

TEB Phase III - Lesson 1

Refundings

Overview

Introduction

Lesson 8 of Phase I provided a basic overview of both current and advance refundings as a foundation for discussing the limits on advance refundings found in § 149(d). This lesson discusses refundings in more detail.

What is a Refunding Issue?

Regulations § 1.150-1(d)(1) defines a “refunding issue.” Under this definition, a refunding issue is an issue of obligations the proceeds of which are used to pay principal or redemption price of, or interest on, another issue of bonds (the refunded issue). The refunded issue may be an issue that was issued prior to, simultaneously with, or subsequent to, the issuance of the refunding issue.

Refundings are either “current” or “advance” refundings. Most rules applicable to refundings apply to both current and advance refundings. Application of the rules often is much more complex with advance refundings. A few rules found in § 149(d) only apply to advance refundings.

Organization of this Lesson

This lesson contains two parts. The first part generally deals with rules that apply to all refunding issues. For ease of presentation, these topics are usually discussed in the context of current refundings.

The second part deals with advance refundings. It applies many of the rules discussed in Part I in the context of advance refunding transactions. It also deals with the special rules that only apply to advance refundings. Finally, it discusses a particular type of nonpurpose investment that may be used in advance refunding escrow funds.

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Objectives

After completing this lesson, you will be able to:

- Identify a refunding issue and explain the exceptions to the general definition of a refunding issue
- Identify the difference between a current refunding and an advance refunding
- Measure private activity and private security for refunding bond issues
- Compute the proceeds, gross proceeds and excess gross proceeds of a refunding issue
- Define transferred proceeds and explain how the universal cap affects transferred proceeds of a refunding issue
- Apply the multipurpose allocation rules when allocating proceeds, costs, and bonds of a multipurpose issue
- Apply the mixed escrow rules
- Describe the various forms of advance refundings and the general rules of § 149(d) regarding advance refundings
- Describe abusive arbitrage devices and the rules designed to curb them
- Determine the effect of the TRA 1986 Transition rules on a refunding issue

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Part I: The Rules of Refundings

Overview

Statutory Provisions and Regulations

Part I of this lesson discusses various rules that are generally applicable to all refundings.

Regulations § 1.141-13 governs the private activity bond analysis for refunding issues.

Other provisions, such as §§146 and 147, may also apply to refundings.

Section 148 governs various arbitrage aspects of current and advance refundings. In addition to the general yield restriction rules, specific arbitrage rules applicable to refunding issues are in Regulations § 1.148-9.

The hedge bond rules found in § 149(g) have specific rules applicable to refunding bonds.

Definitions related to refundings are found in Regulations § 1.150-1(d).

In addition, whenever a bond is issued **after** August 15, 1986 to refund a bond issued **before** August 15, 1986, the transition rules of Section 1313(b) of the Tax Reform Act of 1986 (TRA 1986) need to be consulted.

As with the case of a new money issue (i.e. non-refunding bond), it is necessary to properly allocate gross proceeds of a refunding issue to expenditures and investments in order to determine whether the issue meets the requirements of §§ 103, 141-150. To do so, you must first identify the gross proceeds of the refunding issue.

Many of the general allocation and accounting rules under Regulations § 1.148-6, discussed in Lesson 6 of Phase I, apply to refunding issues. In addition, specific rules provided in Regulations § 1.148-9 apply only to refunding bonds.

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Section 1: Introduction

Overview

Introduction Regulations § 1.150-1(d) provides a definition of refunding issue and special rules applicable to refunding issues.

The transition rules of TRA 1986 provide requirements applicable to post-1985 bonds issued to refund pre-1986 bonds.

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Definition of Refunding Issue

What is a Refunding Issue?

Regulations § 1.150-1(d)(1) defines a “refunding issue” as an issue of obligations the proceeds of which are used to pay principal of, or interest or redemption price on, a “prior issue.” Proceeds of the refunding issue may be used for issuance costs, accrued interest, capitalized interest on the refunding issue, a reserve or replacement fund, or any similar costs that are properly allocable to that refunding issue.

Although the regulations use the term “prior issue,” a refunded issue may be an issue that is issued before, simultaneously with, or after the issuance of the refunding issue.

Additionally, a reissuance of a bond issue results in a refunding of the issue. Lesson 4 of Phase III discusses when a significant modification of a bond issue results in reissuance.

Example 1

City issues bonds in 2010 the proceeds of which are to be used to pay the principal of, and interest on, a bond issue issued by the City in 1999. The 2010 bond issue is a refunding issue and the 1999 bond issue is a refunded issue or the prior bonds.

Exceptions and Special Rules

Regulations § 1.150-1(d)(2) provides exceptions and special rules to the general definition of “refunding issue.”

The exceptions and special rules apply where the:

- Proceeds of the refunding issue are used to pay certain interest on a refunded issue
- Refunding issue and the refunded issue have different obligors
- Refunding occurs in connection with an integrated transaction involving asset acquisition
- Refunding involves affiliated persons
- Refunding occurs in connection with a purpose investment, or
- Substance of the transaction controls in determining whether an issue is a refunding issue in the absence of other controlling rules.

Each exception and special rule is discussed below.

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Definition of Refunding Issue, Continued

Payment of Certain Interest

Regulations § 1.150-1(d)(2)(i) provides that an issue is not a refunding issue if the only principal and interest that is paid with proceeds of the issue is interest on another issue that:

- Accrues on the other issue during a 1-year period including the issue date of the issue that finances the interest
 - Is a capital expenditure, or
 - Is a de minimis working capital expenditure (see Regulations § 1.148-6(d)(3)(ii)(A))
-

Example 2

City issues bonds in 2010, the proceeds of which are primarily used immediately to pay the 6 months of interest currently due on a bond issue issued by the City in 1997. The 2010 issue is not a refunding issue.

City issues bonds in 2010 the proceeds of which are used to pay only the accrued interest and the next 18 months of interest on bonds issued by the City in 2009 to finance a project with a 4-year construction period. Application of proceeds of the 2010 issue to pay the capitalized interest on the 2009 issue does not make the 2010 issue a refunding issue.

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Definition of Refunding Issue, Continued

Certain Issues with Different Obligor

Regulations § 1.150-1(d)(2)(ii)(A) provides that an issue is not a refunding issue to the extent that the obligor of one issue is neither the obligor of the other issue nor a related party with respect to the obligor of the other issue.

Example 3

City issues bonds in 2000 the proceeds of which are used to finance an office building used by the City. In 2010, the City sells the office building to County. County issues bonds to pay the purchase price of the office building. City uses the amount received from the County to pay the principal of, and interest on, the 2000 bonds. Under state law, City and County are not related parties. The obligor on the 2000 issue is the City and the obligor on the 2010 issue is the County. The 2010 issue is not a refunding issue.

Proposed Regulations

On April 10, 2002, the Service issued Proposed Regulations (REG 165706-01) amending portions of Regulations § 1.150-1(d). Under the Proposed Regulations, the determination whether the persons are related is generally made immediately before the issuance of the refinancing issue. Additionally, this section does not apply to any issue that is issued in connection with a transaction to which § 381(a) applies (carryovers in certain corporate acquisitions).

Definition of an Obligor

Generally, an obligor of an issue means the actual issuer of the issue. In a conduit financing issue, the obligor of the issue means the conduit borrower. However, where the bond issue is used to finance single-family mortgages, student loans, or similar program investments, the obligor is the issuer of the issue rather than the ultimate borrower of the proceeds of the issue (such as, the individual mortgagor or the student).

See Regulations § 1.150-1(d)(2)(ii)(B).

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Definition of Refunding Issue, Continued

Example 4 City issues bonds and loans the proceeds to Corporation to finance a hospital. Corporation makes payments to City under the loan agreement and City uses such payments to pay debt service on the bonds. Corporation is the obligor of the bonds for purposes of Regulations § 1.150-1(d)(2)(ii)(B).

Example 5 City issues bonds and loans the proceeds to a number of first-time homeowners to finance single-family homes. The homeowners make monthly mortgage payments that are aggregated and used by the City to pay debt service on the bonds. For purposes of Regulations § 1.150-1(d)(2)(ii)(B), the City rather than the homeowners, is the obligor of the bonds.

Pooled Financing In Revenue Rulings 2003-78 and 2003-29, and IRB 76, the governmental entity (Issuer) issues bonds (Bonds) to make loans to other governmental units to finance or refinance governmental projects of those units. The Issuer loans a portion of the proceeds of its Bonds to a separate governmental entity (Borrower) that uses the proceeds to redeem prior tax-exempt bonds (Prior Bonds) issued by the Borrower. Pursuant to Regulations § 1.150-1(d)(2)(ii)(B), the Borrower is an obligor of the Bonds. The portion of the Bonds allocable to the loan to the Borrower are advance refunding bonds within the meaning of § 149(d)(5) because a Bond shall be treated as issued to advance refund another bond if it is issued more than 90 days before the redemption of the refunded Bond. The Borrower may use the proceeds to redeem the Prior Bonds.

Note that Regulation § 1.150-1(d)(2)(ii)(B) further provides that the obligor of an issue used to finance qualified mortgage loans, qualified student loans, or similar program investments does not include the ultimate recipient of the loan (e.g., the homeowner, the student).

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Definition of Refunding Issue, Continued

Refunding of certain Conduit Financings

Whether a conduit refunding issue is a refunding of the conduit financing issue depends upon the actual use of the proceeds of the conduit refunding issue by the actual issuer of the conduit financing issue.

See Regulations § 1.150-1(d)(2)(iii)(A).

Example 6

State issued bonds in 2004 and loaned the proceeds to School District 1. The 2004 bond issue is a conduit financing issue. In 2010, County issues bonds and loans the proceeds to School District 1 to be used by the School District 1 to prepay its obligation to State with respect to the 2004 bonds. Upon receiving the prepayment, State uses the proceeds to pay the principal of, and interest on, the 2004 bond issue. The 2010 bond issue is a conduit refunding issue that refunded the 2004 bonds.

Example 7

Same facts as Example 6, except that upon receiving the prepayments from School District 1, State reasonably expects to loan the proceeds to School District 2 within 6 months of the prepayment. The 2010 bond issue is not a refunding issue.

See Regulations § 1.150-1(d)(2)(iii)(B).

Certain Integrated Transactions in Connection with Asset Acquisitions

Under Regulations § 1.150-1(d)(2)(v), if a person assumes an obligation of an unrelated party in connection with an asset acquisition and within 6 months before or after such assumption the assumed obligation is refinanced with proceeds of a bond issue, the bond issue is not considered a refunding issue. What are the consequences of this?

The bond issue will have financed the acquisition of the asset. Such acquisition might not qualify for tax-exempt financing, depending on the facts involved.

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Definition of Refunding Issue, Continued

Proposed Regulations

Proposed Regulations (REG 165706-01) proposes amendments to § 1.150-1(d)(2)(v) of the existing regulations consisting of examples of transactions involving affiliated persons and transactions involving reverse acquisitions. In general, the Proposed Regulations retain the change in obligor exception and the 6-month exception, with certain modifications.

Section 1.150-1(d)(2)(ii)(C) of the Proposed Regulations provides – **IF**

(i) a person assumes (including taking subject to) obligations of an unrelated party in connection with an acquisition transaction (other than a transaction to which § 381(a) applies), **AND**

(ii) within 6 months, before and after such assumption, the assumed issue is refinanced, **THEN** the refinancing issue is not a refunding issue.

The Proposed Regulations at § 1.150-1(d)(2)(ii)(C) state that the 6-month exception applies to *acquisition transactions*. An *acquisition transaction* is a transaction in which a person acquires from an unrelated party:

- (1) assets (other than an equity interest in an entity),
- (2) stock of a corporation and makes a valid § 338 election (certain stock purchases treated as asset acquisitions), or
- (3) control of a governmental unit or a 501(c)(3) organization through the acquisition of stock, membership interests or otherwise.

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Definition of Refunding Issue, Continued

Special Rule for Affiliated Persons

The Proposed Regulations clarify that the determination of whether persons are related for purposes of the change in obligor exception and the 6-month exception is generally made immediately before the transaction.

Section 1.150-1(d)(2)(ii)(D) of the Proposed Regulations provides that the “different obligor rule” and “integrated transaction rule” in subsections (A) and (C) thereof, does not apply where the transaction is between “affiliated persons” unless the:

- (i) Refinanced issue is redeemed on the earliest date on which it may be redeemed (or otherwise within 90 days after the date of issuance of the refinancing issue), and
- (ii) Refinanced issue is treated for all purposes of §§ 103, 141-150 as financing the assets that were financed with the refinanced issue.

Persons are “affiliated persons” if –

- (i) Anytime during the 6 months prior to the transaction, more than 5 percent of the voting power of the governing body of either person is in the aggregate vested in the other person and its directors, officers, owners, and employees, or
- (ii) During the 1-year period beginning 6 months prior to the transaction, the composition of the governing body of the acquiring person (or any person that controls the acquiring person) is modified or established to reflect (directly or indirectly) representation of the interests of the acquired person or the person from whom assets are acquired (or there is an agreement, understanding, or arrangement relating to such modification or establishment during that 1-year period).

Example 1 under § 1.150-1(d)(2)(v) of the Proposed Regulations illustrates the application of subsection (d)(2) of the Proposed Regulations.

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Definition of Refunding Issue, Continued

Reverse Acquisitions Rule

The Proposed Regulations state that a refinancing issue is a refunding issue if the obligor of the refinanced issue (or any person that is related to the obligor of the refinanced issue immediately before the transaction) has or obtains in the transaction, the right to appoint the majority of the members of the governing body of the obligor of the refinancing issue (or any person that controls the obligor of the refinancing issue).

This rule applies notwithstanding any other provisions in § 1.150-1(d)(2)(ii).

Example 2 under § 1.150-1(d)(2)(v) of the Proposed Regulations illustrates a reverse acquisition.

Effective Date of Proposed Regulations

Although the Proposed Regulations amending § 1.150-1(d)(2) are applicable to bonds sold on or after the date the final regulations are issued, the Proposed Regulations may be applied by an issuer, in whole, but not in part, to any bonds sold or after April 10, 2002.

Current Refundings and Advance Refundings

Current Refunding Defined

Regulations § 1.150-1(d)(3) provides that, except in certain cases of refunding bonds issued before 1986, a refunding issue that is issued not more than 90 days before the last expenditure of any proceeds of the refunding issue for the payment of principal or interest on the prior issue is a current refunding.

A refunding issue issued before 1986 is a current refunding if it was issued not more than 180 days before the last expenditure of any proceeds of the refunding issue for the payment of principal or interest on the prior issue. If the prior issue had a term of less than 3 years and was sold in anticipation of permanent financing, and the aggregate term of all prior issues sold in anticipation of permanent financing was less than 3 years, then a pre-1986 refunding issue was a current refunding issue regardless of how much time expired between its issuance and payment of the prior bonds.

Advance Refunding Defined

A refunding issue that is not a current refunding is an advance refunding.

Example 8

County A issues bonds in the amount of \$20,000,000 at 6 percent in 2003. The bonds are callable in 2013 and mature in 2033. The debt service on the bonds will be paid from revenues from the project. In 2010, County A has an improved credit rating and is able to issue bonds at 4.5 percent to refund the 2003 bonds. The proceeds of the refunding issue are deposited in an escrow fund and will be used to pay the debt service on the 2003 bonds until redeemed in 2013. Because the 2010 issue is issued more than 90 days before redemption of the 2003 issue, the 2010 issue is an advance refunding issue.

Other Important Definitions

Definitions Applying the various refunding rules, especially rules on allocations and the arbitrage, requires an understanding of gross proceeds, proceeds, and replacement proceeds.

Gross Proceeds The definitions of **gross proceeds** and **proceeds** in Regulations § 1.148-1(b) apply to refundings just as they apply to new money bonds. **Gross proceeds** are proceeds plus replacement proceeds of an issue.

Proceeds Generally, proceeds means any:

- Sale proceeds
- Investment proceeds
- Transferred proceeds

Replacement Proceeds Generally, replacement proceeds are amounts that have a direct nexus to the issue or to the governmental purpose of the issue, including the expected use of amounts for the payment of debt service on the issue on a particular date. Replacement proceeds may include:

- A sinking fund
- A pledged fund
- Other amounts available to the issuer

See Regulations § 1.148-1(c).

Transferred Proceeds Generally, transferred proceeds are amounts that were proceeds of the prior issue and that are allocated to be proceeds of the refunding issue in connection with payment of the prior bonds. Transferred proceeds will be discussed in more detail in the Allocations section later in this lesson.

Section 2: Private Activity Tests

Overview

Introduction

Regulations § 1.141-13 provides the rules for applying the private activity bond tests of § 141 to refunding issues. The regulation utilizes the “measurement period” concept found in Regulations § 1.141-3(g), but applies it across the measurement period of the refunding issue. For refundings of governmental bonds; however, use of a “combined measurement period” encompassing both the prior issue and the refunding issue may be required in certain situations.

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Applying the Private Activity Bond Tests

General Rule Regulations §§ 1.141-13(a) and -13(b) provide a general rule that, except as otherwise provided in that section, the prior issue and the refunding issue are tested separately under § 141 to determine the issue's status as a governmental bond or a private activity bond. Thus, the determination of whether a refunding issue is a private activity bond issue generally does not depend upon whether the prior bonds were private activity bonds.

Deemed Allocation of Use of Proceeds Regulations § 1.141-13(b)(1) provides that in applying the private business use test and the private loan financing test to a refunding issue, the proceeds of the refunding issue are allocated to the same expenditures and purpose investments as were the proceeds of the prior issue.

Example 1 City issues bonds in 2010 secured by its general taxing power. The proceeds of the bonds are used immediately to pay the outstanding principal of a prior issue of qualified mortgage revenue bonds. The 2010 issue is a private activity bond, since its proceeds will be deemed to have been used to make mortgage loans that satisfy the private loan financing test for the refunding bonds.

Note: Private payments are indirect payments by a nongovernmental person treated as using proceeds of the issue even if they are not a private business user. It does not satisfy private security, but it does satisfy the private payment test. This is irrelevant, though, because 1.141-13b applies private business use test and private loan financing test. The bonds satisfy the private loan financing test. *See 1.141-4c2i and -4c3i.*

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Applying the Private Activity Bond Tests, Continued

Measuring Private Business Use

Regulations § 1.141-13(b)(2)(i) provides the general rule for measuring private business use for a refunding issue. The general rule tests the amount of private business use of proceeds of the refunding issue over its own separate measurement period. Private business use occurring before the issue date of the refunding issue is not included.

Recall from the Governmental Bonds lesson in Phase 1 that Regulations § 1.141-3(g)(2)(i) provides that the measurement period for an issue of bonds begins on the later of the issue date or the date the financed project is placed in service. The measurement period for the bonds ends on the earlier of the last date of the reasonably expected economic life of the financed assets or the last maturity of bonds in the issue.

Example 2 – Refunding Taxable Bonds

In 1999, County issued taxable bonds to finance the construction of a facility for the furnishing of water. Revenues from the facility secure the bonds, and the facility is managed pursuant to a private management contract that results in private business use. In 2007, County terminated the management contract and takes over the operation of the facility. In 2009, County issues bonds to refund the 1999 bonds. On the issue date of the 2009 bonds, County reasonably expects that the facility will not be used for a private business use during the term of the 2009 bonds and takes no deliberate action during the term of the 2009 bonds that results in private business use.

The 2009 bonds do not satisfy the private business use test because the amount of private business use is based on the measurement period for those bonds and therefore does not take into account any private business use that occurred pursuant to the management contract.

Example 3 – Refunding Qualified Private Activity Bonds

The facts are the same as in Example 2, except that the 1999 bonds were issued as tax-exempt facility bonds under § 142(a)(4). The 2009 bonds do not satisfy the private business use test.

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Applying the Private Activity Bond Tests, Continued

Combined Measurement Period for Refunding Governmental Bonds and Qualified 501(c)(3) Bonds

Regulations § 1.141-13(b)(2)(ii)(A) provides that, for refundings of governmental bond issues (issues that have no private activity bonds) and qualified 501(c)(3) bond issues, the amount of private use is measured over a combined measurement period.

The combined period begins when the prior bonds' measurement period began. The combined measurement period ends at the end of the measurement period for the refunding bonds.

Regulations § 1.141-3(b)(2)(iv) provides that for purposes of this section, the term "governmental bond" means any bond that, when issued, purported to be a governmental bond, as defined in Regulations § 1.150-1(b) or a qualified 501(c)(3) bond, as defined in section 145(a).

Issuer's Election to Use Single Measurement Period

Regulations § 1.141-13(b)(2)(ii)(B) provides that the issuer may elect to measure private business use of a refunding issue over a measurement period consisting solely of the measurement period for the refunding issue. An issuer may make this election, however, only in instances where the prior issue would not satisfy the private business use tests when the prior issue's measurement period is shortened so that it ends on the issue date of the refunding bonds.

If the issuer makes this election, the private business use of the refunding issue will be measured over the period beginning on the issue date of the refunding bonds (assuming the refinanced project has been completed) and ending on the earlier of the end of the life of the project or the final maturity of the refunding bonds).

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Applying the Private Activity Bond Tests, Continued

Applying Private Payment and Security Test

Under Regulations § 1.141-4, private payment and private security is measured over the life of the issue. The present value of all private payments and fair market value of private security is compared to the present value of debt service on the issue, using the yield on the issue as the discount rate.

Regulations § 1.141-13(c)(1) provides that, if the private business use of a refunding issue is measured over its separate measurement period, then the private payments and security is measured in accordance with Regulations § 1.141-4, treating the refunding as a separate issue.

Therefore, this will be the method used for measuring private payments and private security for private activity bonds, other than qualified 501(c)(3) bonds, and for governmental bonds and qualified 501(c)(3) bonds for which the issuer properly makes the election to use a separate measurement period for private business use.

Calculation Over Combined Measurement Period

Regulations § 1.141-13(c)(2) provides that, if the private business use of a refunding issue is measured over the combined measurement period, then the private payments and security is measured in accordance with Regulations § 1.141-4, including all private payments and private security for the refunding issue and all earlier issues that are part of the combined measurement period. The present value of the private payments and private security is compared to the present value of all the debt service on the refunding issue and all those prior issues.

The discount rate to be used in the present value calculations is the yield on the combined issues. This is determined by finding the discount rate that will result in all payments on the refunding issue and all the prior issues equaling the issue price of the earliest issue that is included.

In the case of partial refundings, a ratable allocation of debt service and private payment and private security is to be made.

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Applying the Private Activity Bond Tests, Continued

Calculation for Arrangements Not Made in Contemplation of Refunding

In the case of refundings of governmental bonds and qualified 501(c)(3) bonds, Regulations § 1.141-13(c)(3) permits the issuer to use the yield on the prior issue to determine the present value of private payments and private security arising from arrangements not made in contemplation of the refunding.

In high-to-low refundings, this will decrease the present value of the private payment and security.

Any arrangement entered into more than a year prior to the issue date of the refunding is treated as not entered into in contemplation of the refunding.

Examples in the Regulations

Regulations § 1.141-13(g), Examples 1, 2 and 3, provide good illustrations of the measurement of private use and private payments and private security under the refunding rules.

Allocations and Special Situations

Multipurpose Issue Allocations

Regulations § 1.141-13(d) provides that, for purposes of § 141, Regulations 1.148-9(h) applies to allocations of multi-purpose issues, including allocations involving the refunding purposes of the issue. Allocations under Regulations § 1.148-9(h) are discussed in detail in the Allocations section of this lesson.

Allocations under Regulations § 1.141-13(d) are not permitted for purposes of compliance with §§ 141(c)(1) (private loan financing test) and 141(d)(1) (nongovernmental output property). Each of these sections uses a “lesser of 5 percent of proceeds or \$5,000,000” test to determine applicability. Splitting issues would enable an issuer to avoid the \$5,000,000 trigger.

A permitted allocation may be made at any time. However, once made, an allocation cannot be changed.

The issue to be allocated, and each “separate” issue resulting from the allocation, must qualify as tax-exempt obligations. An allocation is not reasonable (and therefore not permitted), if it achieves more favorable results than would have resulted from actual separate bond issues.

Allocations made for § 141 (private activity tests) purposes must be consistent with allocations made for § 148 (arbitrage) purposes.

Example 4

In 2017, State issued bonds to finance the construction of two office buildings. State expended an equal amount of the proceeds on each building. State entered into arrangements resulting in private business use of 8 percent of building 1 and 12 percent of building 2 during the measurement period under Regulations § 1.141-3(g), and private payments of 4 percent of the 2017 bonds in respect of Building 1 and 6 percent of the 2017 bonds in respect of Building 2. These arrangements result in 10 percent of the proceeds of the 2017 bonds being used for a private business use and total private payments of 10 percent. In 2022, State purports to make a multipurpose issue allocation under Regulations § 1.141-13(d) of the outstanding 2017 bonds, allocating the issue into two separate issues of equal amounts, with one issue allocable to Building 1 and the second allocable to Building 2. State's allocation is unreasonable because, if permitted, it would allow more favorable results under § 141 for the 2017 bonds (that is, private business use and private payments that exceed 10 percent for the 2017 bonds allocable to Building 2) than could be achieved with actual separate issues. **Note:** Please see example 5 under 1.141-13g.

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Allocations and Special Situations, Continued

Special Rules – Non-deliberate Actions Prior to Refunding

Regulations § 1.141-13(e) provides that an action that would otherwise cause a refunding issue to satisfy the private business tests or the private loan financing test is not taken into account under the reasonable expectations test of § 1.141-2(d) if (1) the action is not a deliberate action within the meaning of § 1.141-2(d)(3), and (2) the weighted average maturity of the refunding bonds is not greater than the remaining weighted average maturity of the prior bonds.

Example 5

In 1998, City issues bonds to finance the purchase of land and construction of a building (the prior bonds). On the issue date, City reasonably expects that it will be the sole user of the financed property for the entire term of the bonds. In 2003, the federal government acquires the financed property in a condemnation action. In 2006, City issues bonds to refund the prior bonds. The weighted average maturity of the refunding bonds is not greater than the weighted average reasonably expected economic life of the property financed by the prior bonds.

In general, under Regulations §§ 1.141-2(d) and 1.141-13, reasonable expectations must be separately tested on the issue date of a refunding issue. However, under Regulations § 1.141-13(e), the condemnation action is not taken into account in applying the reasonable expectations test to the refunding bonds, because the condemnation action is not a deliberate action within the meaning of § 1.141-2(d)(3) and was not within the control of the issuer. Thus, the condemnation action does not cause the refunding bonds to be private activity bonds.

Special Rules – General Obligation Issues That Finance Large Number of Projects

Pursuant to Regulations § 1.141-13(f), if the prior issue met the requirements of Regulations § 1.141-2(d)(5), the refunding issue will not be a private activity bond notwithstanding any provision of Regulations § 1.141-13. Regulations § 1.141-2(d)(5) provides that if seven conditions are met, an issue may rely on reasonable expectations on the issuance date of general obligation bonds that finance a large number of separate purposes. In other words, subsequent actions are not taken into account for determining satisfaction of the private use tests.

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Allocations and Special Situations, Continued

Effective Date In general, Regulations § 1.141-13 applies to refunding bonds that are sold on or after February 17, 2006 and are subject to the 1997 private activity bond test regulations.

Transition Rule Regulations § 1.141-13 provides a special transition rule for refundings of bonds originally issued before the May 16, 1997. For these refundings, at its option, the issuer may treat the combined measurement period as beginning on the earlier of December 19, 2005 or the date the prior bonds became subject to the 1997 private activity bond regulations. This is the “transition date.”

If the issuer applies the transition rule, the transition date is treated as the issue date for the earliest issue of the prior bonds, and the issue price of those bonds is treated as being the value (under Regulations § 1.148-4(e) of the bonds on that date. Any private payments and private security before the transition date is disregarded.

TRA 1986 Transition Rules

Introduction

Transition rules are particularly important in the tax-exempt bond area. Most new legislation and regulations apply to bonds issued after specified effective dates. New tax-exempt legislation often results in stricter rules. Accordingly, determining when refunding issues are “grandfathered” from new stricter rules is a very common and very important issue.

In general, most of the major tax-exempt bond acts since 1980 have contained detailed transition rules. Perhaps the most important transition rules are contained in sections 1312 and 1313 of TRA 1986. These sections generally permit refundings to be grandfathered from new use rules, but **NOT** from new arbitrage rules.

Many different sets of regulations also have been issued over the years. The effective date and transition rule question arises for new regulations as well as new legislation.

While the transition rules apply for many purposes, a primary purpose is to permit the refunding of bonds that were not “industrial development bonds” (pre-1986 name for concept of private activity bonds) under the 1954 Code, but if issued after the effective date of the 1986 Code, would satisfy the private activity tests.

Current Refundings

Section 1313(a) of the TRA 1986 generally provides that §§ 103 and 141-150 (with certain exceptions) shall not apply to any bond the proceeds of which are used exclusively to current refund a bond issued (or which was issued to refund a bond issued) before August 16, 1986 if requirements set forth in that section are met.

Section 1313(c) provides requirements applicable to exempt bonds issued to current refund certain industrial development bonds from the \$40,000,000 limitation under § 144(a) and qualified 501(c)(3) bonds from the \$150,000,000 limitation under § 145(b).

Continued on next page

TRA 1986 Transition Rules, Continued

Advance Refundings

Section 1313(b) of the TRA 1986 generally provides that §§ 103 and 141-150 (with certain exceptions) shall not apply to any bond the proceeds of which are used exclusively to advance refund a bond issued (or which was issued to refund a bond issued) before August 16, 1986 if the requirements set forth in that section are met.

Special Rules for Certain Bonds Issued After August 15, 1986

Section 1312(b)(4) of TRA 1986 provides the following adjustments for certain advance refundings of qualified 501(c)(3) bonds that occur before September 1, 1986:

- Sections 147(f) and (g) do not apply
 - Section 150(b) does not apply
 - The refunding bonds will not be private activity bonds for purposes of applying §§ 148 and 149(e).
-

Volume Cap

Section 1313(b)(5) of TRA 1986 provides that certain advance refunding bonds that are otherwise transitioned, but are related to output facilities, may be subject to volume cap. Application of the volume cap requirements of § 146 is discussed in the next section.

Section 3: Other Private Activity Bond Rules

Overview

Introduction

As discussed in section 2, the rules of Regulations § 1.141-13 generally apply the private activity tests separately to the refunding issue. Generally, however, if the use of a facility has not changed, a refunding of private activity bonds will result in the refunding bonds also satisfying the private activity bond tests. Therefore, the requirements of §§ 146 and 147, which generally apply to all private activity bonds, must be considered.

Section 146(i) provides the application of volume cap rules to refunding issues. Section 146(m) may apply in certain cases.

Section 147 generally applies only to private activity bonds. Therefore, its rules usually need be considered only in current refundings of those bonds. Certain provisions apply to advance refundings for qualified 501(c)(3) bonds.

Pursuant to § 149(d)(2), refunding bonds issued to advance refund private activity bonds (other than qualified 501(c)(3) bonds) are not tax-exempt. This rule is discussed in detail in section 7 of Part II of this lesson.

In this Section

This section contains the following topics:

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Applicability of § 147 Rules	32
Other Refunding Situations	34

Applicability of § 146 – Volume Cap

General Rule Section 146(i)(1) provides that a bond issued to refund another bond is not considered a “private activity bond” for purposes of § 146 to the extent that the amount of the refunding bond does not exceed the outstanding amount of the refunded bond.

In other words, generally, the volume cap rules do not apply to a refunding bond that meets the above requirements.

Example 1 On August 1, 2009, City has \$10,000,000 principal amount of outstanding bonds, which it issued in 1999 to a finance multi-family housing facility owned by Partnership. On August 1, 2009, City issues \$10,000,000 principal amount of bonds to current refund the 1999 bond issue. City does not need volume cap in connection with the issuance of the 1999 bond issue.

Student Loan Bonds Section 146(i)(2) provides that a bond issued to refund a qualified student loan bond does not need volume cap if the maturity date of the refunding bond is not later than the later of the:

- (i) Average maturity date of the refunded bonds, or
- (ii) Date 17 years after the date on which the refunded bond was issued (or in the case of a series of refundings, the date on which the original bond was issued)

Average maturity is determined in accordance with § 147(b)(2)(A). Note that student loan bonds are private activity bonds and can only be current refunded and the amount of the refunding bond may not exceed the amount of the refunded bond.

Continued on next page

Applicability of § 146 – Volume Cap, Continued

Single Family Bonds

Section 146(i)(3) provides that a bond issued to refund a qualified mortgage bond does not need volume cap only if the maturity date of the refunding bond is not later than the later of the:

- (i) Average maturity date of the refunded bond, or
- (ii) Date 32 years after the date on which the refunded bond was issued (or in the case of a series of refundings, the date on which the original bond was issued)

Average maturity is determined in accordance with § 147(b)(2)(A). Note that single-family bonds are private activity bonds and can only be current refunded and the amount of the refunding bond may not exceed the amount of the refunded bond.

Advance Refunding Bonds

The above-described rules exempting current refundings from needing volume cap does not apply to advance refunding bonds. *See § 146(i)(5)*. As discussed below, a portion of the refunding bonds issued to advance refund bonds that meet the requirements of § 141(b)(5) may require volume cap.

Recall from Lesson 4 of Phase I that § 141(b)(5) provides that the issuer of a governmental bond must obtain volume cap for any nonqualified amounts that exceed \$15,000,000 but are less than the amount that would cause the issue to meet the private business test.

Section 146(m)(2) applies to an advance refunding of a bond issue that meets the requirements of § 141(b)(5). Under § 146(m)(2), bonds issued to advance refund such governmental bonds are subject to volume cap to the extent of any private use of the refunding bonds that exceeds \$15,000,000. Generally, the portion of the proceeds of the refunding bonds attributable to private use is determined at the time the refunded bonds are issued. However, if there is a change in facts or circumstances, not originally anticipated at the time of the original issuance, which alters the percentage of private use of the underlying facility, the percentage of private use of the refunding bonds is to take into account in the change in circumstances.

Continued on next page

Applicability of § 146 – Volume Cap, Continued

Example 2 City issues \$250,000,000 of bonds in 2006 to finance a convention center. On the date of issue it was determined that the private use portion of the convention center will be \$20,000,000. Under § 141(b)(5), City obtained volume cap in the amount of \$5,000,000. In 2009, City advance refunds the entire outstanding principal amount of the 2006 bond issue. City should obtain volume cap in the amount of \$5,000,000 in connection with the issuance of the refunding bonds.

Example 3 City issues \$250,000,000 of bonds in 2006 to finance a convention center. City intends to use all of the facility for its purposes without any private business use and thus no volume cap is necessary on the date of issuance of the 2006 bond issue. In 2009, City contracts with a management company to manage the parking facility in the convention center and such contract results in private business use of \$20,000,000 of the proceeds of the 2006 issue. In 2010, City advance refunds the entire outstanding principal amount of the 2006 bond issue. City should obtain volume cap in the amount of \$5,000,000 in connection with the issuance of the refunding bonds.

Example 4 In 2006, City issues \$300,000,000 principal amount of bonds to finance a convention center. On the date of issue, City expects that \$30,000,000 of the proceeds will be used in private business use and obtains volume cap in the amount of \$15,000,000. In 2009, City advance refunds \$200,000,000 of the outstanding 2006 bond issue. City must obtain volume cap in the amount of \$5,000,000 on the date of the refunding. This is because 10 percent of the refunding issue (same portion as the refunded bonds) is treated as attributable to private use for purposes of determining whether an allocation of the issuer's private activity bond volume limitation is required.

Applicability of § 147 Rules

In General Private activity bonds will not be qualified bonds unless they comply with the provisions of § 147. The rules of that section need to be considered for refunding bonds that are private activity bonds.

Limitation on Maturity Section 147(b) limits the permitted maturity of bonds financing a facility. The average weighted maturity of the bonds may not be greater than 120 percent of the average reasonable expected economic life of the facilities financed.

Under the 1954 Code, § 103(b)(14) contained a rule similar to that of § 147(b). The Joint Committee on Taxation Staff Explanation of the Tax Equity and Fiscal Responsibility Act (TEFRA) explains that in applying the maturity limitations of § 103(b)(14) to refunding issues, “[t]he maturity of the refunding obligations cannot be later than the maximum maturity date of the refunded obligations.” See pages 106 and 107 of the *General Explanation of the Revenue Provisions* of the TEFRA of 1982.

Treasury has taken the position that determination of the reasonably expected economic life of the financed assets is to be made at the time the assets are placed in service, and not at a later date when the assets may be refinanced.

Public Hearing and Approval Private activity bonds must be approved by an elected official after a public hearing. Section 147(f)(2)(D) provides that no approval is required for bonds refunding a prior issue that was approved in accordance with the approval requirement unless the average maturity date of the refunding bond issue is later than the average maturity date of the prior bond issue. Legislative history for the provision makes clear that the amount of refunding bonds issued may not exceed the amount of the prior bonds.

However, the refunding exception does not apply to advance refundings. Qualified 501(c)(3) bonds may be advance refunded and must comply with § 147(f).

Continued on next page

Applicability of § 147 Rules, continued

Costs of Issuance

Section 147(g) limits the amount of proceeds of an issue of private activity bonds that may be applied to paying costs of issuing the bonds to 2 percent of the proceeds. As discussed later in this lesson, gross proceeds of the prior bonds often still exist at the time the refunding bonds are issued. The General Explanation of the Tax Reform Act of 1986 contains a footnote (159) stating that the two percent limit may not be avoided by using unexpended proceeds of the prior issue to pay costs of issuance.

Other Refunding Situations

Alternative Minimum Tax

Section 57(a)(5)(C) describes the specified private activity bonds that bear interest included as an item of tax preference for purposes of determining alternative minimum tax liability.

Refunding bonds that refund prior bonds (in a series of refundings, the original bonds) issued before August 8, 1986 are excluded from items of tax preference. In a series of refundings, the issue date of the original bonds is the relevant date.

Pursuant to the American Recovery and Reinvestment Act of 2009, any bond issued after December 31, 2008, and before January 1, 2011, is excluded from items of tax preference, including refunding bonds that refund prior bonds issued after December 31, 2003, and before January 1, 2009.

The exclusion from items of tax preference for interest on certain types of housing bonds issued after July 30, 2008, does not apply to refunding bonds unless the refunded bonds (or in the case of a series of refundings, the original bonds) were described in such exclusion.

Qualified Tax Exempt Obligations Under § 265(b)

In designating “bank qualified” bonds pursuant to § 265(b)(3)(C)(ii)(II), a qualified small issuer need not count toward its \$10 million annual limit on bonds issued any current refunding bonds to the extent such refunding bonds do not exceed the principal amount of the prior bonds, regardless of whether such prior bonds were bank qualified.

Additionally, if such refunding bonds had been previously designated as bank qualified bonds, the refunding bonds will be deemed designated as bank qualified if certain maturity limits are met, regardless of whether the issuer qualifies as a qualified small issuer that year. To be deemed designated, the refunding bonds must have a maturity date not later than 30 years after the original designated bonds, and the refunding bond issue must have an average maturity date not later than the prior bonds.

See § 265(b)(3)(D)(ii).

Continued on next page

Other Refunding Situations, continued

Current Refundings-

Notice 2003-40 (2003-27 I.R.B. 10) and [Notice 2012-3](#) (2012-3 I.R.B. 289) provide guidance on certain current refunding issues (as defined in Treas. Reg. §1.150-1(d)(3)). The notices apply to current refunding issues that are used to refund original tax-exempt bonds that met the qualification requirements for one of the following programs:

- Notice 2003-40 covers qualified New York Liberty Bonds under section 1400L of the Internal Revenue Code
- Notice 2012-3 covers:
 - (1) Qualified Gulf Opportunity Zone Bonds under section 1400N of the IRC
 - (2) Qualified “Midwestern Disaster Area Bonds as defined in the notice
 - (3) Qualified Hurricane Ike disaster area bonds as defined in the notice

The guidance allows that if a current refunding issue meets the requirements set forth in the applicable notice, then the current refunding bonds may be issued after the specified deadline for the issuance of the original qualified bonds.

Section 4: Yield Restriction

Overview

Introduction

The proceeds of both the prior and the refunding issues are subject to the yield restriction rules. However, since there are actually two separate issues involved, and each issue has its own proceeds, care must be taken when applying the yield restriction rules.

To apply the yield restriction rules properly, the first step is to determine the character of the proceeds (i.e., sale, investment, transferred, or replacement.) Then, the proceeds are allocated to the appropriate issue. Then, and only then, can the yield restriction rules be applied. This is why differentiating between proceeds and gross proceeds is so important.

Review of Yield Restriction and Rebate

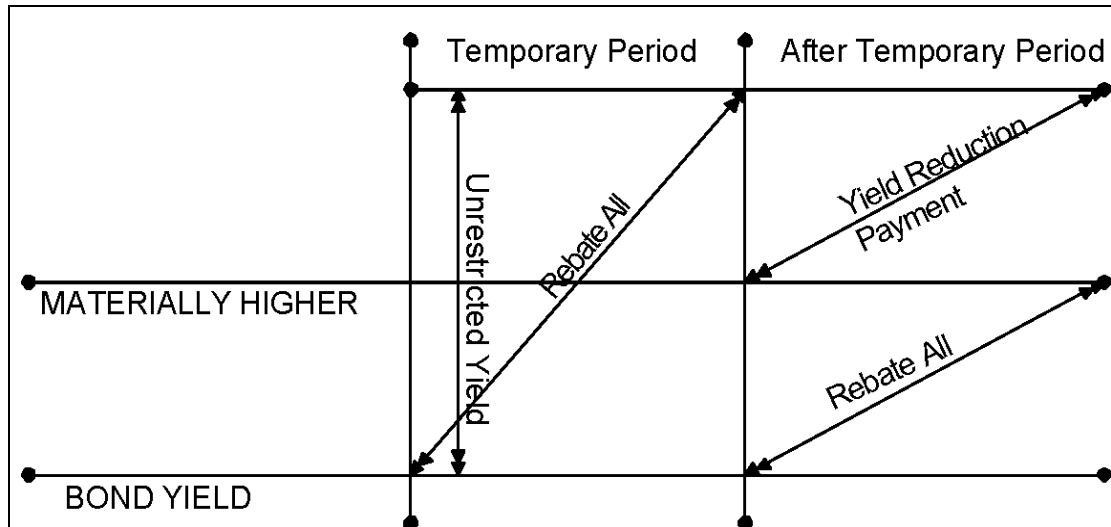
Remember that the yield restriction rules are separate from the rebate rules. Permitted earnings above the bond yield but not exceeding “materially higher” are still required to be rebated to the US government. Additionally, rebate cannot cure a yield restriction violation. However, noncompliance with the yield restriction rules can be corrected with a yield reduction payment in certain instances.

Figure 3-1 illustrates the overlap of the yield restriction and rebate rules in the context of proceeds in a construction fund.

Continued on next page

Overview, Continued

Figure 3-1: Yield Restriction and Rebate



Overview, Continued

In this Section This section contains the following topics:

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Initial Temporary Periods	39
Definition of “Materially Higher”	42
Yield Blending in the Computation of Yield on Investments	44
Yield Reduction Payments	50

Initial Temporary Periods

Introduction

The general temporary periods set forth in Regulations § 1.148-2(e) do NOT apply to refunding issues, except by special reference. Instead, Regulations § 1.148-9(d)(1) provides that investment of proceeds of refunding issues is permitted only during the temporary periods described in Regulations § 1.148-9(d)(2).

Additionally, § 149(d)(3)(A)(iv) provides that, with respect to advance refundings:

- Proceeds of a refunding issue are permitted an initial temporary period of 30 days after issuance, **AND**
- The initial temporary period of any remaining proceeds of the refunded bond ends on the issuance date of the refunding bonds.

Regulations § 1.149(d)-(1)(d)(3) provides that the rules in Regulations § 1.148-9(d) apply to advance refunding issues.

Temporary Periods for Refundings

If a different temporary period is not found in Regulations § 1.148-9(d)(2), then the general temporary period applies to the proceeds of a refunding issue (other than transferred proceeds). The general temporary period applicable for a refunding issue is the period ending 30 days after the date of issuance.

Regulation § 1.148-9(d)(2)(ii) provides a general temporary period for current refunding issues. Generally, the temporary period for proceeds (other than transferred proceeds) of a current refunding issue is 90 days. However, for a current refunding issue that has an original term to maturity of 270 days or less, the temporary period for proceeds (other than transferred proceeds) may not exceed 30 days. Furthermore, the aggregate temporary periods for proceeds (other than transferred proceeds) of all current refunding issues described in the preceding sentence that are part of the same series of refundings is 90 days.

Continued on next page

Initial Temporary Periods, Continued

Temporary Periods for Refundings, (continued)

Regulations § 1.148-9(d)(2)(iii) provides that except for advance refundings, each available temporary period for transferred proceeds of a refunding issue begins on the date those amounts become transferred proceeds of the refunding issue and ends on the date that, without regard to the discharge of the prior issue, the available temporary period for those proceeds would have ended had those proceeds remained proceeds of the prior issue. In other words, the original term of the temporary period continues to apply.

The rules on determining when prior issue proceeds become transferred proceeds are covered in section 7 of this lesson.

As noted in the Introduction above, § 149(d)(3)(A)(iv) provides that the initial temporary period of any remaining proceeds of the refunded bond ends on the issuance date of the refunding bonds. Regulations § 1.148-9(d)(2)(iii)(B) also contains this rule.

Example 1

In 2008, City K advance refunds a series of bonds, which were originally issued in 2006. On the issuance date of the advance refunding bonds, the prior issue has unspent proceeds in its project fund. These funds still qualified for investment at an unrestricted yield under the 3-year temporary period for construction projects.

However, according to § 149(d)(3)(A)(iv), on the issuance date of the refunding bonds, the temporary period for the project fund ends and the yield on investments in the fund cannot exceed the **prior issue's** bond yield by more than 0.125 percent.

When proceeds of the refunding escrow are used to pay principal on the prior issue, a portion of the project fund will become transferred proceeds of the refunding issue. The earnings on investments must be restricted to 0.125 percent above the **refunding bond yield**.

Continued on next page

Initial Temporary Periods, Continued

Temporary Periods for Specific Proceeds

The table below summarizes the temporary period rules with respect to refundings.

Type of Proceeds	Temporary Period
Unspent proceeds of prior issue in current refunding	Ends on the same date that would apply in absence of the refunding
Unspent proceeds of prior issue in advance refunding	Ends on the issuance date of the refunding issue
Proceeds of current refunding issue held in refunding escrow (except certain short-term issues)	90 days
Proceeds of advance refunding issue held in refunding escrow	30 days
Proceeds reasonably expected to pay debt service on prior issue	Same as if in refunding escrow
Replacement proceeds held in bona fide debt service (BFDS) fund	13 months
Replacement proceeds not held in a BFDS fund	30 days
Proceeds held in BFDS fund	13 months
Proceeds used to pay costs of issuance	13 months
Investment earnings	13 months
Proceeds held in reserve fund	Unrestricted, but measured together with any remaining reserve fund for prior bonds
Transferred proceeds of current refunding issue	Remaining term as if no refunding occurred
Transferred proceeds of advance refunding issue	No “initial” temporary period. For BFDS fund and 4R funds, same as current refunding.
Minor portion	Unrestricted

Definition of “Materially Higher”

General Rules Regulations § 1.148-9 does **NOT** contain a special definition of “materially higher” for refundings. Therefore, the definitions of “materially higher” that are set forth in Regulations § 1.148-2(d) apply to proceeds of refunding issues, and are shown in the table below:

Type of Proceeds	Definition of Materially Higher
Replacement proceeds	.001 percent
Proceeds held in a refunding escrow	.001 percent
All other refunding issue proceeds	.125 percent

Introduction In 2009, City C issues \$15,000,000 bonds to advance refund bonds originally issued in 2008. City C also supplements the bond issue with \$5,000,000 from its general fund. On the issuance date of the refunding bonds, City C deposits both of the above amounts in the escrow fund. The mixed escrow rules will require that the refunding bond proceeds not be spent faster than pro rata with the replacement proceeds in the escrow fund.

Investments of amounts (including issuer equity and investment earnings) in the escrow fund must be yield restricted to 0.001 percent above the applicable bond yield. The proceeds of the refunding bond are yield restricted relative to the refunding bond yield. The replacement proceeds in the escrow are yield restricted relative to the prior bond yield.

On the issuance date, the original issue has unspent proceeds as follows:

Fund	Amount
Project	\$20M
Reserve	\$1.5M
BFDS	\$1M

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Definition of “Materially Higher,” Continued

Example 2 (continued)

In this example, amounts in the project fund remain there pending completion of the project, but earnings must be yield restricted to no more than 0.125 percent greater than the prior bond yield, because:

- The temporary period ended on the issuance date of the refunding bonds, **AND**
- They are not yet proceeds of the refunding issue

The issuer designates the \$1,500,000 in the reserve fund as the reserve fund of the refunding issue. Assuming the limitations of Regulations § 1.148-2(f) are met, the earnings on these amounts are not subject to yield restriction because they are held in the reserve fund.

The \$1,000,000 in the BFDS is deposited into the escrow fund, and the earnings must be yield restricted to no more than 0.001 percent of the prior issue bond yield, because they are not yet proceeds of the refunding issue.

The mixed escrow rules will require these prior BFDS amounts to be allocated to the earliest debt service payments.

Yield Blending in the Computation of Investment Yield

Introduction

Assume that City M issues seven percent bonds the proceeds of which will be loaned to a hospital to acquire new equipment. During the 3-year temporary period when the issuer is permitted to invest the proceeds without restriction, market conditions are such that the best return available is five percent. After the expiration of the temporary period, rates skyrocket, and the issuer invests in securities yielding nine percent, believing that the blended yield from the issuance date to the investments' maturity date will be below seven percent.

Special rules in Regulations § 1.148-5(b) prevent issuers from investing in this manner, by dividing investments into different classes. Only the yields on investments in the same class can be blended. Investments in a project fund **during** the temporary period are in a different class from investments in a project fund **after** the temporary period.

The general rules will be discussed first, followed by a discussion of yield blending of escrow funds.

Continued on next page

Yield Blending in the Computation of Investment Yield, Continued

General Rules Regulations § 1.148-5(b)(2)(i) provides that for purposes of the yield restriction rules of § 148(a) and Regulations § 1.148-2, **(but NOT for the rebate rules of § 148(f))** the yield is computed separately for each class of investments. Additionally, the yield on each individual investment in each class is blended with other individual investments within the same class, whether or not held concurrently, by treating those investments as a single investment.

In other words, all investments in the same class can be blended together regardless of when they are held AND despite the 5-year computation date rule that applies for rebate. The single yield is determined over the life of the investments. Investments (other than escrows) are **NOT** treated this way for rebate purposes. For rebate purposes, class doesn't matter, and the yield is computed for each computation period.

Example 3 On January 1, 1999, County R issues bonds to be used for a construction project. On January 1, 2002, the temporary period expires, but some project funds remain unspent and are invested at the bond yield. On January 1, 2003, County R makes the first payment to a sinking fund to provide for principal payments of term bonds maturing in years 2007 through 2009. Additional payments are made on January 1, 2004, January 1, 2005, and January 1, 2006. Amounts in the sinking fund are invested in excess of 0.001 percent of the bond yield. On January 1, 2004, County R calculates the amount of rebate due by including all payments and receipts on ALL funds subject to rebate from January 1, 1999 through December 31, 2003. However, to determine compliance with yield restriction, County R can blend the payments and receipts on the project funds invested **after** the expiration of the temporary period (but not invested during the temporary period) with those in the sinking fund for as long as the funds are invested, despite the computation date.

Continued on next page

Yield Blending in the Computation of Investment Yield,

Continued

Investment Classes

Regulations § 1.148-5(b)(2)(ii) provides for the following classes of investments:

- Each category of yield-restricted purpose and program investment that is subject to a different definition of “materially higher” under Regulations § 1.148-2(d)(2)
- Yield-restricted non-purpose investments
- All other non-purpose investments

Each of these classes is discussed below.

Purpose and Program Investments

Yield-restricted purpose investments and program investments would be separated into the following classes, each of which has a different “materially higher” limit:

- Qualified student loans
- Tax-exempt investments
- Qualified mortgage loans
- Program investments, other than student loans and qualified mortgage loans
- Other purpose investments

The yield on investments in any of the above classes cannot be blended with each other. Only the yield on investments within each class can be blended.

Yield-restricted Non-Purpose Investments

Generally, the yields on yield-restricted nonpurpose investments can be blended together for yield restriction purposes. This class would include investments in funds such as the following:

- Project fund after the expiration of the temporary period
 - Sinking fund that does **NOT** meet the definition of a reasonably required reserve or replacement (4R) fund or a BFDS fund
-

Continued on next page

Yield Blending in the Computation of Investment Yield,

Continued

Special Rule for Escrows and Sinking Funds

According to Regulations § 1.148-5(b)(2)(ii)(B), for yield restriction purposes, the yield on investments in an escrow fund should be blended with the yields of yield-restricted investments in other funds. Additionally, Regulations § 1.148-5(b)(2)(iii) provides that, for yield restriction **AND** rebate purposes, the yield on investments in the escrow can be blended with investments in a sinking fund specially set up to earn negative arbitrage.

This rule will be discussed in the next section because it is also applicable to rebate.

Mandatory Blending of All Escrow Funds

Regulations § 1.148-5(b)(2)(iv) provides that for all purposes of § 148 (yield restriction and rebate), investments allocable to all proceeds of the refunding issue that are held in one or more refunding escrows will be treated as one investment having a single yield.

For example, the yield on individual investments allocable to sale and investment proceeds of a refunding issue held in a refunding escrow for a prior issue can be blended with the yield on investments allocable to transferred proceeds of that refunding issue that are held in another refunding escrow.

All Other Non-Purpose Investments

This category consists of non-yield restricted, nonpurpose investments. For example those:

- Invested during the 3-year temporary period for capital projects
- Invested in the 13-month temporary period for working capital
- Invested in a reasonably required reserve or replacement fund
- Making up the minor portion

None of these investments may be blended with those in other classes unless the issuer waives the right to invest in higher yielding investments, as discussed below.

Continued on next page

Yield Blending in the Computation of Investment Yield,

Continued

Waiver of Right to Invest in Higher- Yielding Investments (in general)

Regulations § 1.148-2(h) provides that **on or before the issue date**, an issuer may elect to waive the right to invest in higher yielding investments during any temporary period, or as part of a 4R fund.

Additionally, **at any time**, an issuer may waive the right to invest in higher yielding investments as part of a minor portion.

For example, assume that on the issuance date the issuer expects that the yield on investments in the project fund during the first 3 years will be lower than the bond yield, but that funds invested in the sinking fund will be greater than the bond yield. Normally, the investments in these two funds cannot be blended for yield restriction purposes because they are in separate classes. However, if the issuer waives the right to invest in higher-yielding investments during the project fund temporary period, then these investments can be blended with those in the sinking fund.

An identical rule is found in Regulations § 1.148-9(g), which allows for waivers in refundings. (However, special rules restrict funds that may be blended with refunding escrows. These rules will be discussed later.)

Continued on next page

Yield Blending in the Computation of Investment Yield,

Continued

Waivers in Advance Refunding Issues

Waivers can allow the issuer of an advance refunding issue to blend investment yields in the following ways, which also would apply to a “new money” issue:

- Investments in the minor portion can be blended with those in a sinking fund
- Investments in the 4R fund can be blended with those in a sinking fund, or
- Investments in the 4R fund can be blended with those in a sinking fund **AND** the minor portion.

Further, if the advance refunding issue is part of a multipurpose issue, and the other issue is a construction issue, the issuer can also waive the temporary period for the project fund and blend the investment yield with the minor portion and/or 4R fund (if waived) and a sinking fund.

Although Regulations § 1.148-9(h) permits multipurpose issues to be treated as separate issues for certain purposes, neither yield restriction nor rebate is one of these purposes.

Comprehensive Example

A comprehensive example of yield blending, covering yield restriction and rebate, is found at the end of section 5 of this Part I of the lesson.

Yield Reduction Payments

General Rules For purposes of yield restriction, Regulations § 1.148-5(c) provides a mechanism for “reducing” the yield on certain covered investments by paying the excess yield on the investments to the United States.

For example, if the yield on investments in a project fund after expiration of the temporary period is above the definition of “materially higher”, then a yield reduction payment could be made to reduce the yield to equal an amount not “materially higher” than the bond yield. Earnings above the bond yield but not in excess of “materially higher” must be rebated, unless an exception to rebate applies.

No yield reduction payments can be made to reduce the yield on 4R funds because 4R funds are **NOT** subject to yield restriction except as provided in Regulations § 1.148-5(c)(3)(v) as discussed in this lesson on page 160 titled, Project Funds: Amounts Continue to be Used for the Governmental Purposes of the Issue Any earnings above the bond yield must be rebated, unless an exception is met.

The yield reduction rules do not apply to all investments. They are only available for the covered investments delineated in Regulations § 1.148-5(c)(3), as amended by TD 9777, effective July 18, 2016. For example, yield reduction payments are not generally available to cure a violation of yield restriction in an advance refunding escrow. However, Regulations § 1.148-5(c)(3)(iii) provides that yield reduction payments can be used for nonpurpose investments allocable to transferred proceeds of an advance refunding issue to the extent that investment of the refunding escrows allocable to the proceeds, other than transferred proceeds, of the refunding issue in zero-yielding nonpurpose investments is sufficient to satisfy yield restriction under § 148(a).

Section 5: Rebate

Overview

Introduction

Earnings on investments of gross proceeds of refunding issues that are above the bond yield generally are subject to the rebate requirement.

The only rebate exceptions available for sale proceeds (and investment earnings thereon) of a refunding issue are the small issuer exception and the 6-month spending exception.

If proceeds of a prior issue become transferred proceeds of the refunding issue, special rules apply to determine whether an exception may exist. If proceeds of a prior issue have met a rebate exception, then they are **NOT** subject to rebate as transferred proceeds of the refunding issue.

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Rebate Exceptions for Transferred Proceeds

Introduction

Earnings on investments of gross proceeds of refunding issues that are above the bond yield generally are subject to the rebate requirement.

As noted above, the only rebate exceptions available for sale proceeds (and investment earnings thereon) of a refunding issue are the small issuer exception and the 6-month spending exception. Special rules apply to determine whether an exception may exist for any transferred proceeds.

Special Transferred Proceeds Rule for Refunded Issues

Regulations § 1.148-7(b)(1)(i) provides that, for purposes of determining applicability of the spending exceptions, proceeds of the prior issue that become transferred proceeds of the refunding issue continue to be treated as unspent proceeds of the prior issue. Therefore, if the prior issue satisfied one of the spending exceptions, the proceeds of the prior issue that are exempted from rebate under that spending exception are not subject to rebate either as proceeds of the prior issue or as transferred proceeds of the refunding issue.

Example 1

In 2009, City advance refunds an issue originally issued in 2007. The 2007 issue met the 2-year exception to rebate. The following 2007 proceeds remain unspent on the issuance date of the refunding bonds:

- Amounts equal to less than 5 percent of available construction proceeds (ACP) in the project fund
- Sale proceeds and earnings thereon in the reserve fund, which qualifies as a 4R fund, **AND**
- Project revenues in the BFDS fund.

Rebate is not required on amounts equal to less than 5 percent of ACP in the project fund (as long as the amount is spent within 3 years of the issue date of the 2007 issue.) If these proceeds transfer to the 2009 issue, they will not be subject to rebate. Note, however, that upon the issuance of the advance refunding issue, the temporary period for the project fund ended, and yield reduction payments or other yield restriction may be required.

After the 2-year period, earnings on sale proceeds in the 4R fund are subject to rebate as gross proceeds of the refunded issue. Also, upon transfer, they are subject to rebate as gross proceeds of the refunding issue.

Small Issuer Exception to Rebate

Introduction Similar to other small issues, refunding bonds can qualify for the small issuer exception to rebate if certain requirements are met.

Requirements Section 148(f)(4)(D)(v) provides that in order to meet this exception from rebate, a refunding bond (or any portion of a bond issued to refund another bond) must meet these requirements:

- The aggregate face amount of the refunding issue cannot exceed \$5,000,000.
- Each **refunded** bond met the requirements for the small issuer rebate exception
- If the average maturity of the **refunded** bonds was over 3 years, the average maturity date of the **refunding** bonds cannot be later than the average maturity date of the **refunded** bonds.
- The refunding bond cannot have a maturity date that is more than 30 years after the issuance date of the original refunded bond.

Because this exception only applies to bonds issued after the effective date of TRA 1986, § 148(f)(4)(D)(vi) provides special rules for refundings of bonds issued prior to TRA 1986, which technically could not have qualified for this exception.

Reasonably Required Reserve and Replacement Fund Except for earnings on a reserve fund during construction that an issuer elects to include in available construction proceeds for purposes of the 2-year construction issue exception to rebate, amounts in the reserve fund can be exempt from rebate only under the small issuer exception.

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Small Issuer Exception to Rebate, Continued

Bona Fide Debt Service Fund	Amounts in the BFDS fund of a refunding issue are exempt from rebate if the refunding issue meets the small issuer exception. Also, the BFDS fund would likely be exempt from rebate under the exception for BFDS funds.
Exclusion of Current Refundings from \$5,000,000 Limit	Regulations § 1.148-8(c)(3) provides that in applying the \$5,000,000 limitation, the portion of an issue that is a current refunding issue is not taken into account to the extent that the principal amount of such current refunding issue is not greater than the principal amount of the refunded bonds.
Example 2	City issues two issues in 2009: a \$4,000,000 issue for parks and streets and a \$20,000,000 issue that is used to retire \$20,000,000 of outstanding bonds 30 days after the refunding bonds are issued. City is a small issuer for 2009 and the \$4,000,000 issue is exempt from rebate.

Six-Month Spending Exception to Rebate

Refunding Issue	According to Regulations § 1.148-7(b)(1)(ii), the only spending exception applicable to refunding issues is the 6-month exception.
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Amounts NOT Treated as Gross Proceeds	Regulations § 1.148-7(c)(3) provides that the following amounts are NOT treated as gross proceeds for purposes of the 6-month exception: • Amounts in a BFDS fund • Amounts in a reasonably required reserve and replacement fund • Amounts that, as of the issue date, are not reasonably expected to be gross proceeds, but that become gross proceeds after the end of the 6-month spending period • Amounts representing sale or investment proceeds derived from payments • Under any purpose investment of the issue • Amounts representing repayments of grants financed by the issue
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See Regulations § 1.148-6(d)(4).

Therefore, these amounts do **NOT** have to be spent for the refunding issue to meet the 6-month spending exception.

Reasonably Required Reserve and Replacement Fund	Although amounts in the 4R fund do not have to be spent for the refunding issue to meet the 6-month spending exception, they are not exempt from rebate even if the refunding issue meets this exception. In fact, the rebate requirement must be met for amounts in the 4R fund for the refunding issue to meet the 6-month spending exception.
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Bona Fide Debt Service Fund	Amounts in the BFDS fund do not have to be spent for the refunding issue to meet the 6-month spending exception, AND they are exempt from rebate if the refunding issue meets the exception for BFDS funds.
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Six-Month Spending Exception to Rebate, Continued

Special Transferred Proceeds Rule for Refunded Issues

Regulations § 1.148-7(b)(1)(ii)(A) provides, generally, that **for purposes of applying the 6-month exception to a refunding issue**, proceeds of the prior issue that become transferred proceeds of the refunding issue generally are not treated as proceeds of the refunding issue and need not be spent for the refunding issue to satisfy that spending exception.

Even if the refunding issue qualifies for the 6-month spending exception, those transferred proceeds are subject to rebate unless an exception to rebate applied to those proceeds (determined as if they continued as proceeds of the prior issue). Any rebate on the transferred proceeds will be based on the refunding bond yield.

Example 3

Prior Issue A is advance refunded by Refunding Issue B. On the date of issuance of Issue B, \$5,000,000 remained in the project fund of Issue A. Issue B satisfies the 6-month spending exception because all of the proceeds (except for the transferred proceeds) are used to redeem the prior issue within 6 months of the issuance date.

The \$5,000,000 in unspent proceeds does not jeopardize Issue B's satisfaction of the spending exception. Unless an exception to rebate applies to the unspent proceeds of the prior issue (determined as if they continued as proceeds of the prior issue), they will be subject to rebate, based on the yield of the refunding issue.

Exception for Certain Transferred Proceeds Not Treated as Gross Proceeds

Regulations § 1.148-7(b)(1)(ii)(B) provides that for purposes of applying the 6-month exception, the following proceeds are generally treated as gross proceeds of the refunding issue, and must be spent within 6 months of the issue date, unless they are used in a manner that does not cause those amounts to be gross proceeds, as defined in Regulations § 1.148-7(c)(3):

- Those transferred proceeds of the refunding issue excluded from the gross proceeds of the prior issue under the special definition of gross proceeds in Regulations § 1.148-7(c)(3)
 - Proceeds that transferred from a prior taxable issue
-

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Six-Month Spending Exception to Rebate, Continued

Example 4

In 2009, City advance refund bonds that were originally issued in 2008. The 2008 bonds met the 6-month exception to rebate by spending all of the required amounts in the project fund within the required time. However, amounts in the BFDS and 4R funds were not spent, but in accordance with Regulations § 1.148-7(c)(3) they were not required to be spent. During the time when these amounts are considered to be gross proceeds of the refunded issue, amounts in the 4R fund are subject to rebate, but the amounts in the BFDS fund are not.

When the proceeds in the 4R or BFDS fund transfer to the refunding issue, **unless they are maintained in a BFDS or 4R fund**, they must be spent in order for the refunding issue to meet the 6-month exception.

If the amounts do not transfer within 6-months of the issuance date of the refunding bonds, then the amounts do not affect the refunding issue for purposes of applying the 6-month exception. The amounts continue to be treated as proceeds of the prior issue during this time. Thus, proceeds in the 4R fund are subject to rebate, but the proceeds in the BFDS fund are not.

This same treatment will come into play if the refunded issue met the 18-month exception to rebate.

See Regulations § 1.148-7(d)(3).

The rule would **NOT** apply to refunded issues which meet the 2-year exception to rebate, because that exception does not refer to the definition of gross proceeds set forth in Regulations § 1.148-7(c)(3). Therefore, transferred proceeds from a refunded issue that met the 2-year exception to rebate would not be required to be spent for the refunding issue to meet the 6-month exception.

Series of Refundings

Regulations § 1.148-7(c)(4) provides that if the principal purpose of a series of refunding issues is to exploit the difference between taxable and tax-exempt interest rates by investing proceeds during the temporary periods provided in Regulations § 1.148-9(d), the 6-month spending period for all issues in the series begins on the issue date of the first issue in the series.

Yield Blending in the Computation of Rebate

Introduction

Regulations § 1.148-3(b) provides that the rebate amount for an issue is the excess of the future value of all receipts on non-purpose investments over the future value of all payments on non-purpose investments, as of the computation date.

Therefore, all payments and receipts **during the computation period** are lumped together for rebate purposes, and class does not matter. Generally, anticipated payments and receipts beyond the computation date are **NOT** taken into account for rebate purposes. In other words, generally, the single investment concept that applies for yield restriction purposes does **NOT** apply for rebate purposes. While the yield restriction rules generally are based on reasonable expectations over the life of the bonds, the rebate rules are based on actual events.

The only investments that are excluded from the computation are purpose investments and those nonpurpose investments that are exempt from rebate under one of the exceptions.

Example 5

County issues bonds to advance refund a prior issue and invests the sale proceeds in a defeasance escrow. Because of existing market conditions, the proceeds are invested at a yield below the yield on the refunding bonds. County also has amounts in a 4R Fund for the refunding bonds and such amounts are invested at a yield that is above the yield on the refunding bonds. For rebate purposes, the yield on the investments in the refunding escrow will be blended with the yield on the investments in the 4R Fund during each computation period.

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Yield Blending in the Computation of Rebate, Continued

The Single Investment Concept Does Apply for Escrow Funds

Regulations § 1.148-5(b)(2)(iv) provides that for all purposes of § 148 (**both yield restriction and rebate**) investments allocable to proceeds of the refunding issue that are held in one or more refunding escrows will be treated as a single investment having a single yield, whether or not held concurrently. Proceeds include sale proceeds, investment proceeds, and transferred proceeds of the refunding issue, but **NOT** replacement proceeds.

Example 6

In 2010, County D issues bonds to advance refund bonds issued in 2003. The 2003 bonds were issued to advance refund a 1983 issue. Sale proceeds of the 2010 issue are placed into an escrow fund. As principal payments are made on the 2003 issue from the 2010 escrow, proceeds of the 2003 issue in its escrow fund become transferred proceeds of the 2010 issue. The yield on the investments of the transferred proceeds **must be** blended with the yield on investments of the 2010 escrow for **both** yield restriction and rebate purposes.

Example 7

County issues bonds to advance refund a prior issue. Sale proceeds of the issue are invested in SLGSs and held in a refunding escrow. On the issuance date, short-term market rates are higher than the bond yield. The issuer structures the escrow so that short-term investments earn a yield above the bond yield. As these investments mature, the issuer plans to reinvest the proceeds and earnings in zero percent SLGSs until needed for redemption. The single investment rule requires the yields on these investments to be blended for both yield restriction **and rebate**, producing a single yield, even though they are held consecutively, not concurrently

Example 8

City issues bonds to advance refund two outstanding issues. After payment of issuance costs, the proceeds are split and deposited into two separate escrow funds. The yields on these two escrow funds must be blended for yield restriction and rebate.

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Yield Blending in the Computation of Rebate, Continued

Special Permissive Rule for Refunding Escrows and Related Sinking Funds

Regulations § 1.148-5(b)(2)(iii) provides that for **all purposes of § 148**, an issuer **may** treat all of the yield-restricted non-purpose investments in a refunding escrow and a sinking fund that is reasonably expected as of the issue date to be maintained solely to reduce the yield on investments in the refunding escrow as a single investment, having a single yield.

For this purpose, the definition of “sinking fund” is narrowly interpreted to include only redemption funds, and to exclude BFDS and 4R funds.

Example 9

In 2009, County issues bonds to advance refund a 2001 issue, which had advance refunded a 1984 issue. The 2009 escrow will retire the 2001 bonds on their 2011 redemption date. The 2001 escrow pays the 1984 bonds at their 2024 maturity. Even investing all of the 2009 escrow in 0 percent SLGSs, the combined yield on the investments in the 2009 escrow and the transferred proceeds in the 2001 escrow will exceed the yield on the 2009 bonds. County may establish a sinking fund for the 2009 bonds and invest such in 0 percent SLGSs to reduce the combined investment yield further. The yield on all these investments may be blended together for rebate purposes, as well as yield restriction, even though the sinking fund investments will extend beyond the first computation date for the 2009 bonds.

Putting it all Together

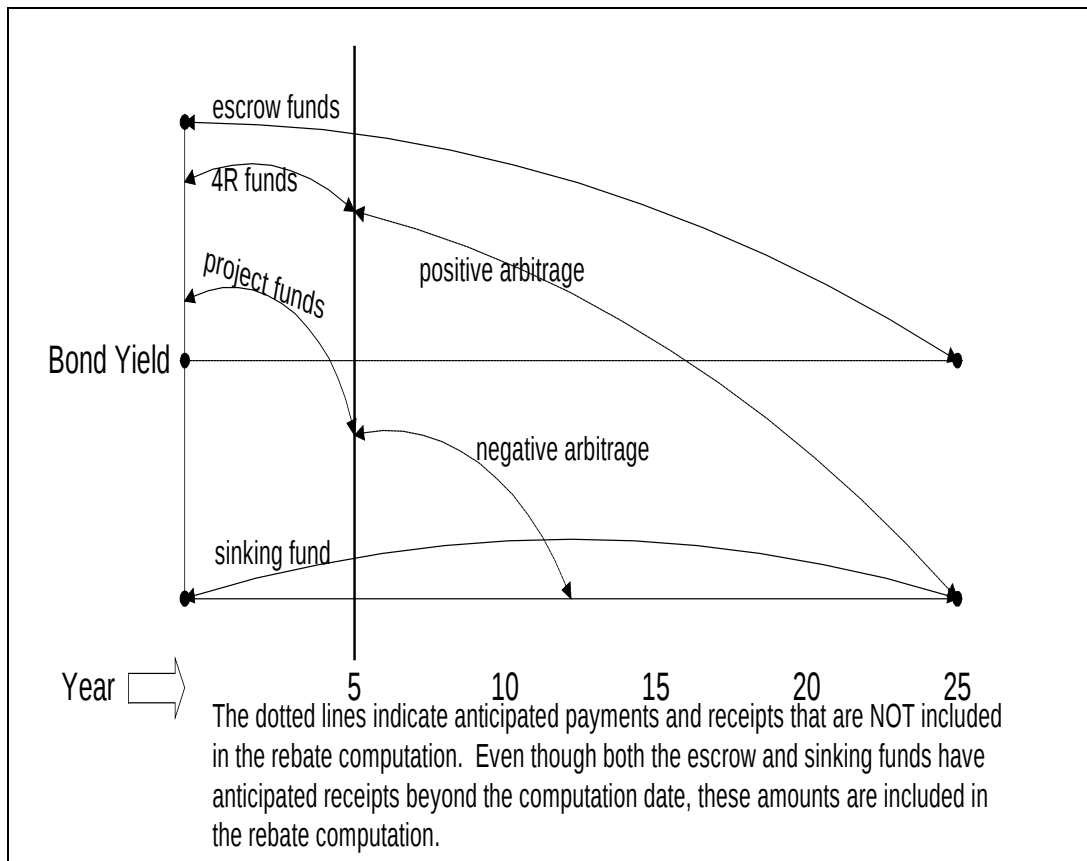
Figure 3-2 illustrates yield blending for rebate. The illustration shows the payments and receipts that will be included in the rebate computation. Note that although amounts in the project and 4R funds are invested beyond the 5-year computation date, only the payments and receipts relative to the 5-year computation period are included in the first rebate computation period.

Contrast this treatment with that of the escrow and sinking fund (assuming that the sinking fund meets Regulations § 1.148-5(b)(2)(ii)). All of the payments and receipts relative to the first computation period are included, as well as anticipated payments and receipts to be received beyond the end of the first computation period. In this way, escrow funds and their set-up sinking funds are treated for rebate purposes in the same manner as all funds are treated for yield restriction purposes with certain exceptions.

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Yield Blending in the Computation of Rebate, Continued

Figure 3-2: Yield Blending for Rebate



Comprehensive Example of Yield Blending

Example 10

On October 15, 1999, County Y issues \$83,000,000 principal amount of bonds. A portion of the proceeds are used to advance refund a prior issue of bonds, while the remainder of the proceeds are used for a construction project. The yield on the bonds is 7.5 percent. On October 15, 1999, after payment of issuance costs, County Y establishes the following funds in the following amounts:

Refunding Escrow	\$48,751,100
Project Fund	25,000,000
4R Fund	8,000,000

Refunding Escrow:

Amounts in the escrow fund are invested in SLGSs, at various interest rates and maturities, designed to be available when needed to pay debt service and redemption of the prior bonds. The redemption date of the prior bonds is October 1, 2004.

Project Fund

County Y expects that the project will take 3 years to complete. \$25,000,000 is invested in open-market securities. \$10,000,000 is invested for 6 months and is expected to be spent at that time. \$15,000,000 is invested for 3 years and is expected to be spent at that time.

4R Fund

Amounts in the 4R fund are invested in open-market securities for an initial term of 5 years, and then reinvested until the final principal payment date of October 1, 2019.

Sinking Fund

On the issuance date, County Y establishes this fund with \$1,500,000 of its own revenues, and reasonably expects to maintain this fund to reduce the yield on the escrow. This initial deposit is used for debt service on October 1, 2004. Additional investments in 0 percent SLGSs are made on October 1, 2005, 2006, and 2007. The funds will be used to pay bonds maturing on October 15, 2019.

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Comprehensive Example of Yield Blending, Continued

Analysis

Yield Restriction

Receipts from the **Escrow Fund** are shown in Table 1. The two earliest maturing investments were invested in 0 percent SLGSs. The remainder was invested at various interest rates. Table 2 shows that the yield of the escrow fund for yield restriction purposes is 7.62773 percent. Note that the yield computation begins on the issuance date and ends on the redemption date of the prior bonds. This yield is 0.0012773 percent higher than the bond yield. Since the yield exceeds the bond yield by more than 0.001 percent, without the benefit of yield blending offered by Regulations § 1.148-5(b)(2)(i) and (ii), these bonds would be arbitrage bonds. (Yield reduction payments are **NOT** permitted.) However, these rules permit the yields of the investments of the escrow and sinking funds to be blended because they are both in the same class (yield-restricted non-purpose investments). Table 3 shows that the blended yield of these investments is 6.71091 percent, well below the bond yield.

Yields on the project and 4R funds are **NOT** included, because they are not yield-restricted (a separate class.)

Rebate

Table 4 shows the amount of rebate that would be due were it not for Regulations § 1.148-5(b)(iii). Generally, payments and receipts on investments subject to rebate are included from the issuance date only to the computation date. Class doesn't matter here, and all investments are combined.

Project funds, although spent within the 3-year temporary period, are **NOT** spent fast enough to meet a rebate exception. Therefore, all earnings during the temporary period are subject to rebate.

Even though amounts in the 4R fund are exempt from the yield restriction rules, all earnings above the bond yield must be rebated.

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Comprehensive Example of Yield Blending, Continued

Analysis (continued)

However, Regulations § 1.148-5(b)(iii) permits investments in the escrow and sinking fund (which meets the requirements) to be treated as a single investment having a single yield. Therefore, payments and receipts beyond the computation date are included in the computation, as shown in Table 5. When this future cash activity is included in the computation, there is no rebate due. Table 6 shows how this future cash activity is present-valued back to the computation date at the blended yield of the escrow and sinking fund.

Even if the sinking fund was not established, all payments and receipts (even those beyond the computation date) of the escrow fund itself would be included in the rebate computation, because Regulations § 1.148-5(b)(2)(iv) **requires** that investments in the escrow be treated as single investment having a single yield.

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Comprehensive Example of Yield Blending, Continued

TABLE 1: CASH FLOWS FROM NONPURPOSE INVESTMENTS

Date	ESCROW Principal	ESCROW Interest	ESCROW Total	SINKING FUND Principal	SINKING FUND Interest	SINKING FUND Total	PROJECT FUND Principal	PROJECT FUND Interest	PROJECT FUND Total	4R FUND Principal	4R FUND Interest	4R FUND Total
4/1/2000	\$1,882,800	\$1,531,644	\$3,414,444			-	\$10,000,000	\$850,000	\$10,850,000			
10/1/2000	243,400	1,659,281	1,902,681		\$200,000	\$200,000					\$754,000	\$754,000
4/1/2001	1,808,300	1,659,281	3,467,581			-						-
10/1/2001	244,900	1,600,656	1,845,556		285,000	285,000					744,000	744,000
4/1/2002	1,933,000	1,592,494	3,525,494			-						-
10/1/2002	255,600	1,526,927	1,782,527		300,000	300,000	15,000,000	1,500,000	16,500,000		744,000	744,000
4/1/2003	2,069,400	1,518,136	3,587,536			-						-
10/1/2003	266,900	1,446,142	1,713,042		300,000	300,000					760,000	760,000
4/1/2004	2,221,200	1,436,765	3,657,965			-						-
10/1/2004	37,825,600	2,706,196	40,531,796	1,500,000	-	1,500,000				\$8,000,000	750,000	8,750,000
10/1/2004										(8,000,000)		(8,000,000)
10/1/2005						-					744,000	744,000
4/1/2006						-						-
10/1/2006						-					744,000	744,000
4/1/2007						-						-
10/1/2007						-					744,000	744,000
10/1/2008						-					744,000	744,000
10/1/2009					-	-					744,000	744,000
10/1/2019				6,000,000		6,000,000				8,000,000	750,000	8,750,000
TOTAL	\$48,751,100	\$16,677,521	\$65,428,621	\$7,500,000	\$1,085,000	\$8,585,000	\$25,000,000	\$2,350,000	\$27,350,000	\$8,000,000	\$8,222,000	\$16,222,000

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Comprehensive Example of Yield Blending, Continued

TABLE 2: YIELD OF ESCROW FUND

ISSUE DATE: 10/15/1999

COMP INTERVALS: 2

YIELD: 7.62773 percent

Date	Cash Flows	Present Value	Days
10/15/1999	(\$48,751,100.00)	(\$48,751,100.00)	0
4/1/2000	3,414,444.00	3,298,594.55	166
10/1/2000	1,902,681.00	1,770,596.34	346
4/1/2001	3,467,581.00	3,108,313.63	526
10/1/2001	1,845,556.00	1,593,566.10	706
4/1/2002	3,525,494.00	2,932,293.74	886
10/1/2002	1,782,527.00	1,428,131.66	1066
4/1/2003	3,587,536.00	2,768,681.73	1246
10/1/2003	1,713,042.00	1,273,472.04	1426
4/1/2004	3,657,965.00	2,619,422.71	1606
10/1/2004	40,531,796.00	27,958,027.50	1786
TOTAL	\$16,677,522.00	(0)	

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Comprehensive Example of Yield Blending, Continued

TABLE 3: YIELD OF ESCROW AND SINKING FUND

ISSUE DATE: 10/15/1999

COMP INTERVALS : 2

YIELD: 6.71091 percent

Date	Cash Flows	Present Value	Days
10/15/1999	(\$48,751,100.00)	(\$48,751,100.00)	0
10/15/1999	(1,500,000.00)	(1,500,000.00)	0
4/1/2000	3,414,444.00	3,312,084.45	166
10/1/2000	1,902,681.00	1,785,722.52	346
10/1/2000	200,000.00	187,705.93	346
4/1/2001	3,467,581.00	3,148,771.86	526
10/1/2001	1,845,556.00	1,621,468.05	706
10/1/2001	285,000.00	250,395.22	706
4/1/2002	3,525,494.00	2,996,868.83	886
10/1/2002	1,782,527.00	1,466,055.66	1066
10/1/2002	300,000.00	246,737.75	1066
4/1/2003	3,587,536.00	2,854,809.91	1246
10/1/2003	1,713,042.00	1,318,911.11	1426
10/1/2003	300,000.00	230,977.02	1426
4/1/2004	3,657,965.00	2,724,919.32	1606
10/1/2004	40,531,796.00	29,213,025.42	1786
10/1/2004	1,500,000.00	1,081,115.14	1786
10/1/2005	(2,000,000.00)	(1,349,409.79)	2146
10/1/2006	(2,000,000.00)	(1,263,214.29)	2506
10/1/2007	(2,000,000.00)	(1,182,524.66)	2866
10/1/2019	6,000,000.00	1,606,680.57	7186
TOTAL	\$68,013,622.00	0	

Continued on next page

Comprehensive Example of Yield Blending, Continued

TABLE 4: REBATE COMPUTATION WITHOUT BLENDING

COMPUTATION DATE: 10/15/2004

COMP INTERVALS: 2

YIELD: 7.50000 percent

Date	Cash Flows	Future Value	Days
10/15/1999	(\$48,751,100.00)	(\$70,447,481.75)	1800
10/15/1999	(8,000,000.00)	(11,560,351.54)	1800
10/15/1999	(25,000,000.00)	(36,126,098.57)	1800
10/15/1999	(1,500,000.00)	(2,167,565.91)	1800
4/1/2000	14,264,444.00	19,924,678.21	1634
10/1/2000	2,656,681.00	3,576,743.30	1454
10/1/2000	200,000.00	269,264.04	1454
4/1/2001	3,467,581.00	4,499,734.31	1274
10/1/2001	2,589,556.00	3,238,899.40	1094
10/1/2001	285,000.00	356,465.10	1094
4/1/2002	3,525,494.00	4,250,147.73	914
10/1/2002	19,026,527.00	22,108,305.78	734
10/1/2002	300,000.00	348,591.82	734
4/1/2003	3,587,536.00	4,017,946.07	554
10/1/2003	2,473,042.00	2,669,630.91	374
10/1/2003	300,000.00	323,847.83	374
4/1/2004	3,657,965.00	3,806,020.91	194
10/1/2004	41,281,796.00	41,400,167.93	14
10/1/2004	8,000,000.00	8,022,939.30	14
10/1/2004	1,500,000.00	1,504,301.12	14
10/15/2000	(1,000.00)	(1,342.47)	1440
10/15/2001	(1,000.00)	(1,247.18)	1080
10/15/2002	(1,000.00)	(1,158.65)	720
10/15/2003	(1,000.00)	(1,076.41)	360
10/15/2004	(1,000.00)	(1,000.00)	0
10/15/2004	-	-	
REBATE DUE		\$10,361.28	

Continued on next page

Comprehensive Example of Yield Blending, Continued

TABLE 5: REBATE COMPUTATION WITH BLENDING

COMPUTATION DATE: 10/15/2004

COMP INTERVALS : 2

YIELD: 7.50000 percent

Date	Cash Flows	Future Value	Days
10/15/1999	(\$48,751,100.00)	(\$70,447,481.75)	1800
10/15/1999	(8,000,000.00)	(11,560,351.54)	1800
10/15/1999	(25,000,000.00)	(36,126,098.57)	1800
10/15/1999	(1,500,000.00)	(2,167,565.91)	1800
4/1/2000	14,264,444.00	19,924,678.21	1634
10/1/2000	2,646,681.00	3,563,280.10	1454
10/1/2000	200,000.00	269,264.04	1454
4/1/2001	3,467,581.00	4,499,734.31	1274
10/1/2001	2,589,556.00	3,238,899.40	1094
10/1/2001	285,000.00	356,465.10	1094
4/1/2002	3,525,494.00	4,250,147.73	914
10/1/2002	19,026,527.00	22,108,305.78	734
10/1/2002	300,000.00	348,591.82	734
4/1/2003	3,587,536.00	4,017,946.07	554
10/1/2003	2,473,042.00	2,669,630.91	374
10/1/2003	300,000.00	323,847.83	374
4/1/2004	3,657,965.00	3,806,020.91	194
10/1/2004	41,281,796.00	41,400,167.93	14
10/1/2004	8,000,000.00	8,022,939.30	14
10/1/2004	1,500,000.00	1,504,301.12	14
10/15/2000	(1,000.00)	(1,342.47)	1440
10/15/2001	(1,000.00)	(1,247.18)	1080
10/15/2002	(1,000.00)	(1,158.65)	720
10/15/2003	(1,000.00)	(1,076.41)	360
10/15/2004	(1,000.00)	(1,000.00)	0
10/15/2004	(3,044,207.00)	(3,044,207.00)	0
REBATE DUE		<u><u>\$(3,033,845.73)</u></u>	

NOTE: SEE TABLE 6 FOR COMPUTATION OF \$(3,044,207.00)

Continued on next page

Comprehensive Example of Yield Blending, Continued

TABLE 6: PV OF PAYMENTS/RECEIPTS OF ESCROW/SF AFTER COMP DATE

COMPUTATION DATE: 10/15/2004

COMP INTERVALS: 2

COMP INTERVALS: 6.71091 percent

Date	Cash Flows	Present Value	Days
10/1/2005	(\$2,000,000.00)	(\$1,877,059.37)	346
10/1/2006	(2,000,000.00)	(1,757,159.57)	706
10/1/2007	(2,000,000.00)	(1,644,918.54)	1066
10/1/2019	6,000,000.00	2,234,930.25	5386
TOTAL	0	(\$3,044,207.00)	

Section 6: Allocations

Overview

Introduction

As with the case of a new money issue, it is necessary to allocate gross proceeds of a refunding issue to expenditures and investments properly in order to determine whether the issue meets the requirements of §§ 103, 141-150. To do so, an agent must first identify the gross proceeds of the refunding issue.

This section discusses certain of the allocation rules applicable to refunding issues. Many of the general allocation and accounting rules under Regulations § 1.148-6, discussed in Lesson 6 of Phase I, apply to refunding issues. Specific rules provided in Regulations § 1.148-9 apply only to refunding issues.

In many cases, when refunding bonds are issued, the proceeds of the prior issue, it is refunding, will have already been spent. In this situation, only the proceeds of the refunding issue would be subject to the arbitrage rules.

However, in other cases, when refunding bonds are issued, proceeds of the prior issue remain unspent. The existence of unspent proceeds of a prior issue and what happens with those proceeds is the source of the complexity in the advance refunding arbitrage rules.

For example, assume that City A issues a “high-to-low” advance refunding of an outstanding issue. In a “high-to-low” refunding, the yield on the refunding issue is less than the yield on the refunded issue. On the issuance date of the refunding bonds, the prior issue has unspent proceeds invested in non-purpose investments. Now, there are two bond issues outstanding for one project. The allocation rules for refunding issues require that the issuer spend the prior issue proceeds before spending any of the refunding issue proceeds.

Continued on next page

Overview, Continued

In this Section This section contains the following topics:

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Multipurpose Issue Allocations	74
Partial Refundings	82
Universal Cap	84
Transferred Proceeds	87
Mixed Escrow Rules	88

Multipurpose Issue Allocations

Introduction

Multipurpose allocation rules may apply where the proceeds of a bond issue are used to finance or refinance distinct and separate governmental purposes. Typically, these involve the combined refunding of separate prior issues, or a refunding and the financing of a new project.

The following example is illustrative:

Example 1

In 1989, County X issued bonds to build a recreation center. In 1994, County X issued \$25,000,000 principal amount of bonds, using \$15,000,000 of the proceeds to advance refund the 1989 issue, and the remaining \$10,000,000 of the proceeds to finance a skating rink adjacent to the recreation center. The 1994 bond issue consists of 10 serial bonds maturing in the principal amount of \$2,500,000 each year. The 1994 issue consists of two series, Series A (advance refunding) and Series B (rink), but for purposes of Regulations § 1.150-1(c)(1) constituted a single issue.

In 1997, interest rates have declined and County X is considering advance refunding the skating rink portion of the 1994 issue. Is the County permitted to do this?

The multipurpose issue allocation rules of Regulations § 1.148-9(h) permit issuers to advance refund only a portion of an issue, as long as that portion qualifies as a separate purpose under the rules.

In the above example, County X issues bonds in 1997 and advance refunds 1994 Series B bonds with the proceeds. At that time, unspent proceeds of 1994 Series B bonds remain in the project fund and reserve fund. In addition, unspent proceeds of the 1994 Series A remain in the defeasance escrow for the 1989 issue.

The multipurpose allocation rules are used to determine whether payment of principal of the 1994 Series B issue with proceeds of the 1997 issue will result in a transfer of the unspent proceeds of the 1994 Series A bonds or 1994 Series B bonds. The rules also provide which of the maturing 1994 bonds should be paid with the 1997 refunding escrow funds.

Continued on next page

Multipurpose Issue Allocations, Continued

When are the Allocation Rules Used?

Regulations § 1.148-9(h)(1) provides that a portion of the bonds of a multipurpose issue reasonably allocated to any separate purpose is treated as a separate issue for ALL purposes of § 148 except the following:

- Arbitrage yield on bonds and investments (except for the yield on two or more conduit loans that are tax-exempt bonds)
- Rebate amount (except for the yield on two or more conduit loans that are tax-exempt bonds)
- Determining the minor portion of an issue under § 148(e)
- Limits on a reasonably required reserve or replacement fund
- Applying the provisions of Regulations § 1.148-11(b), relating to elective retroactive application of §§ 1.148-1 through 1.148-10 to certain issues

In the above example, County X would be permitted to have only one reserve fund for the 1994 issue and would calculate its size based on the total amount of bonds issued (Series A plus Series B) and the combined annual debt service.

What is a Separate Purpose?

Regulations § 1.148-9(h)(3)(i) provides that separate purposes of a multipurpose issue include:

- Refunding a separate prior issue
 - Financing a separate purpose investment
 - Financing a construction issue (as defined in Regulations § 1.148-7(f))
 - Any clearly discrete governmental purpose reasonably expected to be financed by that issue
-

Continued on next page

Multipurpose Issue Allocations, Continued

Example 2

On January 1, 1994, Housing Authority issues a \$10,000,000 issue at an interest rate of 10 percent to finance single-family loans. During 1994, Authority originates \$5,000,000 in qualified mortgage loans. In 1995, the market interest rates for housing loans fall to 8 percent and Authority is unable to originate further loans from the 1994 issue. On January 1, 1996, Authority issues a \$5,000,000 issue to refund partially the 1994 issue. Authority treats the portion of the 1994 issue used to originate \$5,000,000 in loans as a separate issue comprised of that group of purpose investments. Authority allocates those purpose investments representing those loans to that separate unrefunded portion of the issue. In addition, Authority treats the unoriginated portion of the 1994 issue as a separate issue and allocates the non-purpose investments representing the unoriginated proceeds of the 1994 issue to the refunded portion of the issue.

As a result of the allocation into separate purposes, when proceeds of the 1996 issue are used to pay principal on the refunded portion of the 1994 issue, only the portion of the 1994 issue representing unoriginated loan funds invested in non-purpose investments transfer to become transferred proceeds of the 1996 issue.

Continued on next page

Multipurpose Issue Allocations, Continued

Capital Projects

Generally, all capital projects that are (i) integrated or functionally related **AND** (ii) qualify for the same initial temporary period under Regulations § 1.148-2(e)(2), are treated as having a single governmental purpose.

Example 3

City issues bonds and loans the proceeds to a qualified 501(c)(3) organization. The organization uses part of the funds to build an addition to a clinic. The rest of the funds are used to build a parking lot adjacent to a hospital on the other side of City. Even though both projects qualify for the general 3-year temporary period, they are not integrated or functionally related. Therefore, they are **NOT** treated as having a single governmental purpose.

Refunding Issues

Regulations § 1.148-9(h)(3)(i) provides that the separate purposes of a refunding issue include the separate purposes of the prior issue, if any.

Financing Common Costs

Common costs of a multipurpose issue are **NOT** separate purposes and include:

- Issuance costs
- Accrued interest
- Capitalized interest on the issue
- Reserve or replacement fund
- Qualified guarantee fees
- Similar costs properly allocable to the separate purposes of the issue

See Regulations § 1.148-9(h)(3)(ii).

Continued on next page

Multipurpose Issue Allocations, Continued

General Rule

As discussed above, the regulations permit allocation of portions of a bond issue between the issue's separate purposes. How are such allocations to be made?

Regulations § 1.148-9(h)(2)(i) provides generally that proceeds, investments, and bonds of a multipurpose issue may be allocated among the various separate purposes of the issue using any reasonable, consistently applied allocation method.

An allocation is not reasonable if it achieves more favorable results under §§ 148 or 149(d) than could be achieved with actual separate issues.

An allocation may be made at any time but once made may **NOT** be changed.

Allocations of Common Costs

Regulations § 1.148-9(h)(2)(ii) provides that a ratable allocation of common costs among the separate purposes of the multipurpose issue is generally reasonable.

Another method may be used if it more accurately reflects the economic benefit or burden of the costs.

Application of Savings Test

Regulations § 1.149(d)-1(f)(3) provides that the multipurpose issue rules in Regulations § 1.148-9(h) apply for purposes of the savings test of § 149(d)(3)(B)(i). This section provides generally that if an advance refunding will result in debt service savings over the prior bonds, the issuer must redeem the prior bonds at the first optional redemption date (the "first call requirement").

If any separate issue in a multipurpose issue increases the aggregate present value of debt service savings or reduces the present value debt service losses on the entire multipurpose issue, that separate issue satisfies the savings test.

Continued on next page

Multipurpose Issues Allocations, Continued

Allocations of Bonds of a Multipurpose Issue

If an issuer treats a bond issue as a multipurpose issue having separate purposes, the issuer must also allocate each bond in the bond issue to the separate purposes of the multipurpose issue. This is important because if the issuer determines to redeem a portion of the bond issue related to a separate purpose, the issuer must first determine which particular bonds in the bond issue may properly be redeemed. Can the issuer redeem all of the earliest maturing bonds to Series B, or should a portion of each maturity be allocated to both Series A and Series B?

Regulations § 1.148-9(h)(4) provides the answers to these questions.

Safe Harbor for Allocation of Bonds

Regulations § 1.148-9(h)(4)(i) provides that the portion of the bonds of multipurpose issue allocated to a separate purpose must have an issue price that bears the same ratio to the aggregate issue price of the multipurpose issue as the portion of the sale proceeds of the multipurpose issue used for that separate purpose bears to the aggregate sale proceeds of the multipurpose issue.

Regulations § 1.148-9(h)(4)(ii) provides that this pro rata method of allocation based on the relative amount of sales proceeds will be considered to be a reasonable method of allocating the bonds of a multipurpose issue.

Example 4

In our example of County X's bonds, each year the \$2,500,000 maturities could be allocated \$1,500,000 to Series A, and \$1,000,000 to Series B.

Allocation of Bonds Used to Refund Two or More Prior Issues

When a refunding issue refunds two or more prior issues, its bonds are allocated to each prior issue in the same manner as discussed above. However, the portion of the sales proceeds allocated to the refunding of a separate prior issue is based on the present value of the refunded debt service on that prior issue, using the yield on investments in the refunding escrow allocable to the entire refunding issue as the discount rate.

Continued on next page

Multipurpose Issues Allocations, Continued

Example 5 Series X in the principal amount of \$50,000,000 refunds Series A and Series B. \$2,500,000 of the refunding bonds mature each year for 20 years. The present value of the debt service to be refunded for Series A and Series B is \$19,500,000 and \$29,250,000, respectively. These present values are determined using the aggregate yield of the Series X escrow investments. As the bonds of Series X mature, 40 percent (\$19,500,000/\$48,750,000) of the bonds will be allocated to Series A (and paid with revenues of the Series A project,) and 60 percent will be allocated to Series B (and paid with revenues of the Series B project.)

Safe Harbor for Allocation of Purpose Investments Regulations § 1.148-9(h)(4)(iii) provides that an allocation of a portion of the bonds of a multipurpose issue to a particular purpose investment is generally reasonable if that purpose investment has principal and interest payments that reasonably coincide in time and amount to principal and interest payments on the bonds allocated to that purpose investment.

Example 6 Housing Authority X issues a \$10,000,000 bond issue to finance qualified mortgage loans for owner-occupied residences under § 143. The Authority originates \$5,000,000 of loans at 5 percent and 6 months later originates \$5,000,000 of loans at 6.5 percent. A portion of the maturing bonds can be allocated to each purpose investment (loans) as long as the principal and interest payments of both coincide in time and amount.

Allocations of Refunding Bonds When allocating bonds of a multipurpose issue which refunds separate prior issues, the rules of Regulations §§ 1.148-9(h)(1) and (2) must be followed along with other rules found in Regulations § 1.148-9(h)(4)(v).

Continued on next page

Multipurpose Issues Allocations, Continued

Multi- Generation Allocations

Regulations § 1.148-9(h)(5) provides that the allocation rules apply only to refunded issues, which are refunded directly by issues to which Regulations § 1.148-9(h) applies. Regulations § 1.148-9(h) generally applies to bonds issued after June 30, 1993. The rule does not apply to the prohibition on advance refundings of private activity bonds (§ 149(d)(2)) or the advance refunding limit for governmental bonds and 501(c)(3) bonds under § 149(d)(3)(A)(i)(ii) and (iii).

Example 7

If a 1994 issue refunds a 1984 multipurpose issue, which in turn refunded a 1980 multipurpose issue, Regulations § 1.148-9(h) applies to allocations of the 1984 issue for purposes of allocating the refunding purposes of the 1994 issue, but does **NOT** permit allocations of the 1980 issue.

Multipurpose Issue Allocations – Section 1.41

Regulations § 1.141-13(d) (TD 9741, effective 10/27/15) provides that for purposes of section 141, unless the context clearly requires otherwise, Regulations § 1.148-9(h) applies to allocations of multipurpose issues including allocations involving the refunding purposes of the issue. An allocation can be made at any time, but once made it cannot be changed. An allocation is not reasonable under this rule if it achieves more favorable results under § 141 than could be achieved with actual separate issues.

Each of the separate issues under the allocation must consist of one or more tax-exempt bonds.

Allocations made under this rule and § 1.148-9(h) must be consistent for purposes of §§ 141 and 148.

Partial Refundings

Introduction

Assume that State Q has a \$100,000,000, 9 percent bond issue outstanding from 1991. The proceeds were used to construct a stadium. In 1998, with \$70,000,000 of this issue still outstanding, the State decides to advance refund only \$35,000,000 of the issue.

The 1991 issue is a single-purpose issue, which according to Regulations § 1.148-9(h)(3) cannot be divided into separate purposes. Are partial refundings permitted? If so, how will the maturing bonds be allocated for refunding purposes? And how much of the unspent proceeds can become transferred proceeds of the refunding issue?

These questions are addressed in Regulations § 1.148-9(i).

Allocating a Single-Purpose Prior Issue

Regulations § 1.148-9(i)(1) provides that for purposes of the multipurpose issue allocations, the separate purposes of a prior issue include the refunded and unrefunded portions of the prior issue.

The refunded portion of the bonds of a prior issue is based on a fraction as follows:

$$\frac{\text{Principal amount of the Prior Issue to be} \\ \text{Paid with Proceeds of the Refunding Issue}}{\text{Outstanding Principal Amount of the Bonds} \\ \text{of the Prior Issue}}$$

Each of the above amounts is determined as of the issue date of the refunding issue.

See Regulations § 1.148-9(b)(2) for the definition of principal amount.

Continued on next page

Partial Refundings, Continued

Allocations of Proceeds and Investments

Regulations § 1.148-9(i)(2) provides that as of the issue date of the partial refunding, unspent proceeds of the prior issue are allocated ratably between the refunded and unrefunded portions of the prior issue.

Investments allocable to those unspent proceeds are allocated in the manner required for the allocation of investments to transferred proceeds under Regulations § 1.148-9(c)(1)(ii).

Example 8

Using the example above, assume that State Q's 1991 issue has unspent proceeds of \$12,000,000. \$10,000,000 is in a 4R fund and \$2,000,000 remains in the project fund. Under Regulations § 1.148-9(i)(2), \$5,000,000 of the amounts in the 4R fund, $(\$35,000,000/\$70,000,000 \times \$12,000,000)$ and \$1,000,000 of the amounts in the project fund would be allocated to the refunded (and unrefunded) portions of the issue. Therefore, only \$6,000,000 of the unspent proceeds would be subject to transfer.

Universal Cap

One-Issue Rule Regulations § 1.148-6(b)(1) provides that gross proceeds can be allocated to only one bond issue at a time.

If amounts simultaneously are proceeds of one issue and replacement proceeds of another issue, those amounts are allocable to the issue of which they are proceeds.

For example, when proceeds of a refunding issue are placed into an escrow fund, these proceeds are both sale proceeds of the refunding issue and replacement proceeds of the refunded issue. However, because Regulations § 1.148-6(b)(1) provides that the amounts are allocable to the issue of which they are **proceeds** (rather than **gross proceeds**), these amounts are treated as proceeds of the refunding issue, rather than replacement proceeds of the refunded issue.

Consider also unspent sale proceeds of a prior issue that are held in a project fund. If, upon issuance of advance refunding bonds, the unspent proceeds are placed into the reserve fund of the refunding issue, such proceeds are considered a pledged fund for the refunding issue. As a result, the unspent proceeds are sale proceeds of the refunded issue and replacement proceeds of the refunding issue. The one-issue rule provides that the amounts in the reserve fund continue to be treated as proceeds of the refunded issue until they are deallocated from being proceeds of the refunded issue, as discussed below, and become proceeds of the refunding issue.

Deallocating Proceeds According to Regulations § 1.148-6(b)(1), **proceeds** will continue to be treated as proceeds of the refunding issue until the amounts are:

- Allocated to an expenditure for a governmental purpose,
 - Allocated to transferred proceeds of another issue,
 - Deallocated from the issue because of the universal cap, **OR**
 - Deallocated from the issue because the issue is retired.
-

Continued on next page

Universal Cap, Continued

Review of Universal Cap

The universal cap limits the amount of gross proceeds that can be allocated to an issue at any one time. When unspent proceeds of a prior issue would otherwise become “transferred proceeds” of the refunding issue, the universal cap may act to limit the amount of prior issue proceeds that can “transfer.”

Thus, it is important to review the rules regarding universal cap before a discussion of transferred proceeds is undertaken.

Remember from Lesson 6 of Phase I that the value of:

- Non-purpose investments allocable to an issue cannot exceed the value of all of the outstanding bonds of the issue.
 - All outstanding bonds of the issue is referred to as the universal cap.
-

What is Included in Non-purpose Investments

Non-purpose investment means any investment property that is not a purpose investment.

Regulations § 1.148-6(b)(2)(ii) provides that, for purposes of computing universal cap, gross proceeds allocable to the following are also treated as non-purpose investments:

- Cash
 - Tax-exempt bonds that would be non-purpose investments but for § 148(b)(3)(A)
 - Qualified student loans
 - Qualified mortgage loans
-

What is NOT Included in Non-purpose Investments

Regulations § 1.148-6(b)(v) provides that non-purpose investments allocated to gross proceeds in a bona fide debt service fund are **NOT** taken into account in determining the value of non-purpose investments that are subject to the universal cap.

Those non-purpose investments remain allocated to the issue.

Continued on next page

Universal Cap, Continued

Determining the Value of Bonds and Investments

Regulations § 1.148-6(b)(2)(ii) provides that the value of the bonds is determined under Regulations § 1.148-4(e), and the value of the investments is determined under Regulations § 1.148-5(d)

When a Cap Calculation is Required

Regulations § 1.148-6(b)(2)(iii) provides that for refunding and refunded issues, universal cap and value of investments and bonds must be determined as of each date that the proceeds of the refunded issue become (or could become) transferred proceeds of the refunding issue.

Therefore, universal cap and values must be determined on each date that the proceeds of a refunding issue pay a portion of the principal of the prior issue.

However, under Regulations § 1.148-6(b)(2)(i) universal cap does not have to be applied if no reduction or reallocation of gross proceeds results.

Application of the Universal Cap

Because transferred proceeds are included in gross proceeds, it is possible that proceeds from a prior issue could become transferred proceeds of a refunding issue, and then be deallocated from the refunding issue by operation of the universal cap.

Where Do Deallocated Proceeds Go?

If, as a result of the universal cap, proceeds cannot be allocated to the refunding issue, Regulations § 1.148-9(b)(3)(i) provides that deallocated amounts are reallocated back to the prior issue to the extent of the unused universal cap on that prior issue.

Additionally, Regulations § 1.148-6(b)(2)(iv)(B) provides that when amounts are deallocated from an issue due to the application of the universal cap, they are allocated to another issue to the extent they are replacement proceeds of the other issue.

Transferred Proceeds

Purpose of the Transferred Proceeds Rule

The purpose of the transferred proceeds rule is to reflect the economics of the transaction after a refunding and discharge of some or all of the refunded bonds by determining which obligation is effectively supporting the investments in question. The arbitrage rules (both yield restriction and rebate) generally compare the earnings on unspent gross proceeds of an issue with the yield on that issue.

After a refunding issue discharges a prior issue, the yield on the investment acquired with the unspent proceeds of the prior issue should not be compared with the yield on the prior issue. After the prior issue is discharged, the issuer has an issue of obligations outstanding (the refunding issue) and unspent proceeds. In Example 8 described above on page 3-83, assume that the 1998 issue is discharged in 2008 and at that time the amount in the project fund are spent but \$2,000,000 of the proceeds of the 1998 issue remain in the reserve fund for the 2000 issue. This puts the issuer in the same position as it was before the refunding occurred. Thus, City should not be permitted to invest the amounts in the reserve fund at a 7 percent yield while the yield on the 2000 issue is 5 percent.

The transferred proceeds rule provides that the unspent proceeds of the prior issue become proceeds of the refunding issue when the prior issue is discharged, whether in whole or in part. Investments allocable to the transferred proceeds become subject to yield restriction and rebate at the yield of the refunding issue.

Definition of Transferred Proceeds

In general, transferred proceeds are any proceeds of a refunded issue that, as a result of allocation rules in Regulations § 1.148-9(b), become proceeds of the refunding issue.

Regulations § 1.148-9(b)(1) provides that when **proceeds** of the refunding issue discharge any of the outstanding principal amount of the prior issue, **proceeds** of the prior issue become transferred proceeds of the refunding issue and cease to be proceeds of the prior issue.

While transferred proceeds may arise in connection with any refunding, the most complex transferred proceeds allocations arise in connection with advance refundings. The specific allocation rules will be discussed in the next section.

Mixed Escrow Rules

Introduction	Mixed escrow rules provide a method of allocating investments held in a refunding escrow that is funded with proceeds of refunding bonds and other moneys.
---------------------	--

Definition	If an escrow fund contains refunding issue proceeds and other amounts, such as unspent proceeds of the prior issue or issuer revenues, it is referred to as a “ mixed escrow .” The rules require that non-refunding amounts be spent at least as fast as refunding issue proceeds.
-------------------	--

Advance Refundings	Although a mixed escrow situation could arise in a current refunding, the rules are most often applied in advance refunding escrows, which may have duration of many years. Detailed examination of the mixed escrow rules occurs later in this lesson, in the section on Advance Refundings.
---------------------------	---

Section 7: Hedge Bond Rules

Overview

Introduction The provisions of § 149(g) regarding hedge bonds also have provisions which apply only to refundings. These provisions will be discussed in this section. Generally, the determination of whether or not the issue meets the hedge bond requirements depends on the original issue.

Treatment of the refunding issue differs depending on whether or not § 149(g) applies to the refunded issue.

In this Section This section contains the following topics:

Topic	See Page
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Review of § 149(g)	90
Analysis When Prior Bonds Covered by § 149(g)	91
Analysis When Prior Bonds Not Covered	92
Additional Rules	96
Map of Refunding Analysis	97

Review of § 149(g)

Review of Hedge Bond Rules

Section 149(g)(1) provides that § 103(a) shall not apply to any “hedge bond” unless the costs of issuance of the issue are paid within 180 days and the issuer reasonably expects to meet certain specified targets as to expenditure of the proceeds of the issue.

Section 149(g)(3)(A)(i) and (ii) defines a hedge bond:

(3) Hedge bond

(A) In general For purposes of this subsection, the term “hedge bond” means any bond issued as part of an issue unless-

- (i)** the issuer reasonably expects that 85 percent of the spendable proceeds of the issue will be used to carry out the governmental purposes of the issue within the 3-year period beginning on the date the bonds are issued, and
 - (ii)** not more than 50 percent of the proceeds of the issue are invested in nonpurpose investments (as defined in section 148(f)(6)(A)) having a substantially guaranteed yield for 4 years or more.
-

Analysis When Prior Bonds Covered by § 149(g)

**Applicability
When § 149(g)
Applies to the
Refunded Issue**

Section 149(g)(3)(C)(i) states that a refunding bond will be treated as meeting the requirements of § 149(g) only if the original bond met the requirements. Congress intended that this be read to mean that a refunding bond will be a hedge bond that fails to satisfy the requirements of § 149(g)(1) unless the refunded bonds had satisfied § 149(g)(1).

For a refunding bond to qualify as satisfying the hedge bond rules pursuant to § 149(g)(3)(C)(i), the provisions of § 149(g) must apply to the refunded issue. Section 149(g) generally applies to bonds issued after September 14, 1989. Therefore, if the refunded issue was issued after this date, and none of the transition exceptions in the legislation apply, then § 149(g)(3)(C)(i) will apply to the refunded issue. Generally, in this situation, the status of the refunded bond will just carry over to the refunding issue.

Example 1

City K issues \$25,000,000 principal amount of bonds having a yield of 8 percent on November 1, 1989. Preliminary offering materials were mailed on September 15, 1989 and the bonds were sold on October 20, 1989. The bonds were not issued to finance a self-insurance fund. On July 1, 1993, interest rates fall to 3 percent and the city decides to refund the 1989 bonds. The city issues \$22,000,000 principal amount of bonds having a yield of 3 percent solely to refund the 1989 bonds.

To determine whether or not the refunding issue (1993) meets the hedge bond requirements, you must first determine whether or not § 149(g) applied to the refunded issue (1989). To do this, you can use Figure 3-3. Answering the first four questions tells you that § 149(g) applies to the 1989 issue. Therefore, the next step will be to continue with the flowchart to determine whether or not the 1989 issue is a hedge bond and, if so, if it fails the requirements of § 149(g)(2). If the prior issue is not a hedge bond, or if it satisfies § 149(g)(2), then neither issue will fail to qualify for exemption under § 149(g). If, however, the 1989 issue turns out to be a hedge bond, and fails to satisfy § 149(g)(2), then the 1993 issue will also fail to qualify for exemption under § 149(g)(2).

Analysis When Prior Bonds Not Covered

Applicability When § 149(g) Does *Not* Apply to the Refunded Issue

If § 149(g) did NOT apply to the refunded issue (usually because it was issued before the effective date), §§ 149(g)(3)(C)(ii) and (iii) may provide relief to the issuer. These sections contain the hedge bond provisions for refunded bonds that were issued prior to the effective date of § 149(g), or were eligible for a transition exception. There are two separate provisions, and if the requirements of at least one of them are met, then the refunding issue will not fail to satisfy § 149(g). These provisions are summarized below.

General Rule for Pre- Effective Date Bonds

Section 149(g)(3)(C)(ii) states that a refunding bond will be treated as satisfying § 149(g) if all of the following are true:

- Section 149(g) does **not** apply to the **original** bond.
 - The average maturity date of the refunding issue is **not later than** the average maturity date of the refunded issue.
 - The amount of the refunding bond does **not** exceed the outstanding amount of the refunded bond.
-

Continued on next page

Analysis When Prior Bonds Not Covered, Continued

Example 2

On September 1, 1993, County M issues \$15,000,000 principal amount of bonds at par with a yield of 4 percent. The bonds were issued solely to refund \$20,000,000 principal amount of bonds having a yield of 7 percent issued on October 1, 1988. The maturity schedules for each issue are shown below:

1988 Issue Due	1988 Issue Amount Maturing	1993 Issue Due	1993 Issue Amount Maturing
1989	\$1,000,000	1994	\$1,000,000
1990	\$1,000,000	1995	\$1,000,000
1991	\$1,000,000	1996	\$2,000,000
1992	\$1,000,000	1997	\$2,000,000
1993	\$1,000,000	1998	\$2,000,000
1994	\$1,000,000	1999	\$7,000,000
1995	\$1,000,000		
1996	\$1,000,000		
1997	\$1,000,000		
1998	\$1,000,000		
1999	\$1,000,000		
2000	\$1,000,000		
2001	\$2,000,000		
2002	\$2,000,000		
2003	\$4,000,000		

To compute the average maturity date, we first compute the "weighted average maturity" of each issue. The first step is to divide each maturity amount by 1,000. Then each quotient is multiplied by the number of years remaining until maturity. The sum of these products is then divided by the principal (also divided by 1000). That answer is the weighted average maturity of the issue. These computations are shown below:

Continued on next page

Analysis When Prior Bonds Not Covered, Continued

Example 2 (continued)

1988 Issue	1993 Issue
1,000,000 ÷ 1,000 = 1,000 × 1 = \$1,000	1,000,000 ÷ 1,000 = 1,000 × 1 = \$1,000
1,000,000 ÷ 1,000 = 1,000 × 2 = \$2,000	1,000,000 ÷ 1,000 = 1,000 × 2 = \$2,000
1,000,000 ÷ 1,000 = 1,000 × 3 = \$3,000	2,000,000 ÷ 1,000 = 2,000 × 3 = \$6,000
1,000,000 ÷ 1,000 = 1,000 × 4 = \$4,000	2,000,000 ÷ 1,000 = 2,000 × 4 = \$8,000
1,000,000 ÷ 1,000 = 1,000 × 5 = \$5,000	2,000,000 ÷ 1,000 = 2,000 × 5 = \$10,000
1,000,000 ÷ 1,000 = 1,000 × 6 = \$6,000	7,000,000 ÷ 1,000 = 7,000 × 6 = <u>\$42,000</u>
1,000,000 ÷ 1,000 = 1,000 × 7 = \$7,000	\$69,000
1,000,000 ÷ 1,000 = 1,000 × 8 = \$8,000	
1,000,000 ÷ 1,000 = 1,000 × 9 = \$9,000	
1,000,000 ÷ 1,000 = 1,000 × 10 = \$10,000	
1,000,000 ÷ 1,000 = 1,000 × 11 = \$11,000	
1,000,000 ÷ 1,000 = 1,000 × 12 = \$12,000	
2,000,000 ÷ 1,000 = 2,000 × 13 = \$26,000	
2,000,000 ÷ 1,000 = 2,000 × 14 = \$28,000	
4,000,000 ÷ 1,000 = 4,000 × 15 = <u>\$60,000</u>	
\$192,000	
Weighted average maturity equals: 192,000 ÷ 20,000 = 9.60 years	Weighted average maturity equals: 69,000 ÷ 15,000 = 4.60 years

Once the weighted average maturity of each issue is determined, the next step is to add it to the issuance date to find the average maturity date, as follows:

October 1, 1988
+ 9 yrs, 7 mos, 6 days
May 7, 1998

September 1, 1993
+ 4 yrs, 7 mos, 6 days*
April 7, 1998

* To convert .60 years to days and months:

$$360 \times .60 = 216 \text{ days}; 216 \div 30 = 7.20 \text{ months}; .20 \times 30 = 6 \text{ days}$$

The weighted average maturity of the refunding issue is **not** later than the weighted average maturity of the refunded issue.

Additionally, the amount of the refunding bond (\$15M) does not exceed the outstanding amount of the refunded bond (\$16M).

Lastly, § 149(g) did not apply to the refunded bond. Therefore, since all of the requirements of § 149(g)(3)(C)(ii) are met, the refunding bonds are not hedge bonds.

Continued on next page

Analysis When Prior Bonds Not Covered, Continued

Special Rule for Refunded Bonds Meeting Spending Tests

If the bonds cannot meet the general rule of § 149(g)(3)(C)(ii), then § 149(g)(3)(c)(iii) may apply. This section provides that the refunding bond will **not** be a hedge bond if all of the following are true:

- Section 149(g) does **not** apply to the **original** bond.
 - The issuer reasonably expected that 85 percent of the spendable proceeds of the **original** issue would be spent for governmental purposes within a 5-year period, but would **not** be spent within a 3-year period (the 3-year and 5-year periods begin on the issuance date).
 - At least 85 percent of spendable proceeds of **all prior original issues** were **actually spent** before the date the refunding bonds are issued.
-

Additional Rules

Additional Rules for Refunding Issues

Regulations § 1.149(g)-1 contains two additional provisions regarding refundings. These provisions apply to bonds issued after June 30, 1993, and to bonds issued earlier **only** if the issuer elected to apply the 1993 regulations retroactively. These provisions are summarized below:

- Regulations § 1.149(g)-1(c)(1) provides that if a refunded bond escaped hedge bond status because 95 percent of net proceeds were invested in non-AMT bonds, then the refunding bond must invest 95 percent of gross proceeds in non-AMT bonds in order to avoid hedge bond status. (For this test, gross proceeds do **NOT** include any proceeds deposited into the refunding escrow for the refunded bond.)
 - Regulations § 1.149(g)-1(c)(2) states that a refunding bond will be a hedge bond unless there is a significant governmental purpose for the issuance of the bond. Examples of this are debt service savings and relief of burdensome covenants.
-

Map of Refunding Analysis

**Determining
Status of a
Refunding
Bond**

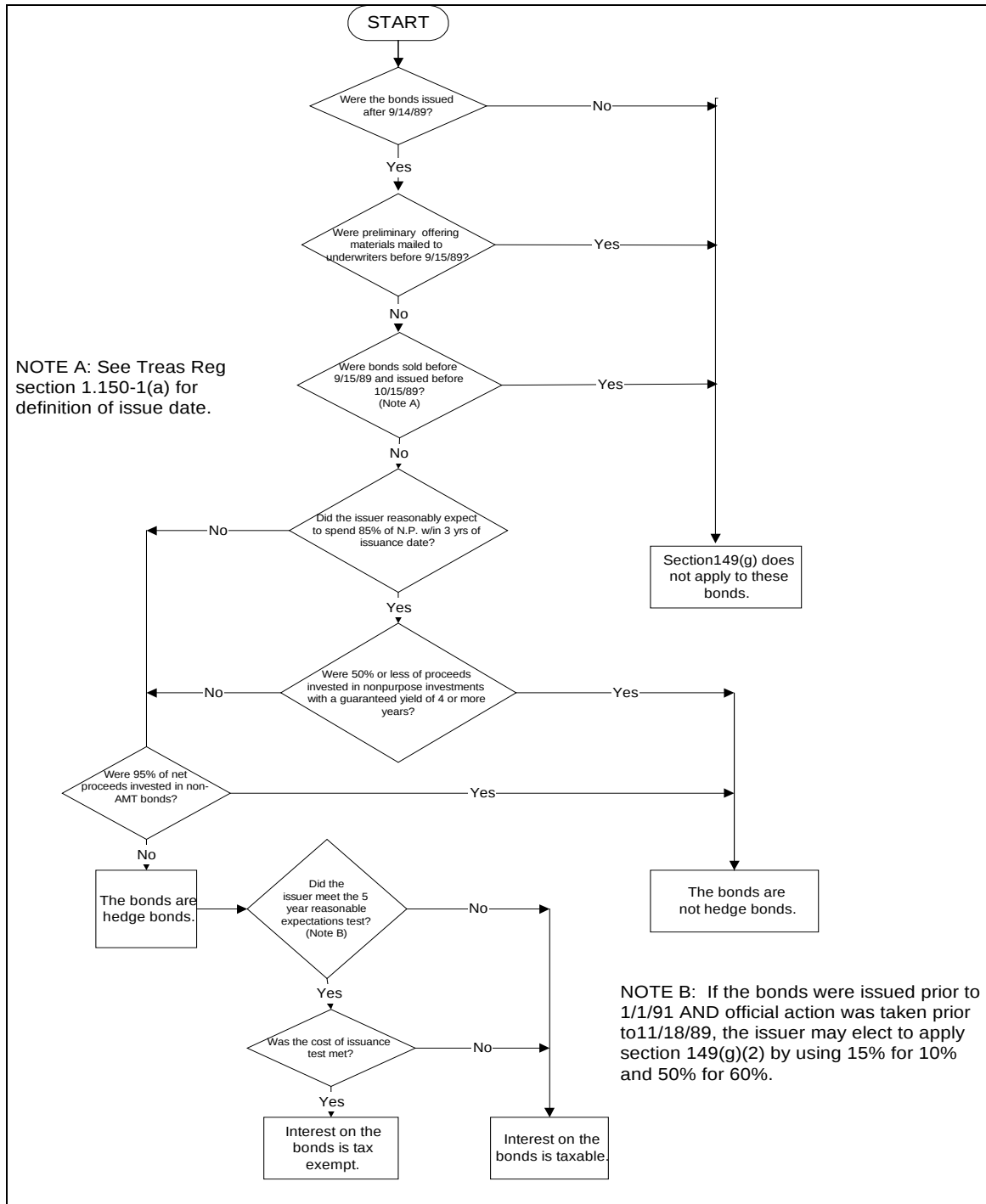
The status of the refunding issue generally is derived from the original issue. Therefore, you must test the original issue(s) to see if they meet the requirements of § 149(g). To do this, you will need to refer to Figures 3-3 and 3-4.

Remember that this determination depends on whether or not the original issue was subject to § 149(g). As soon as you know that the bond is a refunding issue, you should request documents for the original issue.

Continued on next page

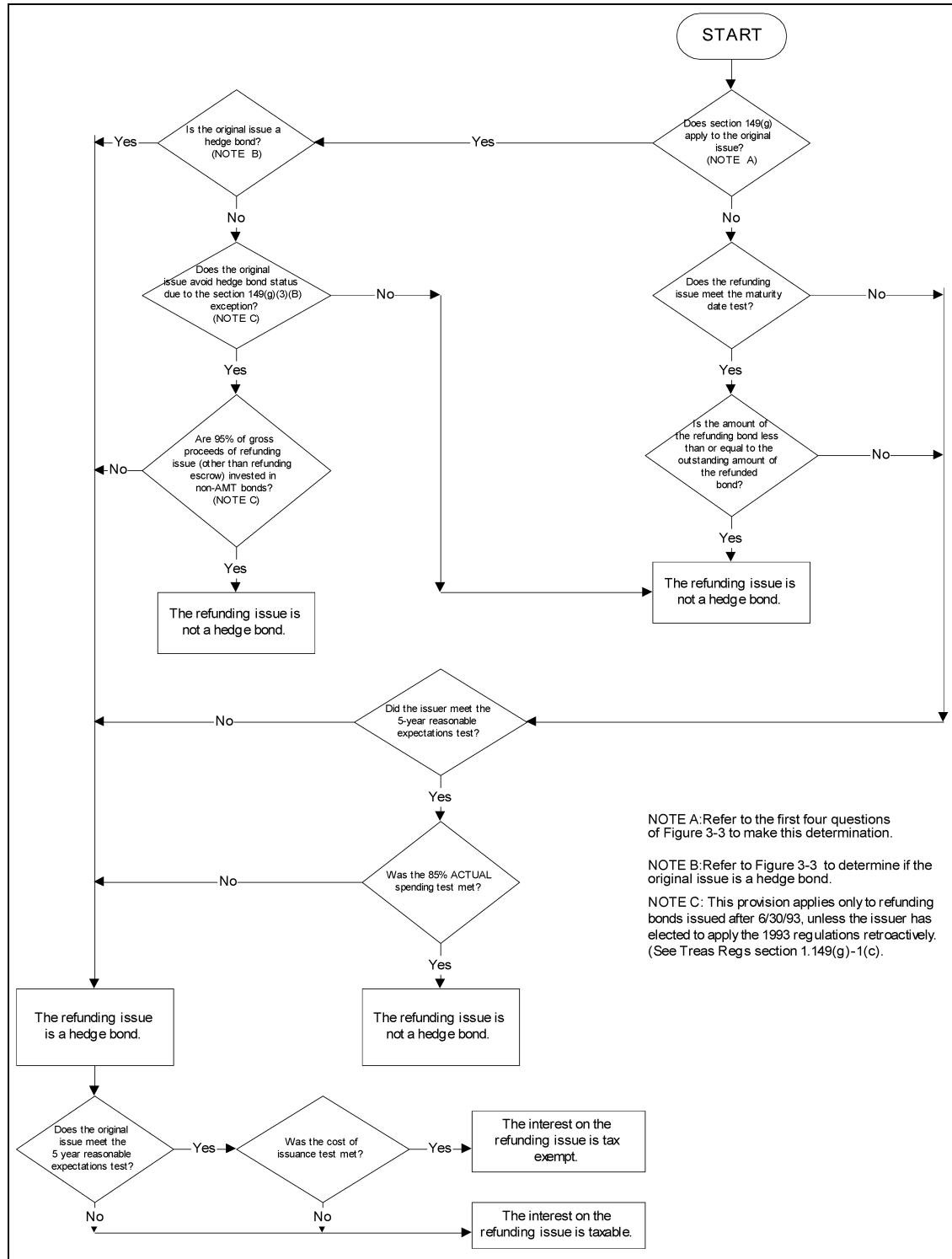
Map of Refunding Analysis, Continued

Figure 3-3: Hedge Bond Rules for Original Issues



Map of Refunding Analysis, Continued

Figure 3-4: Hedge Bond Rules for Refunding



Part II: Advance Refunding Topics

Overview

Introduction

Advance refundings present unique problems with respect to arbitrage. This is mainly because two bond issues related to the same initial project are outstanding at the same time. Depending on the issuance date of the refunding bonds and the call date of the refunded bonds, both issues can be outstanding for some time.

Part II of this lesson covers the special rules that apply to advance refundings. It also goes into greater detail on how many of the refunding rules described in Part I apply in the context of an advance refunding.

The general rules that define and limit advance refundings are in § 149(d) and the accompanying regulations. In addition to the general yield restriction rules, specific arbitrage rules applicable to refunding issues are in Regulations § 1.148-9, including allocation rules. The allocation rules are particularly significant in advance refundings because, for a certain period, there are two bond issues outstanding and each issue may have unspent proceeds at the same time. Specific anti-abuse rules for advance refundings are in Regulations § 1.148-10.

Organization of This Part

This Part II begins by describing three types of advance refunding structures. Then various types of funds typically found in advance refundings will be covered.

With that background covered, this Part will then cover various arbitrage rules in detail. Section 4 covers the mixed escrow allocation rules. Section 5 covers complex transferred proceeds calculations involving multiple transfer dates. Section 6 covers how use of moneys from various existing funds for the refunded bonds will affect the arbitrage analysis.

The next two sections cover rules specific to advance refundings.

The last section deals with an investment mechanism that is often paired with open market treasury investments in advance refunding escrows.

Continued on next page

Overview, Continued

In this Part

This part contains the following topics:

Topic	See Page
Section 1: Forms of Advance Refundings	102
Section 2: Typical Funds in Advance Refundings	114
Section 3: Mixed Escrow Rules	122
Section 4: Multiple Transferred Proceeds Allocations	134
Section 5: Use of Prior Issue's Proceeds	152
Section 6: Section 149(d) Limits	167
Section 7: Abusive Arbitrage Devices	173
Section 8: Special Topic – Forward Float Contracts	182

Section 1: Forms of Advance Refundings

Overview

Introduction Before the arbitrage restrictions can be understood, it is helpful to understand the three different forms that an advance refunding may take. The first form, the net refunding, is by far the most common. The other two forms are described in the anti-abuse rules on excess gross proceeds of advance refundings in Regulations § 1.148-10(c).

In this Section This section contains the following topics:

Topic	See Page
Overview	102
Net Refunding	103
Gross Refunding	106
Crossover Refunding	109
Summary of Forms of Advance Refundings	113

Net Refunding

Introduction

This is the most typical form of advance refunding. In a net refunding, the proceeds of the refunding bonds plus investment income thereon are used to pay the principal of and interest and call premium, if any, on the refunded issue. The proceeds of the advance refunding bonds are used either to acquire in the open market obligations of the United States Treasury or obligations guaranteed by the full faith and credit of the United States, or to purchase State or Local Government Series obligations from the Bureau of Public Debt. These securities are purchased in an amount that is sufficient, including interest earnings on the securities, to pay the principal, interest, and redemption premium (if any) on the refunded bonds on each debt service payment date until their redemption date.

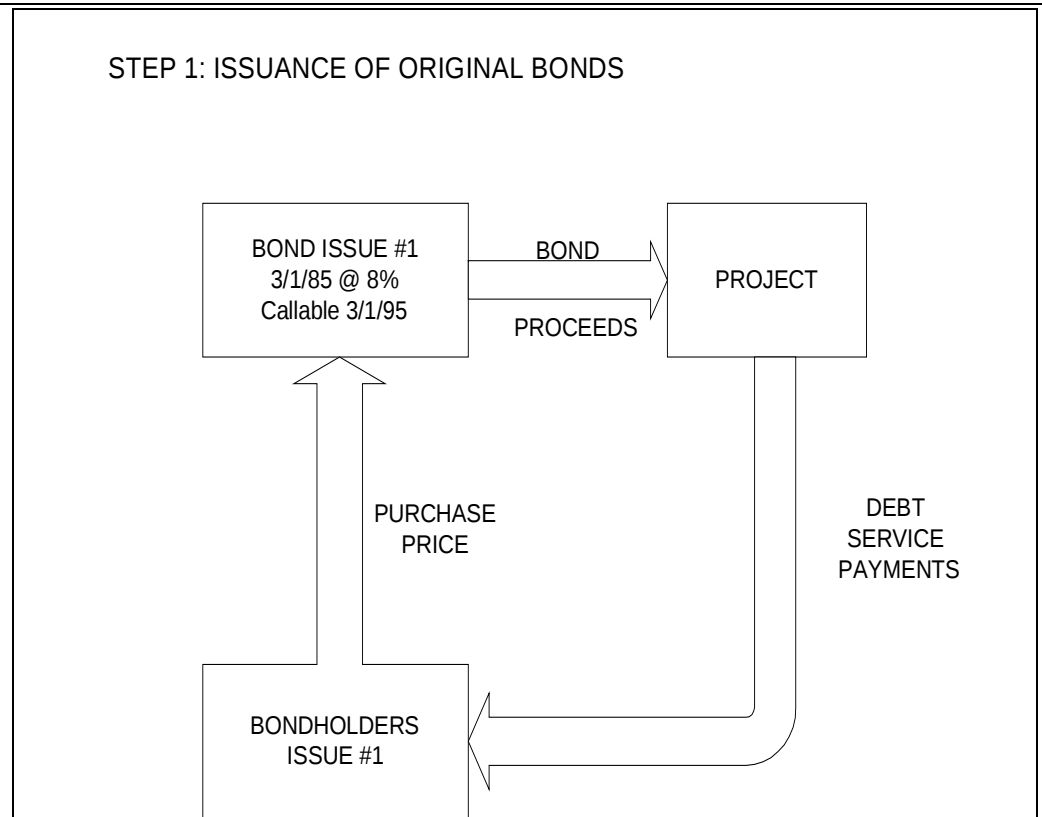
Typically, the securities purchased are deposited into an irrevocable escrow fund and the refunded bonds are considered to be "defeased." The sources of funds (taxes or revenues, as the case may be) that were previously being used to pay debt service on the refunded bonds are, after the refunding, used to pay debt service on the refunding bonds. The interest and maturing principal of the government securities in the escrow fund are used to pay the debt service on the refunded bonds.

Figure 3-5 illustrates a net refunding.

Continued on next page

Net Refunding, Continued

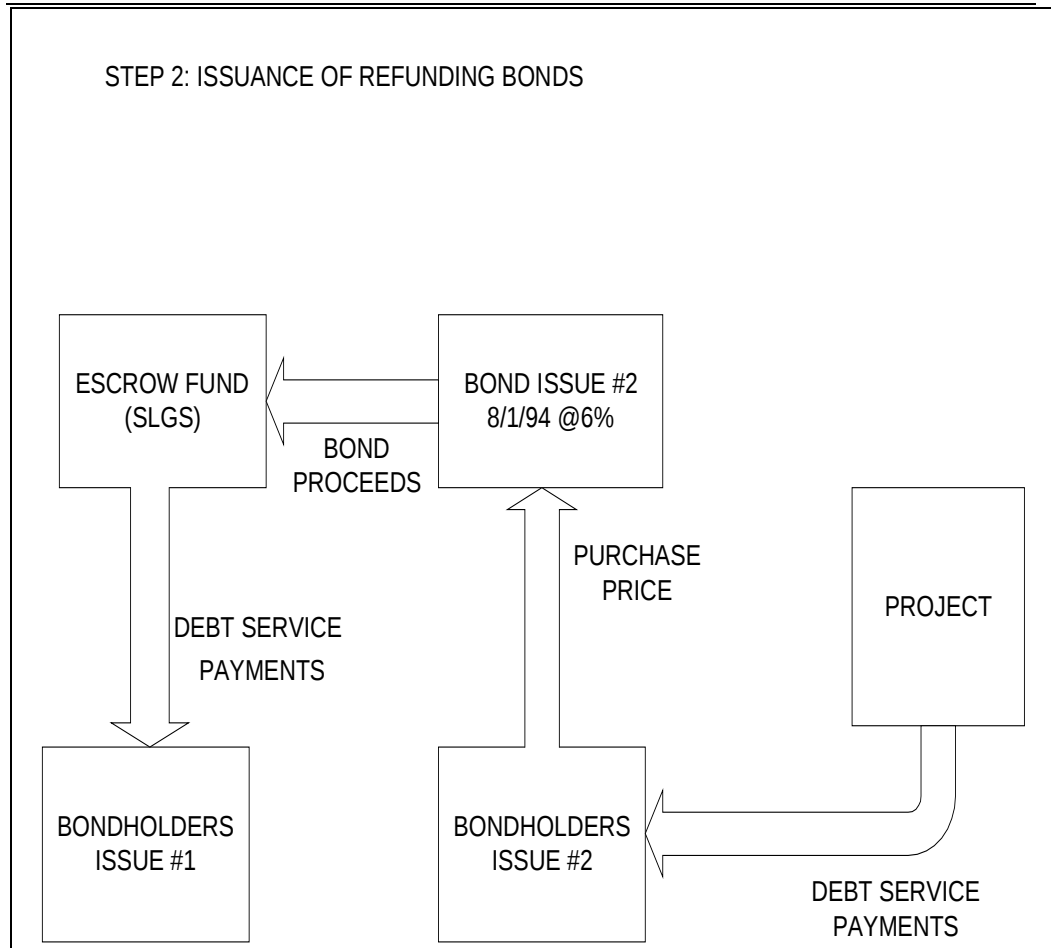
Figure 3-5: Net Refunding



Continued on next page

Net Refunding, Continued

Figure 3-5: Net Refunding (continued)



Claim of bondholders on project revenues is now released, or “defeased.”
Revenues are used to pay debt service on the refunding bonds.

Gross Refunding

Gross (or Full Cash) Refunding

Occasionally, state law or bond documents require that a gross refunding be used. Unlike a net refunding, in a gross refunding, investment earnings on the securities deposited into the refunding escrow are not taken into account to determine whether the trustee has sufficient funds to pay the principal, interest and redemption premium, if any, on the refunded bonds. Therefore, on the issuance date of the refunding bonds, the issuer determines the full cash amount needed to pay principal, interest, and premium, if any, on the refunded bonds, when due and deposits securities in a principal amount equal to that full cash amount into the escrow account. Therefore, on the final redemption date of the refunded bonds, the value of the securities in the escrow account is in excess of the amount needed to redeem the refunded bonds. This may result in “excess gross proceeds.” Regulations § 1.148-10(c)(5) provides rules applicable to gross refundings.

Example 1

On September 1, 1999, City advance refunds a prior bond which is callable at a redemption price of \$10,000,000 on August 15, 2004. No interest is payable on the refunded bond before the redemption date (a “zero coupon bond”). If City is authorized to do a net refunding and can achieve an 8 percent return on the escrow investments, it needs to issue approximately \$6,750,000 principal amount of refunding bonds. This is because \$6,750,000 principal amount of securities having a yield of 8 percent will have an accreted value of \$10,000,000 on August 15, 2004. On the other hand, if City is required by law or governing document to use a gross refunding, it needs to issue \$10,000,000 principal amount of refunding bonds, because on the issue date it must have \$10,000,000 in the escrow fund.

Figure 3-6 illustrates a gross refunding.

Mechanics of Gross Refundings

In a gross refunding, there are two separate bond issues, the proceeds of which are used to pay debt service on the refunded issue:

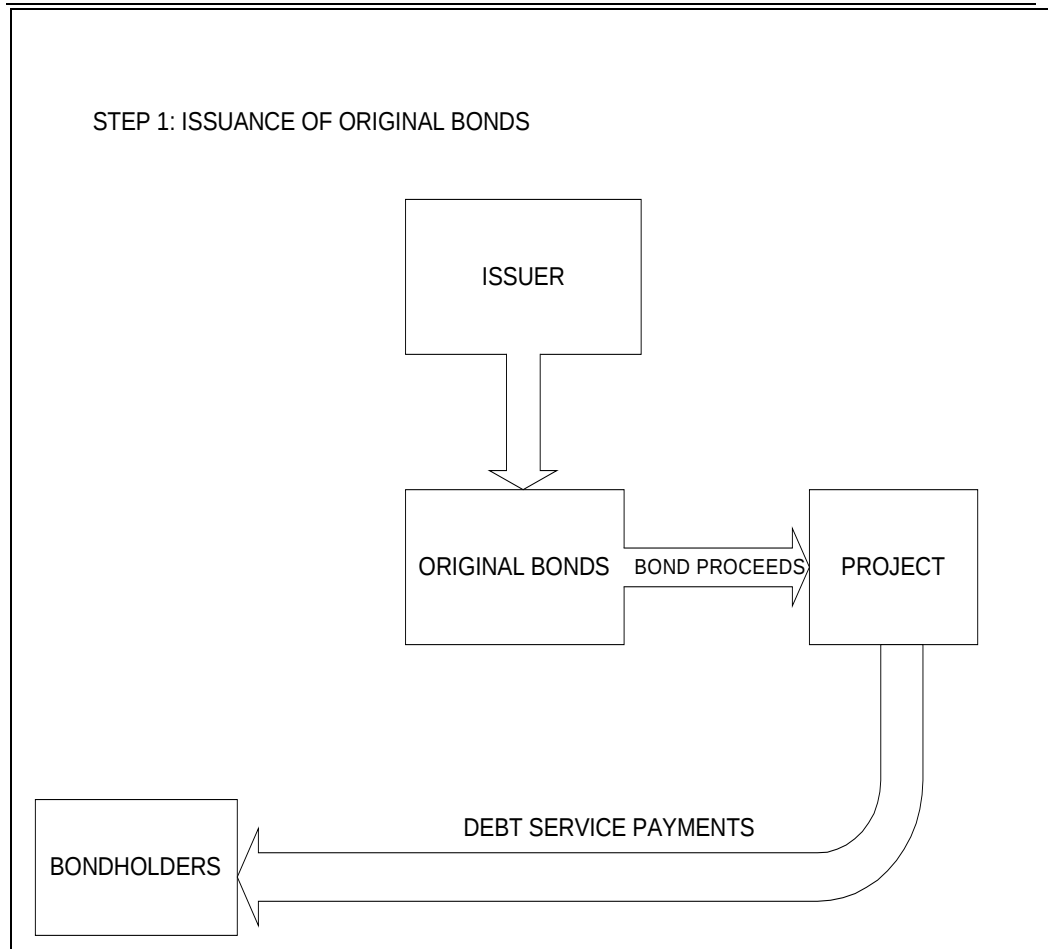
- Refunding Series A
- Refunding Series B (Special Obligation Bonds)

The interest earned on the escrow funds is used to pay debt service on Series B bonds. The Series B bonds must be retired along with (if not before) the prior issue.

Continued on next page

Gross Refunding, Continued

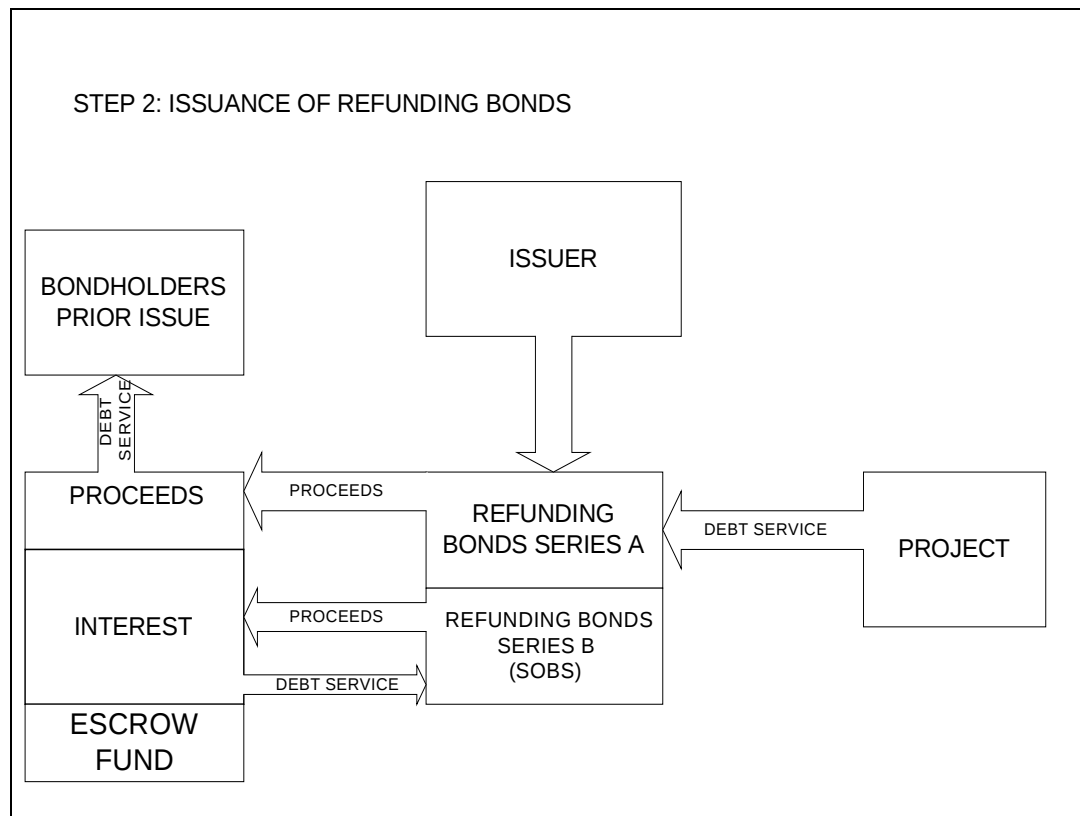
Figure 3-6: Gross Refunding



Continued on next page

Gross Refunding, Continued

Figure 3-6: Gross Refunding (continued)



Crossover Refunding

Crossover In this method, advance refunding bonds are issued in an amount sufficient to pay the redemption price (including premium, if any) of the refunded bonds, but not debt service prior to the redemption date. In the crossover method, the prior bonds are not defeased. On the redemption date of the refunded bonds, which is called the “crossover date,” the proceeds of the advance refunding bonds will retire the refunded bonds. Until the crossover date, the investment income from the proceeds of the refunding issue is used to pay the debt service on the refunding bonds. Prior to the crossover date, the debt service of the refunded bonds is paid from the revenues of the issuer. After the crossover date, the refunding bonds are then secured by the funds that initially secured the refunded bonds.

Special rules in Regulations § 1.148-10(c)(4) apply to crossover refundings.

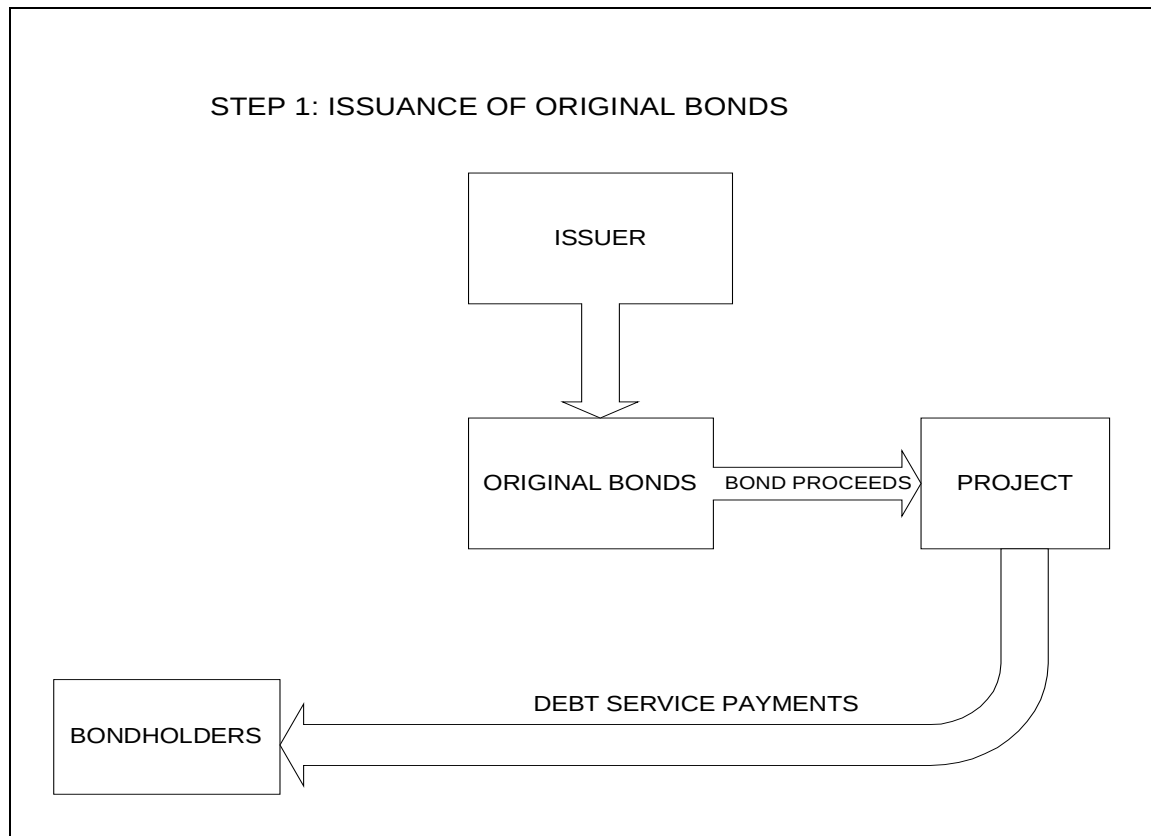
Example 2 On June 1, 1998, City has outstanding \$10,000,000 principal amount of bonds issued in 1995. On October 1, 2005, the first redemption date for the 1995 bonds, the outstanding principal amount of the 1995 bonds will be \$9,000,000 and the premium will be \$180,000. On June 1, 1998, City issues advance refunding bonds in an amount that, when invested in investments maturing on October 1, 2005, will provide City with \$9,180,000. Prior to the crossover date, earnings on the investments pay debt service on the 1998 advance refunding bonds. On October 1, 2005, City will use the maturing amount of the investments to redeem the 1995 bonds. October 1, 2005 is the “crossover date.”

Figure 3-7 illustrates a crossover refunding.

Continued on next page

Crossover Refunding, Continued

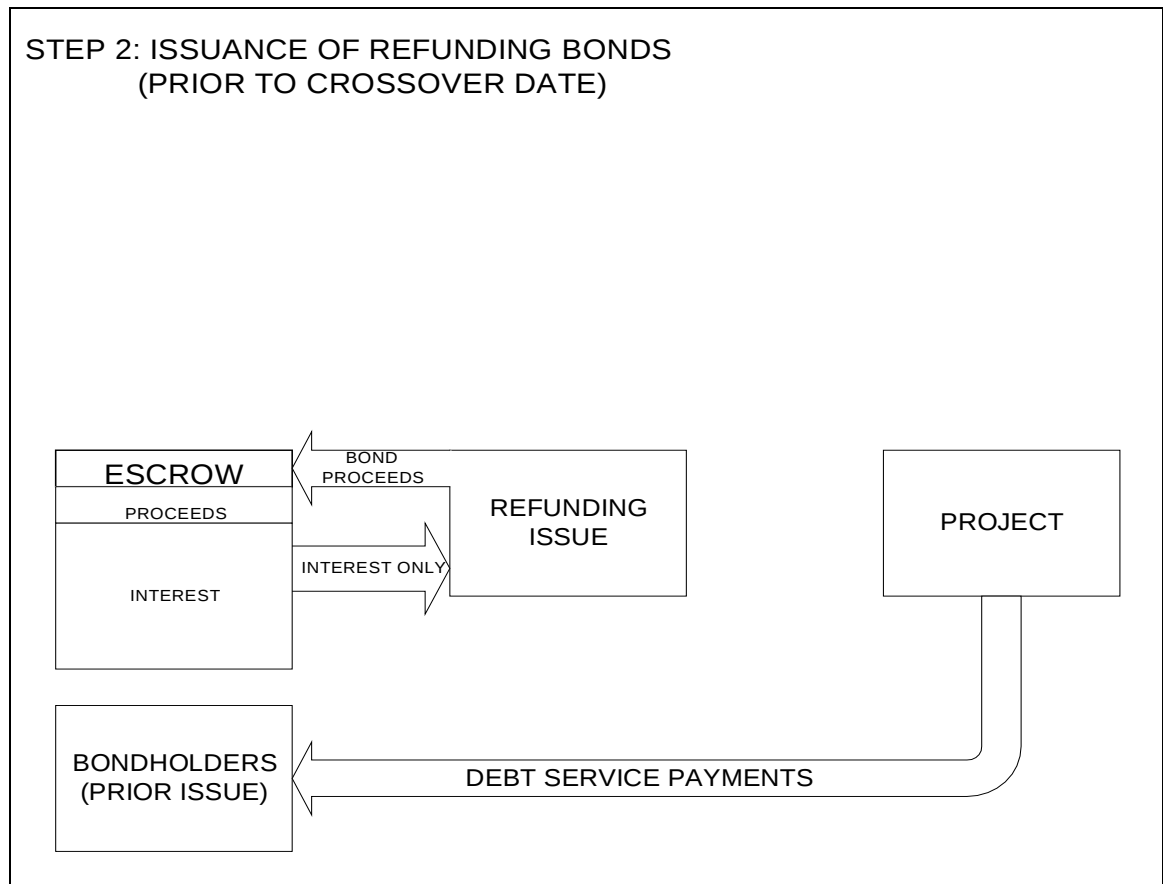
Figure 3-7: Crossover Refunding



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Crossover Refunding, Continued

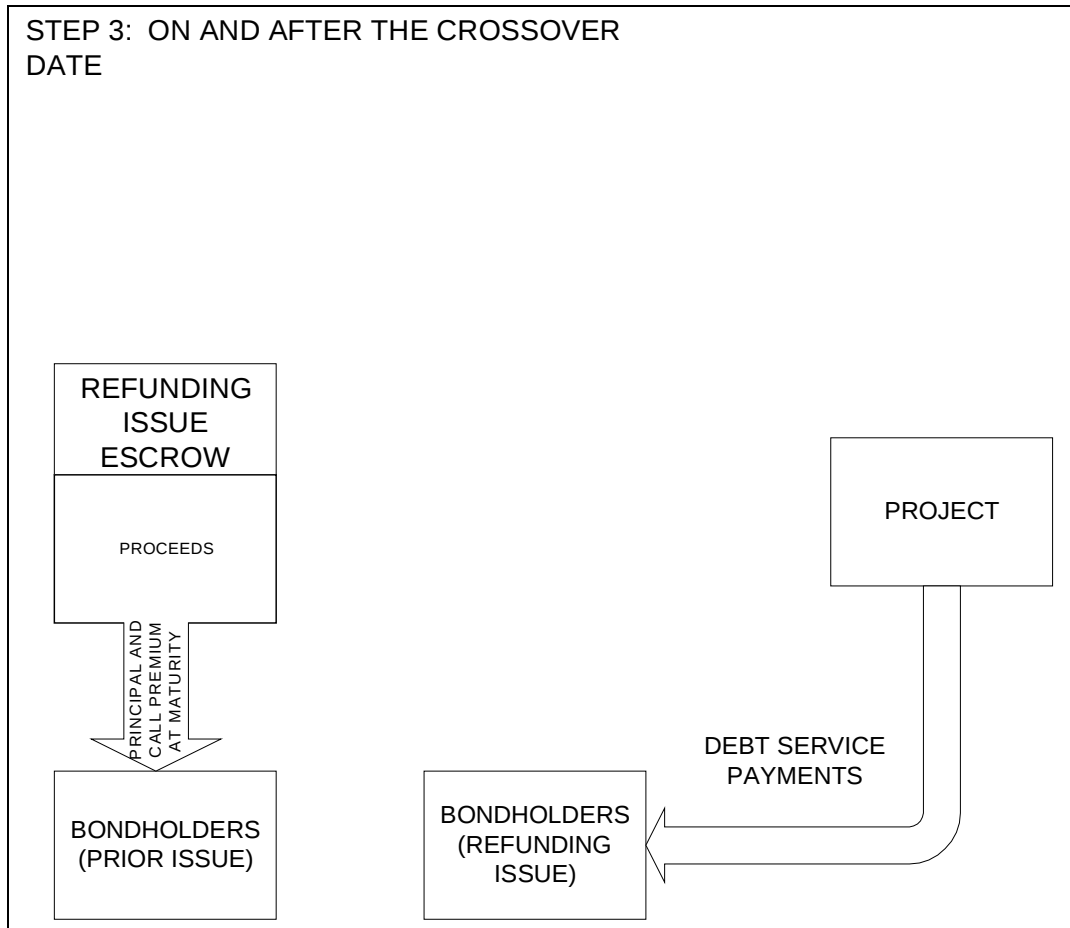
Figure 3-7: Crossover Refunding, continued



Continued on next page

Crossover Refunding, Continued

Figure 3-7: Crossover Refunding, continued



Summary of Forms of Advance Refundings

The Table below compares and contrasts the three methods of refundings:

Table: Comparison of the Three Methods of Refundings

	Net Refunding	Gross Refunding	Crossover
Prior Bonds	Defeased when refunding bonds are issued.	Defeased when refunding bonds are issued.	May be redeemed when callable. Not defeased.
Revenue Supporting Prior Bonds	Pays debt service on refunding issue.	Pays debt service on Refunding Series A.	Continues to support prior issue until crossover date. Then pays debt service on refunding issue.
Refunding Sale Proceeds	Pay debt service of prior bonds from issuance date to redemption. Then pay remaining principal and call premium, if any, of prior bonds.	Pay debt service of prior bonds from issuance date to redemption. Then pay remaining principal and call premium of prior bonds.	Pay the principal and call premium of prior bonds on crossover date and possibly interest on the refunding issue prior to the crossover date.
Earnings on Refunding Sale Proceeds	Pay debt service of prior bonds from issuance date to redemption. Then pay remaining principal and call premium of prior bonds.	Pay debt service on prior bonds and Refunding Series B special obligation bonds.	Pay the interest on refunding bonds until crossover date.

Section 2: Typical Funds in Advance Refundings

Overview

Introduction To understand advance refundings, it is necessary to be familiar with the various types of funds usually established in an advance refunding. You should be familiar with these many of these concepts from other lessons.

In this Section This section contains the following topics:

Topic	See Page
Overview	114
Refunding Escrow	115
Reasonably Required Reserve and Replacement Fund	117
Bona Fide Debt Service Fund	120
Sinking Fund	121

Refunding Escrow

Introduction

Typically, the most significant fund in an advance refunding issue is the refunding escrow. As discussed in the prior section, in the typical net refunding the investments deposited into the escrow fund are security for the refunded bonds and are used to pay principal, interest, and redemption premium, if any, on the refunded issue. Although the refunding escrow is usually funded solely by proceeds of the refunding issue, it may also be funded with other moneys provided by the issuer (such as, issuer's equity or unspent proceeds of the refunded issue). When the escrow fund consists of moneys from various sources, it is called a **mixed escrow**. Special rules apply to mixed escrows, and they will be discussed later in this lesson.

Regulations § 1.148-1(b) defines a refunding escrow.

Investments in the Escrow Fund

Remember that arbitrage is the investment of tax-exempt proceeds in higher yielding taxable investments in order to take advantage of the difference between tax-exempt and taxable rates. Generally, the tax-exempt issuer pays a lower rate of interest than that available in the taxable market at any given time. Because the proceeds of refunding bonds are invested in taxable securities, yield restriction rules apply to the investments in a refunding escrow. Under Regulations § 1.148-2(d)(2)(ii), the yield on a refunding escrow is restricted to 0.001 percent above the yield on the refunding bonds. The issuer can invest the refunding proceeds in open market securities that may, depending upon the interest rates at the time of the refunding, have yield in excess or below the yield on the refunding bonds.

The issuer may also invest in special securities offered by the Bureau of Public Debt that are called State and Local Government Series, commonly known as SLGSs. The yield on the SLGSs is tailor-made to the needs of the issuer, but are not intended to exceed the yield on open market Treasury securities.

SLGSs Regulations

The Department of the Treasury has published regulations governing U.S. Treasury Certificates of Indebtedness, Notes, and Bonds of the State and Local Government Series. These regulations can be found in 31 CFR Part 344.

Continued on next page

Refunding Escrow, Continued

General Information about SLGSs

The purpose of the SLGSs is to provide issuers of tax-exempt bonds with investments that will enable the issuer to comply with the arbitrage provisions of the Code.

SLGSs are available to issuers (not conduit borrowers) in principal amounts of \$1,000 or more. Time deposit SLGSs are available for periods ranging from 30 days to a maximum of 40 years. Demand deposit SLGSs are 1-day securities which are rolled over continuously until redemption.

The interest rate on each security is designated by the issuer, but cannot exceed the maximum offered interest rate. Maximum offered interest rates are released by the Bureau of Public Debt daily and can be obtained from any one of four sources listed in the regulations.

Fair Market Value of Investments

Under Regulations § 1.148-6(c), the gross proceeds of the refunding bonds may not be allocated to a nonpurpose investment (such as a Treasury security) in an amount that exceeds its fair market value, regardless of the actual purchase price as of the purchase date or to a receipt from the sale of a nonpurpose investment in an amount less than the fair market value as of the sale date.

Regulations § 1.148-5(d)(6)(iii) provides a safe harbor known as the “three-bid rule” for establishing fair market value of guaranteed investment contracts and investments purchased for a yield restricted defeasance escrow used in a refunding or in an invested sinking fund.

Reasonably Required Reserve or Replacement Fund

Introduction

Refunding issues, like new money issues, will often have a reserve fund. The escrow fund is pledged to pay debt service on the refunded issue, while the debt service on the refunding issue will be paid from project revenues or taxes. To provide security for the refunding bonds, a reserve fund may be established.

The issuer may use any, or all, of the following sources to fund a reserve fund:

- Refunding bond proceeds,
- Unspent proceeds of the refunded issue (including the 4R fund of the refunded issue), **OR**
- Issuer equity, including project revenues.

If sale proceeds of the refunding issue are used, no more than 10 percent of the principal amount of the refunding bonds may be used to fund the reserve fund.

See Regulations § 1.148-2(f)(1).

A reserve fund must meet the requirements of a **reasonably required reserve or replacement fund** (or “4R fund”) found in § 148(d) and Regulations § 1.148-2(f)(2) to be eligible for unrestricted investment.

Continued on next page

Reasonably Required Reserve or Replacement Fund, Continued

Requirements of a Reasonably Required Reserve or Replacement Fund

Regulations § 1.148-9(e) provides that beginning on the issue date of a refunding issue, a reserve or replacement fund for the refunding issue or the prior issue will not be a reasonably required reserve or replacement fund if amounts therein that are invested at an unrestricted yield exceed the size limitation set forth in Regulations §§ 1.148-2(f)(2) and (3).

The size limitation provides that gross proceeds of an issue that make up a 4R fund may **NOT** exceed the lesser of:

- 10 percent of the stated principal amount of the issue,
- The maximum annual principal and interest requirements on the issue,
OR
- 125 percent of the average annual principal and interest requirements on the issue.

When determining if the requirements are met, the limits are measured by reference to the refunding issue only (regardless of whether proceeds of the refunded issue have become transferred proceeds of the refunding issue).

Additionally, the amount of any reserve funded with the proceeds of the refunding issue may not exceed the 10 percent funding limitation of Regulations § 1.148-2(f)(1), regardless of yield restriction.

Continued on next page

Reasonably Required Reserve or Replacement Fund, Continued

Example 1

County G issues 10-year bonds in the principal amount of \$20,000,000 to advance refund a bond issue that has \$1,000,000 in its 4R fund. County G wishes to deposit as much as possible into the 4R fund of the refunding issue, using both the funds in the prior issue's 4R fund and proceeds of the refunding issue. To determine the maximize size of the 4R fund, County G will use the financial data from the refunding issue only. Assume that the debt service schedule calls for payments of principal and interest of \$2,000,000 each year. To meet the size limitation (and be exempt from yield restriction), the 4R fund cannot exceed \$2,000,000. To meet the funding limitation, no more than \$2,000,000 of refunding bond proceeds can be deposited into the 4R fund.

Among the issuer's options are the following:

- Use \$1,000,000 from the prior issue's 4R fund and \$1,000,000 of refunding bond sale proceeds for the new 4R fund. Both the funding limit and the size limitation are met.
- Use \$2,000,000 of refunding bond sale proceeds for the new 4R fund and none of the prior issue 4R fund.
- Use \$1,000,000 of prior issue 4R and \$2,000,000 of refunding bond sale proceeds for the new 4R fund. The funding limit is satisfied; however, the size limitation is exceeded. Therefore, \$1,000,000 would have to be yield restricted.

Not Meeting the Requirements

Amounts in the reserve fund in excess of the size limitation are not considered a part of the reasonably required reserve fund. This means only that excess amounts must be yield restricted. However, the fact that the reserve fund is too large does not affect the tax-exempt status of the bonds if the investment yield is restricted. If, however, sale proceeds in excess of 10 percent of the principal amount of the refunding issue are deposited into the reserve fund, then under Regulations § 1.148-1(f)(1) the refunding issue will be an arbitrage issue regardless of the yield at which the amounts in the 4R fund are invested.

Regulations § 1.148-1(b) provides that "sale proceeds" include any amounts actually or constructively received from the sale of the issue, including:

- Amounts used to pay underwriters' discount or compensation
 - Accrued interest other than pre-issuance accrued interest
 - Amounts derived from the sale of a right that is associated with the bond
-

Bona Fide Debt Service Fund

General Rules A bona fide debt service fund is a type of sinking fund that enjoys preferred status under the arbitrage regulations.

The requirements for a bona fide debt service fund for a refunding issue are the same as those for new money issues.

The definition of a bona fide debt service fund can be found in Regulations § 1.148-1(b).

Sinking Fund

Introduction

According to Regulations § 1.148-1(c)(2), a sinking fund includes a debt service fund, redemption fund, reserve fund, replacement fund, or any similar fund, to the extent reasonably expected to be used directly or indirectly to pay principal or interest on the issue.

This section has already discussed reasonably required reserve and replacement (4R) funds and bona fide debt service (BFDS) funds, which are types of sinking funds.

However, an issuer may establish a sinking fund to accumulate funds to pay the refunding bonds at redemption. The amounts in a sinking fund usually meet requirements to be characterized as replacement proceeds of the refunding issue and, as such, are subject to yield restriction and rebate.

Section 3: Mixed Escrow Rules

Overview

Introduction

Mixed escrow rules provide a method of allocating investments held in a refunding escrow that is funded with proceeds of refunding bonds and other moneys. The following scenario illustrates a situation where mixed escrow rules will apply.

Example 1

In 1995, State issues bonds to advance refund an outstanding bond issue issued in 1990. The yield on the 1995 issue is 4 percent and the yield on the 1990 issue is 8 percent. The 1990 issue is callable in 2000. The defeasance escrow for the 1990 issue is funded with unspent proceeds of the 1990 issue in the project fund and the reserve fund and proceeds of the 1995 issue. Only interest is due on the 1990 issue through 1999. A principal payment is due on the redemption date.

As discussed in the prior section, proceeds of the refunded issue become transferred proceeds of the refunding issue when proceeds of the refunding issue are used to pay principal of the refunding issue. Because no principal payments are made on the refunding issue until 2000, proceeds of the 1990 issue will not transfer over until 2000. If not for the mixed escrow rules, State could allocate the proceeds of the refunding issue (invested limited to 4 percent) to payment of interest on the 1990 issue and allocate unspent proceeds of the 1990 issue (invested limited to 8 percent) to payment of principal of the 1990 issue on the redemption date. If allowed, State could invest unspent proceeds of the 1990 issue for 5 years at a yield that is higher than the yield of the refunding bonds while spending the proceeds of the refunding issue faster.

The mixed escrow rules of Regulations § 1.148-9(c)(2)(i) are designed to prevent issuers from making such allocations. If an escrow fund contains refunding issue proceeds and other amounts, such as unspent proceeds of the prior issue or issuer revenues, it is referred to as a “**mixed escrow**.” The rules require that non-refunding amounts be spent at least as fast as refunding issue proceeds.

Continued on next page

Overview, Continued

Definition of Non-proceeds

The mixed escrow rules consist of a general rule and two exceptions to the general rule. The general rule provides rules for the treatment of refunding bond proceeds and other amounts that are not proceeds of a refunding issue (non-proceeds). In effect, the general rule does not distinguish among amounts that come from different funds (e.g., project, reserve, debt service) of the prior issue or other moneys of the issuer. Instead, the rules lump together all amounts that are **NOT** refunding bond proceeds and refer to them as non-proceeds.

However, the exceptions to the general rules DO make distinctions based on the source of non-proceeds, and they prove to be more controlling than the general rule.

In this Section

This section contains the following topics:

Topic	See Page
Overview	122
General Rule	124
Allocation Rules for Specific Types of Non-Proceeds	126
Treatment of Issuer Revenues	127
Example 1	129
Example 2	132

General Rule

Introduction Regulations § 1.148-9(c)(2)(i) requires, with certain exceptions, that when a refunding escrow contains refunding proceeds and other amounts that are **NOT** refunding proceeds, expenditures for principal, interest, and redemption prices on the prior issue must be allocated so that the expenditures of the refunding bond proceeds do **NOT** occur faster than ratably with expenditures of the other amounts in the mixed escrow.

Example 2 City issues \$9,000,000 principal amount of bonds to advance refund a prior issue. On the issuance date of the refunding bonds, the prior issue has unspent proceeds in the amount of \$1,000,000. City deposits \$9,000,000 of the refunding bond proceeds and \$1,000,000 of the refunded bond proceeds into the refunding escrow. Thus, 10 percent of the refunding escrow is funded with non-proceeds, in the form of proceeds of the refunded bonds. On an interest payment date, State uses amounts in the refunding escrow to pay interest on the refunded bonds. State should allocate 10 percent of this interest payment as coming from the proceeds of the refunded bonds and 90 percent of the interest payment as coming from the proceeds of the refunding bonds.

Continued on next page

General Rule, Continued

Actually Two Allocations are Required

Whenever there are unspent prior issue proceeds, Regulations § 1.148-9(c)(2)(i) requires that the:

- Debt service payment be allocated ratably between sources of funds (refunding bond proceeds and non-proceeds), **AND**
 - Sources of funds be allocated ratably to uses (payment of principal, interest and redemption price for the prior issue).
-

Example 3

State advance refunds a prior issue, depositing \$500,000 of unspent proceeds along with \$2M of refunding bond proceeds into the refunding escrow. The first debt service payment on the refunded bonds consists of \$1M principal payment and \$500,000 interest payment.

The first allocation determines the source of the funds to be used for debt service:

$$\$500,000 + \$2,000,000 = \$2,500,000$$

$$\$500,000 \div 2,500,000 \times 1,500,000 = \$300,000 \text{ from the prior issue}$$

$$\$2,000,000 \div 2,500,000 \times 1,500,000 = \$1,200,000 \text{ from the refunding issue}$$

The second allocation determines the use of the funds:

Prior Issue Proceeds:

$$\$1,000,000 \div 1,500,000 \times 300,000 = \$200,000 \text{ for principal}$$

$$\$500,000 \div 1,500,000 \times 300,000 = \$100,000 \text{ for interest}$$

Refunding Issue Proceeds:

$$\$1,000,000 \div 1,500,000 \times 1,200,000 = \$800,000 \text{ for principal}$$

$$\$500,000 \div 1,500,000 \times 1,200,000 = \$400,000 \text{ for interest}$$

Reason for Allocation to Use

Under the transferred proceeds rules discussed in the prior section, State must determine the amount of the proceeds of the prior issue that will become transferred proceeds of the refunding issue as a result of the allocation of \$800,000 of the proceeds of the refunding issue to the discharge of principal of the refunded issue.

Continued on next page

Allocation Rules for Specific Types of Non-Proceeds

BFDS and Project Funds

Regulations § 1.148-9(c)(2)(ii)(A) requires that amounts deposited into the refunding escrow that were in a bona fide debt service fund for the prior issue or in a fund to carry out the governmental purpose of the prior issue (e.g., a project fund) prior to the issuance of the refunding bonds **must** be allocated to the earliest maturing investments in the mixed escrow. This means that these amounts must be considered to be available for expenditures before all other funds.

If non- proceeds from both the BFDS fund and the project fund are deposited to the refunding bond escrow, an allocation between those two funds is **NOT** required.

Other Amounts

Regulations § 1.148-9(c)(2)(ii)(B) provides that non-proceeds MAY be allocated to the earliest maturing investments in the mixed escrow, provided:

- Any amounts previously in a BFDS fund or project fund have already been allocated,
 - The investments actually mature, **AND**
 - The moneys from the investments are expended before the date of any expenditure from the mixed escrow to pay any principal of the prior issue.
-

Treatment of Issuer Revenues

Introductions Regulations § 1.149(d)-1(d)(2) provides that, for purposes of certain limitations on advance refundings, the mixed escrow rules do not apply to amounts that were **NOT** gross proceeds of the prior issue before the issue date of the refunding issue.

Example 4 City issues bonds to advance refund a prior issue issued in 1984 to finance school construction. The 1984 bonds are callable in 1 year at 103 percent, but since no savings is expected from the refinancing City expects to provide for an escrow to their maturity. Prior to the issuance of the refunding bonds, City received a payment from the State under the State's educational program. City uses a portion of the funds received from State and the proceeds of the advance refunding bonds to establish a defeasance escrow for the refunded bonds. Assume that this decreases City's present value loss savings in connection with the refunding. Pursuant to Regulations § 1.149(d)-1(d)(2), the City is not required to apply the mixed escrow rules in determining savings, and may therefore structure the refunding escrow to pay the 1984 bonds later than their first redemption date. (The "first call" requirement does not apply since the refinancing does not result in debt service savings.)

Example 5 In 1995, City issued bonds the proceeds of which were used to (i) construct schools and (ii) advance refund prior bonds issued in 1990. In 2000, City wants to advance refund the 1995 bonds. City makes a multipurpose allocation with respect to the 1995 issue (see discussion in next section). City determines that \$5,000,000 of the 1995 issue was expended on construction and \$5,000,000 was used for the advance refunding. City establishes a defeasance escrow that is funded 50 percent with the proceeds of the 2000 issue and 50 percent with funds received from State. City allocates investments purchased with funds from the State to pay debt service on the 1995 bonds used to refund the 1990 issue. City allocates investments purchased with the proceeds of the 2000 issue to pay debt service on the new money portion of the 1995 issue.

Without Regulations § 1.149(d)-1(d)(2), City would be required to allocate a portion of the 2000 issue proceeds (along with the State funds) to the debt service on all of the 1995 issue, which would result in a prohibited advance refunding since a portion of the 1995 issue was used to advance refund the 1990 bonds.

Treatment of Issuer Revenues, Continued

Recap

Regulations § 1.149(d)-1(d)(2) provides that the mixed escrow rules will **NOT** apply to amounts that were not gross proceeds of the prior issue before the issue date of the refunding issue for the following purposes:

- Section 149(d)(2)
- Section 149(d)(3)(A)(i) and (ii)

Note that § 149(d)(3)(A)(iii) is not included.

Example 1

Facts

City C's refunding escrow contains amounts from the following sources in the indicated amounts:

- Refunding proceeds \$5,000,000
- Prior issue bona fide debt service fund 50,000
- Prior issue project fund 800,000
- Prior issue reserve 200,000

The earliest scheduled investment maturities are shown below:

Date of Maturity	Investment Proceeds
May 15, 1997	\$250,000
November 15, 1997	\$250,000
May 15, 1998	\$1,250,000

The earliest scheduled debt service payments on the refunded bonds are shown below.

Date of Payment	Type of Payment	Amount of Payment
June 1, 1997	Interest	\$250,000
December 1, 1997	Interest	\$250,000
June 1, 1998	Principal and interest	\$1,250,000

Continued on next page

Example 1, Continued

According to Regulations § 1.148-9(c)(2)(ii)(A), the \$50,000 in the bona fide debt service fund and \$200,000 of the project fund must be allocated to the investments maturing on May 15, 1997. These funds will then be considered to pay the interest payment of \$250,000 on June 1, 1997.

\$250,000 of the project fund must be allocated to the investments maturing on November 15, 1997, and will then be considered to pay the interest payment of \$250,000 on December 1, 1997.

The last payment requires two allocations because both refunding bond proceeds and non-proceeds will be used, **AND** because the debt service payment consists of both interest and principal components. The remaining \$350,000 in the project fund must be allocated to the investments maturing on May 15, 1998, and will be considered to pay \$350,000 of the \$1,250,000 payment on June 1, 1998. This amount must also be allocated between principal and interest:

$$\$1,000,000 \div \$1,250,000 \times \$350,000 = \$280,000 \text{ for principal}$$

$$\$250,000 \div \$1,250,000 \times \$350,000 = \$70,000 \text{ for interest}$$

Then, according to Regulations § 1.148-9(c)(2)(i), the remaining \$900,000 of maturing investments and the subsequent debt service payment on June 1, 1998, must be allocated ratably between the refunding proceeds and the reserve fund. This allocation can be accomplished in the following manner:

$$\$5,000,000 \text{ refunding proceeds} + \$200,000 \text{ reserve fund} = \$5,200,000$$

$$(\$5,000,000 \div \$5,200,000) \times \$900,000 = \$864,000 \text{ of refunding bond proceeds}$$

$$(\$200,000 \div \$5,200,000) \times \$900,000 = \mathbf{\$36,000} \text{ of non-proceeds (reserve)}$$

\$900,000

Continued on next page

Example 1, Continued

(continued)

Therefore, \$864,000 of refunding proceeds are considered to be spent, as is \$36,000 of the reserve fund.

Lastly, the \$864,000 and the \$36,000 each must be allocated to principal and interest, as follows:

Refunding bond proceeds:

$$(\$1,000,000 \div \$1,250,000) \times \$864,000 = \$691,200 \text{ for principal}$$

$$(\$250,000 \div \$1,250,000) \times \$864,000 = \$172,800 \text{ for interest}$$

Non-proceeds (reserve):

$$(\$1,000,000 \div \$1,250,000) \times \$36,000 = \$28,800 \text{ for principal}$$

$$(\$250,000 \div \$1,250,000) \times \$36,000 = \$7,200 \text{ for interest}$$

Because a principal payment was made with proceeds of the refunding bonds, a portion of the \$164,000 in the reserve fund will become transferred proceeds of the refunding issue. The portion that transfers cannot be invested at a yield greater than 0.001 percent of the refunding bond yield. The remainder must be yield restricted to 0.001 percent above the prior issue bond yield. (Remember that these amounts are in the escrow fund and thus must meet the yield restriction rules applicable to replacement proceeds.)

These transferred amounts also become subject to rebate at the refunding issue yield.

Example 2

Facts

County K's refunding escrow contains amounts from the following sources in the indicated amounts:

Refunding proceeds	\$2,000,000
Prior issue project fund	\$50,000
Prior issue BFDS fund	\$50,000
Prior issue 4R fund	\$200,000

Scheduled investment maturities are shown below:

DATE OF MATURITY	FUND TYPE	INVESTMENT PROCEEDS
1/1/99	BFDS Project 4R	\$ 50,000 50,000 25,000
7/1/99	4R Fund Refunding Bond Proceeds	\$ 25,000 300,000

Scheduled debt service payments on the refunded bonds are shown below:

DATE OF PAYMENT	TYPE OF PAYMENT	PAYMENT AMOUNT
1/1/99	Interest	\$100,000
7/1/99	Principal and interest	\$325,000
1/1/00	Interest	\$125,000
7/1/00	Principal and interest	\$325,000

Continued on next page

Example 2, Continued

Amounts in the escrow will be considered to be allocated to the debt service payments as shown below:

DATE OF PAYMENT	TYPE OF FUND	AMOUNT
1/1/99	Project BFDS	\$50,000 50,000
7/1/99	Non-proceeds Refunding bond proceeds	\$ 25,000 300,000

Analysis

On January 1, 1999, amounts in the project and BFDS funds must be used to pay the debt service payment on that date. Even though \$25,000 of the 4R fund matures on this date, this amount CANNOT be used for debt service because amounts in the project and BFDS funds must be allocated first. The \$25,000 in the 4R fund will be reinvested and used to pay a portion of the July 1, 1999 payment. This amount must be allocated ratably with any other non-proceeds and refunding bond proceeds because a principal payment will be made on July 1, 1999.

Section 4: Multiple Transferred Proceeds Allocations

Overview

Introduction

The following example illustrates the need for rules regarding transferred proceeds.

Example 1

On November 1, 2000, City issues bonds to advance refund an outstanding issue issued in 1998. The yield on the 2000 issue is 5 percent and the yield on the 1998 issue is 7 percent. On the date of issuance of the 2000 issue, the 1998 issue has \$1,000,000 unspent proceeds in the project fund and \$2,000,000 in the 4R fund. City establishes an escrow fund with the proceeds of the 2000 issue that is invested at a yield of 5 percent and will be used to pay the debt service on the 1998 issue. The 4R fund for the 1998 issue is now pledged as security for the 2000 issue. If the proceeds in the project fund and the 4R fund continue to be treated as proceeds of the 1998 issue, they can be invested at 7 percent yield. Effectively, City is able to earn a higher yield (7 percent) on invested funds of the 1998 issue, while being secured with an escrow funded with proceeds of the 2000 issue at a yield of 5 percent.

This scenario raises questions, such as: Should City be permitted to issue advance refunding bonds before it has spent all of the proceeds of the refunded issue? Should the principal amount of the refunding issue be reduced by the amount of unspent proceeds of the refunded issue? Should the yield at which the unspent proceeds may be invested be the yield on the refunding bonds beginning on the issue date of the refunding issue?

Continued on next page

Overview, Continued

History of Transferred Proceeds Rules

To reflect the true economics of the transaction, the proceeds of the prior issue become transferred proceeds of the refunding issue as the prior issue is discharged. In a current refunding, generally, all the refunded bonds are redeemed at the same time. However, in an advance refunding, the refunded bonds may be discharged on several different dates over a number of years (from the issue date of the refunding bonds to the redemption date of the refunded bonds).

Regulations § 1.103-14(e)(2)(ii) of the 1979 regulations and Regulations § 1.148-11(d)(1) of the 1992 regulations set forth a similar “principal to principal” transferred proceeds rule, which provides for a transfer of proceeds to the refunding issue only upon a discharge of principal of the prior issue. However, Regulations § 1.148-4T(e)(2)(i) of the 1989 temporary regulations sets forth a “dollar for dollar” transferred proceeds rule, which provides for a transfer of proceeds to the refunding issue upon a discharge of either the principal of, or interest or retirement price on, the prior issue.

When auditing a refunding issue issued before the effective date of the current regulations under § 148, the agent should determine which regulations are applicable to the issue under audit.

Organization of this Section

The transferred proceeds rules in Regulations 1.148-9(b)(1) follow the “principal to principal” rule and are discussed first. After the rules have been presented, the text provides an example to illustrate the computation of the amount of transferred proceeds from the prior issue to the refunding issue.

A brief discussion of the “dollar for dollar” method under the 1989 temporary regulations is provided at the end of this section. This discussion focuses on how the “dollar for dollar” method differs from the “principal to principal” method.

This section provides an example to illustrate computation of transferred proceeds in an advance refunding. The purpose is to show the calculations required to determine the amount of transferred proceeds. Thus, it does not consider the application of the universal cap. However, the significance of the application of universal cap cannot be ignored when transferred proceeds are present.

Continued on next page

Overview, Continued

In this Section This section contains the following topics:

Topic	See Page
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Illustration of the Transferred Proceeds Rules - Principal to Principal Method	140
Transferred Proceeds Rules - Dollar for Dollar Method	150

Transferred Proceeds Rules – Principal-to-Principal Method

General Rule As stated previously, Regulations § 1.148-9(b)(1) provides that when proceeds of the refunding issue discharge any of the outstanding **principal** amount of the prior issue, proceeds of the prior issue become transferred proceeds of the refunding issue and cease to be proceeds of the prior issue.

Therefore, on and after the transfer date, the transferred proceeds must meet the yield restriction and rebate requirements based on the yield on the refunding issue.

Transfer Factor Regulations § 1.148-9(b)(1) states that the amount of proceeds of the prior issue that becomes transferred proceeds of the refunding issue is an amount equal to the proceeds of the prior issue on the date of that discharge multiplied by the following fraction.

The numerator of the fraction is the principal amount of the prior issue discharged with proceeds of the refunding issue on the date of that discharge.

The denominator of the fraction is the total outstanding principal amount of the prior issue on the date **immediately before** the date of that discharge.

This fraction is sometimes referred to as the **“transfer factor.”**

**Definition of
“Principal
Amount”**

Regulations § 1.148-9(b)(2) provides that for purposes of this section, “principal amount” means in reference to:

- A plain par bond - its stated principal amount
 - Any other bond - its present value
-

Continued on next page

Transferred Proceeds Rules – Principal-to-Principal Method, Continued

Allocations of Investments to Transferred Proceeds

Regulations § 1.148-9(c)(1)(ii) provides that when proceeds of a prior issue become transferred proceeds of a refunding issue, investments (and the related payments and receipts) of proceeds of the prior issue **that are held in a refunding escrow for another issue** are allocated to the transferred proceeds under the ratable allocation method described in Regulations § 1.148-9(c)(1)(iii).

Investments of proceeds of the prior issue **that are NOT held in a refunding escrow for another issue** are allocated to the transferred proceeds under the:

- Ratable allocation method described as above, **OR**
 - Representative allocation method described in Regulations § 1.148-9(c)(iv).
-

Ratable Allocation Method

Under the ratable allocation method, a ratable portion of each nonpurpose investment and purpose investment of proceeds of the prior issue is allocated to transferred proceeds of the refunding issue.

Example 2

Proceeds of the refunded issue (1990 issue) are invested in a defeasance escrow (1990 escrow) for another issue (1984 issue) because the 1990 issue advance refunded the 1984 issue. The 1992 issue advance refunded the 1990 issue. Assume that the 1990 escrow consists of two plain par investments in the same principal amount, with one having a yield of 5 percent and another having a yield of 7 percent. On June 1, 1992, \$100,000 of the proceeds of the 1990 issue become transferred proceeds of the 1992 issue. Under the ratable allocation method, on and after June 1, 1992, \$50,000 from each investment in the 1990 escrow is allocated to the 1992 issue.

Note that although the investments continue to be held in the 1990 escrow and continue to be security for the 1984 issue, \$50,000 principal amount of each investment is allocated to the transferred proceeds of the refunding issue. Thus, for arbitrage purposes, earnings on such portion of the investments are allocated to the refunding issue and are subject to rebate and yield restriction measured by the yield on the refunding issue.

Continued on next page

Transferred Proceeds Rules – Principal-to-Principal Method, Continued

Representative Allocation Method

Under the representative allocation method, representative portions of the portfolio of non-purpose and purpose investments of the proceeds of the prior issue are allocated to transferred proceeds of the refunding issue.

Example 3

Proceeds of the refunded issue (1998 issue) are invested in a 4R fund for the refunding issue (2001 issue). Assume that the 4R fund has three plain par investments, each in the principal amount of \$100,000 with the following yields: 5 percent, 6 percent and 7 percent, respectively. On June 1, 2002, \$100,000 of the proceeds of the 1998 issue become transferred proceeds of the 2001 issue. Under the representative allocation method, on and after June 1, 2002, the issuer can allocate the \$100,000 principal amount of the investment having a yield of 6 percent to the transferred proceeds of the 2001 issue. The investment having a yield of 6 percent is “representative” of the portfolio of non-purpose investments of the proceeds of the 1998 issue.

As stated above, for arbitrage purposes, earnings on \$100,000 of the investment allocated to transferred proceeds of the 2001 issue are allocated to the refunding issue. The remaining earnings in the 4R fund continue to be allocated to the 1998 issue because the remaining investments are allocated to the proceeds of the 1998 issue.

Illustration of Transferred Proceeds – Principal-to-Principal Method

Facts

On January 1, 1998, City advance refunds its 1991 bond issue that has \$32,500,000 outstanding principal amount on the refunding date. Interest on the 1991 issue is payable semi-annually on each January 1 and July 1 and principal is due on each January 1. The 1991 issue is callable at par on January 1, 2001.

Assume for purposes of this example that on the date of issue of the refunding bonds, City has \$1,445,000 unspent proceeds of the 1991 issue in the Project Fund of the 1991 issue. In addition, on the date of issuance of the 1991 issue, the 4R Fund for the 1991 issue was funded with \$1,500,000 of the proceeds of the 1991 issue. The 1991 4R Fund is now the 4R Fund for the refunding issue.

Table 1 shows the activity in the project fund from January 1, 1998 through January 1, 2001.

Table 2 shows the activity in the reserve fund from January 1, 1998 through January 1, 2001.

Table 3 shows the debt service requirements of the prior issue from January 1, 1998 through January 1, 2001.

Table 4 is a summary of the transferred proceeds.

Continued on next page

Illustration of Transferred Proceeds – Principal-to-Principal Method, Continued

TABLE 1: SCHEDULE OF ACTIVITY IN THE PROJECT FUND

Date	Purchases	Earnings	Redemptions	Purpose Disbursements	Investment Balance
1/1/98					1,445,000.00
3/1/98		3,741.00	172,861.00	176,602.00	1,272,139.00
6/1/98	1,324,690.00	52,551.00	1,272,139.00		1,324,690.00
9/1/98	4,845.00		162,574.00	157,729.00	1,166,961.00
12/1/98	1,215,057.00	48,096.00	1,166,961.00		1,215,057.00
1/1/99			207,789.00	207,789.00	1,007,268.00
3/1/99	968,938.00	55,524.00	1,031,512.00	118,098.00	944,694.00
6/1/99			340,137.00	340,137.00	604,557.00
9/1/99		33,577.00			638,134.00
12/1/99			128,892.00	128,892.00	509,242.00
1/1/00	374,019.00	5,536.00	384,464.00	15,981.00	498,797.00
3/1/00	9,847.00		127,863.00	118,016.00	380,781.00
6/1/00	260,000.00	8,308.00	251,692.00		389,089.00
9/1/00		382.00	73,506.00	73,888.00	315,583.00
12/1/00	192,000.00	6,300.00	185,700.00		321,883.00
1/1/01		178.00	36,920.00	37,098.00	284,963.00

Illustration of Transferred Proceeds – Principal-to-Principal Method, Continued

TABLE 2: SCHEDULE OF ACTIVITY IN THE RESERVE FUND

Date	Earnings	Sweep into the BFDS of the 1998	Investment Balance
1/1/98			1,500,000.00
6/1/98	37,500.00		1,537,500.00
1/1/99	38,437.00	75,937.00*	1,500,000.00
6/1/99	37,500.00		1,537,500.00
1/1/00	38,437.00	75,937.00*	1,500,000.00
6/1/00	37,500.00		1,537,500.00
1/1/01	38,437.00	75,937.00*	1,500,000.00

*Although the earnings are proceeds of the 1991 issue, they are used to pay debt service on the 1998 issue and for purposes of this example are not included in the computation of transferred proceeds.

TABLE 3: SCHEDULE OF DEBT SERVICE TO BE REFUNDED

Date	Interest Payment	Principal Payment	Total Debt Service
7/1/98	\$2,250,000.00		\$2,250,000.00
1/1/99	2,250,000.00	\$2,500,000.00	4,750,000.00
7/1/99	2,250,000.00		2,250,000.00
1/1/00	2,250,000.00	2,500,000.00	4,750,000.00
7/1/00	2,250,000.00		2,250,000.00
1/1/01	2,250,000.00	27,500,000.00	29,750,000.00
	<u>\$13,500,000.00</u>	<u>\$32,500,000.00</u>	<u>\$46,000,000.00</u>

Continued on next page

Illustration of Transferred Proceeds – Principal-to-Principal Method, Continued

Step 1:
Compute the
Transfer Factor

On the date of the issuance of the refunding issue, the refunded issue has unspent proceeds in the project fund and in the reserve fund. Because these funds have not yet been allocated to purpose expenditures, they are subject to transfer. The first principal payment that will be made from refunding proceeds is scheduled for January 1, 1999. Therefore, no proceeds from the prior issue will transfer until that date.

The January 1, 1999 transfer factor is equal to the following:

(Principal amount of prior issue discharged with proceeds of the refunding issue on 1/1/99) ÷ (Outstanding principal amount of the prior issue on 12/31/98) = Transfer Factor

$$\$2,500,000 \div \$32,500,000 = .0769231$$

Step 2:
Compute the
Amount of
Transferred
Proceeds on
1/1/99

The amount of unspent proceeds of the prior issue is equal to \$2,507,268 (\$1,007,268 in project fund plus \$1,500,000 in 4R Fund). The amount of proceeds of the prior issue that becomes transferred proceeds of the 1998 issue is computed as follows:

$$\text{Transferred Proceeds} = \$2,507,268 \times .0769231 = \$192,867.$$

Continued on next page

Illustration of Transferred Proceeds – Principal-to-Principal Method, Continued

Step 3:
Allocate the
Transferred
Proceeds
Between the
Project Fund
and the Reserve
Fund

According to Regulations § 1.148-9(c)(1)(ii), either the ratable allocation method or the representative allocation method can be used to allocate the proceeds to be transferred. In this example, the ratable allocation is used.

A portion of the reserve fund transfers as follows: **(see Table 4)**

$$(\$192,867 \times \$1,500,000) \div 2,507,268 = \$115,384.$$

Similarly, a portion of the project fund transfers as follows:

$$(\$192,867 \times \$1,007,268) \div 2,507,268 = \$77,482. \text{ **(see Table 4)**}$$

Step 4:
Calculate
Transfer Factor
on 1/1/00

When a principal payment is made on 1/1/00, a new transfer factor must be computed in order to compute the amount of proceeds that will transfer on that date.

The transfer factor is computed as follows:

(Principal amount of prior issue discharged with proceeds of the refunding issue on 1/1/00) ÷ (Outstanding principal amount of the prior issue on 12/31/99) = Transfer Factor

$$\$ 2,500,000 \div \$30,000,000 = .0833333$$

Continued on next page

Illustration of Transferred Proceeds – Principal-to-Principal Method, Continued

Step 5:
Compute the
Amount of
Transferred
Proceeds on
1/1/00

The amount of proceeds of the 1991 issue that becomes transferred proceeds of the 1998 issue on 1/1/00 is computed as follows:

The amount of proceeds subject to transfer is calculated as follows:

$$\begin{aligned} &\$1,384,615 \text{ amount in 4R Fund less amount transferred on 1/1/99} \\ &\quad + \underline{\$421,315} \text{ amount in Project Fund less amount transferred on 1/1/99} \\ &= \$1,805,930 \end{aligned}$$

$$\text{Transferred Proceeds} = \$1,805,930 \times .0833333 = \$150,494$$

Step 6: Allocate
the Transferred
Proceeds
Between the
Project Fund
and the Reserve
Fund

A portion of the reserve fund transfers as follows:

$$(\$150,494 \times \$1,384,615) \div \$1,805,930 = \$115,384$$

Similarly, a portion of the project fund transfers as follows:

$$(\$150,494 \times \$421,315) \div \$1,805,930 = \$35,110$$

Step 7:
Calculate the
Transfer Factor
on Redemption
Date

On 1/1/01, the 1991 bonds are redeemed and the last interest payment is made.

Therefore, the transfer factor is calculated as follows:

$$\$27,500 \div \$27,500 = \$100 \text{ percent}$$

Continued on next page

Illustration of Transferred Proceeds – Principal-to-Principal Method, Continued

Step 8:
Calculate the
Amount of
Transferred
Proceeds on
1/1/01

The amount of proceeds of the 1991 bonds that becomes transferred proceeds of the 1998 bonds on 1/1/01 is computed as follows:

$$100 \text{ percent} \times 1,519,084 = \$1,519,084$$

The amount subject to transfer is calculated as follows:

$$\begin{aligned} &\$1,269,231 \text{ amount in 4R Fund less amount transferred previously} \\ &+ 249,853 \text{ amount in Project Fund less amount transferred on 1/1/00} \\ &= \$1,519,084 \text{ amount subject to transfer on 1/1/01} \end{aligned}$$

Step 9: Allocate
the Transferred
Proceeds
Between the
Project Fund
and the Reserve
Fund

The remaining balance in the reserve fund subject to transfer is equal to \$1,269,231.

The remaining balance in the Project Fund subject to transfer is equal to \$249,853.

Therefore, a total of \$1,519,084 transfers on 1/1/01.

All funds have transferred and no more calculations are required.

As of each transfer date, the funds in the Project Fund and the 4R Fund that are allocated to the 1998 issue are subject to yield restriction and rebate rules based on the yield of the 1998 issue.

Continued on next page

Illustration of Transferred Proceeds – Principal-to-Principal Method, Continued

TABLE 4: SUMMARY OF TRANSFERRED PROCEEDS

Date	Amount Transferred	Reserve Fund Subject to Transfer	Project Fund Subject to Transfer	Total Subject to Transfer	Allocated to 1991 Issue	Allocated to 1998 Issue
12/31/1998		\$ 1,500,000.00	\$ 1,007,268.00	\$ 2,507,268.00	\$ 2,507,268.00	
1/1/1999	\$ 192,867.00	(115,385.00)	(77,482.00)		2,314,401.00	\$ 192,867.00
12/31/1999		1,384,615.00	421,315.00	1,805,930.00	1,805,930.00	
1/1/2000	150,494.00	(115,384.00)	(35,110.00)		1,655,436.00	150,494.00
12/31/2000		1,269,231.00	249,853.00	1,519,084.00	1,519,084.00	
1/1/2001	1,519,084.00	(1,269,231.00)	(249,853.00)			1,519,084.00
Total	\$1,862,445.00	-0-	-0-	-0-	-0-	\$1,862,445.00

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Illustration of Transferred Proceeds – Principal-to Principal Method, Continued

Treatment of Transferred Proceeds for Arbitrage Purposes

Once proceeds of a prior issue become transferred proceeds of a refunding issue, their treatment for arbitrage purposes depends on:

- How the funds are used, **AND**
- The fund in which the amounts are held.

For example, when the proceeds in a project fund become transferred proceeds and spent on the project financed with the refunded issue, they are subject to yield restriction and rebate based on the yield of the refunding issue. However, the transferred proceeds allocated to the 4R fund for the refunding issue are not subject to yield restriction (assuming sizing limitation is met) but are subject to rebate measured by the yield of the refunding issue.

Remember that the universal cap can limit the amount of transferred proceeds allocated to an issue.

Transferred Proceeds Rules – Dollar-for-Dollar Method

Introduction

The dollar for dollar method of transferring proceeds is set forth in Regulations § 1.148-4T(e)(2)(i) of the 1989 regulations. This method provides that unspent proceeds of the refunded issue become transferred proceeds of the refunding issue when any amount of proceeds of the refunding issue are used to discharge either the principal **OR** interest of the refunded issue.

On the date of transfer, the amount of unspent proceeds that transfers to the refunding issue is equal to the amount of the debt service discharged.

A portion of each investment (and their related payments and receipts) is included in the rebate computation or other arbitrage determination. This portion is based on a ratio of amounts transferred to the total investment balance on the date of transfer. However, unspent proceeds of the prior issue transfer prior to other proceeds of the prior issue, and a transfer cap similar to the universal cap limits the amount of nonpurpose investments that may transfer.

See Regulations § 1.148-4T(e)(2)(ii).

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Transferred Proceeds Rules – Dollar-for-Dollar Method, Continued

Effective Dates Regulations § 1.148-0T(b)(1)(ii) (**temporary**) provides that the 1989 Regulations are generally effective for bonds issued after:

- August 15, 1986, if the bond is **NOT** a governmental bond described in section 1312(c)(2) of the 1986 Act
- August 31, 1986, if the bond is a governmental bond described in section 1312(c)(2) of the 1986 Act

Regulations § 1.148-0T(b)(1)(iii) (**temporary**) provides a transition rule so that, except for abusive advance refundings under § 149(d)(4), the dollar for dollar method of determining transferred proceeds does not apply to refunding issues sold on or before May 15, 1989, and issued on or before June 4, 1989.

Regulations § 1.148-0(b)(8)(i) of the 1992 Regulations provides that § 1.148-11 (the principal to principal method) generally applies to all issues issued after June 17, 1992. Therefore, generally, the dollar-for-dollar method applies to bonds sold after May 15, 1989, and issued after June 14, 1989, but before June 18, 1992.

Additionally, Regulations § 1.148-0(b)(8)(iii) of the 1992 Regulations provides for elective early application of §§ 1.148-4, 1.148-8 and 1.148-11 (the principal to principal method) to issues issued on or after May 18, 1992. Any or all of these three sections may be selectively applied.

Lastly, Regulations § 1.148-0(b)(8)(iv) of the 1992 Regulations provides that an issuer may elect to apply the provisions of §1.148-11 and 1.148-4(b)(3) in lieu of § 1.148-4T(e) to bonds sold after May 15, 1989, and issued after June 14, 1989, and issued on or before June 17, 1992. Certain additional redemption requirements apply for issuers who make this election.

Section 5: Use of Prior Issue's Proceeds

Overview

Introduction On the issuance date of refunding bonds, if there are unspent proceeds of the prior issue, the issuer must decide what to do with them. This section discusses some of the options that the issuer has, along with the ramifications of those options.

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Required Reserve and Replacement Fund

Introduction

Regardless of whether the prior issue was a new money or a refunding issue, a 4R fund may have been established on the issuance date of the bonds. When the prior issue is refunded, the issuer must decide what to do with any amounts that remain in that fund.

Below are some of the options that the issuer has regarding amounts in a prior issue reserve fund:

- Amounts in the reserve fund can be spent prior to becoming transferred proceeds of the refunding issue,
 - Amounts can remain in the reserve fund for the prior issue,
 - Amounts can be used as a reserve fund for the refunding issue, **OR**
 - Amounts can be deposited into the refunding escrow.
-

Amounts in the Reserve Fund Can be Spent

Amounts in the prior issue 4R fund can be spent prior to becoming transferred proceeds. If these amounts are proceeds of the prior issue, they can be spent on debt service or can even be used to pay issuance costs of the refunding issue. For private activity bonds, the two percent limit on financing costs of issuance will also apply to these prior reserve fund amounts.

Reserve Fund of Prior Issue Maintained

When an escrow fund is established for the prior issue, a reserve fund is no longer necessary for the prior issue. There is no specific rule (statutory or otherwise) prohibiting continuation of the reserve, but the regulations discourage this. Regulations § 1.148-9(e) provides that in a refunding, both the refunded and the refunding issues can have reserve funds, but the funds are aggregated for purposes of complying with the size limitations.

In addition, the size limitations are based on the refunding issue only. Therefore, if amounts remain in the prior issue's reserve fund, these amounts can remain there only if proceeds of the refunding issue are reduced to meet the size limitations.

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Required Reserve and Replacement Fund, Continued

Reserve Fund of Prior Issue Maintained (continued)

If the aggregate reserve funds exceed the size limitations, the excess must be yield restricted. Investments of excess funds attributable to proceeds of the prior issue in the prior issue reserve fund must not exceed 0.125 percent (or 0.001 percent if replacement proceeds) above the yield of the prior issue until the proceeds transfer to the refunding issue. A portion of the proceeds will transfer to the refunding issue when refunding issue proceeds are used to make principal payments on the prior issue. When the proceeds transfer to the refunding issue, investment yields on the transferred proceeds must not exceed 0.125 (or 0.001, as applicable) percent above the yield on the refunding issue.

Yield reduction payments can be used to comply with the arbitrage rules for reserve funds as provided in Regulations § 1.148-5(c)(3) (TD 9777, effective July 18, 2016). Regulations § 1.148-5(c)(3)(v) provides that yield reduction payments may be used for nonpurpose investments allocable to gross proceeds of an issue in a 4R fund that, except for its failure to satisfy the size limitation in Regulations § 1.148-2(f)(2)(ii), would qualify as a 4R fund, but only to the extent that the value of the nonpurpose investments in the fund is not greater than 15 percent of the stated principal amount of the issue computed according to the size limitation.

This provision includes nonpurpose investments that are allocable to transferred proceeds of an advance refunding issue, but only to the extent necessary to satisfy yield restriction under § 148(a) on those proceeds as a separate class for yield blending purposes.

If the reserve fund meets the size limitations, then the funds can be invested without restriction under the rules for reserve funds.

As there is no special exception from rebate for 4R funds (except for the quasi-exception for available construction proceeds under Regulations § 1.148-7(i)(2)) once the funds become transferred proceeds of the refunding issue, they will be subject to rebate at the yield of the refunding issue.

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Required Reserve and Replacement Fund, Continued

Amounts in Prior Issue Reserve Fund are Used as a Reserve for the Refunding Issue

Often the issuer simply uses the prior issue reserve fund as a reserve fund for the refunding issue. As long as the fund meets the requirements of a reasonably required reserve and replacement fund, amounts can be invested at an unrestricted yield. This is the simplest method to handle a 4R fund of a prior issue containing proceeds of the prior issue in an advance refunding.

For rebate purposes, as the funds become transferred proceeds of the refunding issue, they will become subject to rebate at the yield of the refunding issue. Prior to becoming transferred proceeds, even though they are technically replacement proceeds of the refunding issue, the amounts continue to be treated as proceeds of the prior issue, pursuant to the one-issue rule.

These proceeds retain their character as transferred proceeds (rather than replacement proceeds) while in the reserve fund.

If, however, amounts in the prior reserve fund were issuer equity or revenues, they immediately become replacement proceeds of the refunding issue upon their deposit and pledge to secure the refunding issue, and are subject to rebate based on the refunding issue bond yield. Remember that as replacement proceeds, they do not become transferred proceeds.

Reserve Funds are Deposited into the Refunding Escrow

Depositing prior issue gross proceeds (of any kind) into the refunding escrow is probably the most complicated option.

When amounts from different sources are deposited into a refunding escrow, the resulting escrow fund is referred to as a “mixed escrow.” This “mixed escrow” then becomes subject to the allocation rules regarding mixed escrows set forth in Regulations § 1.148-9(c)(2). Remember that the mixed escrow rules specify the order in which prior issue funds must be spent. After amounts from the BFDS and project funds have been spent, then amounts from the reserve fund can be spent, as long as no principal payments have been made yet from the refunding bond proceeds. If not allocated prior to a principal payment being made from the refunding bond proceeds, then these funds must be spent ratably with refunding bond proceeds. They are at the end of the line in priority. Therefore, to the extent they were proceeds of the prior issue, these amounts have a good chance of becoming transferred proceeds of the refunding issue.

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Required Reserve and Replacement Fund, Continued

Treatment of Prior Issue Proceeds in the Refunding Escrow

When prior issue proceeds are placed in the refunding escrow, their treatment for arbitrage purposes depends on their characterization.

Prior to becoming transferred proceeds, the amounts will continue to be treated as proceeds of the prior issue for arbitrage purposes because they have not yet been allocated to the refunding issue. This means that they are required to be yield restricted to no more than 0.001 percent of the prior bond yield. (They no longer receive the shelter from the yield restriction rules offered by the 4R fund rules **AND** they are in the escrow fund now, which requires yield restriction at 0.001 percent.) Upon transfer, because they are now proceeds of the refunding issue, they must be yield restricted to no more than 0.001 percent above the refunding bond yield.

If a deallocation is required under the universal cap, these amounts are treated as proceeds, rather than replacement proceeds, since they were originally proceeds of the prior issue.)

Treatment of Prior Issue Replacement Proceeds in the Refunding Escrow

If the amounts in the prior issue reserve fund were issuer equity or revenues, and are placed in the escrow fund, they retain their character as replacement proceeds of the prior issue, but now must be yield restricted to no more than 0.001 percent above the prior issue bond yield.

As replacement proceeds of the prior issue, they will not become transferred proceeds of the refunding issue. According to Regulations § 1.148-9(b)(1), only **proceeds** of the prior issue transfer, not replacement proceeds.

They are not gross proceeds of the refunding issue because they are not used or pledged to pay debt service on the refunding issue. Contrast this with issuer revenues or equity from the prior issue reserve fund that are deposited into the reserve fund of the refunding issue.

Bona Fide Debt Service Fund

Introduction

Since the prior issue is now secured by the refunding escrow, the BFDS fund is no longer needed. When amounts remain in the bona fide debt service fund of the prior issue, some of the issuer's options are:

- Amounts can be used to pay the earliest debt service on the prior issue,
 - Amounts can be deposited into the bona fide debt service fund of the refunding issue, OR Amounts can be deposited into the refunding escrow.
-

Amounts Can be Used to Pay the Earliest Debt Service on the Prior Issue

Using amounts in the prior issue debt service fund to pay the next debt service payment on the prior issue is probably the simplest and most preferred way to use these funds. Since the amounts in the fund generally consist of revenues which were deposited specifically for debt service, the funds would be used for their intended purpose.

Since amounts in the bona fide debt service fund have only a 13-month temporary period, it is in the issuer's best interests to spend these funds to avoid having to yield restrict them.

Spending the proceeds in this manner also avoids transferred proceeds allocations and complies with the mixed escrow rules.

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Bona Fide Debt Service Fund, Continued

Amounts Can be Deposited into the Bona Fide Debt Service Fund of the Refunding Issue

Issuers should use caution when using this option. Amounts in the prior issue debt service fund are considered to be “short-term proceeds,” meaning that they are expected to be spent relatively quickly.

Moving these funds into the debt service fund of the refunding issue requires that other funds (probably refunding issue proceeds in the escrow) be used to make the debt service payments on the prior issue, while the prior issue debt service funds are saved until a later time for debt service on the refunding issue.

The mixed escrow and transferred proceeds rules are designed to prevent issuers from investing prior issue proceeds at a higher yield, while using refunding proceeds for current liabilities. Using refunding proceeds while prior issue proceeds are available could be viewed as an abusive arbitrage device, as described in Regulations § 1.148-10(c).

If the issuer transfers funds from the debt service fund of the prior issue to the debt service fund of the refunding issue, the issue is whether there will be excess gross proceeds of the refunding issue. Regulations § 1.148-10(c)(2) provides that excess gross proceeds means all gross proceeds of an advance refunding issue, less gross proceeds used for certain specified purposes. If the excess gross proceeds exceed an amount equal to one percent of sale proceeds of a refunding issue, the refunding is using an abusive device. The excess proceeds rules are discussed separately in this lesson.

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Bona Fide Debt Service Fund, Continued

Amounts Can be Deposited into the Refunding Escrow

If amounts from the prior issue debt service fund are deposited into the refunding escrow, they become subject to the mixed escrow and possibly the transferred proceeds rules, as was discussed previously.

Regulations § 1.148-9(c)(2)(ii)(A) requires that, if amounts other than proceeds of the refunding issue are deposited in a mixed escrow and those amounts had been held in a bona fide debt service fund or a fund to carry out the governmental purpose of the refunded issue, those amounts must be allocated to the earliest maturing investments in the mixed escrow.

Usually, amounts in the BFDS fund are issuer revenues (replacement proceeds). Therefore, they will not become transferred proceeds of the refunding issue. However, since the 13-month temporary period afforded these proceeds as BFDS funds expires on the issuance date of the refunding bonds, these amounts must immediately be yield restricted to no more than 0.001 percent of the prior issue bond yield. (Their treatment is similar to that of revenues from the prior reserve fund deposited into the escrow fund.)

If amounts in the BFDS fund are sale proceeds of the prior issue, they continue to be treated as sale proceeds of the prior issue (until transferring), but must be yield restricted to no more than 0.001 percent (because they are in the escrow fund) of the prior issue bond yield.

Because of their priority of expenditure in the mixed escrow rules, sale proceeds of the prior issue that were originally in the prior issue's BFDS fund have only a slight chance of becoming transferred proceeds of the refunding issue.

Project Funds

Introduction

Unspent project funds of the prior issue may be available when the refunding bonds are issued. The issuer has the following options, among others, regarding these funds. Amounts in the project fund can:

- Remain in the project fund and continue to be used for the governmental purposes of the issue,
 - Be deposited into the refunding escrow, **OR**
 - Be used to make the earliest debt service payments on the refunded issue.
-

Amounts Continue to be Used for the Governmental Purposes of the Issue

If there are amounts remaining in the project fund as of the date of issuance of the refunding bonds, these amounts continue to be proceeds of the refunded issue until such the amounts become transferred proceeds of the refunding issue in accordance with the transferred proceeds rules discussed earlier.

In a current refunding, the transferred amounts continue to be subject to the same rebate exception and temporary period as prior to their transfer.

In an advance refunding, if the 3-year temporary period for the refunded issue has not yet expired, under § 149(d)(3), it will terminate as of the date of issue of the refunding issue. The project fund will become subject to yield restriction to the yield on the refunded issue plus .125 percent.

When the funds transfer, they also become subject to yield restriction and rebate based on the refunding issue's yield.

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Project Funds, Continued

Amounts Can be Deposited into the Refunding Escrow

If the amounts in the project fund are deposited into the refunding escrow, then they become subject to the mixed escrow rules, as discussed previously.

Remember that Regulations § 1.148-9(c)(2)(ii)(A) **requires** that when project funds are deposited into a refunding escrow, they (along with any funds deposited from the prior issue's BFDS) must be allocated to the earliest maturing investments in the mixed escrow. Since these funds are considered to be available for spending, they should be considered to be spent first on the prior issue debt service paid from the escrow.

If the amounts are sale proceeds of the prior issue, they retain that character when placed in the escrow until they become transferred proceeds. In the meantime, they must be yield restricted to no more than 0.001 percent of the prior bond yield. After transferring, they become proceeds of the refunding issue, and are yield restricted to no more than 0.001 percent of the refunding issue bond yield.

If issuer equity or revenues from the project fund are deposited into the refunding escrow, they must be yield restricted to no more than 0.001 percent of the prior bond yield until spent. They never will become transferred proceeds because they were never proceeds of the prior issue.

Can be Used to Make the Earliest Debt Service Payments

If the issuer determines that the amounts in the project fund are no longer needed for the project, then the amounts can be used to make debt service payments on the prior issue.

Spending these proceeds avoids yield restriction and the transferred proceeds rules.

Refunding Escrow

Introduction

If original bonds were issued prior to 1986, and were already advance refunded, then the refunded issue may still have a refunding escrow. This escrow (escrow #1) will be paying the debt service on the original bond issue, while taxes or revenues will be paying the debt service on the refunding issue.

If a second advance refunding is issued, another escrow (escrow #2) will be established. Escrow #2 will pay the debt service on the first refunding, while the taxes or revenues will pay the debt service on the second refunding issue.

Transferred Proceeds

The transferred proceeds rules apply to refunding escrows in the same manner that they apply to other funds. Therefore, as soon as proceeds of the second refunding are used to pay principal of the first refunding, unspent proceeds of the first refunding will become transferred proceeds of the second refunding issue. Unspent proceeds include proceeds in the first escrow fund.

However, remember that in establishing an escrow fund, the issuer computed the exact amount necessary for debt service payments, and then calculated the amount of the required initial deposit to the escrow based on the limited yield of the fund. Usually, the escrow is invested in SLGSs. If these investments were to be sold and invested in SLGSs with a lower yield (assuming that this is a “high-to-low refunding”), then the escrow would not generate enough earnings to meet the debt service payments.

Obviously, the issuer has a problem. The yield of the investments in escrow #1 cannot be lowered without jeopardizing its ability to meet the debt service requirements. The resolution to the issuer’s problem can be found in Regulations § 1.148-5(b)(2)(iv) which provides that all investments of proceeds in all refunding escrows will be treated as a single investment having a single yield for purposes of § 148. This means that the yields of both escrows can be blended.

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Refunding Escrow, Continued

**Transferred
Proceeds
Penalty**

Yield blending may not be enough to compensate for escrow #1's higher yield if the second escrow is invested at the yield of the second refunding issue. In that case, the issuer can calculate the "transferred proceeds penalty" and lower the yield on escrow #2 by that amount.

In essence, the issuer will need to structure escrow #2 so that the yield on investments of proceeds in that escrow, together with the investment of transferred proceeds held in escrow #1, will not exceed the yield on the second refunding issue. A detailed explanation showing actual calculations is provided in Continuing Professional Education, Exempt Organizations, Technical Instruction Program for FY 1997, Tax-Exempt Advance Refunding Bonds - Some Basics, pages 149-187.

Sinking Fund

Introduction

If the prior issue had a sinking fund, the amounts in that fund will be available when the refunding bonds are issued. Some of the issuer's options regarding these amounts are that amounts can be:

- Used to pay earliest debt service payments on the refunded issue,
 - Deposited into the refunding escrow,
 - Deposited into the 4R fund, **OR**
 - Deposited into the sinking fund of the refunding issue.
-

Amounts Are Used to Pay Earliest Debt Service on Prior Bonds

Prior to the issuance of the refunding bonds, these amounts are replacement proceeds of the prior issue and must be yield restricted to no more than 0.001 percent above the prior issue bond yield. As replacement proceeds, they will not become transferred proceeds.

If they are not deposited into any other fund, they retain this treatment until spent.

Amounts Are Deposited into the Refunding Escrow

When these amounts are deposited into the refunding escrow, they retain their character as replacement proceeds of the prior issue, since they are still to be used to pay bonds of the prior issue. Thus, they are yield restricted to no more than 0.001 percent of the prior bond yield. As replacement proceeds, they do not become transferred proceeds.

Amounts Are Deposited into the 4R Fund of the Refunding Issue

When these amounts are used as reserve funds of the refunding issue, they immediately become replacement proceeds of the refunding issue. Although they are not subject to yield restriction (because they are in a 4R fund), they are subject to rebate as gross proceeds of the refunding issue.

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Sinking Fund, Continued

**Amounts Are
Deposited into
the Sinking
Fund of the
Refunding
Issue**

When these amounts are made part of the sinking fund of the refunding issue, they immediately become gross proceeds of the refunding issue. Thus, they must be yield-restricted to no more than 0.001 percent of the refunding issue, and are subject to rebate as gross proceeds of the refunding issue. However, see the discussion of the excess gross proceeds rules above in connection with the prior issue BFDS funds. It does not appear that a deposit of amounts that are replacement proceeds of a refunding issue due to their originally intended use to pay debt service on the refunded bonds, and therefore are gross proceeds of the refunding bonds, would reduce excess gross proceeds of the refunding issue.

Minor Portion

Initially Two, Reducing to One

Granted, the minor portion is not a separate fund. However, since it does provide for a certain amount of funds to be invested without yield restriction, the issuer is provided the opportunity to invest a portion of the bond proceeds without arbitrage yield restriction concerns.

As mentioned previously, Regulations § 1.148-9(f) provides that beginning on the issue date of the refunding issue, gross proceeds not in excess of a minor portion of the refunding issue and gross proceeds not in excess of a minor portion of the refunded issue qualify for the exception to yield restriction requirement. Prior to transfer, both of the minor portions will be available. As proceeds of the refunded issue become transferred proceeds of the refunding issue, the permitted amount of the minor portion of the refunded issue will be reduced. At the same time, the minor portion amount available for the refunding issue will not increase. This means that the issuer has to be ever vigilant over the yield of the various investments. Obviously, the issuer will want to allocate those investments with the highest yield (generally transferred proceeds from the refunded issue) to the minor portion, while lower-yielding investments will cease to be included.

Section 6: Section 149(d) Limits

Overview

Introduction

Section 149(d)(1) provides that the interest on bonds described in §§ 149(d)(2), (3), or (4) will not be tax-exempt.

Section 149(d)(2) provides that, private activity bonds, other than qualified 501(c)(3) bonds, may not be advance refunded with proceeds of tax-exempt bonds.

Section 149(d)(3) describes the limitations on the number of permitted advance refundings and the redemption rules.

Section 149(d)(4) provides that abusive transactions employed in an advance refunding are prohibited. These rules are discussed in the following section of this lesson.

In this Section

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Prohibition on Advance Refundings of Private Activity Bonds

Bonds that may be Advance Refunded Governmental bonds and qualified 501(c)(3) bonds may be advance refunded.

Pursuant to § 149(d)(2), refunding bonds issued to advance refund private activity bonds (other than qualified 501(c)(3) bonds) are not tax-exempt. This applies even if the advance refunding issue would be a governmental bond or a qualified 501(c)(3) bond after application of the rules in Regulations § 1.141-13.

Example 1 In 1991, City B issues \$40,000,000 of bonds and loans the proceeds to Corporation to finance a solid waste disposal facility. On January 1, 2001, City B issues bonds to refund the 1991 issue. The 1991 issue is redeemed on May 1, 2001. Because the 1991 issue was not redeemed within 90 days of the issuance of the 2001 issue, the 2001 issue is an advance refunding issue. The 1991 issue is a private activity bond (and not a qualified 501(c)(3) bond issue) and cannot be advance refunded with tax-exempt bonds. Thus, the 2001 bond issue is taxable as of the date of issuance.

Example 2 Same facts as Example 1, except that the City owned the solid waste facility, but had issued qualified private activity bonds because the facility was operated by Corporation A under a non-qualified management agreement. City terminated the agreement in 1999 and began operating the facility itself. If City issues bonds to advance refund the 1991 bonds, the result is the same as in Example 1, even though the refunding bonds would be governmental bonds.

Limitation on Number of Advance Refundings

Limitations on the Number of Permitted Advance Refundings

Section 149(d)(3)(A)(i) provides that if the original bond was issued after 1985, only one advance refunding is permitted with respect to that bond, including any bond that that refunds that bond.

If the original bond was issued before 1986, two advance refundings are permitted.

For purposes of this rule, § 149(d)(6) provides that:

- A refunding occurring before 1986 is treated as an advance refunding only if the refunding bond was issued more than 180 days before the redemption of the refunded bond.
 - If the original bond was issued before 1986, it is treated as if advance refunded only once before March 15, 1986, regardless of the number of times it was advance refunded before such date.
-

Example 3

In 1995, City issues bonds to advance refunds bonds issued in 1990. The 1990 bonds are callable in 2000. Neither the original bonds (nor the refunding bonds) can be advance refunded again.

Example 4

In 1983, City issued bonds to advance refund its outstanding 1980 bond issue. On December 15, 1985, City issued bonds to advance refund the 1983 bond issue. In 1990, City issues bonds to advance refund the 1985 bond issue. Under § 149(d)(6), the 1983 issue and the 1985 issue are treated as only one advance refunding.

Continued on next page

Limitation on Number of Advance Refundings, Continued

Taxable Refundings

If an issuer has already used the permitted number of tax-exempt advance refundings, but still wishes to advance refund, an issue a taxable advance refunding issue may be an option.

Regulations § 1.149(d)-(1)(e) provides that:

- Taxable advance refunding issues are not counted, **AND**
- An advance refunding of a taxable issue is not counted (except when the taxable issue is a conduit loan of a tax-exempt conduit financing issue).

Section 149(d) does not apply to refunding bonds that are taxable.

Example 5

In 1997, City issued bonds to advance refund its outstanding bonds issued in 1992. The 1992 bonds are callable in 2002. In 1999, City wants to refund the 1997 bonds but the 1997 bonds are not callable until 2007. City cannot issue tax-exempt advance refunding bonds. In 1999, City advance refunds the 1997 bonds using taxable advance refunding bonds, callable at any time. The taxable bonds are not counted for purposes of § 149(d)(3)(A)(i)(I).

City Y may currently refund the taxable issue with tax-exempt bonds; however, the tax-exempt refunding issue must not be issued until 90 days before the date the 1997 bonds are redeemed in 2007.

Example 6

In 2000, City issues bonds and uses the proceeds to construct a public hospital. The 2000 bonds are callable in 2010. In 2005, City borrows a portion of the proceeds from County's tax-exempt pool issue ("tax-exempt conduit financing issue") and uses the proceeds to advance refund the 2000 bonds. County and City treat the loan as a taxable issue. City cannot advance refund the taxable issue, even after the 2000 bonds are redeemed. Regulations § 1.149(d)-1(e) provides that because the taxable issue is a conduit loan of a tax-exempt conduit financing issue, any advance refundings will be counted under § 149(d)(A)(3).

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Limitation on Number of Advance Refundings, Continued

Taxable Refundings (continued)

However, Regulations § 1.149(d)-(1)(e)(2) provides that a taxable issue will be counted if it is issued to avoid the limitations of § 149(d)(3)(A)(i).

For example, if a taxable advance refunding issue is used to refund a tax-exempt issue, and is, in turn, currently refunded with a tax-exempt issue, the taxable advance refunding issue is counted if the two tax-exempt issues are outstanding concurrently for more than 90 days.

Example 7

In 1989, City M issues tax-exempt private activity bonds for Partnership to finance a solid waste disposal facility. The 1989 bonds cannot be advance refunded. On December 1, 1995, City M issues taxable bonds to advance refund the 1989 bonds. The 1989 bonds will be redeemed on December 1, 1999. On September 1, 1999, City M issues tax-exempt bonds to refund the 1995 taxable bonds on October 15, 1999. Because the tax-exempt issues (the 1989 bonds and the 1999 bonds) are not outstanding concurrently for longer than 90 days, the 1999 bonds are tax-exempt. If the 1999 bonds were issued prior to September 1, 1999, the issuance of the 1995 taxable bonds and the subsequent current refunding thereof with the 1999 bonds would be treated as if undertaken to avoid the limitations of § 149(d)(3)(A)(i).

Example 8

City R issues tax-exempt bonds in 1987 to finance a convention center. The first call date of the 1987 bonds is June 1, 1997. In 1995, City R advance refunds the 1987 bonds with tax-exempt bonds. The 1995 bonds are first callable in 2005. In 1997, City R advance refunds the 1995 bonds with a taxable issue. In 1998, City R wants to advance refund the taxable issue using tax-exempt bonds, but is prohibited from doing so by Regulations § 1.149(d)(1)(e)(2), because the 1995 bonds and the proposed 1998 bonds cannot be outstanding concurrently for longer than 90 days. No tax-exempt bonds may be issued more than 90 days before the redemption of the 1995 bonds to refund the 1998 taxable issue.

Required Redemption of Prior Bonds

Redemption Rules

If the issuer may realize present value debt service savings in connection with issuance of the refunding issue, then the following redemption rules apply:

- Section 149(d)(3)(A)(ii) provides that if the refunded bonds were issued before 1986, the refunded bond must be redeemed not later than the earliest date on which such bond may be redeemed at par or at a premium of three percent or less.
- Section 149(d)(3)(A)(iii) provides that if the refunded bonds were issued after 1985, the refunded bond must be redeemed not later than the earliest date on which such bond may be redeemed.

See § 149(d)(3)(B)(i).

Section 149(d)(3)(B)(ii) provides that for purposes of applying the above rules, the earliest date for redemption shall not be considered to be earlier than the 90th day after the issuance date of the refunding bond.

Example 9

In 1987, County A issued \$10,000,000 principal amount of bonds having a yield of 7 percent. The bonds are callable on January 1, 1997 at a premium of 3 percent. On January 1, 1996, \$5,500,000 principal amount of the 1987 bonds are outstanding. In 1996 County A issues bonds having a yield of 4 percent to advance refund the 1987 bonds. County A plans to redeem the 1987 bonds on January 1, 2000, when the bonds are callable at par. Because the refunding results in a savings of debt service, the 1987 bonds must be redeemed at the first call date, January 1, 1997.

Section 7: Abusive Arbitrage Devices

Overview

Introduction

Section 149(d)(1) provides that the interest on bonds described in §§ 149(d)(2), (3), or (4) will not be tax-exempt.

Section 149(d)(4) provides that the interest on a refunding bond, which employs an abusive device, will **NOT** be tax-exempt. An abusive device is employed if a material financial advantage (based on arbitrage) is obtained, aside from savings attributable to lower interest rates.

Advance Refunding Issues that Employ Abusive Devices

Regulations § 1.149(d)-1(b) provides that an advance refunding issue employs an abusive device and is described in § 149(d)(4) if:

- The issue violates any of the anti-abuse rules under Regulations § 1.148-10
 - The issue fails to meet the general rebate requirements of Regulations § 1.148-3
 - Any of the proceeds of the issue are invested in certain tax-exempt bonds, as described in Regulations § 1.149(d)-1(b)(3), **OR**
 - Investment of funds resulting from the sale of a tax-exempt conduit loan that is used to pay debt service on the conduit financing issue, is made at a yield in excess of the yield at which such conduit loan was sold.
(Regulations § 1.149(d)-1(b)(4) and Regulations § 1.148-10(d), example 4)
-

Continued on next page

Overview, Continued

Example 1

Proceeds of refunding bonds are allocated to amounts used to pay debt service on the refunded bonds. Accumulated revenues of the issuer are then free to be invested substantially longer than they would have been had there not been a refunding. The revenues are invested at a yield materially higher than the yield on the refunding bonds.

The method of allocation used by the issuer is a device within the meaning of § 149(d)(4) because it enabled the issuer to obtain a material financial advantage that would not have been available absent the allocation.

See S. Rep. No. 99-313, 99th Cong., 1st Sess.(1986), Example 1 at 850), 1986-3 C.B. Vol. 3, 850.

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Mixed Escrows Invested in Certain Tax-Exempt Bonds	181

Anti-Abuse Rules Under Regulations § 1.148-10

Introduction

The anti-abuse rules of Regulations § 1.148-10 apply to ALL tax-exempt bonds, not just advance refundings. Only § 1.148-10(c) applies solely to advance refunding issues.

Regulations § 1.148-10(a)(1) generally provides that bonds will be arbitrage bonds if an **abusive arbitrage device** (as defined in § 1.148-10(a)(2)) is used in connection with the issue.

Definition of Abusive Arbitrage Device

Regulations § 1.148-10(a)(2) states that an action is an abusive arbitrage device if the action:

- Enables the issuer to exploit the difference between tax-exempt and taxable interest rates to obtain a material financial advantage, **AND**
- Overburdens the tax-exempt bond market.

Both must be present for the bonds to be arbitrage bonds.

Exploitation

Regulations § 1.148-10(a)(3) provides that an investment of any portion of the gross proceeds of an issue at any time can exploit tax-exempt interest rates, even if the gross proceeds are not invested in higher yielding investments over the entire term of the issue.

See Regulations § 1.148-10(d), Example 2.

Continued on next page

Anti-Abuse Rules Under Regulations § 1.148-10, Continued

Overburdening the Tax-exempt Market

Regulations § 1.148-10(a)(4) provides that an action overburdens the tax-exempt bond market if, based on all of the facts and circumstances, it results in:

- Issuing more bonds,
- Issuing bonds earlier, **OR**
- Allowing bonds to remain outstanding longer than is reasonably necessary to accomplish the governmental purposes of the issue.

These factors may be outweighed by other factors, such as bona fide cost underruns, an issuer's bona fide need to finance extraordinary working capital items, or an issuer's long-term financial distress.

An over-issuance can be the result of reasonable expectations or actual events occurring after the issuance date.

Example 2

City W issues bonds secured by revenues from the city's sewer system. A few years later, City W issues bonds to advance refund the next 8 years of principal maturities of the initial bond issue. City W structures the refunding bonds with no required debt service payments until 8 years after issuance. The refunding bonds are secured by revenues from the sewer system.

Proceeds of the refunding bonds are placed into an escrow fund that is used to pay debt service on the prior bonds. On the issuance date of the refunding bonds, City W invests the available sewer revenues in a forward contract at a yield that is materially higher than the yield on the refunding bonds. The contract is structured to provide amounts that are used to redeem the principal maturities of the initial bond issue that come due starting in 9 years. The yield on the contract does not exceed the yield on the initial bonds.

City W's issuance of the refunding bonds with the debt service structure chosen was not necessary and caused bonds to be outstanding longer than necessary. Therefore, it constituted an overburdening of the tax-exempt market. Further, the city's window advance refunding transaction enabled the city to exploit the difference between tax-exempt and taxable interest rates to gain a material financial advantage.

See PLR 9746001. Also see Regulations § 1.148-10(d), Example 3.

Continued on next page

Anti-Abuse Rules Under Regulations § 1.148-10, Continued

Consequences of Overburdening the Tax-exempt Market

If an issue overburdens the market, without exploiting the tax-exempt interest rates, Regulations § 1.148-10(b)(1) provides the following limitations:

- The definition of “materially higher” is equal to one-thousandth of one percent (0.001 percent).
- Each investment is treated as a separate class of investments (no yield blending).
- Yield reduction payments are not permitted.
- Administrative costs cannot be deducted when computing yield.
- Proceeds are not allocated to expenditures unless the “proceeds-spent-last” rule would be satisfied if the expenditures were for restricted working capital.

Regulations § 1.148-10(b)(2) provides that the above limitations will apply to:

- All of the gross proceeds if the overburdening was **reasonably expected** on the issuance date, **OR**
- The portion of the issue which overburdens the market if the action was **NOT reasonably expected**.

Continued on next page

Anti-Abuse Rules Under Regulations § 1.148-10, Continued

Authority of the Commissioner to Clearly Reflect the Economic Substance of a Transaction

Regulations § 1.148-10(e) provides that, if an issuer enters into a transaction for a principal purpose of obtaining a material financial advantage based on the difference between taxable and tax-exempt interest rates in a manner that is inconsistent with the purposes of § 148, the Commissioner may exercise the Commissioner's discretion to depart from the rules in the regulations as necessary to reflect the economics of the transaction to prevent such financial advantage. For this purpose, the Commissioner may, among other things, recompute yield and rebate.

See *City of Columbus v Commissioner*, 106 TC 325 (1996). Although the Service prevailed in this instance, the case was lost on remand. See *City of Columbus v Commissioner* 112 F.3d 1201(1997), and *City of Columbus v Commissioner*, T.C. Memo 1998-135.

Authority of the Commissioner to Require an Earlier Date for Payment of Rebate

Regulations § 1.148-10(f) provides that if the Commissioner determines that an issue is likely to fail to meet the requirements of Regulations § 1.148-3 (regarding the general arbitrage rebate rules), **AND** that a failure to serve a notice of demand for payment on the issuer will jeopardize the assessment or collection of tax on interest paid or to be paid on the issue, the date that the Commissioner serves notice on the issuer is treated as a required computation date for payment of rebate for that issue.

Authority of the Commissioner to Waive Regulatory Limitations

On the other hand, Regulations § 1.148-10(g) provides that if the Commissioner finds that good faith or other similar circumstances so warrant, the Commissioner may prescribe:

- Extensions of temporary periods,
 - Larger reasonably required reserve or replacement funds,
 - Consequences of failures or remedial action under § 148 in lieu of or in addition to other consequences of those failures, OR
 - Other action.
-

Anti-Abuse Rules on Excess Gross Proceeds of Advance Refundings

Excess Gross Proceeds

Regulations § 1.148-10(c) provides generally that if an advance refunding issue has excess gross proceeds, an abusive arbitrage device is used and the bonds are arbitrage bonds.

Definition of Excess Gross Proceeds

Regulations § 1.148-10(c)(2) defines excess gross proceeds as all gross proceeds of an advance refunding issue that exceed an amount equal to one percent of sale proceeds of the issue, other than gross proceeds allocable to:

- Payment of principal, interest, or call premium on the prior issue
- Payment of pre-issuance accrued interest on the refunding issue, and interest on the refunding issue that accrues for a period up to the completion date of any capital project for which the prior issue was issued, plus 1 year
- A reasonably required reserve or replacement fund for the refunding issue or investment proceeds of such a fund
- Payment of costs of issuance of the refunding issue
- Payment of administrative costs allocable to repaying the prior issue, carrying and repaying the refunding issue, or investments of the refunding issue
- Transferred proceeds that will be used or maintained for the governmental purpose of the prior issue
- Interest on purpose investments
- Replacement proceeds in a sinking fund for the refunding issue
- Qualified guarantee fees for the refunding issue or the prior issue
- Fees for a qualified hedge for the refunding issue

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Anti-Abuse Rules on Excess Gross Proceeds of Advance Refundings, Continued

Other Special Rules

Regulations § 1.148-10(c)(4) contains special rules permitting for crossover refundings. Without the special rules, crossover refundings would not comply with the excess gross proceeds rule.

Regulations § 1.148-10(c)(5) contains special rules for gross refundings. The special rule only applies to transactions that are grandfathered under the regulations.

The structure of crossover refundings and gross refundings was discussed earlier in section 2 of this Part II.

Mixed Escrows Invested in Certain Tax-Exempt Bonds

Introduction

Regulations § 1.149(d)-1(b)(3) provides that an advance refunding issue is abusive if:

- Any of the proceeds of the issue are invested in a refunding escrow in which a portion of the proceeds are invested in tax-exempt bonds and a portion of the proceeds are invested in non-purpose investments,
- The yield on the tax-exempt bonds in the refunding escrow exceeds the yield on the issue,
- The yield on all the investments (including investment property and tax-exempt bonds) in the refunding escrow exceeds the yield on the issue,
AND
- The weighted average maturity of the tax-exempt bonds in the refunding escrow is more than 25 percent greater or less than the weighted average maturity of the non-purpose investments in the refunding escrow, and the weighted average maturity of non-purpose investments in the refunding escrow is greater than 60 days.

Purpose of This Rule

Regulations § 1.149(d)-1(b)(3) prevents issuers from taking advantage of the spread between long-term tax-exempt obligations and short-term taxable obligations. Generally, investments in tax-exempt obligations are not considered to be investment property under § 148. Therefore, but for this rule, funding an escrow with long-term higher yielding tax-exempt obligations and short-term taxable obligations would allow an issuer to earn a yield (based on actual cash flows) in excess of the advance refunding bond yield. Note, however, that the rule does not apply if the escrow is funded solely with tax-exempt bonds.

See Preamble, T.D. 8345, Section I.

Section 8: Special Topic – Forward Float Contracts

Overview

Introduction

When structuring an advance refunding escrow, the goal is to match the timing and amount of anticipated cash flow from open market securities as closely as possible to the escrow disbursements required to pay the principal and interest on the refunded bonds. In most instances, the escrow securities will not mature on the same date the cash flow is required, thus there is an imperfect match. This results in cash held in the escrow between the time the investment matures and the date needed to pay debt service on the prior bonds.

Cash Is Not an Investment

Bond proceeds held as cash, pending investment or other use, are not an investment obligation. Therefore, cash is not a non-purpose investment of bond proceeds.

Because cash is not an investment, it does not result in a “zero yield” when it is held, even though the issuer receives no income from it. Contrast this with an investment in a 0 percent SLGS obligation, which would produce a zero yield and reduce the yield on an escrow in which it is held.

Example 1

City W issues advance refunding bonds on February 1, 2011. The prior bonds secured by the advance refunding escrow have debt service requirements each January 1 and July 1 for the next 3 years until their redemption date on July 1, 2014. City W funded the escrow with open market U.S. Treasury securities maturing on May 15, 2014, and paying interest each May 15 and November 15. May 15, 2014 was the latest date of maturity for eligible escrow securities (exclusive of SLGSs) that was not later than July 1, 2014. This escrow will produce cash each May 15 and November 15, which will not be used until the following July 1 and January 1, respectively. These cash amounts are typically referred to as the cash inefficiencies of the escrow.

Continued on next page

Overview, Continued

Forward Float Agreements

Forward float agreements are a type of investment agreement developed in response to scenarios like Example 1. They effectively become an investment of the cash inefficiencies in a refunding escrow. As such, their valuation at fair amounts is important to assure that the yield on the investments is properly determined.

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Purpose and Effect of Forward Float Agreements

Introduction

As shown in Example 1, many times an advance refunding escrow will have periods during which cash will be available in the escrow earlier than needed to pay debt service on the prior bonds. The issuer of the bonds in Example 1 could, of course, invest maturing amounts at the rates in effect at the beginning of each of those 45-day “float periods.” However, the conditions for establishing an effective defeasance of the prior bonds, and the yield restriction rules and excess gross proceeds rules governing advance refunding issues, combine to require that the issuer have certainty as of the issue date as to the exact investment earnings from, and yield on, the escrow fund over its life. Reinvesting at unknown future rates may cause the issuer difficulty in complying with the yield restriction rules and excess gross proceeds rules.

Benefits of the Agreement

By using a forward float agreement, an issuer can invest the amounts received from the other defeasance securities in the escrow until the funds are needed. Because the investments are structured at the time the escrow is established, the issuer can account for the additional earnings from the float agreement and the yield on the agreement when structuring the escrow and its investments as a whole.

Example 2

In connection with the issuance of the advance refunding bonds funding the escrow described in Example 1, City W enters into an agreement with Bank B. Under the agreement, Bank B has the right to all investment earnings that may be derived from the future investment of the cash inefficiencies in the escrow. Pursuant to the agreement, City W receives an upfront payment from Bank B upon the initial funding of the escrow. City W uses the upfront payment as part of the funds needed to accomplish the refunding and defeasance of the prior bonds. City W must take the upfront payment into account when calculating the yield on the escrow, and determining whether the escrow yield is not materially higher than the yield on the refunding bonds.

City W has been able to reduce the amount of advance refunding bonds it needs to issue to defease the prior bonds. Assuming the amount paid by Bank B is equal to the fair market value of the agreement on the trade date, City W has done this without creating excess gross proceeds or violating yield restriction rules.

Continued on next page

Purpose and Effect of Forward Float Agreements, Continued

Excess Gross Proceeds

When the issuer of advance refunding bonds uses amounts received by the issuer from the provider of a forward float agreement to finance one of the costs described in Regulations § 1.148-10(c)(2), it has avoided the creation of excess gross proceeds. This assumes no diversion of investment earnings through undervaluing of the forward float agreement.

Yield Restriction

When the issuer of advance refunding bonds calculates the yield on the escrow by including as income the amounts it receives under the forward float agreement, and the resulting yield is not materially higher than the yield on the refunding bonds, the issuer has complied with the yield restriction rules. This assumes that the income the issuer receives reflects the fair market value of the forward float agreement.

Structure of Forward Float Agreements

Parties to Agreement

The forward float agreement may be an agreement between the issuer, the provider of the investment and the escrow agent. Alternatively, the agreement may be an agreement between the issuer and the investment provider, with a letter of instructions from the issuer to the escrow agent as part of the required terms. If the advance refunding transaction involves a conduit borrower (as may be the case in qualified 501(c)(3) bond financings), the borrower is also likely to be a party.

Upfront Payment

Under a typical forward float agreement, the issuer effectively “sells” the benefit of future investment of the cash inefficiencies in the escrow to the provider under the agreement. The provider pays the issuer for the transfer of this right on the date the escrow is funded. Since the issuer is receiving this payment in return for the provider’s use of the proceeds held in the escrow, the upfront payment is part of the investment return on the escrow, and constitutes investment proceeds.

Cash Reinvestments by Provider

The forward float agreement generally provides that the escrow agent will invest the cash amounts not immediately needed for the escrow cash flow for the benefit of the provider of the agreement or its designee. The return on these investments is not investment return to the issuer and is not included in determining the yield on the escrow.

Continued on next page

Structure of Forward Float Agreements, Continued

Mechanics of Agreement

In most cases, in order for a defeasance of bonds to be effective, the escrow agent must continually hold cash and U. S. Treasury obligations in an amount so that, as the Treasuries pay interest and mature, the escrow agent will always have sufficient cash to pay debt service on the refunded bonds as such is due. Investments other than U. S. Treasury obligations are usually not permitted. Therefore, a promise by the provider of the agreement to pay back funds when needed will not suffice for a forward float agreement with respect to an advance refunding escrow.

To address this problem, the forward float agreement is structured to provide that, upon demand by the provider, the escrow agent will use cash then available in the escrow to buy U.S. Treasury obligations from the provider or its designee. The agreement will require that the U.S. Treasury obligations be purchased by the escrow agent at a price equal to the amount that will be paid under the U.S. Treasury obligations upon their maturity. This has the effect of the escrow agent investing the cash at a 0 percent rate of return. Remember, the yield to the issuer on the agreement is in the form of the up-front payment.

The amount to be purchased by the escrow agent on any given date may not exceed the amount of cash available in the escrow on that date. The securities to be purchased by the escrow agent must consist of U.S. Treasury obligations, and they must mature in sufficient time to provide the cash required in the escrow.

IR 2007-152

History of Valuing Forward Float Agreements

Regulation § 1.148-5(d)(6)(i) defines “fair market value” of an investment as the price at which a willing buyer would purchase the investment from a willing seller. The regulations also provide that investments not traded on an established securities market are rebuttably presumed to be acquired at a price that is **NOT** its fair market value. This part of the Regulations has not changed since 1993 (except with regard to U.S. Treasury Securities purchased directly from the United States Treasury including State and Local Government Series investments).

When first issued in 1993, Regulations § 1.148-5(d) did not contain a specific rule on valuing securities in an advance refunding escrow. It did contain a rule on valuing guaranteed investment contracts, which are defined in a way to include forward float agreements.

Today, the regulations require a fair bidding process be used to acquire any open market securities used in an advance refunding escrow, as well as any investment agreement.

The Announcement

In IR-2007-152, the Service announced a Voluntary Closing Agreement Program permitting issuers to settle any concern they might have about the fair pricing of a forward float agreement in their refunding escrow. The announcement provided for a means that issuers could determine whether it was likely that any forward float agreement in an advance refunding escrow had been underpriced. Issuers who undertook the analysis described in the announcement and found that their forward float agreement may have been underpriced were invited to seek a closing agreement prior to the opening of an examination.

The portion of this section that follows, describing the valuation of forward float agreements, is based on the principles set forth in IR-2007-152.

Value of Forward Float Agreements

Introduction

Establishing the value of a forward float agreement involves the use of generally accepted financial theory.

Because float agreements pertain to cash-flows that will occur in the future, they are generally priced using implied forward rates. Forward rates may be modeled based on different markets, including the U.S. Treasury market and the Euro Dollar futures market. The Service has analyzed float contracts occurring in a wide range of yield-curve conditions (relatively flat, medium and steep), comparing the valuation using Euro Dollar futures to the valuation using the U.S. Treasury yield curve. The results of both valuation methods were substantially the same. Because of its relative simplicity, the Service values float agreements using the U.S. Treasury curve.

Valuing a forward float agreement consists of valuing each separate transaction under the agreement.

Example 3

For the facts set out in Example 1, there are seven transactions involved. The first transaction covers the period from May 15, 2011 until July 1, 2011. Other transactions take place each May 15 and November 15 thereafter through May 15, 2014. Each transaction has a fair market value that may be determined based on the implied forward rate for that transaction.

Continued on next page

Value of Forward Float Agreements, Continued

Implied Forward Rates

Based on generally accepted financial theory regarding forward rates and certain assumptions (for example, an upward-sloping yield curve and efficient markets without significant opportunities for arbitrage), the yield applicable for a float period should exceed the yield applicable to a Treasury with a term measured from the trade date of the float to the end of the float period. For example, the rate for a 6-month float period beginning 1 ½ years from now should exceed the current rate on a 2-year Treasury note (the end of the float period rate or “ending-rate”). This results from the fact that in a no-arbitrage market, the blended rate of the 1 ½ year rate (the beginning of the float period rate or “beginning-rate”) and the float rate will equal the ending-rate. In the typically occurring upward sloping yield curve environment, the beginning rate will be less than the ending rate. Therefore, the float rate must be greater than the ending-rate, simplified as follows:

If the weighted average of $(a, b) = c$ and $a < c$, then $b > c$ where:

a = beginning rate

b = float rate

c = ending rate

Forward rates can be computed using the following formula, adapted from John C. Hull’s, “Options, Futures and Other Derivatives”:

$$\text{Forward Rate} = \frac{(Re * Te) - (Rb * Tb)}{Te - Tb}$$

where:

Rb = interest rate applicable to beginning of float period

Re = interest rate applicable to end of float period

Tb = time between date float contract commences and beginning of float period

Te = time between date float contract commences and end of float period

Continued on next page

Value of Forward Float Agreements, Continued

Example 4

County X desires to enter into a float contract on March 1, 2000 providing for a 90-day float period of October 1, 2003 to January 1, 2004 with respect to \$20,000,000 of maturing investments in the advance refunding escrow. What rate should the provider of the forward float agreement be willing to pay, before reduction for hedging costs, profit, risk, etc., assuming no arbitrage?

Yield Curve Data:

	03/01/2000
	<u>Treasury Rates (A)</u>
6-mo	6.02 %
1-yr	6.17
2-yr	6.52
3-yr	6.54
5-yr	6.59
7-yr	6.63

Computation: (as of 03/01/2000; convention 30/360)

Months	Date	Rate	Days	Years
36	03/01/2003	6.5400%	1080	3.0000
43	10/01/2003	6.5546%*	1290	3.5833 (Tb)
46	01/01/2004	6.5608%*	1380	3.8333 (Te)
60	03/01/2005	6.5900%	1800	5.0000

Number of days to beginning of float period = 1290

Number of days to end of float period = 1380

Float period days = 90

(A) [Source: U.S. Treasury - Daily Treasury Yield Curve](#)

<http://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yieldAll>

* interpolated (linear)

Continued on next page

Value of Forward Float Agreements, Continued

Example 4,
continued

Using the interpolated rates from the preceding page:

Applicable interest rate at beginning of float period = 6.5546% (Rb)

Applicable interest rate at end of float period = 6.5608%(Re)

The no-arbitrage float period rate = 6.6504%, computed as

$$\begin{aligned} &[(Re \times Te) - (Rb \times Tb)] \div (Te - Tb) = \\ &[(6.5608 \times 3.8333) - (6.5546 \times 3.5833)] \div (3.8333 - 3.5833) \end{aligned}$$

Proof (assumes no arbitrage):

Borrow \$1,000,000 for 1380 days at 6.5608%, pay \$280,770 of interest
(\$1mm x 6.5608% x 1380 days)

Loan \$1,000,000 for 1290 days at 6.5546%, receive \$259,993 of interest
(\$1mm x 6.5546% x 1290 days)

Loan \$1,259,993 for 90 days at 6.6504% receive \$20,777 of interest
(\$1,259,993 x 6.6504 for 90 days)

\$259,993 plus \$20,777 = \$280,770

Conventions:
semi-annual compounding
360 day count

Continued on next page

Value of Forward Float Agreements, Continued

Example 4,
continued

The above result can be shown graphically. A person would be neutral between the following investment scenarios:

$$\frac{[1380 \text{ days}]}{6.5608\%}$$

$$\left[\frac{1290 \text{ days}}{6.5546\%} \right] \left[\frac{90 \text{ days}}{6.6504\%} \right] = 6.5608\%$$

Thus, County X should expect a rate of 6.6504% to apply to the 90-day float investment of the \$20,000,000 before reduction for hedging costs, profit, risk, etc. of the provider of the agreement.

Conventions:
semi-annual compounding
360 day count

Continued on next page

Value of Forward Float Agreements, Continued

Present Value Considerations

In a typical forward float agreement associated with an advance refunding escrow, the provider of the investment agreement is required to make an upfront payment to the issuer rather than paying the investment return at the end of the forward float period. Therefore, a present value must be calculated for the no-arbitrage float period investment return computed using the methodology set out above.

The present value of a future amount is dependent on the discount rate used in the calculation. The discount rate should approximate the rate of return obtainable if the amount were invested at the beginning of the discount period until the future value date.

Again ignoring adjustments for hedging and other costs, and a reasonable profit, the rate computed as the forward investment rate would be a discount rate that reflects the rate of return. In fact, it is slightly greater than the rate of return over the discount period, so it will slightly understate the present value.

Present Value Calculations

As explained in more detail in Lesson 2 of Phase 2, *Advanced Topics in Arbitrage*, the formula for the present value of an amount paid in the future is:

$$PV = \frac{FV}{(1 + r/c)^{(y * c)}}$$

where:

FV = Future Value

r = rate

y = years between settlement and future value date

c = number of compounding intervals per year

The formula for present value also can be found in § 1.148-8T(b)(5) of the 1989 Regulations. However, the regulation's presentation combines certain of the variable elements, with their detail explained in the text.

Continued on next page

Value of Forward Float Agreements, Continued

Example 5

Applying the above concepts to the forward float agreement described in Example 3 with the forward rate of 6.6504 percent calculated in Example 4, would result in the following Present Value VCAP Float Earnings Amount:

Forward float agreement with cash flow of \$20,000,000 for 90 days, starting 3 years and 7 months forward.

Forward Rate = 6.6504%

<u>Date</u>	<u>Cash Flow</u>	<u>Present Value on 03/01/2000</u>
03/01/2000	\$256,648 (A)	\$256,648
10/01/2003	(20,000,000)	(15,820,429)
01/01/2004	20,000,000	15,563,781
	\$256,648	\$0.00

(A) The amount that, when combined with the remaining cash flows of the float agreement, generates a yield equal to the "Float Rate" shown above.

Conventions:
semi-annual compounding
360 day count

Note: This example is for a float agreement with a single cash flow. Float agreements containing multiple cash flows will require separate pricing of each cash flow. Frequently, the final cash flow is the most significant in terms of dollar amount compared to all the other cash flows in a float agreement. In this instance, a simplifying assumption may be made for float agreements priced at a time with a generally upward sloping yield curve. The simplification would be to use the float rate computed for the final cash flow in the float agreement for all cash flows. This simplified approach generally will not significantly distort the valuation of the float agreement, since the earlier cash flows will also be discounted at the higher rate applicable to the final cash flow investment period.

Continued on next page

Value of Forward Float Agreements, Continued

Adjustment for Costs and Reasonable Profit

As noted above, the mathematical formula to value the forward float cash flows described does not make adjustments for hedging and other costs or a reasonable profit for the provider of the forward float investment agreement. These items may vary depending on a wide variety of factors. Some factors may be specific to the issuer and the transaction, and others may be more broadly market based.

For purposes of the valuations used in IR-2007-152, the Service permitted adjusting the present value of the future cash flow downward by 20 percent to account for these items. The adjustment for these items is appropriately done prior to including the value of the agreement in the calculation of the advance refunding escrow.

Including the Value in the Yield Calculation

When the value of the forward float agreement has been determined, such value should be compared to the amount that the issuer was paid for the agreement. If the amount paid is significantly different from the calculated value, further inquiry is appropriate. As noted in IR-2007-152, an issuer may be able to explain any special circumstances that might cause the fair value of the forward float agreement to be less than the calculated amount.

Once the value has been determined to be greater than the amount paid to the issuer, the value should be included in the calculation of the yield on the refunding escrow. Of course, in this calculation, the amount actually paid to the issuer for the forward float agreement would be excluded.

Limitation of Methodology set forth in IR 2007-152

It is not purported that the methodology described in IR 2007-152 will produce a float valuation with extreme precision. It is however, a methodology based on widely accepted financial theory designed to allow Service personnel and practitioners to determine quickly if a float agreement has been significantly overpriced and to provide the basis for computation of settlement amounts. Additionally, the computation methodologies described in IR 2007-152 should not be interpreted to be a “safe harbor” for float agreements or any other investment or financial product. Finally, IR 2007-152 was a special Voluntary Closing Agreement Program. It is a general policy of the Service to resolve violations brought forward voluntarily on more favorable terms than those discovered as part of an examination.

Summary

Review of Lesson

There are two kinds of refundings. A bond is an advance refunding bond if it is issued **more than 90 days** before the redemption of the refunded bond. A bond is a current refunding if it is issued **90 or fewer days** before redemption of the refunded bond.

The rules governing advance refundings can be found in various sections of the Code and regulations. The general rules that define and limit advance refundings are in § 149(d) and the accompanying regulations. Certain definitions are found in Regulations § 1.150-1(d). The arbitrage rules are found throughout Regulations §§ 1.148-0 to 11. The private business test and private loan financing test also apply, and the refunding bond provisions are found in Regulations 1.141-13. The provisions of §§ 146 and 147 apply only in certain cases. Lastly, whenever a bond is issued after August 15, 1986, to refund a bond issued before August 15, 1986, the transition rules of Section 1313(b) of the TRA 1986 need to be consulted.

Section 149(d) provides that:

- Only governmental and qualified 501(c)(3) bonds (and corresponding bonds for exempt persons under the 1954 Code) may be advance refunded.
- Original bonds issued prior to 1986 may be advance refunded twice.
- Original bonds issued after 1985 may be advance refunded only once.

Advance refunding issues generally involve three different funds:

- Escrow fund
- Reserve fund
- Bona fide debt service fund

Once proceeds of the refunding issue are used to pay principal on the prior issue, any unspent proceeds (but not replacement proceeds) of the prior issue transfer to the refunding issue.

When proceeds other than refunding issue proceeds are deposited into the refunding escrow, the escrow becomes subject to the mixed escrow rules.

Continued on next page

Summary, Continued

**Review of
Lesson
(continued)**

The multipurpose allocation rules allow an issuer to divide a single issue used for different purposes into separate issues.

The temporary period for proceeds of a refunding issue varies depending on the type of proceeds.

The yields of yield-restricted non-purpose investments can be blended for arbitrage yield restriction purposes, but the yields of non-yield-restricted investments cannot be included with them. Yield blending does not work in the same manner for rebate purposes. Yields of all investments are blended for rebate purposes. A special rule allows the escrow and a sinking fund to be treated as a single investment with a single yield for rebate and yield restriction purposes.

Proceeds of refunding issues can qualify only for the small issue exception to rebate or the 6-month spending exception.

Abusive devices are described in Regulations § 1.149(d)-1(b).
