Scarsdale Investment Group

The Unbeaten Path to Secure Investment Growth

Think Yield, Not Price with Premium Bonds

Hildy & Stan Richelson
September, 2017

Why Pay a Premium for Bonds?

If you could buy a coat for $100 or buy a similar coat for $135, why would you want to pay more if you did not have to? Common sense, right? Well, when it comes to bond investing logic is often turned on its head. Sometimes investors choose to pay more upfront for buying bonds, and we will explain why.

Generally speaking all bonds come due at their face value. So if you purchased a bond at par with a face value of $5,000 when the bonds mature you would get $5,000 back. Bonds for which you pay more than the face value have a special name. They are called premium bonds, and are priced such that you pay more than the face value or par for the bond at the time of purchase.

In the table below, you can see how bond prices adjust when coupons change to keep yields to maturity the same. This is a comparison of hypothetical bonds, created by Vanguard, with 15 years to maturity that does not represent the return on any particular investment.

Prices Adjust to the Coupon to Keep Yields the Same

Coupon (annual interest payment)	6%	4%	2%	0%
Market price as a percentage of face value	122.24	100	77.76	55.53
Yield to Maturity	4	4	4	4

Premium bonds are sometimes referred to as “kicker bonds.” The Municipal Securities Rule Making Board (MSRB) defines a kicker bond as a callable high coupon bond sold at a premium and priced to a specific call date. The actual yield realized by the investor increases or “kicks up” if that call is not exercised.

Premium bonds may be sold as a new issue or priced that way in the secondary market. Premium bonds may be good purchases.

Here is an example of a premium bond:

Aaa/AAA Bloomfield Township Michigan, taxable,

- 4.46% coupon, which establishes the cash flow for the life of the bond
- due date is 5/1/2026, the date the bonds terminate
- 2.75% yield to the call on 5/1/2023, if called at the option of the issuer at this date
- 3.2% yield to maturity of 5/1/2026
- Price 109 (1,090 per $1,000 bond).

Premium bonds can be subject to tax, appropriate for your retirement accounts, or tax-free for your individual, joint and trust accounts.

What might incentivize you to pay 109 ($1,090) for a bond that will pay 100 ($1,000) when the bond comes due or is called? You are paying an extra 9% per bond up front.

<u>Why Buy Premium Bonds?</u>

There are two principal reasons for buying premium bonds.

- You will receive a higher current cash flow than if you purchased a bond at par.
- You might get a higher yield-to-maturity (YTM) if the bonds are not called. If you believe that interest rates are low, and they might rise by the time the bonds are callable – in which case they might not be called – then you might want to opt for the premium bonds.

When you buy a premium bond, you are placing a bet that interest rates will increase by the first call date. If they do increase then your bonds may not be called and you may have the opportunity to hold them until maturity. In this case you would enjoy a higher long-term yield (the YTM) than you would have gotten on discount or par bonds. In addition, if rates are significantly higher at the first call date, you may not care if the bonds are called since you would be able to buy new higher yielding bonds at that time.

So why wouldn't everyone just want to buy premium bonds? In the bond business when you are buying a premium bond, the word "yield" refers to the first call date, rather than to the yield-to-maturity. When bond traders buy and sell bonds, they are always buying to sell and they always use yield-to-call (YTC) as the measure of "yield". However, when you buy a premium bond you get a lower YTC.

In the current bond market investors are buying a lot of premium bonds with 5 percent coupons. In this case, the YTC will be lower than bonds with a 4% coupon, for example, or with par or discount bonds with calls in the same year. Why then do bond buyers purchase bonds with high coupons if the YTC is lower than they might get on discount or par bonds? The answer is to get higher cash flow.

<u>The Search for Cash Flow</u>

Bond buyers who seek a higher cash flow are willing to pay a premium for several reasons:

- If interest rates rise, bond holders of premium bonds have a reinvestment advantage. They have more cash flow to reinvest at higher rates.
- If you were spending the cash flow, you might want more cash now when you are younger and had higher spending needs. You might also like the higher cash flow as a protective cushion even if you were not spending it.
- You might be willing to invest more money currently when buying premium bonds because you might like knowing that the cash is earning a higher current yield than might otherwise be possible. The cash is coming back to you at a relatively fast rate. The more money you pay for a bond above its face value, the higher the current yield. This is not however, a basis for comparing bonds to one another.
- Institutions like Exchange Traded Funds (ETFs), mutual funds and insurance companies like to be able to offer higher dividends which are supported in part from the cash flows from premium bonds.

If you don't want the higher current cash flow and fear that interest rate could as well decline as rise, you might want to hedge your bets by purchasing par and discount bonds which have a higher yield-to-call. After many years of study we really "know" that we don't know the direction of interest rates. Therefore we find it a good practice to buy some 3%, 4%, and 5% coupon bonds to hedge our bets and get balance.

At one time, we represented a bank and thus we had large buying power. In that case we were able to call the underwriter concerning a new issue, and tell the underwriter what coupon the bank wanted. This was possible if we bought the entire maturity year of a new issue. It was a very revealing exercise as to how bonds are priced. The underwriter just adjusted the price and yields to reflect the coupon. Bonds are bought on yield as reflected by the coupon, not on price. The price of a bond is a function of the coupon based upon the expected yield. The coupon will determine the price.

Here is an example of this principle from an issue priced on September 13th, 2017. The issuer, Onondaga County, New York, was seeking buyer feedback on the structure of the bonds they were issuing. All the bonds are priced off the 10-year Treasury bond on the date of sale. In the 2028 maturity, if you purchased bonds with a 5% coupon, you would get up to 2 basis points more than the 10-year Treasury. If the coupon was 4% instead, you might receive +7 to +9 basis points above the 10-year Treasury. However, the 3% coupon offered the most increase over the 10-year of +15 to +17 basis points.

Issuers Adjust the New Issue Yields Based on 10-Year Treasury Price

2028	5.00% coupon	on to +2 Basis points	4% coupon	+7 to +9 Basis points	3% coupon	+15 to +17 Basis points

Be aware that on premium bonds, although the current return (coupon/price) is high, you may lose part of the premium at the first call date – get the lower YTC call than the higher YTM. Why do you lose part of the premium? A piece of the premium is paid back with each interest payment. Since the call date comes before the maturity date there is less time for the full premium to be repaid. That is why the YTC is always lower than the YTM on premium bonds.

Premium bonds are not always better than par bonds if what you want to do is preserve your entire principal. If you spend all the interest payments, then you will wind up with less principal when the bond is called or comes due.

<u>Conclusion</u>

Finally, we cannot emphasize enough that bond investing is all about "cash flow" –our key to investing – not gains and losses. Most pre-retirees and retired clients – even those working with a financial advisor – do not have a written retirement income plan. Few seem to have value the concept of cash flow while protecting principal, this simple and powerful concept. However, if you want to minimize the possibility of running out of money, protect your portfolio principal and minimize taxes you need to understand how much cash flow you have and whether it is invested in the most tax-effective way. High quality taxable bonds and tax-free municipal bonds are intrinsic to your financial plan.