



Refundings and Redemption Provisions

Generally unique to municipal securities, a refunding is the process by which an issuer refinances outstanding bonds by issuing new bonds. This may serve either to reduce the issuer's interest costs or to remove a restrictive covenant imposed by the terms of the bonds being refinanced. Investors considering the purchase of refunding or refunded bonds should be aware of their characteristics and how they may affect the security for the bonds, their maturity date and pricing.

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What Is a Refunding?

A refunding is a means by which previously issued debt is retired or refinanced with an issue of bonds or other obligations whose proceeds are used to pay the principal, interest and any redemption premium for prior bonds. The bonds to be refunded are referred to as *prior bonds* or *refunded bonds*; the new bonds issued are referred to as the *refunding bonds*.

Many of the provisions applicable to a refunding are defined in the Internal Revenue Code and related regulations and rulings. The Internal Revenue Code is located at Title 26 of the United States Code (26 U.S.C.). The U.S. Treasury Regulations are located at the United States Code of Federal Regulations (26 C.F.R.). Other tax guidance published by the Internal Revenue Service, including revenue rulings, revenue procedures, notices, announcements and other resources, may be found at www.irs.gov.

The requirements of a refunding are governed in part by the terms of the instrument under which the prior bonds were issued, such as a trust indenture, a resolution or a bond ordinance. A refunding is generally accomplished by an issuer depositing the proceeds of the refunding bonds in an escrow fund (discussed below), typically with a trustee, and investing the proceeds in permitted investments. The proceeds and earnings are used to pay the principal, interest and any redemption premium on the refunded bonds when due.

What Is the Purpose of a Municipal Bond Refunding?

The type of refunding chosen by an issuer will depend in part on its objectives, its refunding policies and the terms of the relevant indenture, as well as the requirements and/or limitations of the tax code and applicable state law. A refunding may be used to reduce or restructure an issuer's debt service to achieve budget or policy objectives, such as recognizing savings in the earliest maturities or creating level debt service over some or all the maturities. Some refundings may be structured to shorten, maintain or

lengthen the maturity of an issuer's debt, or to redeem all or a portion of prior bond issues. Refundings may also be used to release certain funds held under an indenture, or to release or defease the lien of the indenture and thereby modify or eliminate outdated or ineffective covenants or other restrictions.

Tax code restrictions, state law, the issuer's refunding policies and the terms of the prior bonds' indenture may limit the type of refunding chosen by an issuer and the maturities that may be redeemed.

An important factor for many issuers is the present value (PV) savings to be realized by the refunding. The PV savings concept is important to issuers because the costs incurred in a refunding, such as legal, advisory, underwriting or bond insurance or letters of credit, may outweigh the savings obtained from the refunding. Some issuers have a minimum PV savings target that must be achieved before they may undertake a refunding.

The amount of PV savings is calculated by measuring the present value of the debt service due on the prior bonds before a refunding against the present value of the debt service due after the refunding has been completed.

Types of Refundings

There are two general types of refundings defined in the tax code: a current refunding and an advance refunding. In a **current refunding**, the proceeds of the refunding bonds are applied to pay the principal, interest and any redemption premium on the refunded bonds within 90 days of the date the refunding bonds are issued. In an **advance refunding**, the proceeds of the refunding bonds are applied to pay principal, interest and any redemption premium on the refunded bonds more than 90 days after the date the refunding bonds are issued.

Bonds may be advance refunded by several different methods depending on the objectives and policies of the issuer, state law and any tax code limitations. These methods include a high-to-low refunding, a forward refunding and a cross-over refunding.

In a **high-to-low refunding**, interest rates on the refunding bonds are lower than the rates on the refunded bonds. This option may be chosen to reduce or restructure an issuer's periodic debt service payments. In a low-to-high refunding, lower coupon bonds are refunded with higher coupon bonds. This option may be chosen for a variety of reasons, including restructuring debt service payments or amending or replacing the indenture governing the refunded bonds.

In a **forward refunding**, an issuer and an underwriter agree that the issuer will issue refunding bonds on a specified date in the future, and the underwriter will purchase those bonds on that date at a specified price. The proceeds of the refunding bonds will be applied on the specified future date to effect a current refunding of the prior bonds. This structure is typically considered when the prior bonds are not eligible for an advance refunding on a tax-exempt basis and the issuer wishes to lock-in current rates.

Another type of refunding is a **"cross-over" refunding**, in which the proceeds of refunding bonds are applied to pay interest on the refunding bonds until the prior bonds mature or are called for redemption. Until the maturity or redemption date, the prior bonds remain outstanding and debt service on the prior bonds continues to be paid from the sources of funds originally pledged for that purpose. On the applicable maturity and redemption dates, the remaining proceeds of the refunding bonds are applied to pay the principal, interest and any redemption premium due on the prior bonds. The funds originally pledged for the prior bonds then secure the refunding bonds.

Redemption Rights

A bond's redemption provisions, typically set forth in the indenture and in the bond instrument itself, allow or require an issuer to redeem, or call, all or a portion of an outstanding issue of bonds prior to the bonds' stated maturity. There are various types of redemption provisions investors should be aware of.

- **Optional.** An optional redemption provision allows the issuer to call all or a portion of outstanding bonds on or after a specified date at a specified redemption price plus interest to the redemption date. Call provisions of this type typically allow an issuer to call bonds at one or more dates that are usually 10 years or later after the date the bonds were issued.
- **Extraordinary.** An extraordinary redemption provision may permit or require the issuer to call all or a portion of outstanding bonds following an extraordinary event that affects the financed project (e.g., a change in use, a condemnation, etc.), or a determination that the interest on the bonds may become taxable, or an event or circumstance that affects an issuer's ability to repay the bonds. In some cases, this type of redemption is mandatory; in others, and depending on the severity of the event or circumstance, the redemption may be optional.
- **Mandatory.** This type of redemption provision requires an issuer to redeem all or a portion of outstanding bonds on and after specified dates at specified redemption prices. A sinking fund redemption is a type of mandatory redemption used to call or redeem portions of term bonds before their stated maturities, subject to a predetermined schedule, or otherwise when moneys are available.
- **Make-Whole.** A make-whole call provision allows an issuer to retire an outstanding issue of bonds following an event or circumstance that has required an earlier redemption, such as an extraordinary call. The make-whole amount is a lump sum payable to investors and calculated on a net present value basis to protect the investor from lost interest payments arising from the earlier call.

Defeasance

The requirements of a defeasance are usually governed by the terms of the indenture under which the refunded bonds were issued, and are subject to the tax code and state law. To undertake a defeasance, the indenture trustee (or an escrow agent) and the issuer typically enter a separate escrow or refunding agreement. This agreement usually includes the applicable redemption and maturity dates of the bonds to be refunded and other requirements of the indenture, such as the types of investments permitted for the escrow fund. The escrow agreement may also include any rights reserved by the issuer to exchange escrowed securities prior to maturity or to call "escrowed-to-maturity" bonds (see below) prior to maturity, and other related issues.

To secure the refunded bonds' debt service payments until those bonds mature or are called for redemption, the proceeds of the refunding bonds are deposited

in the escrow fund and invested until the proceeds and earnings on the investments are applied to pay debt service on the refunded bonds when due. Similar to a homeowner's mortgage payment schedule, the amount deposited in the escrow fund and the investments and expected earnings are calculated at the time the refunding bonds are issued to be sufficient to pay the amounts on the refunded bonds when due.

Types of Defeasances

When the specific requirements in the indenture for defeasing the bonds are met, the defeasance is referred to as a "legal defeasance." Thereafter, the refunded bonds, while outstanding for the purposes of paying principal, interest and any redemption premium when due, are not considered outstanding for purposes of calculating outstanding debt of an issuer. In an "economic defeasance," while funds are set aside to pay the debt service and any redemption premium on the prior bonds when due, the lien of the indenture is not released. In this case, the prior bonds, while paid from the escrowed securities, may be treated as outstanding debt of an issuer for certain purposes.

Escrow Fund and Investments

The types of investments permitted by an indenture to fund an escrow fund typically include obligations issued and backed by the full faith and credit of the United States government, and State and Local Government Series (SLGS) securities. SLGS are also issued by the U.S. government and sold by the Treasury Department to states, municipalities and other local governments.

Permitted investments other than SLGS may be purchased on the open market. Because the tax code restricts the yield that can be earned on the investments in the escrow fund, proceeds are typically invested in those vehicles that will result in the highest yield available and permitted. Frequently, SLGS are chosen because SLGS may be obtained with yields that allow issuers to comply with the tax code's yield requirements and more closely match the yield on the refunding bonds. Open market securities may not always be purchased at prices necessary to achieve the desired yield, and may result in negative arbitrage, or lost investment yield in the escrow fund. "Negative

arbitrage" in the escrow occurs when the yield on the investments purchased for the escrow fund is less than the yield permitted by the tax code.

The amount deposited in an escrow fund may be designed to achieve a "net funding" or a "gross" or "full cash" defeasance. In a "net funding" defeasance, the amount deposited in the escrow fund is calculated to be sufficient, together with the expected investment earnings, to pay the debt service and any redemption premium due on the refunded bonds when due. In a "gross defeasance" or a "full cash defeasance," the entire amount required to pay the principal, interest and any redemption premium on the refunded bonds when due, without considering investment earnings, is initially deposited in the escrow fund.

The sufficiency of amounts in an escrow fund may be calculated to one or more redemption dates, or to maturity. Bonds that are "escrowed-to-maturity" have sufficient funds deposited in the escrow fund, together with any permitted earnings, to pay the principal and interest on the bonds on the originally scheduled interest and maturity dates.

Yield Limitations and Rebate

The tax code governs the amounts that may be earned on the investment of tax-exempt bond proceeds. In certain accounts under the indenture, the earnings may not exceed the bond yield. In certain other accounts, the earnings may exceed the bond yield but are subject to rebate. If earnings are subject to rebate, the issuer is required to calculate the amount as prescribed by the tax code and to pay any rebate amount to the federal government at specified times while the bonds are outstanding.

Yield limitations also may affect proceeds of prior bonds that have not been spent at the time of the refunding. The tax code requires that these unspent proceeds, referred to as "transferred proceeds," be allocated, or "transferred," and treated as proceeds of the refunding issue. The transfer occurs over time, as the principal of the refunded bonds is paid. The proceeds and investments allocated to the transferred proceeds become subject to the yield restrictions and rebate requirements applicable to the refunding issue. A "transferred proceeds penalty" refers to the amount that may be subject to rebate (or payments in lieu of rebate) as a result of the allocation or transfer.

Key Considerations for Investors with Refunded Bonds

Investors should know how the refunded portion of a partially refunded bond issue has been identified. The refunded bonds should be identified by a separate nine-digit CUSIP number. This is particularly important as only the refunded portion is secured by the escrowed securities.

To find CUSIP numbers relating to the refunded and refunding issues, investors can go to EMMA's "Security Details" for a bond then click the "Related Securities" tab to find links to any new (or former) CUSIPs.

Investors should know whether any of the escrow securities may be called prior to maturity, thereby subjecting the escrow fund to reinvestment risk. Investors should also know whether and under what circumstances the escrow trustee may replace or substitute escrow securities. In many cases, this information may be obtained from a review of the escrow agreement. Generally, escrow agreements are available from the escrow trustee and can be found on the [MSRB's Electronic Municipal Market Access \(EMMA®\) website](#).

Escrow or refunding agreements, if filed, can be found on the EMMA website under the Continuing Disclosure/Advance Refunding tab on the security's details page.

While secured by escrowed securities, refunded bonds are subject to interest rate risk until they are retired.

Key Considerations for Investors Purchasing Refunding Bonds

Investors considering the purchase of refunding bonds should undertake the same risk and reward analysis as with any investment. An investor should consider the security provisions, redemption provisions, covenants — financial and otherwise — and events of default, among other features, applicable to the refunding bonds. Consult with a financial advisor and/or tax advisor to better understand all the implications and their impact on an investor's portfolio.