

Compounding advantages of zero coupon municipal bonds and zero coupon convertibles



Wealth Management

Introduction

Zero coupon municipal bonds are an innovative alternative debt structure which provides investors with an additional vehicle to meet their investment needs.

Retirement can bring about feelings of both excitement and concern: excitement for this next big step, but concern over having saved enough to enjoy a comfortable retirement. As a result, more and more investors have maxed-out their 401(k)s, IRAs, and other retirement accounts, and are looking for other tax-advantaged ways to save for retirement. There are many alternatives to consider, but few offer the security and value found with zero coupon municipal bonds.

What are tax-exempt zeros?

Tax-exempt zero coupon municipal bonds, or zeros, can be short, intermediate and long-term bonds which do not make periodic coupon interest payments, but rather make a single lump sum payment at maturity. Generally speaking, this lump sum payment is treated as tax-exempt interest and is equal to the principal invested plus the interest earned compounded semiannually at a stated yield. Zeros are sold at a deep discount from their face value with the investor receiving the full face amount of the bond at maturity. The interest earned is accrued over the life of the bond at the original

investment yield. It is the “interest on interest” feature, sometimes referred to as compounding, that investors benefit from the most. For example, an initial investment of \$5,000 in a 2.50% zero would produce a value of approximately \$8,200 in only 20 years.

Investment considerations

Call features

Although the majority of zeros are issued as non-callable, there are some zeros that can be called. If called, the investor will receive the accreted value (based on original issue discount) to the call date plus any applicable premium. Since the yield to maturity is based on interest compounding to maturity, much of the interest accrues near the maturity date. Therefore, the investor should evaluate the bond in terms of its compounded annual yield to both the call date and the maturity date.

Price volatility

Bonds selling at a discount are more responsive to changes in market interest rates, all other factors being equal, than bonds selling at or above par. Moreover, the deeper the discount, the greater the responsiveness or volatility of the bond’s price to changes in market interest rates. However, as a bond nears maturity, its price volatility is reduced.

The issuer

Since investors do not receive any payments prior to maturity, sale or early redemption, they should carefully consider the quality and credit rating of the issuer.

Advantages to the investor

Compounding tax-exempt interest

Generally, interest on the initial investment compounds semi-annually, and interest earnings are exempt from federal income taxation. In some states, the earnings are also free from state income taxation for residents of the state of issuance. There are no concerns about reinvesting periodic coupon interest payments as interest is paid at maturity.

Wealth management planning

For investors less interested in current income, zeros are an excellent way to accumulate funds. Since zeros are issued with varying maturities, some as long as 30 years, they are excellent vehicles to provide for a future funding need such as retirement planning, child education funding, or caring for and supporting an elderly parent. Investors can buy a specific bond to match a set date in the future or build a laddered portfolio if they are uncertain of their future cash flow needs.

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Zero coupon convertible bonds

Zero coupon convertibles are another zero coupon structure (could be taxable as well as tax exempt) that makes a great deal of sense. This type of bond is a combination of a zero coupon bond and a convertible bond. It is issued as a zero coupon bond that pays no interest until a specified date, when it converts to a coupon-paying bond with a specified term and coupon. Depending upon the issue, these bonds can be non-callable or callable at or after the conversion date.

Example

A bond with a stated maturity of 8/1/40 with a 0.0% coupon until 8/1/2025 at which point it converts to a bond paying a 4.675% semiannual coupon until maturity. From now until the 8/1/2025 conversion date, the bond pays no interest. The investor accrues interest at an issue or market yield. For example, say the price is 85 yielding a 4.25%. At the conversion date the investor's accrued par amount is fixed and they begin to receive the 4.675% coupon in semiannual payments until the stated maturity. The combination of the zero coupon and the convert to a fixed rate structure at some future date makes this type of bond very attractive to investors without current income needs, but know they will need income in the future. In this example the customer's bond was purchased at a premium to the original issue discount (OID), with no market discount, so there would be no federal tax consequences.

Sample bond		
Price	85	
Final maturity	8/1/2040	
Coupon schedule		
Rate	Start	End
0.0%	8/1/2020	8/1/2025
4%	2/1/2025*	8/1/2040
Yield	3.80%	
# of bonds	100	
Purchase price	\$85,000	
Redemption value	\$100,000	
Coupon payments over life of bond	\$64,000	
Total value**	\$164,000	

*Accrual date as of 2025

** Not including interest on interest

Tax consequences

Overview

Due to recent changes in tax laws, figuring the tax consequences of municipal zeros has become more complicated. The tax issues come into play for those purchasers who buy their securities in the secondary market at a discount from the original yield (OID) stated on the bond, and for those who sell their securities prior to maturity. In these cases, bondholders may find that a portion of their gains is taxed as either ordinary income, as capital gains, or a combination of both.

Discussion

When a tax-exempt zero is purchased at its original public offering price, it is referred to as original issue discount (OID). Tax-exempt zeros may also be purchased after their original issuance in the secondary market. If the tax-exempt zero is purchased in the secondary market at a price below or at a discount from the "adjusted issue price," this discount is referred to as market discount.

There are no federal income tax consequences for individuals who purchase a tax-exempt zero bonds at the original issue discount price or yield, or at a premium above the OID price or yield and hold it to maturity. However, if a tax-exempt zero is purchased with market discount, there will be tax consequences to consider. Upon disposition of the bond, either through sale or maturity, the gain or loss will equal the proceeds received less the adjusted basis in the tax-exempt zero. The bond's adjusted basis is equal to the purchase price plus the accreted total discount.

The character of the gain or loss recognized in a taxable sale or at maturity will depend on how and when the tax-exempt zero was purchased and whether or not it was purchased with market discount. If the tax-exempt zero was purchased with no market discount, then all of the gain would be considered interest (Federal tax free from the Fed, but possibly taxed by states depending on the investor's state of residence). If the tax-exempt zero was purchased with market discount and

was purchased on or before April 30, 1993, the entire gain will be capital and taxed at the maximum 15% capital gains tax rate. However, if the tax-exempt zero was purchased with market discount and was purchased after April 30, 1993, then the “gain” will be treated as ordinary income up to the extent of accreted market discount, reduced by the amount of the OID accrual and taxed at the taxpayer’s regular tax rate. Any remaining gain will be treated as a capital gain and taxed at the current maximum 15% capital gains tax rate. Any loss is treated as a capital loss.

For example, suppose Investor A buys a 20-year tax-exempt zero coupon bond at an original issue price of 50 sometime after April 30, 1993. After 10 years, assume the adjusted basis of the bond is 70 and Investor A sells the bond at 60. This customer would have a loss of 10 points. Investor B buys the bond in the secondary market at a price of 60. When the bond matures, Investor B must include as ordinary taxable income 10 points of gain (the adjusted basis of 70 at acquisition, less the purchase price of 60). The remaining gain of 30 points, attributable to the difference in the face amount (100) less the adjusted basis cost (70), is not taxed.

This is a very simple discussion of the potential tax consequences, which may arise from investing in zero coupon municipal bonds. Your tax advisor should be consulted for specific tax questions.



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Investing in municipal bonds involves risks such as interest rate risk, credit risk and market risk, including the possible loss of principal. Clients should contact their tax advisor regarding the suitability of tax-exempt investments in their portfolio. If sold prior to maturity, municipal securities are subject to gain/losses based on the level of interest rates, market conditions and the credit quality of the issuer. Income may be subject to the alternative minimum tax (AMT) and/or state and local taxes, based on state of residence. Income from municipal bonds could be declared taxable because of unfavorable changes in tax laws, adverse interpretations by the Internal Revenue Service or state tax authorities, or noncompliant conduct of a bond issuer.

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