

Fixed Income Quarterly

Market Perspectives from Fixed Income Solutions

For Principal Preserving Assets, Performing is Enough

No outperformance, no underperformance ... just performance! Much of the financial market commentary comes from active managers that focus on trying to outperform the market. Their practices, among other things, include: timing the market, overweighting/underweighting, and shortening/extending. These practices can be tied to some future market predictions. If their predictions and associated alignments are correct, maybe they outperform. If they are wrong they may underperform. If the “average” of the market falls 10% and a managed portfolio falls 8%, this can be considered an “outperform”. These disharmonies are somewhat expected when navigating the complexities of and seeking total return. But how desirable is this for the portion of the portfolio dedicated to sheltering your accumulated wealth?

The fixed income allocation of investment portfolios often represents dedicated funds for the purpose of retaining one’s wealth. You’ve made it, now let’s not lose it. So why say, “Just Performance?” Usually, individual bonds have the primary goal of sustaining your wealth. However, the current market environment offers investors an additional benefit: significantly higher income and cash flow that we have not seen in recent years.

“There are reasons that we believe this double-sided advantage exists in a limited window of time.” Doug Drabik, Senior Strategist

Yields are currently at levels not consistently experienced for well over a decade. In other words, you may be able to sustain your wealth and possibly grow it too. High-quality investment-grade individual bonds provide their primary purpose of preserving wealth AND (in the present time) have the potential to earn relatively high levels of income. There are reasons that we believe this double-sided advantage exists in a limited window of time. We will make the case for why this is a unique opportunity and why you may benefit long-term by implementing specified strategies. We frequently say that our only benchmark is yours ... to perform regardless of current market conditions, future interest rate changes, or unexpected events.

FIXED INCOME QUARTERLY CONTRIBUTING STRATEGISTS



DOUG DRABIK



DREW O’NEIL



ROB TAYLOE

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DON'T TRUST YOUR INSTINCTS ALONE...HISTORY CAN PROVIDE VALUABLE INFORMATION

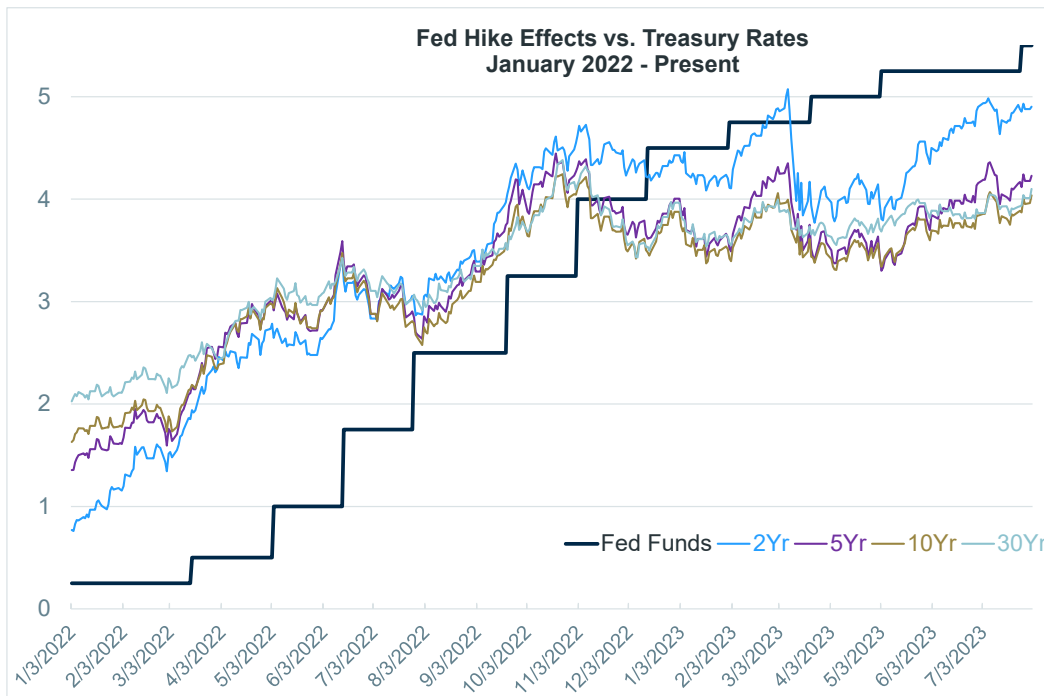
The Fed has hiked interest rates in 11 of the last 12 Federal Open Market Committee (FOMC) meetings. Five times they have raised the Fed Funds rate by 25 basis points (bp), twice by 50bp, and four times by 75bp. In total, for a short 14-month time period, they have (so far) raised rates by 525bp, more than in any cycle going back over 40 years.

This Fed policy implementation was pandemic driven and followed previous actions by both the Federal Reserve and the Federal government. The Fed had lowered rates to 0%-0.25%, an unprecedented amount of money was introduced into the economy through quantitative easing, safety nets were put in place to support financial markets, funding facilities were put in place to support small businesses, new credit lines were established, direct lending occurred to state and municipal governments and the federal government relaxed regulatory requirements. Unprecedented provisions and enormous amounts of money were injected into the economy and directly into the hands of consumers. The money supply remains elevated on a historic basis; however, there are signs that the excess cash has nearly run its course.

	Fed Move	Upper Bound Fed Funds Rate
Mar-22	0.25	0.50
May-22	0.50	1.00
Jun-22	0.75	1.75
Jul-22	0.75	2.50
Sep-22	0.75	3.25
Nov-22	0.75	4.00
Dec-22	0.50	4.50
Feb-23	0.25	4.75
Mar-23	0.25	5.00
May-23	0.25	5.25
Jun-23	-	5.25
Jul-23	0.25	5.50
Sep-23		
Nov-23		
Dec-23		

Sources: Bloomberg, Raymond James

As the Fed raises interest rates, it can be instinctive to reason that all interest rates move congruently. In reality, the Fed tends to have the greatest influence on the short end of the Treasury yield curve. After all, they are raising the Fed Funds rate or the **overnight** rate assigned to excess reserves deposited by banks



Sources: Bloomberg, Raymond James

and financial institutions. Early in the Fed's rate hike cycle, all rates appear to rise, but, disproportionately on the shortest maturities. As the Fed cycle matures and nears its end, the Treasury curve has recently flattened out while the Fed continues rate hikes. As is with the current scenario, the curve can invert. This is when shorter maturities boast higher rates than longer maturities. An

inverted curve can be an indicator that future interest rates will be lower.

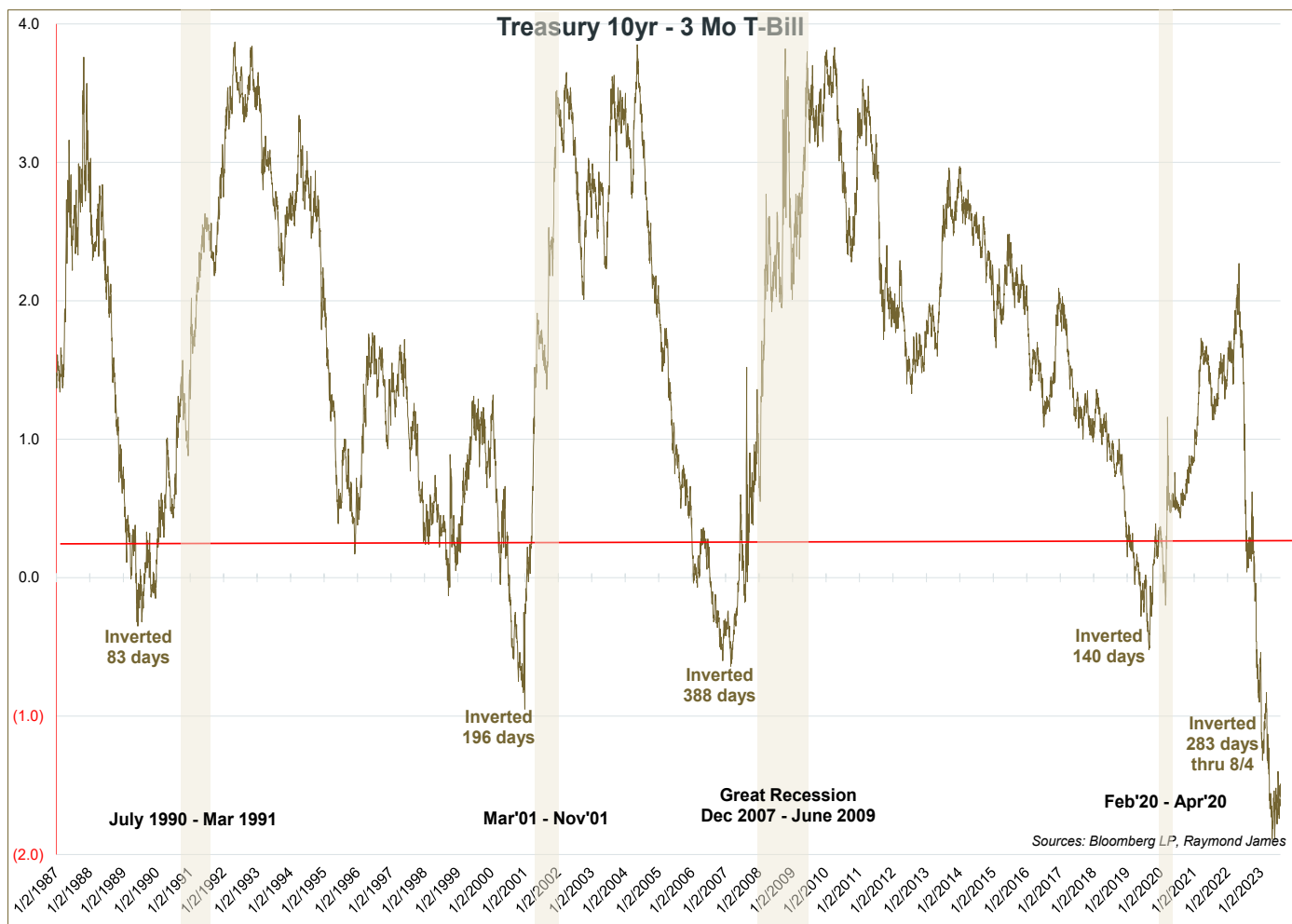
As rates rise higher on short maturities, it may appear like a time to capture higher income by investing short term. This may or may not prove advantageous depending on how rates actually change going forward. It

can prove unfavorable in the long run should yields reverse direction and begin falling. This could be triggered by economic conditions weakening, corporate earnings dropping, and/or unemployment rising, thus pressuring a Fed policy shift. Let's dispel two common misnomers. Investing short is *not* conservative and doing nothing *is* making a decision. Staying short is a posture that prospers if rates head higher but can diminish long-term earnings if they don't. To be clear, staying short is a decision that assumes future interest rates will be higher, and doing nothing with current holdings implies that the current holdings and their structure is ideal for the future.

KEY TAKEAWAY

The current financial environment and higher interest rate environment are providing investors an opportune time to not only preserve wealth but to boost income. Interest rates haven't stayed this high consistently for roughly 15 years. This window of opportunity may only exist for a short period of time and therefore, shoring up your fixed income allocation requires some urgency.

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This graph depicts the most recent yield curve inversions (10-year Treasury – 3-month T-Bill). The depth (how negative 10-year rates are versus 3-month T-Bill rates) of this inversion (189 basis points) dwarfs the depth of the most recent inversions (from 20bp-90bp). However, the length of the inversion may be more

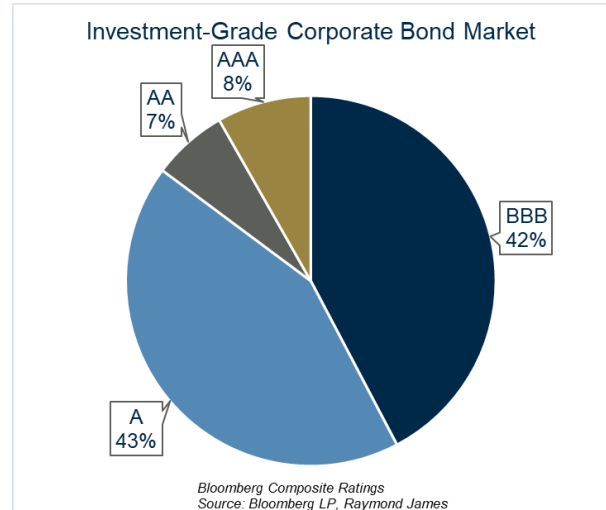
meaningful. Prior to the Great Recession (December 2007-June 2009), the inverted curve lasted over a 388-day range. This resulted in a more pronounced recession. The other depicted inversions all lasted less than 200 days. As of August 4, this economic cycle's inversion is 283 days. Following the inversion, when the Treasury curve begins to show a normal upward slope, a recession has followed, on average, about five months later.

Assuming this pattern holds, this cycle has to run through its inversion period plus an additional five months or so before a recession hits. Of course, past performance is no guarantee of future occurrences, but understanding historic patterns could provide investors with key tendencies. What we do know is that rates are higher than they've been in over a decade and that growth-like returns are available in much more conservative fixed income securities.

EXPLORING THE LANDSCAPE OF INVESTMENT-GRADE CORPORATE BONDS

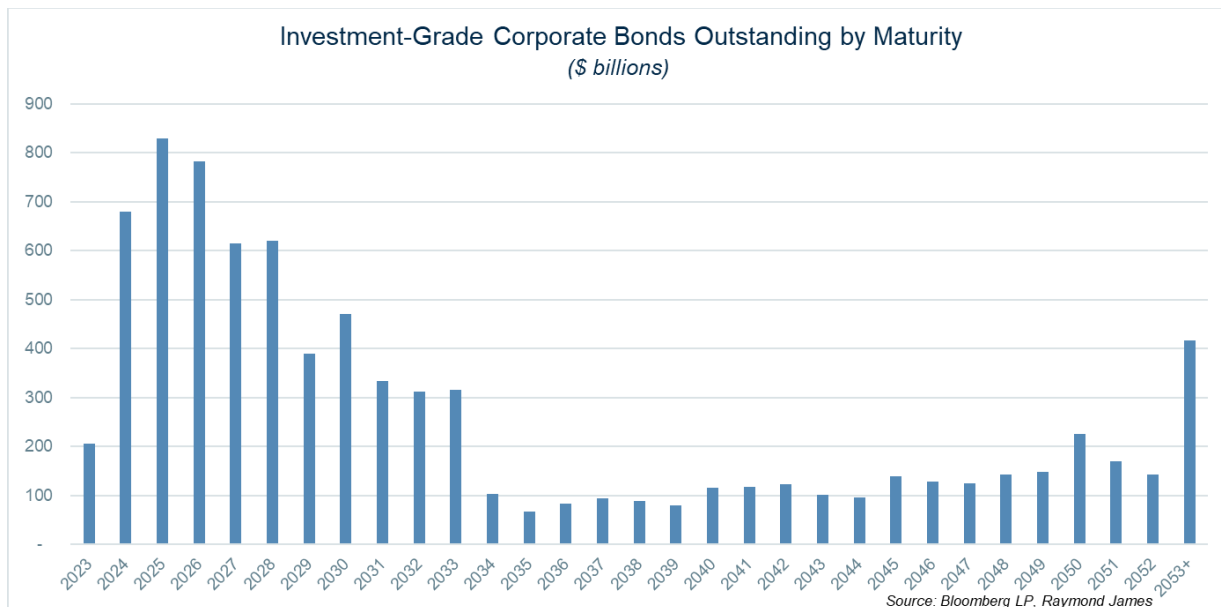
Corporate bonds account for about 20% of the U.S. bond market, but for many investors, they make up 100% of their fixed income allocation. Investment-grade corporate bonds can offer an attractive combination of yield and credit quality that can make them an ideal security for a core fixed income allocation. While it is easy to appreciate yield and credit quality, the specifics of what a corporate bond portfolio generally looks like might not be as familiar. Viewing the corporate bond market from a high-level perspective may begin to provide some insight.

The rating breakdown of the investment-grade corporate bond market reveals that a vast majority of the product type (~85%) is in either the BBB-rated or the A-rated categories. Technically this makes up the bottom half of the investment-grade ratings spectrum, although it still puts them in the investment-grade space with compelling high-credit quality opportunities. The BBB-rated and A-rated categories include many blue-chip companies or easily recognized everyday household names.



Identifiable names may remove emotional hurdles during the process of matching investor expectations with market accessibility. However, it can be challenging to assemble a portfolio of AA/AAA-rated bonds that make up such a small corner of the corporate sector and often deliver comparatively lower yields versus A/BBB-rated corporate bonds.

Portfolios can be easier to construct when supply is plentiful and pricing is competitive. Corporate issuance is dissimilar inside and outside of 10 years to maturity. The total bonds outstanding in any given year drops off considerably past 10 years. While there is still availability in longer-term maturities, finding offerings and value can sometimes be more difficult given the diminished issuance. The probability of meeting expectations is higher inside of 10 years where there are considerably more options at any given time.

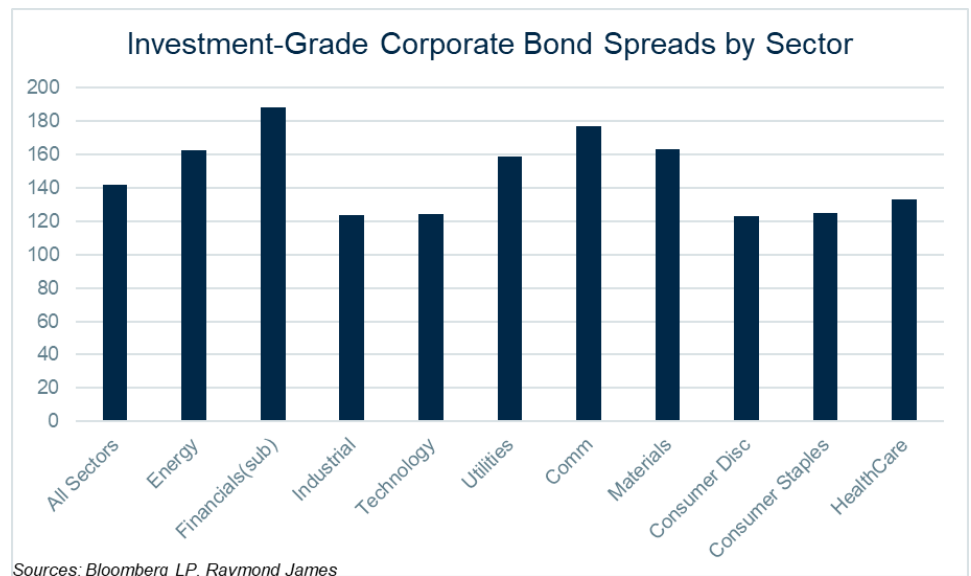
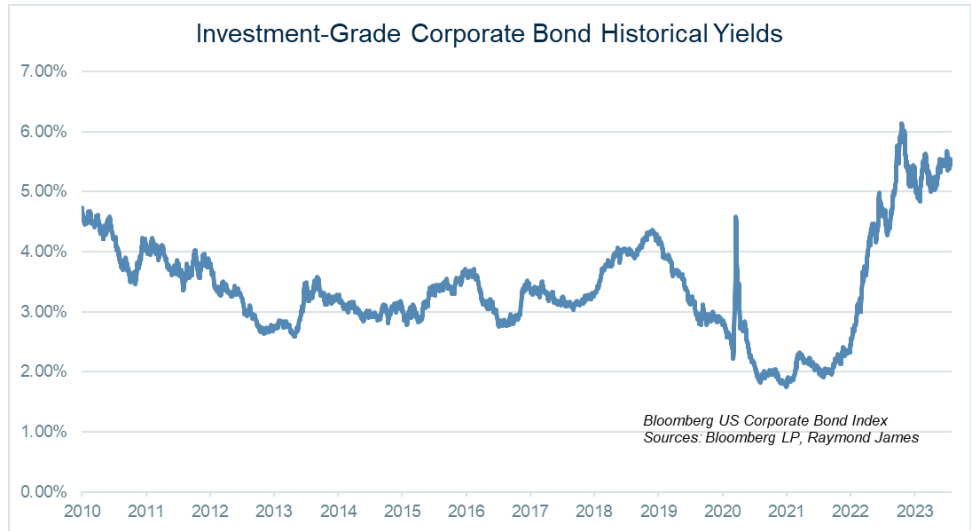


The greatest chance to optimize return and meet investor expectations occurs when expectations are aligned with market supply. A “core” corporate bond portfolio may therefore benefit from BBB-rated and/or A-rated bonds with maturities somewhere within 10 years. Aligning portfolio strategy and targets with what is available in the market should put an investor in a good position when it comes to implementing a plan.

Currently, the corporate bond market has some of the most attractive yields offered in over a decade. Yes, this is the mantra of this newsletter. The Historical Yields graph shows the average yield of the investment-

grade corporate bond index since 2010. While this is an overall index yield and does not distinguish across rating categories or maturity ranges, it provides some high-level insight into historic relative yields.

Corporate bonds trade at a spread to a benchmark yield (the benchmark for corporate bonds is a U.S. Treasury bond). The spread represents the additional yield provided to compensate for the higher credit risk associated with corporate bonds versus Treasury bonds. For example, if the 10-year Treasury is yielding 4.00% and Bond XYZ is a 10-year maturity and yields 5.50%, that bond is trading at a spread of 150 basis points. An investor can earn an additional 1.50% in yield annually by purchasing the corporate bond instead of the Treasury bond. The Corporate Bond Spread



graph illustrates the average spreads in the market right now, broken down by sector. The averages encompass the entire range of maturities and provide some context into general spread levels and the variance among sectors.

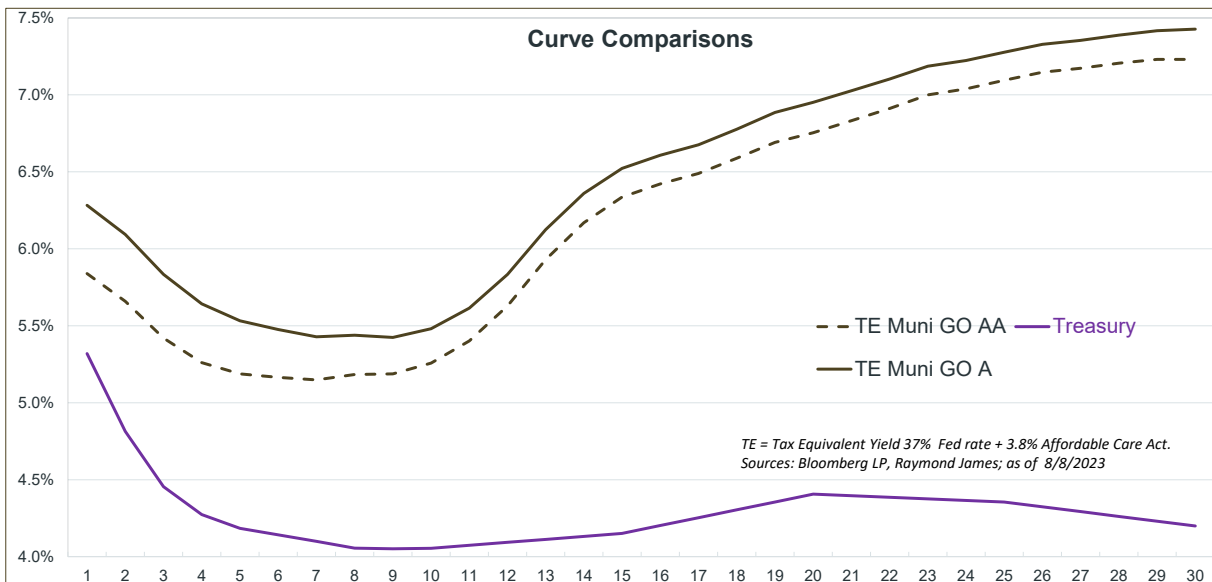
Market awareness, product characteristics and historic tendencies all help guide strategy. For a fixed income allocation intended to preserve principal and provide income, the corporate bond market offers a combination of yield and risk that should align with most investor goals and requirements.

EXPLORING THE LANDSCAPE OF INVESTMENT-GRADE MUNICIPAL BONDS

Municipal bonds offer investors a tax-free income (yield) option. Investors in the highest federal tax brackets benefit the most by avoiding federal taxes. Investment-grade tax-exempt municipal bonds offer lower credit risk and a broad and diverse issuer market in various maturities. Multiple bond characteristics exist within the sector. There is a broad range of coupons from zero to greater than five percent. Tax-exempt municipal bonds generally avoid federal tax but may require paying a state tax, although, most states exempt taxes on their own issues. Therefore, investors residing in states with high state taxes can further benefit by buying in-state issues. There are various pricing scenarios that could create a partial tax on discounts or redemptions made prior to maturity so always check with a tax consultant or expert about your specific situation.

According to Moody's Investor Service data, 98.9% of their rated bonds are issued with investment-grade ratings. Looking at a 5-year, cumulative default rate average from 1970-2021, only 0.04% of investment-grade Moody's-rated municipal bonds defaulted. Put another way, 99.96% did not default. The 10-year investment-grade cumulative default rate average is only 0.09% (99.91% did not default). Credit events activated by extreme market fluctuations, policy changes or even pandemics can change financial metrics and can trigger rating changes. It is important to recognize that downgrades are not defaults but signals of tighter financial conditions expected during tougher times. **The bottom line is that investment-grade municipal bonds are among the lowest risk investment choices available.**

Finding relative value in the municipal bond market is a dynamic concept. As comparative Treasury rates fluctuate, supply/demand pressures swing and other product offerings vary, specific target points on the municipal curve are subject to change. A noteworthy point is that starting about 9 years and out, the municipal curve is upward sloping through 30 years. Investors are rewarded for taking on interest rate risk. Municipal investors may see tax-equivalent yields over 6.0% and up to greater than 8.0%. These are growth-like returns in a less volatile asset class. Adding duration in this market locks in yields for longer and reduces reinvestment risk.



The depicted municipal curves provide general guidelines and may benefit different investor strategies differently depending on characteristics such as the state of residence or federal tax bracket. A California resident paying 13.3% state income tax and 37% in federal tax may benefit from California-issued tax-exempt municipal bonds even in shorter maturities.

Take the Following Hypothetical Example:

Issuer	Coupon	Maturity	Rating	Price	YTM	TEY
San Diego School	5.00%	07/01/26	Aa2	106.361	2.70%	5.43%

The tax-equivalent yield (TEY) represents the comparable yield required in a taxable alternative to equal the actual tax-exempt income generated by this municipal bond. In this case, a 5.43% taxable yield after-tax will equal the 2.70% tax-exempt yield for this short 3-year maturity bond.

Recent bond market shifts have created an on-and-off opportunity to buy 4.0% coupon bonds at or close to par. The appeal is discernable in that a 4.0% coupon, A-rated, New York issued, \$98.87 priced, Florida resident (no state tax), 37% tax bracket, would benefit from a 4.083% tax-exempt yield or a tax-equivalent yield to maturity of 6.48%. To put this in perspective, the average annual total return of the S&P Index from the turn of the century to the present (23+ year span) is 6.85%. A New York resident would boast a 7.84% tax-equivalent yield given that the New York state tax rate is high and a resident would not pay in-state tax on a bond issued from their state.

Municipal offerings with 5.0% or higher coupons, may afford a different opportunity. Since most municipal bonds are structured with call dates inside of 10 years, longer maturing municipals often boast higher yields to the shorter call versus non-callable municipal bonds with shorter maturities. High coupon bonds with longer maturities and shorter call dates are sometimes called “kicker bonds”, meaning that the yield earned “kicks” higher the longer it remains outstanding if it is not called. With the callable bond in the illustration above, a Florida resident in the 37% tax bracket would earn a tax equivalent yield of 7.14% and a New York resident 8.64% to maturity since it is a New York-issued bond.

	Coupon	Call	Maturity	YTC	YTM
NY Dorm Auth	5.00%		07/01/27		3.07%
NY Dorm Auth	5.00%	07/01/27	07/01/43	3.27%	4.50%

At this point in time, the sweet spot and desired characteristics of municipal bonds are 4.0% or higher coupons, A-rated or better credits and between 15 years and 25 years out on the curve where tax-exempt yields can reach 4% or greater. Depending on an investor’s profile, the entire municipal curve may offer comparative advantages. This window of opportunity is dependent upon how the Fed continues its crusade against inflation, whether the economy slips into slow growth or a recession, and any other essential outlier events that may pop up. The known is that investors can currently lock into desirable income levels and lock into them for longer periods.

CONSIDERING OUT-OF-STATE MUNICIPAL BONDS

One of the reasons that many investors purchase tax-exempt municipal bonds is for their tax benefits. Although there are some exceptions, generally interest earned is exempt from federal income taxes and if purchasing a bond issued in the investor's state of residence, interest is also exempt from state income taxes. Due to the state tax benefits, many investors choose to purchase bonds from their own state so that the bonds are double tax-exempt. While there is nothing wrong with trying to avoid state income taxes, sometimes it can be beneficial to consider out-of-state bonds.

If an investor can purchase an out-of-state bond at a higher yield than an in-state bond, sometimes the additional yield gained can more than makeup for the taxes paid on the interest earned from the out-of-state bond. The chart to the right shows how much additional yield would have to be earned on an out-of-state bond to equal the yield on an in-state bond after accounting for the state taxes paid. The chart assumes a yield of 3.5% for the in-state bond. For example, the top of the chart shows Alabama at 18 basis points. An Alabama resident could purchase an Alabama bond at a 3.50% yield, or an out-of-state bond at a 3.68% yield and take home the same amount of income at the end of the day after paying taxes. When constructing a strategy for an Alabama resident, purchasing a non-Alabama bond yielding more than 3.68% may make sense from a net yield perspective.

The additional yield required varies by state depending on the income tax rate, where the higher the income tax rate the more additional yield is required to buy an out-of-state bond. Therefore it is easier to work with out-of-state bonds in some cases.

“A portfolio composed of nationwide issues may prove advantageous in some cases and may make available more opportunities to find value in the market.”

In addition to the potential yield benefits, a national portfolio can be more geographically diversified which provides its own risk benefits.

Raymond James is not a tax advisor and does not give tax advice. Please consult a tax professional prior to making any investment decisions.

How much additional yield do you need from an out-of-state bond?*

State	Basis Points
Alabama	18
Alaska	0
Arizona	9
Arkansas	18
California	54
Colorado	16
Connecticut	26
Delaware	25
District of Columbia	38
Florida	0
Georgia	21
Hawaii	43
Idaho	22
Illinois	18
Indiana	11
Iowa	22
Kansas	21
Kentucky	16
Louisiana	16
Maine	27
Maryland	21
Massachusetts	35
Michigan	16
Minnesota	38
Mississippi	18
Missouri	18
Montana	25
Nebraska	25
Nevada	0
New Hampshire	18
New Jersey	42
New Mexico	22
New York	43
North Carolina	17
North Dakota	10
Ohio	15
Oklahoma	17
Oregon	38
Pennsylvania	11
Rhode Island	22
South Carolina	24
South Dakota	0
Tennessee	0
Texas	0
Utah	18
Vermont	34
Virginia	21
Washington	0
West Virginia	24
Wisconsin	29
Wyoming	0

* Assuming a 3.50% yield for an in-state bond that is state tax-exempt and the investor is in the top marginal tax bracket for their state of residence.

Source: Raymond James

KNOW WHAT YOU CAN OWN

Most individual bonds provide investors with a few prominent features that are difficult to find in other product types, most notably: known cash flow for the life of the security, known income (yield) at the time of purchase, and a known date when the principal will be returned. While most individual bonds provide these benefits to investors, there are many types of individual bonds, each having different features and applications within a portfolio. As an investor, sometimes it's difficult to know which product is most appropriate for a particular situation. Below are listed attributes that may illustrate how various products

might work within a portfolio. Identify acceptable risk factors.

- ✓ Define desired income.
- ✓ Create required cash flow.
- ✓ Identify the requisite redemption period.
- ✓ Create needed liquidity.
- ✓ Isolate personal biases.
- ✓ Use appropriate asset mix.
- ✓ Diversify.
- ✓ Rebalance when applicable.

	PRODUCT ATTRIBUTES	HOW DOES THIS FIT?	HOW DOES THIS FIT?
TREASURY	Minimal credit risk. State and local tax exempt.	Can I benefit from the state tax exemption? Am I seeking safety and liquidity over maximizing yield?	Although credit risk is minimal, market risk increases with lengthening maturity.
CERTIFICATES OF DEPOSIT BROKERED	FDIC insured. Ability to diversify with multiple issuers.	Do I need higher safety of principal? Typically more attractive yield versus Treasuries.	\$250,000 per issuer per tax ID maximum size for insurance. Sales prior to maturity subject to interest rate risk and liquidity risk.
MUNICIPAL TAX-EXEMPT	Tax exempt income with favorable long term credit standing.	The higher the tax bracket, the greater the tax benefit. The high credit quality is often viewed favorably.	Diversification can be attainable yet the liquidity is lesser versus other alternatives due to limited issue sizes. Subject to credit and interest rate risk.
MUNICIPAL TAXABLE	High quality, taxable alternative.	High credit quality alternative taxable investment. Investors in a lower tax bracket not benefitting from tax-exemption but still seeking the high quality and diversification offered by municipal bonds.	Diversification can be attainable yet the liquidity is lesser versus other alternatives due to limited issue sizes. Subject to credit and interest rate risk.
INVESTMENT GRADE CORPORATES	High quality, relatively good liquidity and competitive yields.	The breadth of the corporate market can allow for extensive diversification from credit ratings to multiple sectors. Generally liquid. Flexibility to create desired cash flow and income levels.	Wide range of issuers with various degrees of credit risk. Credit risks can fluctuate during holding period although this will not alter designated cash flow, income or redemption periods.
PREFERRED SECURITIES	Appeal to investors seeking higher yields and/or high cash flow	This may benefit the portfolio as a higher yielding component with more risk versus true fixed income alternatives.	Preferred's are subordinate to debt securities but placed ahead of common stock in the corporate structure. Being perpetual or very long dated exposes them to increased price volatility. Not a hold-to-maturity alternative.

FIXED INCOME STRATEGY RESOURCES

Doug Drabik - Sr. Fixed Income Strategist

Drew O'Neil - Fixed Income Strategist

Rob Tayloe - Fixed Income Strategist

Alejandro Becker – Jr. Fixed Income Strategist

Katherine White – Jr. Fixed Income Strategist

The Fixed Income Strategy Group provides market commentary, portfolio analysis, and strategy to Raymond James financial advisors for the benefit of their clients and prospects. We are part of the larger 14-person Fixed Income Solutions group within the Raymond James' Fixed Income Capital Markets Group's 38 fixed income locations with more than 480 fixed income professionals including trading and public finance specialists nationwide. This publication does not constitute Fixed Income research, but rather it represents commentary from a trading perspective.

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- [Weekly Bond Market Commentary](#)
- [Fixed Income Weekly Primer \(PDF\)](#)
- [Municipal Bond Investor Weekly \(PDF\)](#)
- [Weekly Interest Rate Monitor \(PDF\)](#)

Investment Types/Expertise Include

- Treasuries/Agencies
- Brokered CDs
- Corporate bonds
- MBS/CMOs
- Tax-exempt municipals
- Taxable municipal bonds
- Preferred securities

RAYMOND JAMES July 31, 2023

Bond Market Commentary

Fixed Income Solutions

Sometimes Performance is Enough



DREW O'NEIL
JPMorgan
Fixed Income Strategist

In the active-management world that most market commentary comes from, the focus is often on trying to do something to outperform the market. Through the lens of a portfolio manager, the "market" is typically whatever index they have chosen to benchmark themselves to. In the fixed income space, an attempt to outperform the market can be done by actively trading while doing things such as overweighting or underweighting specific sectors or products, extending or shortening duration, or just simply trying to time the market (buy low, sell high). These trades and portfolio positioning are done based on some prediction as to what is going to happen in the future. If their guesses are correct, maybe they outperform. If they're wrong, they underperform. If the market falls by 10% and your portfolio falls by just 8%, you "outperformed." For the total return portion of your portfolio, you might consider this a victory. For the principal protection portion of your portfolio, this is not likely what you had in mind.

Are these the games you want to play with the portion of your portfolio intended to protect your hard-earned principal? For many investors, the answer is "No." When it comes to the total return portion of your allocation, attempting to outperform might make sense. For the principal protection portion, simply "performing" might be enough. With a passive, buy-and-hold strategy in fixed income, yields are locked in from the day you purchase a bond until the day the bond is redeemed (barring a default and assuming you do not sell prior to redemption). Your portfolio will perform exactly as expected, regardless of what "the market" does. No outperformance, no underperformance, just performance.

Luckily, the current market is offering yields that are more attractive than at most points over the past 15 years. The returns that can be locked in right now are enticing enough that many investors are realizing that they might not need to reach for outperformance. The chart below shows a range of hypothetical portfolios to provide some context into the yields that can be locked in today. With investment-grade portfolios providing annual returns well north of 5%, risking underperformance while reaching for outperformance might not make sense for the portion of your portfolio intended to preserve principal.

		Portfolio Statistics				Credit Quality				
		Maturity Range	Avg. Maturity	Duration	Yield to Worst	1EY*	AAA	AA	A	BBB
Municipal Labels	1 to 5	3	2.76	3.04%	5.13%	15%	60%	20%	5%	
	3 to 10	5.5	4.81	2.90%	4.90%	15%	60%	20%	5%	
	1 to 15	8	6.66	2.99%	5.05%	15%	60%	20%	5%	
	5 to 10	7.5	6.32	2.77%	4.68%	15%	60%	20%	5%	
	5 to 15	10	8.02	2.95%	4.98%	15%	60%	20%	5%	
	5 to 20	12.5	9.55	3.15%	5.31%	15%	60%	20%	5%	
Corporate Labels	10 to 20	15	10.93	3.32%	5.60%	15%	60%	20%	5%	
	1 to 5	3	2.70	5.47%					25%	75%
	3 to 10	5.5	4.68	5.43%					25%	75%
	1 to 15	8	6.44	5.50%					25%	75%
	5 to 10	7.5	6.11	5.37%					25%	75%
5 to 15	10	7.68	5.48%					25%	75%	

*Source: Raymond James, Bloomberg, as of 7/27/23. 1EY is a measure of the total return (pre-tax net) of the portfolio plus the yield on the 10-year Treasury. Yields shown are illustrative only, calculated using the arithmetic average based on the maturity range combined with the credit quality percentages, and are not measures of asset credit.

A credit rating of a security is not a recommendation to buy, sell or hold the security and may be subject to review, revision, suspension, reduction or withdrawal at any time by the assigning Rating Agency. Ratings and insurance do not remove market risk since they do not guarantee the market value of the bond.

VIX Index: financial benchmark designed to be an up-to-the-minute index estimate of the expected volatility of the S&P 500 Index, and is calculated by using the midpoint of real-time S&P Index (SPX) option bid/ask quotes.

MOVE Index: this is a yield curve weighted index of the normalized implied volatility on 1-month Treasury options. It is the weighted average volatilities on the CT2, CT5, CT10 and CT30. (weighted average of 1m2y, 1m5y, 1m10y and 1m30y Treasury implied vols with weights 0.2/0.2/0.4/0.2, respectively).

S&P Index: is widely regarded as the best single gauge of large-cap U.S. equities and serves as the foundation for a wide range of investment products. The index includes 500 leading companies and captures approximately 80% coverage of available market capitalization.

U.S. Bloomberg Aggregate Bond Index (U.S. Corporate Investment Grade/LUACTRUU): Measures the investment grade, taxable corporate bond market. It includes USD denominated securities publicly issued by US and non-US industrial, utility and financial issuers.

Duration is the measure of a bond's price sensitivity relative to interest rate fluctuations.

Diversification and strategic asset allocation do not ensure a profit or protect against a loss. Investments are subject to market risk, including possible loss of principal. The process of rebalancing may carry tax consequences.

Rebalancing a non-retirement account could be a taxable event that may increase your tax liability.

Any opinions expressed are those of the author(s) and not necessarily those of Raymond James, and are subject to change without notice. Past performance is no assurance of future results.

U.S. Treasury securities are guaranteed by the U.S. government and, if held to maturity, generally offer a fixed rate of return and guaranteed principal value. Fixed-income securities (or "bonds") are exposed to various risks including but not limited to credit (risk of default or principal and interest payments), market and liquidity, interest rate, reinvestment, legislative (changes to the tax code), and call risks. There is an inverse relationship between interest rate movements and fixed income prices. Generally, when interest rates rise, fixed income prices fall and when interest rates fall, fixed income prices generally rise. Short-term bonds with maturities of three years or less will generally have lower yields than long term bonds which are more susceptible to interest rate risk. Credit risk includes the creditworthiness of the issuer or insurer, and possible prepayments of principal and interest. Bonds may receive credit ratings from a number of agencies however, Standard & Poor's ratings range from AAA to D, with any bond with a rating BBB or higher considered to be investment grade. Individual investor's results will vary. A credit rating of a security is not a recommendation to buy, sell or hold securities and may be subject to review, revisions, suspension, reduction or withdrawal at any time by the assigning rating agency.

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880 CARILLON PARKWAY // ST. PETERSBURG, FL 33716 // 800.248.8863 // RAYMONDJAMES.COM