WEALTH MANAGEMENT INVESTMENT RESOURCES

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Municipal Bond Monthly

Market Strategy

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INVESTMENT THESIS

Patience may be needed to navigate today's municipal market while building or maintaining an acceptable amount of carry (coupon income) and liquidity (cash) for what could be a protracted ramp-up and liftoff period for the Fed to raise short-term interest rates.

The current environment warrants a premium on both portfolio flexibility (cash on hand) and carry in the form of high-quality municipal bonds with above-market coupons, and we are widening our focus maturity range to 10 to 20 years, while maintaining both cash and floating rate notes (FRNs). We utilize a tiered approach to local GOs and revenue bonds, with mid-A rated for locals and mid-BBB rated for essential service revenue bonds. We remain comfortable with all state-level GOs and state-level appropriated, and expect muni credit generally to plateau, but not materially decline. See sector table on page 3.

Fig 1. Tax-Time Underperformance and Bond Fund Outflows



Source: Morgan Stanley Wealth Management Municipal Strategy, FactSet, Thomson Reuters Municipal Market Data (MMD) as of 4/22/15

Patience & Carry

The Fed obviously removed it from their statement last month, but patience may be exactly what investors need to navigate today's municipal market while building or maintaining an acceptable amount of carry (in the form of coupon income) and liquidity (cash) for what could be a protracted ramp-up and liftoff period for the Fed to raise short-term interest rates.

As we discussed in our last Municipal Bond Monthly entitled *Paid to Wait* the US Treasury (UST) bond market has been range-bound, to the tune of 56 basis points, since late January. With the 10-year UST within a hair's breadth of 2%, it sits just a touch above the middle of that range. Given this wide range and the attendant volatility, patient investors have been afforded numerous opportunities to pick their spots, whether it be selling vulnerable positions during rallies or purchasing bonds on weakness...or better still, a well-timed combination of the two tactics.

Meanwhile, the municipal bond market has been facing its own headwinds in the form of 1) mutual fund outflows, which are, ironically, tax payment related, but a typical market affliction for early April; 2) the inability to keep pace with recent UST strength (reversing as we prepare this note) driven by weaker US economic data and global flows seeking the comparatively "higher" yields of USTs; and 3) the year's lowest muni redemptions (less demand) throughout April. The confluence of these factors has rendered municipals attractive on a relative value basis versus USTs. But that's not news, as the 10-year relative-value ratio has eclipsed 100% since late March (long-term average is 84%).

The real question is when will anyone care? Depending on the prevailing UST market momentum and sentiment, these municipal market headwinds could convert to tailwinds during the summer months when redemptions rise and supply typically plummets. That said, an optimal entry point for prospective purchases may occur during the coming two months if UST weakness is prevalent and munis are slow to outperform.

This brings us to the question of why do we think UST weakness may be prevalent in the coming months? For this answer, we look to the revised forecasts of Morgan Stanley & Co.'s (MS & Co.) Chief US Economist, Ellen Zentner, who recently pulled forward the firm's first rate hike expectations to this December, from March of 2016, and also expects improved GDP growth in the second half of this year, with Q1 being the weakest quarter of 2015. Indeed, following growth of 2.2% in 4Q14, 1Q15 is now tracking at just 1%. Meanwhile, forecasts of 2.6%, 2.5% and 3.1% are maintained for 2Q, 3Q and 4Q15, respectively. Finally, Zentner

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noted that February represented the low point of Q1 and that March data, which is reported throughout April, may surprise to the upside.

Absent a downturn in US equities, an offsetting global development or even just dour global sentiment, the expected stronger US data could drive yields higher and provide an attractive entry point for patient bond buyers.

Meanwhile, tempering our concerns over a sustained spike in rates is yet another updated MS & Co. forecast—this time from Matthew Hornbach, Global Head of Interest Rate Strategy, who recently tapered his year-end target for 10-year USTs to 2.40%, from the previous 2.85%. From current levels, 40 basis points of rate risk is vastly better than 85.

What to do? Given the potential scenarios above, we are placing a premium on both portfolio flexibility (cash on hand for opportunities) and carry in the form of high-quality municipal bonds with above-market coupons. Accordingly, we are widening our focus maturity range to 10 to 20 years, while maintaining our penchant for both cash for flexibility and floating rate notes (FRNs) to limit duration. Our 10-to-20 year band runs right down the center lane of the yield curve, avoiding the shortest maturities (which offer little yield and may come under pressure ahead of Fed liftoff) and avoiding the longest part of the curve (which is rather flat and vulnerable if inflation expectations increase). We define above-market coupons as 4% to 5% and maintain a tiered approach to local GOs and revenue bonds, with mid-A rated and higher for local governments, and mid-BBB rated and higher for essential service revenue bonds.

We remain comfortable with all state-level GOs, but certain states may experience downside rating volatility (New Jersey last week) and spread widening (Pennsylvania year to date) that endures for extended periods (Illinois), which could represent opportunity for investors with the appropriate risk tolerance given states' inherent flexibility and proven resilience (California). Finally, we expect muni credit generally to plateau, but not materially decline. See sector table on page 3.

New Issue Supply & Market Performance

New-issue volume continued to be robust throughout March, and remained bolstered by a still heightened amount of refunding issuance. We attribute this trend to the current low nominal interest rate environment and the increased prevalence of "in the money" refinancing candidates. In fact, deals issued for the sole purpose of refinancing outstanding debt are now higher than 2014 by a remarkable 172% year to date (YTD) year over year (YOY).

The aforementioned dynamic helped last month's gross new-issuance supply to finish at approximately \$41 billion, a striking 44% higher than last March YOY, and 24% above the month's historical average of \$33 billion. At \$102.6 billion, 2015's YTD volume continues to be the third largest in 15 years, ranking behind only 2007 and 2010. Conversely, new-money issuance

remains muted, at -8% YTD YOY, due to lingering impacts from state and local government fiscal austerity, which should gradually fade.

Turning to market performance, US Treasuries initially exhibited a firmer tone on shorter and intermediate maturities during the month, but later surrendered much of those gains. Delving deeper into the market's price action, weaker-than-anticipated domestic economic data (*IQ GDP*, *ADP Employment*, *Retail Sales*), changes to China's equity market margin requirements and lingering concerns over a potential exit for Greece from the Eurozone prompted a flight-to-quality sentiment that benefited USTs, but stronger US housing data in the last few days then drove yields higher. Consequently, yield levels are unchanged on the 5-year UST, higher by 6 basis points on 10-year benchmark USTs and 14 basis points higher for the 30-year UST since the release of our last publication.

For municipals, it was that time of the year again as the April 15 federal tax-filing deadline loomed. Annual tax-time weakness is common during the aforementioned period (especially with shorter maturities that carry low yields) as many participants sell municipal securities to help pay annual income taxes. This year was no different, as the market encountered three consecutive weeks of mild-to-moderate municipal bond mutual fund outflows after such flows had remained solidly positive throughout 2015 (please see chart on page 1). The ensuing weakness was intensified by hefty levels of issuance which, in turn, exacerbated tax-exempt underperformance versus corresponding maturity USTs. Relativevalue ratios for 10-year benchmarks currently stand at 102% after reaching as low as 98% and as high as 105%. While yield levels are lower by 4 and 3 basis points (bps) on the 5- and 10-year AAA MMD, respectively, they are higher by 6 bps on the 30-year benchmark since March 18.

Credit spreads versus the AAA 10-year muni benchmark are largely unchanged since our last publication, as buyers search for paper in a relatively low net-issuance environment (new-issue supply less refunded, called and maturing debt). A rated credit spreads have already compressed by an exceptional 19 bps (27%) throughout the last year, while BBB spreads versus AAAs tightened by 42 bps (32%) during the same period. After such performance, investors are now being compensated less for taking credit risk. Consequently, we suggest that buy-and-hold investors searching for additional yield take only modest extensions out on the credit curve. Investors who focus primarily on wealth preservation and current income may even wish to consider utilizing the current period to increase credit quality (please see our sector table on the next page). Finally, since we believe municipal credit quality may plateau in 2015, credit selection and routine portfolio maintenance continue to be of paramount importance.

JD

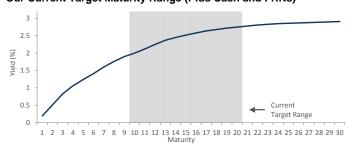
MG

Municipal Market Data

Relative-Value Ratios - (AAA GO Municipals as % of US Treasuries)



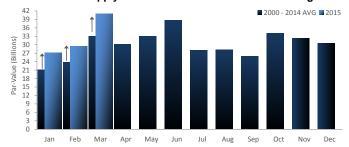
Our Current Target Maturity Range (Plus Cash and FRNs)



A Rated and BBB Rated Credit Spreads to AAA Securities



March's Gross Supply 24% Above Month's Historical Average



Source: Morgan Stanley Wealth Management Investment Resources, Thomson Reuters MMD, The Bond Buyer as of 4/22/15

Morgan Stanley Wealth Management's Broad Municipal Sector Outlooks & Minimum Rating Parameters

Sector	Minimum Rating*	Commentary	
State GO & State Appropriated	All	Political, deferred spending & pension challenges remain. Volatility, but market access likely maintained long te	
Local GO	A2/A	Dependent upon housing & state aid; pension challenges remain; we favor mid-to-high credit quality	
Essential Service (Water & Sewer)	Baa2/BBB	Essential purpose beneficial, where applicable; water scarcity & capital needs may create select challenges	
US Public Power	Baa2/BBB	Favorable non-cyclicality of revenues; evolving power markets & increased regulation may create select challenges	
State Housing Finance Agencies	A2/A	Directly exposed (positively or negatively) to housing market momentum; diversified business models	
Higher Education	A2/A	Favor higher-rated, well-established institutions due to state aid cuts, regulatory and demand sensitivity	
Transportation	A2/A	GDP growth & oil price decline supportive (upside may be limited); favor major tollways & metropolitan/hub airports	
Not-for-Profit Hospitals	AA3/AA-	Major complex changes on horizon; we recommend larger systems as a conservative choice	

^{*}Table lists *minimum* credit rating we are comfortable recommending for buy-and-hold investors (i.e., 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.

Market Performance (Yield Level Changes)

	•	Current	Month-to-Date - Since 3/31/2015	Year-to-Date - Since 12/31/2014
	5.77	***		
	5 Year	1.24	0.00	-0.08
AAA	10 Year	2.00	0.04	-0.04
	30 Year	2.91	0.11	0.05
	5 Year	1.39	0.00	-0.07
AA	10 Year	2.23	0.04	-0.01
	30 Year	3.17	0.13	0.08
	5 Year	1.58	0.00	-0.08
A	10 Year	2.52	0.04	-0.06
	30 Year	3.50	0.12	0.08
	5 Year	2.10	0.02	-0.06
BBB	10 Year	2.94	0.05	-0.07
	30 Year	3.89	0.13	0.11

^{*}Please note: Yield increases represent price declines. Yields are subject to change with economic conditions. Yield is only one factor that should be considered when making an investment decision.

Source: Morgan Stanley Wealth Management Investment Resources, Moody's, S&P, Thomson Reuters MMD as of 4/22/15

Fixed Income Risk Considerations

Call Risk - Some securities may be callable. If the security is called, the investor bears the risk of reinvesting the proceeds at a lower rate of return.

Credit Risk - The risk that the issuer might be unable to pay interest and/or principal on a timely basis. Widely recognized rating agencies, such as Moody's Investor Services and Standard & Poor's, offer their assessment of an issuer's creditworthiness. U.S. Treasury securities are considered the "safest" investment as they are backed by the "full faith and credit" of the U.S. Government. On the other end of the scale, high yield corporate bonds are considered to have the greatest credit risk.

Duration Risk - Duration, the most commonly used measure of bond risk, quantifies the effect of changes in interest rates on the price of a bond or bond portfolio. The longer the duration, the more sensitive the bond or portfolio would be to changes in interest rates. Generally, if interest rates rise, bond prices fall and vice versa. Longer-term bonds carry a longer or higher duration than shorter-term bonds; as such, they would be affected by changing interest rates for a greater period of time if interest rates were to increase. Consequently, the price of a long-term bond would drop significantly as compared to the price of a short-term bond.

Interest Rate Risk - The risk that the market value of securities might rise or fall, primarily due to changes in prevailing interest rates. All fixed income securities are susceptible to fluctuations in interest rates; generally, if interest rates rise, bond prices will fall, and vice versa.

Prepayment Risk - In a CMO or MBS, the risk that an investor's principal will be returned sooner than originally expected, due to principal prepayments made by homeowners on the underlying mortgage loans.

Reinvestment Risk - The risk that the income stream from the investment may be reinvested at a lower interest rate. This risk is especially evident during periods of falling interest rates where coupon payments are reinvested at a lower rate than the current instrument.

Secondary Market Risk - While a secondary market exists for most fixed income securities, there is no guarantee that a secondary market will exist for a particular fixed income security. Furthermore, if a security is sold prior to maturity, the price received may be more or less than face value, or the amount of the original investment.

Index data is based on index total return - Fixed income securities, including municipal bonds, are subject to certain risks including interest rate risk, credit risk, reinvestment and valuation risks. The value of fixed income securities will fluctuate and, upon a sale, may be worth more or less than their original cost or maturity value. Investing in foreign markets entails greater risks than those normally associated with domestic markets, such as political, currency, economic and market risks. Information provided herein has been obtained from outside sources that are deemed to be reliable. However, Morgan Stanley Wealth Management has not independently verified them and we make no guarantees, express or implied, as to their accuracy or completeness or as to whether they are current. Past performance is not a guarantee of future performance. The indices are unmanaged and are shown for illustrative purposes only and do not represent the performance of any specific investment. Investors cannot invest directly in an index.

General and Asset Class Risk Considerations

Interest on **municipal bonds** is generally exempt from federal income tax; however, some bonds may be subject to the alternative minimum tax (AMT). 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.

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

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.

Floating-rate securities The initial interest rate on a floating-rate security may be lower than that of a fixed-rate security of the same maturity because investors expect to receive additional income due to future increases in the floating security's underlying reference rate. The reference rate could be an index or an interest rate. However, there can be no assurance that the reference rate will increase. Some floating-rate securities may be subject to call risk.

International investing entails greater risk, as well as greater potential rewards compared to U.S. investing. These risks include political and economic uncertainties of foreign countries as well as the risk of currency fluctuations. These risks are magnified in countries with emerging markets, since these countries may have relatively unstable governments and less established markets and economies.

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

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

Credit ratings are subject to change.

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