Municipal Bond Premiums: Separating Fact from Fiction

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Understanding premium municipal bonds can be difficult for even the most seasoned investors. Munis are underwritten with a laundry list of complexities such as yield, maturity, call date, duration, and credit. The myth that investors lose the premium at maturity isn't only false, it may also lead to poor decision-making as focus shifts to avoiding premium municipal bonds altogether. Once investors can tell the difference between fact and fiction with regard to premium prices of municipal bonds, investors will be prepared to make decisions leading to better investment outcomes.

This paper aims to dispel common misconceptions about premium municipal bonds by explaining why most municipal issuance is underwritten with premium prices and how coupons factor into the relative value equation. We'll also discuss why yield to worst (YTW) is the primary factor to consider and the investor's option to preserve the premium paid on a municipal investment.

Key takeaways

- » The size of a bond's premium is not an indication of value.
- » YTW-not price-is the best determinant of value for municipal bonds.
- » Municipal bonds are issued with a premium guard against tax consequences of de minimis risk.
- » For educated investors, premium bonds can be an appropriate vehicle for building a municipal bond portfolio with a defensive structure.



Fact 1: The size of a bond's premium is not an indication of value

Despite the naming designation, premium bonds aren't an indicator of a bond being overvalued. The size of a bond's premium is directly related to the rate of the bond's coupon relative to the bond's YTW. In other words, the higher the fixed coupon rate is over the YTW, the bigger the premium price becomes. Figure 1 explains this by comparing two bonds and their associated cash flows.

In figure 1 each bond—one priced at par and one priced at a premium—matures in one year. Both bonds have a YTW of 3%, which measures how much annual return investors earn on their money. In other words, both the coupon and the premium must be considered to determine true income. Further, netting the coupon income against the amortized premium determines the true income—commonly referred to as the yield income—of a municipal bond.

Both scenarios assume the buyer receives \$100 par value back at maturity, and that both bonds provide a 3% return despite one bond having a premium price. Additionally, there's no loss on either bond, dispelling one of the most oft-repeated fictions about premium municipal bonds. The premium on bond 2 is amortized down and returned to the investor in the form of a higher coupon.

Fact 2: YTW—not price—is the best determinant of value for municipal bonds

The price of a premium bond is certainly relevant but only in the context of the bond's other characteristics, such as the coupon rate, call and put provisions, time to maturity, and YTW. It must also take other factors into consideration, such as credit quality and the availability of alternatives offering similar income potential.

Many investors have difficulty understanding the difference between coupon and yield. More specifically, they don't appreciate the difference between coupon and YTW. The coupon is a fixed annual rate a bond promises to pay. The yield reflects the true return an investor earns on their money. Fixed coupon rates don't change, but the lower the price the investor pays for a given bond, the higher its return or yield.

Premiums enter the picture because some bonds are created with higher fixed coupon rates. An investor pays more up front—in the form of a premium price—for a higher annual cash flow due to the higher coupon. However, when investors net the annual coupon income against the amortized premium, the net result is the yield income of the bond¹. This is the math behind municipal bonds, and it always holds true.

Bond 1 (Par bond)				
Yield	3%			\frown
Coupon	3%	Coupon income – \$3	Amortized	Yield
Initial cost	\$100		– premium \$0	= income \$3
Premium paid	\$0			
Bond 2 (Premium bond)				
Yield	3%			
Coupon	5%	Coupon	Amortized	Yield
Initial cost	\$102	income — p \$5	– premium \$2	= income \$3
Premium paid	\$2			
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FIGURE 1: LADDERED PORTFOLIO CAPTURING THE ROLL FROM TERM STRUCTURE OF INTEREST RATES

Source: Parametric. This chart is for illustrative purposes only. Results may not represent the experience of individual investors and should not be construed as tax or legal advice. An investor should consult a financial or tax professional concerning their specific situation before making any financial decisions. Any references to future returns should not be construed as an estimate of the results a client portfolio may achieve.

Yield, therefore, is the most meaningful metric of the value of a particular bond issue. YTW is the preferred yield calculation because it conservatively factors in the possibility of a bond issue potentially being called by the issuer. YTW also assumes any premium paid will be amortized down to zero by the call date.

The fact that investors receive 1099-INTs with only the coupon income can be misleading. Investors must determine the bond price amortization—which is often mistaken for lost premium—for the year and subtract it from the coupon income for their tax filings. We note that the bond amortization schedule is readily available from the custodian.

Fact 3:

Municipal bonds are issued with a premium guard against tax consequences of de minimis risk

It's important to understand that unlike other bonds, municipals are intentionally underwritten with premium prices. They're issued with premiums in the municipal market to guard against taxable events resulting from the IRS de minimis rule. This rule comes into play when market conditions—specifically rising interest rates and falling bond prices—cause a bond's price to fall to a discount, which is a price below par. If the amount of the discount to par exceeds a de minimis amount, the next holder of that bond will see a gain of the accretion back to par from the discounted price. This would be in addition to the income paid by the bond². That appreciation of value back to par may be taxed as ordinary income.

For example, take a 20-year bond with a final maturity issued at \$100 that was purchased in the secondary below \$95. Any realized increase in value—including by holding the bond to maturity—is subject to being taxed as ordinary income. This IRS rule, when combined with most municipal investors' desire to avoid paying taxes on their municipal bonds, creates a situation in which investors in the municipal bond market actually demand bonds be created with premiums. Bonds with premiums are accurately described as having coupon protection. According to Bloomberg, of the almost \$4 trillion outstanding in municipal bonds, 62% of bonds were issued with coupon rates of 4% of higher. An additional 12% had coupons between 3% and 4%, which may trade at premium prices depending on the current market environment. In addition, the publicly disclosed municipal trade history on the Municipal Securities Rulemaking Board website shows a considerable number of trades with prices of \$115 and higher. This demonstrates the prevalence of high-coupon, high-dollar-price bonds offering protection from IRS taxation on capital gains.

Fact 4:

An investor can preserve the premium paid on a bond by choosing to receive only the yield income instead of the full coupon income

As previously discussed, municipal bonds are intentionally issued at premium prices to guard against taxes. Also discussed was the true measure of return being the YTW instead of the coupon. A premium bond's coupon comprises both yield and premium, and it's important to realize that taking the full coupon as an income distribution means the investor is actually receiving some of their principal.

An investor wishing to preserve the premium paid can opt to take only the income corresponding to the yield instead of taking the full coupon. Doing so can preserve the original premium paid.

Consider a premium bond that has one year to maturity with a coupon of 5% and a yield of 3% purchased at a premium price of \$102. In the first case, the investor chooses to receive the full coupon income of 5% as a distribution (as shown in figure 2).

Alternatively, if the investor had instead chosen to take a distribution of only the yield income of 3%—which is the true yield income of the bond—the residual coupon income of 2% would have been preserved. The excess coupon income can be determined by subtracting the yield from the coupon. In this case a 5% coupon subtracted by a 3% yield results in a 2% excess coupon income. By taking only the yield income and reinvesting the residual coupon income, the investor preserves the premium originally paid.

Why we favor premium bonds

For educated investors, premium bonds can be an appropriate vehicle for building a municipal bond portfolio with a defensive structure. A premium bond with a higher coupon will likely outperform a par bond in a rising rate environment thanks to a lower duration or sensitivity to interest rates. YTW is important, but it's just one of the many factors to consider when purchasing premium bonds. Professional credit analysis and oversight are critical to achieving positive investment outcomes. In a market as vast as municipal bonds, experienced security selection factoring in all bond characteristics is also crucial. With all of these challenges, we believe individual investors may benefit from working with professional management to help make the most of their municipal bond investments.

FIGURE 2: HOW INVESTORS CAN PRESERVE PREMIUMS PAID ON PREMIUM MUNICIPAL BONDS

	Buying a premium bond			
	Premium paid	\$102		
	Yield	3%		
	Coupon	5%		
	Preserve the premium	Withdraw the premium		
	Withdraw yield income only	Withdraw coupon income		
Original investment	\$102 investment	\$102 investment		
Cash flows	\$100 at maturity + \$5 coupon	\$100 at maturity + \$5 coupon		
Return on investment	\$3	\$3		
Withdrawal	\$3 of yield income	Full \$5 cash flow		
Result	Original \$102 investment. The premium has been preserved because the investor chose to withdraw the yield income only—the true measure of return.	By withdrawing \$5, the investor takes their \$2 premium in the form of an annual income distribution.		
Summary	An investor preserves the premium paid by takin coupon income. The investor can preserve the p equates to the yield.	g only the yield income and reinvesting residual remium by withdrawing a dollar amount that		

Source: Parametric. This chart is for illustrative purposes only. Results may not represent the experience of individual investors and should not be construed as tax or legal advice. An investor should consult a financial or tax professional concerning their specific situation before making any financial decisions. Any references to future returns should not be construed as an estimate of the results a client portfolio may achieve.

Notes

- 1. Amortization is the amount a premium price is reduced each year. For example, a 10-year bond purchased with a \$10 premium at \$110 will amortize by \$1 per year. After one year the book value is \$109; after five years the book value is \$105. This is the accounting behind a bond purchased at a \$110 that eventually matures at \$100.
- 2. According to the IRS, a de minimis amount is calculated from the lower of par, or an accreted original issue discount equal to 0.25% times the number of full years to maturity is considered de minimis. Once the discount exceeds this threshold, all accretion is taxable as ordinary income.

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