MSRB

About Zero Coupon and Capital Appreciation Bonds

Overview

Zero coupon bonds ("zeros") and capital appreciation bonds (CABs) are types of municipal securities whose distinct characteristics may offer useful investment and funding options for investors and issuers, respectively. Zeros and CABs are types of "original issue discount" (OID) bonds that, when issued, are sold at a price less than their par amount. The difference between the sales price and the par amount is considered the original issue discount. While some OID bonds pay interest periodically, zeros and CABs typically pay interest only at maturity. Zeros and CABs generally offer longer terms than conventional bonds and are non-callable, allowing investors to gain more compounded interest over time and provide a way for municipal borrowers to defer debt service payments until maturity, thereby relieving annual debt service obligations. The bonds accrete in value at a stated yield as interest accrues, regardless of the current market rate. At maturity, investors receive an amount equal to the initial principal invested plus the interest earned, compounded at the stated yield.

Zeros and CABs provide useful investment and funding options.

What is the Difference Between Zeros and CABs?

Zeros are OID bonds on which no periodic interest payments are made and for which the values accrete at the rate represented by the offering yield at issuance to the full value at maturity. CABs are OID bonds on which the investment return on an initial principal amount is reinvested at a stated compounded rate until maturity. At maturity, the investor receives a single payment (the "maturity value") representing both the initial principal amount and the total investment return.

CABs typically are sold at a deeply discounted price, with maturity values in multiples of $5,000. CABs are distinct from zeros because the investment return is considered to be in the form of compounded interest rather than accreted original issue discount. For this reason, only the initial principal amount of a CAB would be counted against a municipal issuer's statutory debt limit, rather than the total par value, as in the case of a zero.

If a zero or CAB is sold prior to maturity, the purchase price will be calculated based on the original purchase price and the accreted value as of the sale date.

Considerations for Investors

Zeros and CABs may be attractive to investors who seek to minimize reinvestment risk because there are

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no interest payments to reinvest and the return is established at the date of purchase. Further, the absence of interest payments may result in higher comparable yields, which may make these bonds attractive to mutual funds and other investors seeking higher yields.

Zeros and CABs also may be attractive to investors seeking to achieve long-term financial goals, such as funding a child's college education. Because zeros and CABs are typically issued with long maturities and do not pay periodic interest during the term of the bonds, they may represent a lower-cost alternative to a conventional municipal bond of the same maturity. Zeros and CABs also may be preferable because they are non-callable, which eliminates the risk to the investor of an early call by the issuer of the bonds.

Like all municipal bonds, zeros and CABs have features and risks that should be carefully considered.

Investors who need or want to sell zeros or CABs before maturity should be aware that the accretion yield, which is locked in at the date of purchase, may cause the value of the bond to decline in a rising interest rate environment. Also, because these bonds do not pay periodic interest, they may be subject to greater secondary market volatility, with additional risk to the investor as the bonds may be illiquid at the specific point in time when the investor desires or needs to sell. Finally, as noted, there are no cash payments until maturity or earlier sale.

Another consideration for investors is that, in the event of a default and failure to pay by the issuer of a zero or CAB, the amount an investor may lose would include the accreted value portion of the bond, some amount of which the investor would have otherwise received prior to default if he or she had purchased bonds that paid periodic interest.

An investor should consider the overall impact of federal income tax on interest when investing in zeros or CABS and should consult his or her tax advisor for personalized guidance on the specifics of tax liabilities related to municipal securities.

Considerations for Issuers

Zeros and CABs may be attractive to issuers because the bonds defer debt service payments until maturity and, thereby, relieve pressure on an issuer's annual debt service budget. These bonds may also allow issuers to smooth out debt service payments in their annual budgets by issuing zeros or CABS structured or scheduled to mature in years in which other series of bonds do not mature, or in the years between the last serial bond and the start of mandatory term bond calls.[1] These bonds may be suitable for projects that are not expected to produce revenues for several years, beyond the period that capitalized interest[2] may be employed.

Due to compounded interest, zeros and CABs can be much more expensive for borrowers than traditional municipal bonds, as the associated debt balloons over time. Although relieving debt service pressure during the term of the

1 Issuers should consult with bond counsel prior to authorizing zeros or CABs to determine the appropriate amount needed for voter or issuer authorization under state law, and the treatment of the original principal and maturity values for state law statutory debt purposes and any volume cap requirements.

2 Capitalized interest is a portion of the proceeds of an issue that is set aside to pay interest on the securities for a specified period of time. Interest is commonly capitalized for the construction period of a revenue-producing project, and sometimes for a period thereafter, so that debt service expense does not begin until the project is expected to be operational and producing revenues.

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For issuers, zeros and CABs can provide budget flexibility but also potentially greater expense than traditional bonds.

bonds prior to maturity, debt service when the zeros and CABs mature must be budgeted for a larger amount than debt service payments associated with bonds that pay periodic interest. Zeros and CABs require long-term planning to ensure repayment at maturity, an effort that can be challenged by multiple years of low revenue collections and/or other pressures and priorities on the issuer's budget. Further, because zeros and CABs are non-callable, the issuer may lose some flexibility in refunding and/or restructuring its outstanding debt for purposes of managing its overall debt budget and portfolio.

To fund the amounts due at maturity with zeros and CABs, an issuer might consider establishing a sinking fund or reserve fund, setting aside periodic payments to accumulate over time to ease the burden when bonds reach maturity. This alternative should be considered with the advice of tax counsel as the reserve may be required to be yield-restricted. Issuers should consult with bond and tax counsel to ensure that the plan an issuer is contemplating does not affect the bond's tax exemption, have other adverse tax consequences or require rebate payments.

In addition, issuers should consider disclosures made in offering statements about the risks associated with investing in zeros or CABs. Particular attention should be paid to disclosure about the issuer's plan to redeem the bonds at maturity and the tax implications of owning the bonds, and buying and selling these bonds in the secondary market prior to maturity.

Both the risks and advantages of CABs should be considered when determining the best option for financing projects.