universe		Investment Banking Clients (IBC)		
Closed-End Fund (CEF) Rating Category	**Count**	**% of Total**	**Count**	**% of Total IBC**	**% of Rating Category**
Overweight/Buy	35	36.1%	13	39.4%	37.1%
Equal-weight/Hold	43	44.3%	13	39.4%	30.2%
Underweight/Sell	19	19.6%	7	21.2%	36.8%
Total	97	100.0%	33	100.0%	

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