

# Module E

## Refundings

### Overview

---

**Introduction** Module C of Phase I of this course provided a basic overview of both current and advance refundings. This module discusses refundings in greater detail.

---

**What is a Refunding Issue?** The definition of a “refunding issue” can be found in Treas. Reg. section 1.150-1(d)(1). Under this definition, a refunding issue is an issue of obligations the proceeds of which are used to pay principal of, or interest or redemption price on, another issue of bonds. The refunded issue may be an issue that was issued prior to, simultaneously with, or subsequent to, the issuance of the refunding bonds.

---

**Statutory Provisions and Regulations** As discussed in this Module, in case of an advance refunding, two bond issues are outstanding at the same time for a certain period. Because of this additional federal subsidy, various rules specifically apply to advance refundings. The general rules that define and limit advance refundings are in IRC section 149(d) and the accompanying regulations. Certain definitions are in Treas. Reg. section 1.150-1(d). In addition to the general yield restriction rules, specific arbitrage rules applicable to refunding issues are in Treas. Reg. section 1.148-9. Specific anti-abuse rules for advance refundings are in Treas. Reg. section 1.148-10.

Other provisions, such as IRC sections 146 and 147, may also apply.

In addition, whenever a bond is issued **after** August 15, 1986 to advance 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.

---

*Continued on next page*

## Overview, Continued

---

### Objectives

At the end of this lesson, the student will be able to:

- Identify a refunding issue.
- Explain the exception and special rules applicable to refunding issues.
- Explain the difference between current and advance refundings.
- Explain the general rules of IRC section 149(d) regarding advance refundings.
- Identify instances when the provisions of IRC sections 146 and 147 apply to refunding issues.
- Determine the effect of the TRA 1986 Transition rules on a refunding issue.
- Describe the various forms of advance refundings.
- Identify the gross proceeds and proceeds of an advance refunding issue.
- Define transferred proceeds.
- Compute the amount of proceeds transferring from the prior issue to the refunding issue.
- Explain how the universal cap affects transferred proceeds of an refunding issue.
- Apply the multipurpose allocation rules when allocating proceeds, costs, and bonds of a multipurpose issue.
- Describe the common funds in an advance refunding issue.
- Explain the mixed escrow rules.
- Determine the temporary periods for gross proceeds of refunding issues.
- Determine the yield on a class of investments.
- Determine if an issue has met an exception to rebate.
- Determine the proper treatment of prior issue proceeds.
- Describe abusive arbitrage devices and the rules designed to curb them.

---

*Continued on next page*

## Overview, Continued

---

**In the Module** This module contains the following topics:

<b>Topic</b>	<b>See Page</b>
Overview	E-1
<b>Part I: Introduction to Refundings</b>	<b>E-4</b>
Section 1: General Rules	E-4
Section 2: Common Funds in Advance Refundings	E-24
Section 3: Forms of Advance Refundings	E-36
<b>Part II: Introduction to the Allocation Rules</b>	<b>E-45</b>
Section 1: Transferred Proceeds	E-48
Section 2: Mixed Escrow Rules	E-68
Section 3: Multipurpose Allocation Rules	E-81
<b>Part III: Introduction to the Arbitrage Rules</b>	<b>E-91</b>
Section 1: General Rules - Yield Restriction	E-93
Section 2: General Rules – Rebate	E-107
Section 3: Treatment of Prior Issue Proceeds	E-126
<b>Part IV: Abusive Arbitrage Devices in Advance Refundings</b>	<b>E-141</b>
Overview	E-141
<b>Summary</b>	<b>E-157</b>
<b>Case Study</b>	<b>E-159</b>

---

# Part I: Introduction to Refundings

## Section 1: General Rules

### Overview

---

#### Introduction

Treas. Reg. section 1.150-1(d) provides a definition of refunding issue and special rules applicable to refunding issues.

IRC section 149(d) and the accompanying regulations provide the general rules for advance refundings. These rules:

- define advance refundings,
- limit the types of bonds which may be advance refunded,
- limit the number of times that a bond can be advance refunded,
- provide specific redemption rules, and
- prohibit abusive transactions.

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

IRC section 146(i) provides the application of volume cap rules to refunding issues.

IRC section 147 generally applies to current refundings and only certain provisions apply to advance refundings.

---

#### In this Section

This section contains the following topics:

Topic	See Page
Overview	E-4
Definition of Refunding Issue	E-5
Limitations on Advance Refundings	E-13
TRA 1986 Transition Rules	E-19
Applicability of IRC section 146 - Volume Cap	E-21

---

## Definition of Refunding Issue

---

### What is a Refunding Issue?

Treas. Reg. section 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. Module B of Phase III of this course discusses when a significant modification of a bond issue results in reissuance.

---

### Example 1

City issues bonds in 1999 the proceeds of which are to be used to pay the principal of, and interest on, a bond issue issued by the City in 1987. The 1999 bond issue is a refunding issue and the 1987 bond issue is a refunded issue.

---

### Exceptions and Special Rules

Treas. Reg. section 1.150-1(d)(2) provides exceptions to the general definition of “refunding issue.”

The exceptions apply where:

- the proceeds of the refunding issue are used to pay certain interest on a refunded issue,
- the refunding issue and the refunded issue have different obligors, and
- the refunding occurs in connection with an asset acquisition.

Each of these exceptions is discussed below.

---

*Continued on next page*

## Definition of Refunding Issue, Continued

---

**Payment of Certain Interest**      Treas. Reg. section 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:

- (A) accrues on the other issue during a one-year period including the issue date of the issue that finances the interest;
  - (B) is a capital expenditure; or
- is a de minimis working capital expenditure.
- 

**Example 2**      City issues bonds in 1999 the proceeds of which are used to pay the interest on a bond issue issued by the City in 1987. The 1999 issue is not a refunding issue.

City issues bonds in 2000 the proceeds of which are used to pay only the accrued interest portion of capitalized interest bonds issued by the City in 1995. The 2000 issue is not a refunding issue.

---

*Continued on next page*

## Definition of Refunding Issue, Continued

---

**Certain Issues  
with Different  
Obligors**

Treas. Reg. section 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 1990 the proceeds of which are used to finance an office building used by the City. In 1995, 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 1990 bonds. Under state law, City and County are not related parties. The obligor on the 1990 issue is the City and the obligor on the 1995 issue is the County. The 1995 issue is not a refunding issue.

---

**Proposed  
Regulations**

On April 10, 2002, the Service issued Proposed Regulations (REG 165706-01) amending portions of Treas. Reg. section 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 section 381(a) applies.

---

*Continued on next page*

## Definition of Refunding Issue, Continued

---

**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 Treas. Reg. section 1.150-1(d)(2)(ii)(B).

---

**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 Treas. Reg. section 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 used by the City to pay debt service on the bonds. For purposes of Treas. Reg. section 1.150-1(d)(2)(ii)(B), the City rather than the homeowners, is the obligor of the bonds.

In Rev. Rul. 2003-78, IRB 2003-29, the Service ruled that in a pool financing issue a borrower of the proceeds of the pool issue was an obligor rather than the issuer of the pool issue and the portion of the bonds allocable to the loan to the borrower were advance refunding bonds. The revenue ruling states that the loan of the proceeds of the pool financing issue to the borrower is not a “similar program investment” within the meaning of Treas. Reg. section 1.150-1(d)(2)(ii)(B).

---

*Continued on next page*



## 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 use of the proceeds of the conduit refunding issue by the actual issuer of the conduit financing issue. Treas. Reg. section 1.150-1(d)(2)(iii)(A).

See Module B of Phase III for additional discussion of conduit refunding issues.

---

### **Example 6**

State issues bonds in 1997 and loaned the proceeds to various School District 1. The 1997 bond issue is a conduit financing issue. In 2003, 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 1997 bonds. Upon receiving the prepayment, State uses the proceeds to pay the principal of, and interest on, the 1997 bond issue. The 2003 bond issue is a conduit refunding issue that refunded the 1997 bonds.

---

### **Example 7**

Same facts as Example 1 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 2003 bond issue is not a refunding issue. See Treas. Reg. section 1.150-1(d)(2)(iii)(B).

---

### **Example 8**

City issues bonds in 1999 and loans the proceeds to Corporation to be used to finance a nursing home (conduit financing issue). The 1999 bonds are not callable. In 2002, Corporation wants to acquire another facility in City and consolidate its debt. City issues bonds and loans proceeds to Corporation to be used to acquire the new facility and to prepay its obligation with respect to the 1999 bond issue. City uses the prepayment amount to establish a sinking fund for the 1999 bond issue. The 2003 bond issue is not a refunding issue.

---

*Continued on next page*

## Definition of Refunding Issue, Continued

---

**Certain  
Integrated  
Transactions in  
Connection  
with Asset  
Acquisitions**

Proposed Regulations (REG 165706-01) amended section 1.150-1(d)(2)(v) of the existing regulations. Under section 1.150-1(d)(2)(v) of the existing regulations 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 person refinances the obligation with proceeds of a bond issue, the bond issue is not considered a refunding issue. 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 section 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.

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 section 338 election; and
- (3) control of a governmental unit or a 501(c)(3) organization through the acquisition of stock, membership interests or otherwise.

---

*Continued on next page*

## Definition of Refunding Issue, Continued

---

**Special Rule for Affiliated Persons** 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 –

- (i) the 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) the refinancing issue is treated for all purposes of sections 10, 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 one-year period beginning six 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 one-year period).

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

---

*Continued on next page*

## Definition of Refunding Issue, Continued

---

### **Reverse Acquisitions**

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 sections 1.150-1(d)(2)(ii).

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

---

### **Effective Date of Proposed Regulations**

Although the Proposed Regulations amending section 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 and Advance Refundings**

Generally, if the proceeds of a refunding issue are used to refund a prior issue within 90 days of the issuance of the refunding issue, the refunding is a current refunding. A refunding issue that is not a current refunding issue is an advance refunding issue.

See Module C of Phase I of this Course for a detailed discussion.

---

## Limitations on Advance Refundings

---

**The Limitation of Advance Refundings** IRC section 149(d)(5) provides that 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.

---

**Example 9** County A issues bonds in the amount of \$20,000,000 at 8 percent in 1987. The bonds are callable in 1997 and mature in 2017. The debt service on the bonds will be paid from revenues from the project. In 1990 tax-exempt interest rates fall to 5 percent and County A issues bonds to refund the 1987 bonds. The proceeds of the refunding issue are deposited in an escrow fund and will be used to pay the debt service on the 1987 bonds until redeemed in 1997. Because the 1990 issue is issued more than 90 days before redemption of the 1987 issue, the 1990 issue is an advance refunding issue.

---

**Bonds that may be Advance Refunded** Governmental bonds may be advance refunded. Refunding bonds issued to advance refund private activity bonds (other than qualified 501(c)(3) bonds) are not tax-exempt. IRC section 149(d)(2).

---

**Example 10** 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 that is 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.

---

*Continued on next page*

## Limitations on Advance Refundings, Continued

---

### Limitations on the number of Permitted Advance Refundings

IRC section 149(d)(3)(A)(i) provides that if the original bond was issued after 1985, it can be advance refunded only once.

If the original bond was issued before 1986, it can be advance refunded twice.

For purposes of this rule, IRC section 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, AND
  - 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 11

In 1995, City issues bonds to advance refund 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 12

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 IRC section 149(d)(6), the 1983 issue and the 1985 issue are treated as one advance refunding.

---

### 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 can be an option.

Treas. Reg. section 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 unless 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.

---

*Continued on next page*

## Limitations on Advance Refundings, Continued

---

### **Taxable Refundings, Example 13** (continued)

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 IRC section 149(d)(3)(A)(i)(I).

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

*Further, the taxable issue cannot ever be advance refunded with tax-exempt bonds, even after both of the tax-exempt issues have been redeemed.*

---

### **Example 14**

In 1990, City issues bonds and uses the proceeds to construct a public hospital. The 1990 bonds are callable in 2000. In 1992, City issues tax-exempt bonds to advance refund the 1990 bonds. The 1992 bonds are callable in 2002. In 1995, 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 1992 bonds. The portion of the proceeds of the 1995 pool issue borrowed by City represents 6 percent of the proceeds of the pool issue. County and City treat loan as a taxable issue. City cannot advance refund the taxable issue, even after the 1992 bonds are redeemed. Treas. Reg. section 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 IRC section 149(d)(A)(3).

County's pool financing issue in the above Example is tax-exempt because the proceeds loaned to City are less than 10 percent of the proceeds of the pool issue.

---

*Continued on next page*

## Limitations on Advance Refundings, Continued

---

### **Taxable Refundings** (continued)

However, Treas. Reg. section 1.149(d)-(1)(e)(2) provides that a taxable issue will be counted if it is issued to avoid the limitations of IRC section 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 15**

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 IRC section 149(d)(3)(A)(i).

---

### **Example 16**

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 Treas. Reg. section 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.

---

*Continued on next page*



## Limitations on Advance Refundings, Continued

---

### 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:

IRC 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.

2. IRC 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 IRC section 149(d)(3)(B)(i).

IRC section 149(d)(3)(B)(ii) provides that for purposes of the above rules, the earliest date for redemption cannot be earlier than the 90<sup>th</sup> day after the issuance date of the refunding bond.

---

### Example 17

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.

---

### Abusive Transactions

IRC 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.

Abusive devices and the anti-abuse rules are in Treas. Reg. sections 1.149(d)-1(b) and 1.148-10 and are discussed later in this module.

---

# TRA 1986 Transition Rules

---

## **Introduction**

Transition rules are particularly important in the tax-exempt bond area. This is largely because of the many different sets of regulations that have been issued over the years. Most new legislation and regulations apply to bonds issued after a certain effective date. This practice has particular importance because most tax-exempt legislation has resulted in stricter rules. Accordingly, determining when refunding issues are “grandfathered” from new stricter rules is a very common and very important issue.

The effective date and transition rule question arises for new regulations as well as new legislation. 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.

---

## **Current Refundings**

Section 1313(a) of the TRA 1986 generally provides that IRC sections 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 unless requirements set forth in that section are met.

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

See Exhibit E-1 for section 1313 of the TRA 1986.

---

*Continued on next page*

## TRA 1986 Transition Rules, Continued

---

### **Advance Refundings**

Section 1313(b) of the TRA 1986 generally provides that IRC sections 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 unless the requirements set forth in that section are met.

---

### **Special Rules for Governmental Bonds Issued After August 15, 1986**

Section 1312(c)(2) of TRA 1986 provides the following adjustments for certain advance refundings of qualified 501(c)(3) bonds that occur before September 1, 1986:

- IRC sections 147(f) and (g) do not apply,
  - IRC section 150(b) does not apply, and
  - the bond won't be a private activity bond for 148 and 149(e).
- 

### **Volume Cap**

Section 1313(b)(5) of TRA of 1986 provides that certain advance refunding bonds may be subject to volume cap. See discussion below.

---

## Applicability of IRC Section 146 – Volume Cap

---

**General Rule** IRC section 146(i)(1) provides that, generally, a bond issued to refund another bond is not considered a “private activity bond” to the extent that the amount of the refunding bond does not exceed the outstanding amount of the refunded bond.

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

---

**Example 18** On August 1, 2002, City has \$10,000,000 principal amount of outstanding bonds issued in 1992 to finance multi-family housing facility owned by Partnership. On August 1, 2002, City issues \$10,000,000 principal amount of bonds to current refund the 1992 bond issue. City does not need volume cap in connection with the issuance of the 2002 bond issue.

---

**Example 19** On August 1, 2002, City has \$10,000,000 principal amount of outstanding bonds issued in 1992 to finance multi-family housing facility owned by Partnership. On August 1, 2002, City issues \$10,000,000 principal amount of bonds to current refund the 1992 bond issue. City does not need volume cap in connection with the issuance of the 2002 bond issue.

---

**Student Loan Bonds** IRC 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 –

- (i) the average maturity date of the refunded bonds, or
- (ii) the 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).

Note that student loan bonds are private activity bonds and can only be current refunded and average maturity is determined in accordance with IRC section 147(b)(2)(A).

---

*Continued on next page*

## Applicability of IRC Section 146 – Volume Cap, Continued

---

### Single Family Bonds

IRC 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 –

- (i) the average maturity date of the refunded bond, or
- (ii) the 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).

Note that single-family bonds are private activity bonds and can only be current refunded and average maturity is determined in accordance with IRC section 147(b)(2)(A).

---

### Advance Refunding Bonds

Generally, advance refunding bonds do not need volume cap. See IRC section 146(i)(5). However, as discussed below, a portion of the refunding bonds issued to advance refund bonds that meet the requirements of IRC section 141(b)(5) may require volume cap.

You will recall from Module J, Phase I of this course that IRC section 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 IRC section 141(b)(5). Under section 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 IRC Section 146 – Volume Cap, Continued

---

**Advance  
Refunding  
Bonds**  
(continued)  
**Example 20**

City issues bonds in 1999 to finance a public power facility. An investor-owned utility contracts to purchase power from the public power facility. On the date of issue it was determined that the private use portion of the public power facility will be \$20,000,000. Under section 141(b)(5), City obtained volume cap in the amount of \$5,000,000. In 2002, City advance refunds the entire outstanding principal amount of the 1999 bond issue. City should obtain volume cap in the amount of \$5,000,000 in connection with the issuance of the refunding bonds.

---

**Example 21**

City issues bonds in 1999 to finance a public power facility. City intends to use all of the power from the facility for its purposes and thus no volume cap is necessary on the date of issuance of the 1999 bond issue. In 2002, an investor-owned utility contracts to purchase power from the public power facility and such sale results in \$20,000,000 of the proceeds of the 1999 issue to be used in private business use. In 2003, City advance refunds the entire outstanding principal amount of the 1999 bond issue. City should obtain volume cap in the amount of \$5,000,000 in connection with the issuance of the refunding bonds.

---

**Example 22**

In 1997 City issues \$200,000,000 principal amount of bonds to finance a convention center. On the date of issue City expects that \$20,000,000 of the proceeds will be used in private business use and obtains volume cap in the amount of \$5,000,000. In 2000, City advance refunds \$100,000,000 of the outstanding 1997 bond issue. Because only 50 percent of the 1997 issue is refunded, City must obtain volume cap in the amount of \$10,000,000 on the date of the refunding. This is because 10 percent of the refunding bonds (same 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.

---

## Section 2

### 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. Two of these forms are described in the anti-abuse rules on excess gross proceeds of advance refundings in Treas. Regs. Section 1.148-10(c).

The first form is by far the most common.

---

**In this Section**

This section contains the following topics:

<b>Topic</b>	<b>See Page</b>
Overview	E-24
Net Refunding	E-25
Gross Refunding	E-28
Crossover Refunding	E-31
Summary of Forms of Advance Refundings	E-35

---

# Net Refunding

---

## **Introduction**

This is the most typical advance refunding. In a net refunding the proceeds of the refunding bonds plus investment income thereon is used to pay the principal and interest on the refunded issue. The proceeds of the advance refunding bonds are used to acquire United States Treasury Obligations in the open market or State or Local Government Series from the Bureau of Public Debt in an amount that is sufficient to pay the principal, interest, and redemption premium (if any) on the refunded bonds until their redemption date. The securities purchased are deposited into an escrow fund and the refunded bonds are considered to be "defeased." The funds (taxes or revenues, as the case may be) that were 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 E-1 illustrates a net refunding.

---

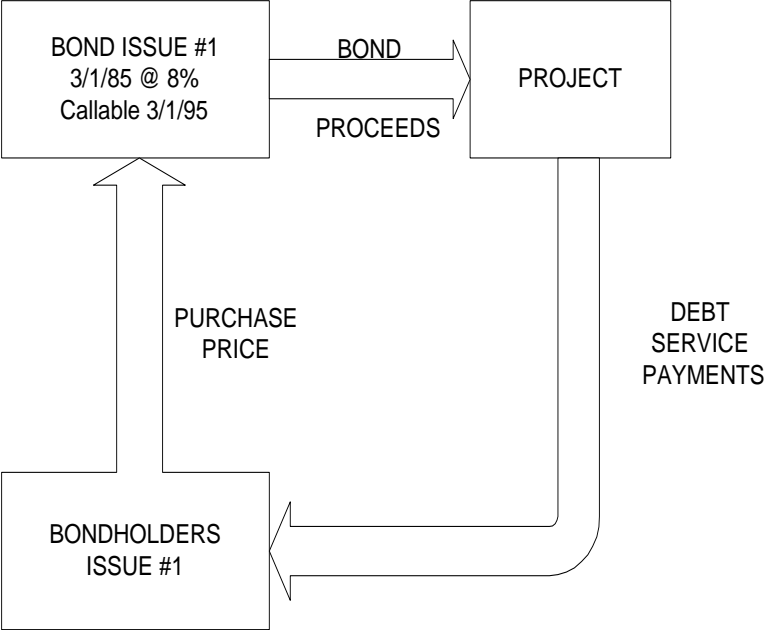
*Continued on next page*



# Net Refunding, Continued

FIGURE E-1: NET REFUNDING

## STEP 1: ISSUANCE OF ORIGINAL BONDS

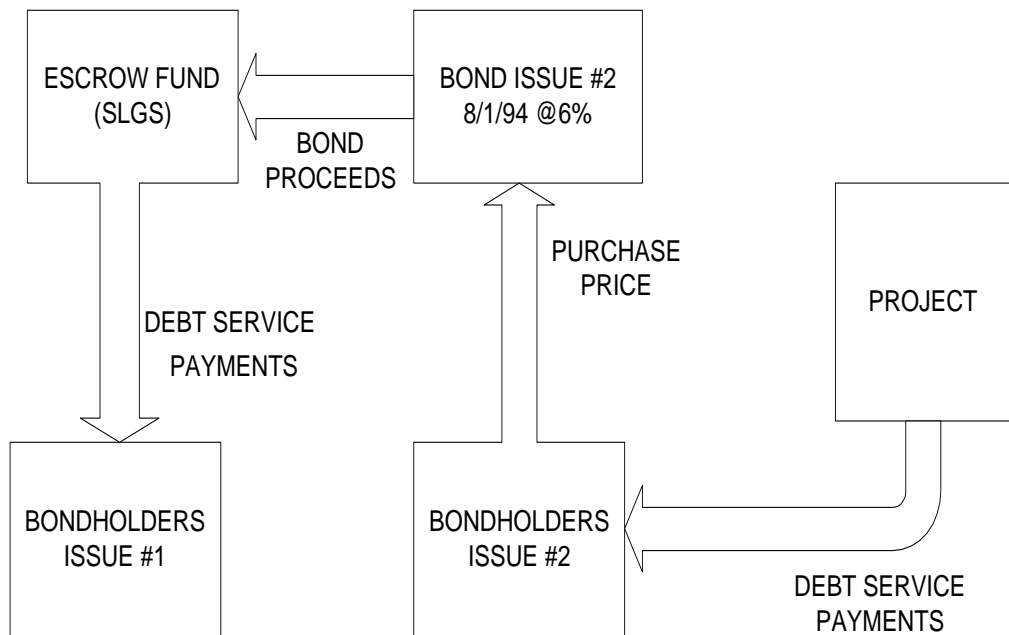


*Continued on next page*

# Net Refunding, Continued

FIGURE E-1: NET REFUNDING

STEP 2: ISSUANCE OF REFUNDING BONDS



**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 amount (the "full 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 the full amount into the escrow account. Therefore, on the redemption date of the refunded bonds, the accreted value of the securities is in excess of the amount needed to redeem the refunded bonds. This results in excess gross proceeds. Treas. Reg. section 1.148-10(c)(5) provides rules applicable to gross refundings.

---

### **Example 23**

On September 1, 1999, City advance refunds a prior bond the yield on which is 8 percent and the redemption price is \$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 does a net refunding, 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 does 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 E-2 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, AND
- 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.

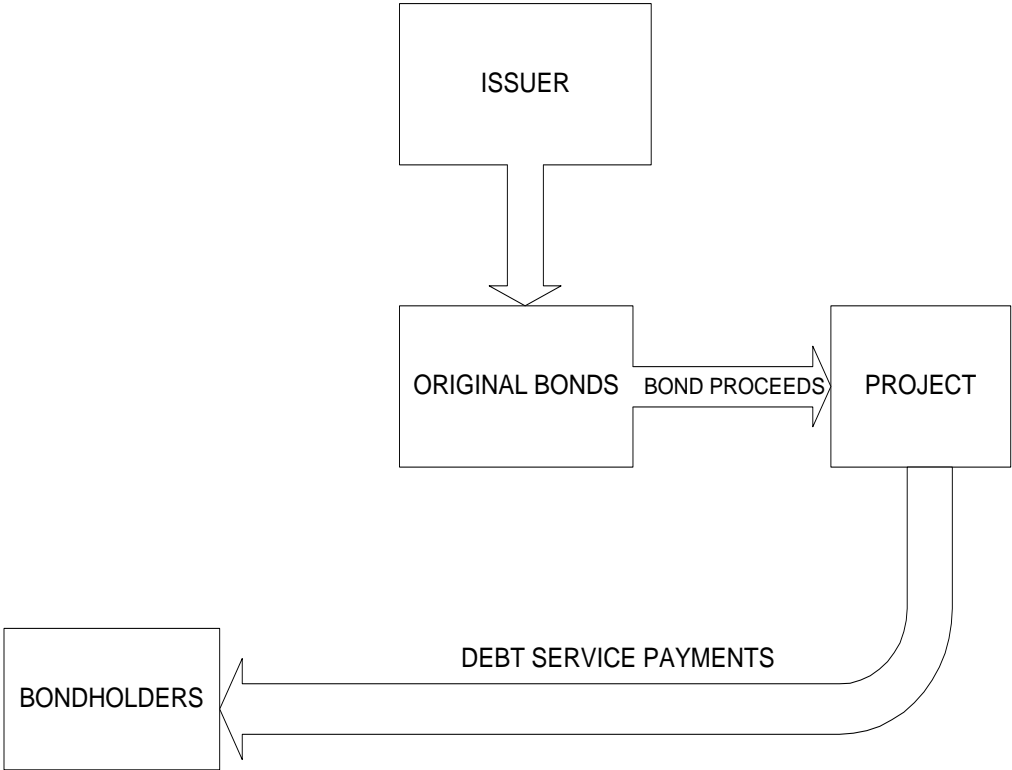
---

*Continued on next page*

# Gross Refunding, Continued

FIGURE E-2: GROSS REFUNDING

STEP 1: ISSUANCE OF ORIGINAL BONDS

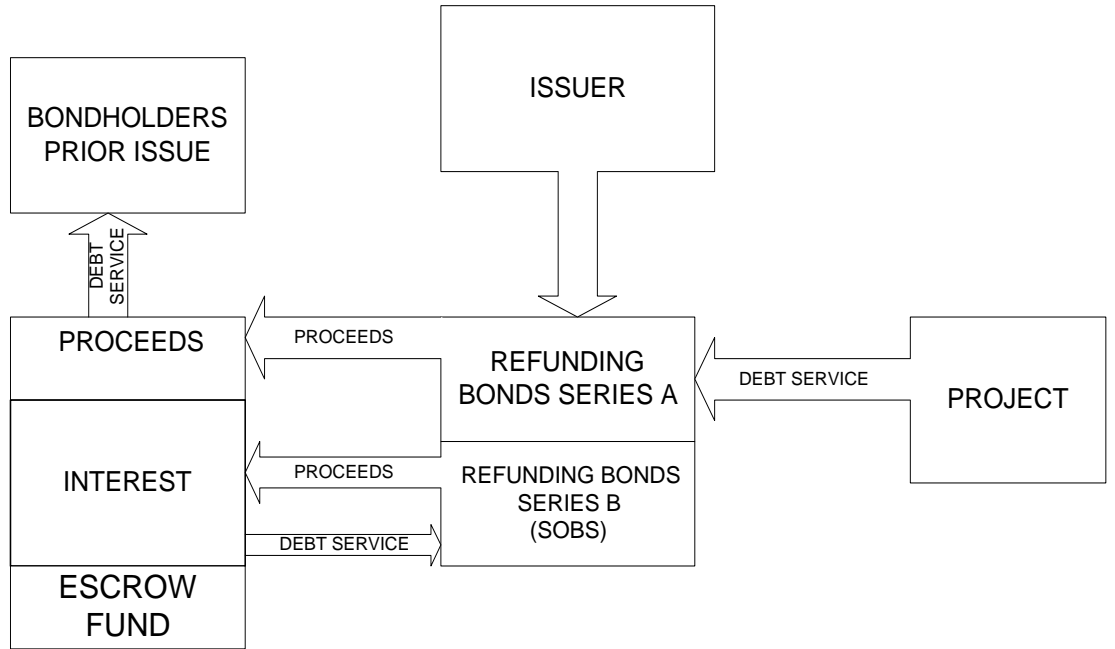


*Continued on next page*

# Gross Refunding, Continued

FIGURE E-2: GROSS REFUNDING

STEP 2: ISSUANCE OF REFUNDING BONDS



## Crossover Refunding

---

### Crossover

This method is similar to gross refundings in that advance refunding bonds are issued in an amount sufficient to pay the redemption price and premium, if any, on the refunded bonds. In the crossover method, the prior bonds are not defeased. The issuer decides on the redemption date of the refunded bonds, which is also called the “crossover date,” whether the proceeds of the advance refunding bonds will refund the refunded bonds or will be used to redeem the refunding bonds. If the issuer determines to refund the refunded bonds, the refunding bonds are then secured by the funds that initially secured the refunded bonds.

Generally, 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. On the crossover date, the proceeds of the refunding issue are used to redeem the refunded bonds. Prior to the crossover date, the debt service of the refunded bonds is paid from the revenues of the issuer.

Special rules in Treas. Reg. section 1.148-10(c)(4) apply to crossover refundings.

---

### Example 24

On June 1, 1998, City has outstanding \$10M 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 \$9M and the premium will be \$180,000. On June 1, 1998, City issues advance refunding bonds in an amount that, when invested in a guaranteed investment contract maturing on October 1, 2005, will provide City with \$9,180,000. On October 1, 2005, City can use the maturing amount of the GIC to redeem the 1995 bonds or to redeem the 1998 bonds. October 1, 2005 is the “crossover date.”

Figure E-3 illustrates a crossover refunding.

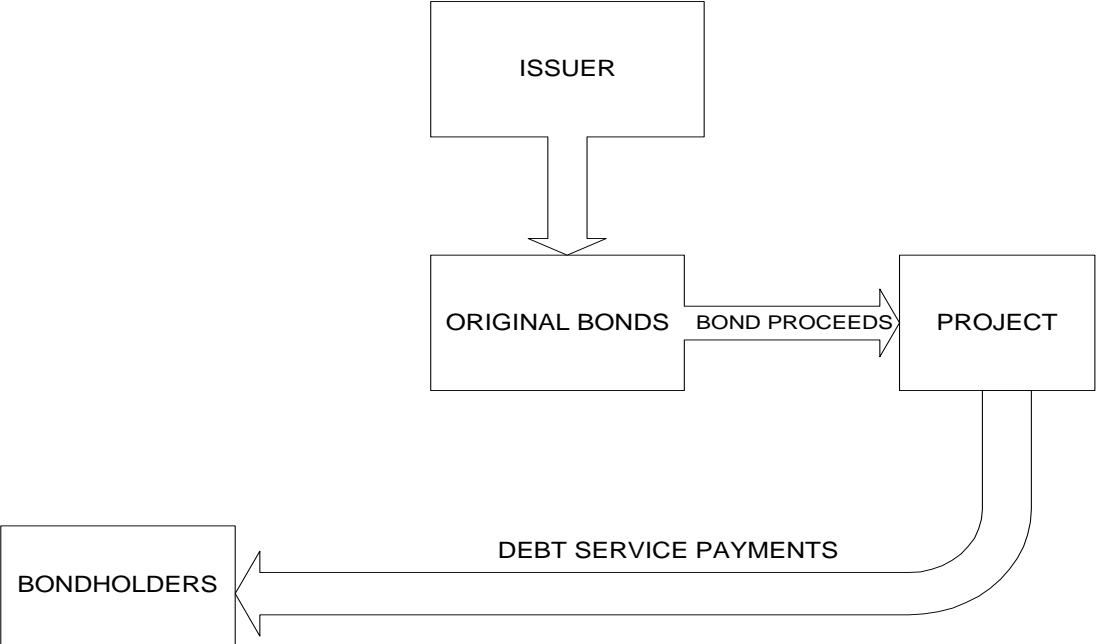
---

*Continued on next page*

# Crossover Refunding, Continued

FIGURE E-3: CROSSOVER REFUNDING

STEP 1: ISSUANCE OF ORIGINAL BONDS



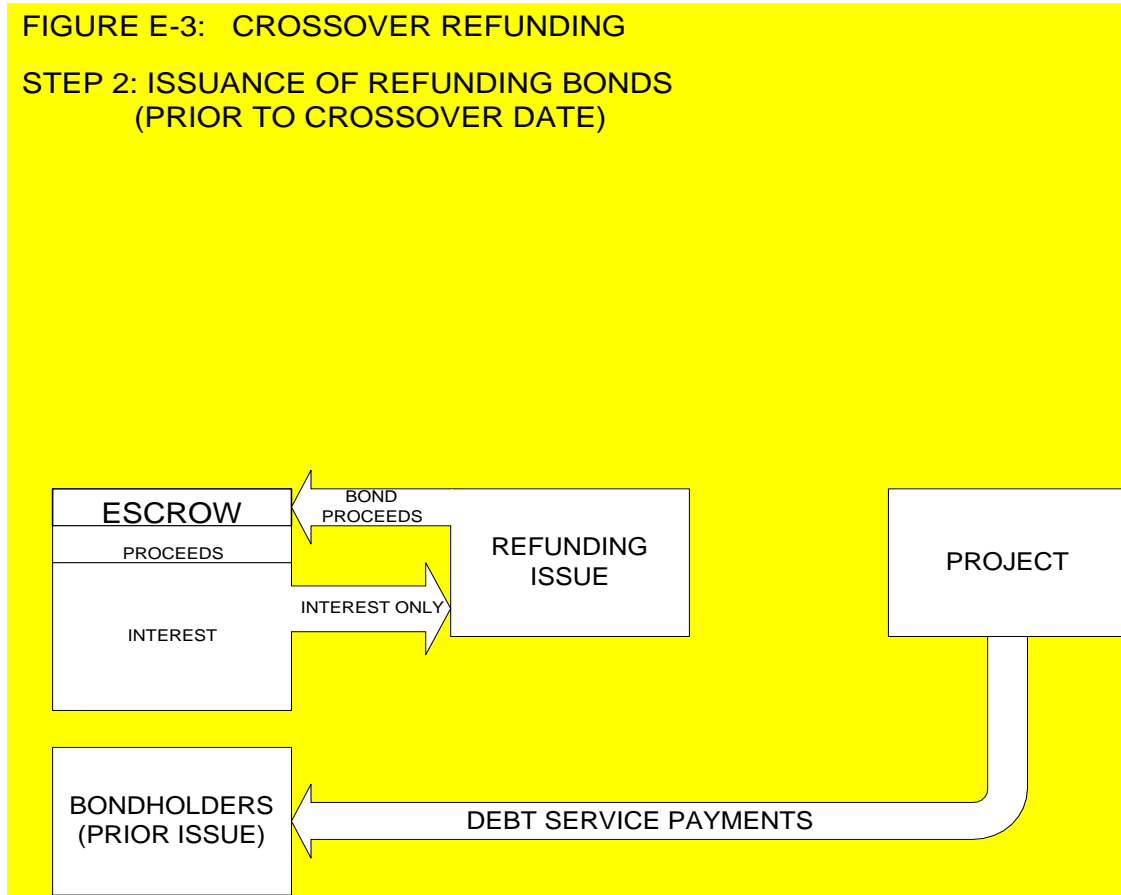
*Continued on next page*

## Crossover Refunding, Continued

---

FIGURE E-3: CROSSOVER REFUNDING

STEP 2: ISSUANCE OF REFUNDING BONDS  
(PRIOR TO CROSSOVER DATE)



---

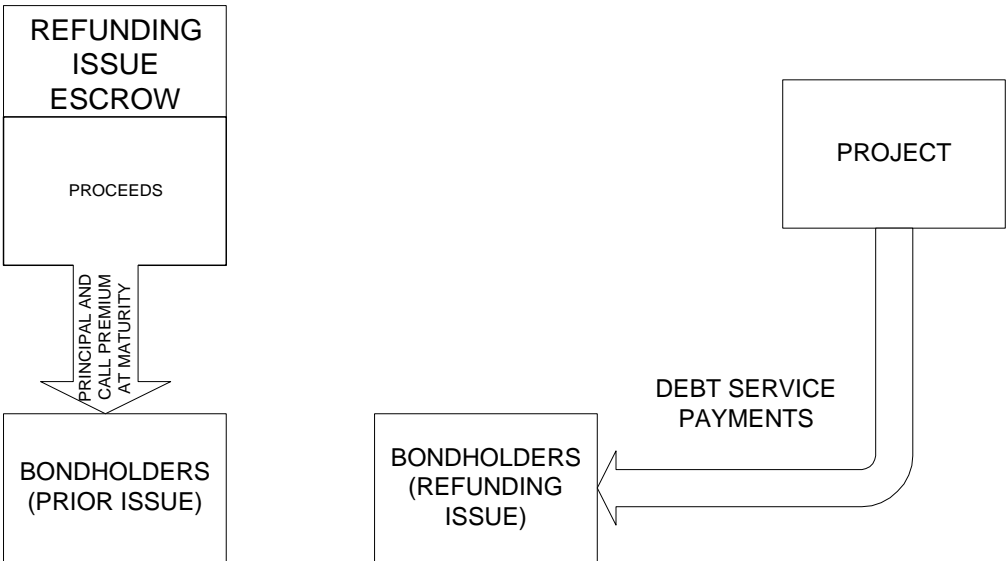
*Continued on next page*



# Crossover Refunding, Continued

FIGURE E-3: CROSSOVER REFUNDING

STEP 3: ON AND AFTER THE CROSSOVER DATE



## Summary of Forms of Advance Refundings

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

<b>Comparison of The Three Methods of Refundings</b>			
	<b>Net Refunding</b>	<b>Gross Refunding</b>	<b>Crossover</b>
<b>Prior Bonds</b>	Defeased when refunding bonds are issued.	Defeased when refunding bonds are issued.	May be redeemed when callable. Not defeased.
<b>Revenue Supporting Prior Bonds</b>	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.
<b>Refunding Proceeds</b>	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.	May pay either the principal and call premium of prior bonds on crossover date or redeem the refunding issue.
<b>Earnings on Escrow</b>	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 Refunding Series B. (SOBS)	Pay the interest on refunding bonds until crossover date.

## Section 3

# Common Funds in an Advance Refunding Issue

## Overview

---

**Introduction** In order to become more familiar with advance refundings, it is necessary to analyze the various types of funds usually established in an advance refunding.

---

**In this Section** This section contains the following topics:

<b>Topic</b>	<b>See Page</b>
Overview	E-36
Refunding Escrows	E-37
Reasonably Required Reserve and Replacement Fund	E-39
Bona Fide Debt Service Fund	E-43
Sinking Fund	E-44

---

# Refunding Escrow

---

## Introduction

Probably the most significant fund in an advance refunding issue is the refunding escrow. As discussed in the prior section, the amounts in the investment 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 module.

Treas. Reg. section 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 Treas. Reg. section 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 treasury securities which 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 "SLGs." The yield on the SLGs is tailor-made to the needs of the issuer.

---

## SLGs Regulations

The Department of the Treasury has published regulations governing US 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 SLGs**

The purpose of the SLGs is to provide issuers of tax-exempt bonds with investments that will enable the issuer to comply with the applicable provisions of the Internal Revenue Code.

SLGs are available to issuers (not conduit borrowers) in principal amounts of \$1,000 or more. Time deposits are available for periods ranging from 30 days to a maximum of 40 years. Demand deposits are one-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 interest rate. Maximum interest rates are released by the Department daily and can be obtained from any one of four sources listed in the regulations.

Samples of the forms used to subscribe to SLGs are shown in Exhibits E-2 through E-7.

---

### **Fair Market Value of Investments**

Under Treas. Reg. section 1.148-6(c), for the gross proceeds of the refunding bonds to be allocated to a nonpurpose investment (such as a treasury security) the purchase price of the investment cannot exceed its fair market value.

Treas. Reg. section 1.148-5(d)(6)(iii) provides a safe harbor for establishing fair market value of investments purchased for a refunding escrow.

See section 5 of Module C for a discussion of determining the value of investments.

---

# Reasonably Required Reserve or Replacement Fund

---

## Introduction

Refunding issues, like new money issues, will generally 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. If 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. Treas. Reg. section 1.148-2(f)(1):

- refunding bond proceeds,
- unspent proceeds of the refunded issue (including the 4R fund of the refunded issue),
- project revenues, OR
- issuer equity.

A **reasonably required reserve fund** (or “4R fund”) must meet the requirements of IRC section 148(d) and Treas. Reg. section 1.148-2(f)(1).

---

*Continued on next page*

## Reasonably Required Reserve or Replacement Fund, Continued

---

### **Requirements of a Reasonably Required Reserve Fund**

Treas. Reg. section 1.148-9(e) provides that beginning on the issue date of a refunding issue, proceeds of the refunding issue or the prior issue in a 4R fund may be invested at an unrestricted yield ONLY if –

- the 10percent funding limitation of Treas. Reg. section 1.148-2(f)(1), AND
- the size limitation set forth in Treas. Reg. sections 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).

---

*Continued on next page*

## Reasonably Required Reserve or Replacement Fund, Continued

---

**Requirements  
of a Reasonably  
Required  
Reserve 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:

- 1.) 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.
- 2.) Use \$2,000,000 of refunding bond sale proceeds for the new 4R fund, and none of the prior issue 4R fund.
- 3.) 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. \$1,000,000 would have to be yield restricted.

---

*Continued on next page*



## Reasonably Required Reserve or Replacement Fund, Continued

---

### **Not Meeting the Requirements**

Amounts in the 4R fund in excess of the size limitation are not considered a part of the 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, however, sale proceeds in excess of 10 percent of the principal amount of the refunding issue are deposited into the reserve fund, then under Treas. Reg. section 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.

Treas. Reg. section 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, and
  - 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 Treas. Reg. section 1.148-1(b).

---

# Sinking Fund

---

## **Introduction**

According to Treas. Reg. section 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 are usually characterized as replacement proceeds of the refunding issue and as such, are subject to yield restriction and rebate.

Sinking funds can play a significant role with respect to yield restriction rules applicable to refunding escrows.

---

## Part II: Introduction to the Allocation Rules

### Overview

---

#### Introduction

As with the case of a new money issue, 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 sections 103, 141-150. To do so, an agent must first identify the gross proceeds of the refunding issue.

Generally, gross proceeds remain allocated to an issue and are subject to yield restriction and rebate rules until the gross proceeds are either spent or “deallocated” from the issue.

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.

Many of the general allocation and accounting rules under Treas. Reg. section 1.148-6 and discussed in Module D apply to refunding issues. In addition, specific rules provided in Treas. Reg. section 1.148-9 apply only to refunding bonds.

Part II of this Module discusses the allocation rules applicable to refundings.

---

#### In this Part

This part contains the following topics:

---

<b>Topic</b>	<b>See Page</b>
Section 1 – Transferred Proceeds	E-48
Section 2 – Mixed Escrow Rules	E-68
Section 3 – Multipurpose Issue Allocations	E-81

---

*Continued on next page*

## Overview, Continued

---

**One-Issue Rule** Treas. Reg. section 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 Treas. Reg. section 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 4R 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 4R fund continue to be treated as proceeds of the refunded issue until they are deallocated, as discussed below, and become proceeds of the refunding issue.

---

**Deallocating Proceeds**

Further, according to Treas. Reg. section 1.148-6(b)(1), these amounts 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.

Sections 1 and 2 of this Part will discuss transferred proceeds and the universal cap.

---

*Continued on next page*

## Overview, Continued

---

**Definitions** Applying the allocation and the arbitrage rules requires an understanding of gross proceeds, proceeds, and replacement proceeds. Therefore, before beginning the allocation rules, let's review these definitions.

---

**Gross Proceeds** The definitions of **gross proceeds** and **proceeds** in Treas. Reg. section 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, AND
  - 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, or
- other amounts available to the issuer.

See Treas. Reg. section 1.148-1(c).

---

# Section 1

## Transferred Proceeds

### 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 (7percent) 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

---

### **Purpose of the Transferred Proceeds Rule**

The purpose of the transferred proceeds rule is to reflect the economic substance after a refunding and discharge of some or all of the refunded bonds – 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 the above example, 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 4R 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 4R fund at a 7 percent yield while the yield on the 2000 issue is 5 percent.

The transferred proceeds rule causes the unspent proceeds of the prior issue to become proceeds of the refunding issue, as the prior issue is discharged. 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 Treas. Reg. section 1.148-9(b), become proceeds of the refunding issue.

Treas. Reg. section 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.

---

*Continued on next page*



## Overview, Continued

---

### **History of Transferred Proceeds Rules**

To reflect the true economic substance 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, the refunded bonds are redeemed at the same time. However, in an advance refunding, the refunded bonds may be discharged over a number of years (from the issue date of the refunding bonds to the redemption date of the refunded bonds).

Treas. Reg. section 1.103-14(e)(2)(ii) of the 1979 regulations and Treas. Reg. section 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, Treas. Reg. section 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 section 148, the agent should determine which regulations are applicable to the issue under audit.

---

*Continued on next page*

## Overview, Continued

---

**Organization of This Section** The transferred proceeds rules in Treas. Reg. 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.

---

**In this Section** This section contains the following topics:

<b>Topic</b>	<b>See Page</b>
Overview	E-48
Review of Universal Cap	E-52
Transferred Proceeds Rules - Principal to Principal Method	E-55
Illustration of the Transferred Proceeds Rules - Principal to Principal Method	E-58
Transferred Proceeds Rules - Dollar for Dollar Method	E-66

---

# Review of Universal Cap

---

## Introduction

While unspent proceeds of a prior issue can become “transferred proceeds” of the refunding issue, universal cap acts to limit the amount of prior issue proceeds that are treated as transferred proceeds.

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

Remember from Module D that:

- the value of non-purpose investments allocable to an issue cannot exceed the value of all of the outstanding bonds of the issue, AND
  - the value of 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.

Treas. Reg. section 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 (absent IRC section 148(b)(3)(A)),
  - qualified student loans, and
  - qualified mortgage loans.
- 

## What is NOT Included in Non-purpose Investments

Treas. Reg. section 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.

Additionally, those non-purpose investments remain allocated to the issue.

---

*Continued on next page*

## Review of Universal Cap, Continued

---

### **Determining the Value of Bonds and Investments**

Treas. Reg. section 1.148-6(b)(2)(ii) provides that:

- the value of bonds is determined under Treas. Reg. section 1.148-4(e),  
AND
  - the value of investments is determined under Treas. Reg. section 1.148-5(d).
- 

### **When a Cap Calculation is Required**

Treas. Reg. section 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 Treas. Reg. section 1.148-6(b)(2)(i) universal cap does not have to be applied if no reduction or reallocation of gross proceeds results.

---

*Continued on next page*

## Review of Universal Cap, Continued

---

### **Application of the Universal Cap**

The universal cap limits the amount of gross proceeds that can be allocated to an issue at any one time. 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.

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.

---

### **Where Do Deallocated Proceeds Go?**

If as a result of universal cap proceeds cannot be allocated to the refunding issue, Treas. Reg. section 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, Treas. Reg. section 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 as replacement proceeds.

---

## Transferred Proceeds Rules – Principal to Principal Method

---

**General Rule** As stated previously, Treas. Reg. section 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** Treas. Reg. section 1.148-9(b)(1) goes on to state 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 a 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”** Treas. Reg. section 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, AND
  - in reference to any other bond - its present value.
- 

*Continued on next page*

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

---

### Allocations of Investments to Transferred Proceeds

Treas. Reg. section 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 Treas. Reg. section 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
  - under the representative allocation method described in Treas. Reg. section 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 investments, one having a yield of 5 percent and another having a yield of 7 percent. On June 1, 1992, \$100 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 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 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.

---

*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 investments with the following yields: 5 percent, 6 percent and 7 percent, respectively. On June 1, 2002, \$100 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 \$100 principal amount of the investment having a yield of 6percent to the transferred proceeds of the 2001 issue. The investment having a yield of 6percent 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 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

*Continued on next page*

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

<u>DATE</u>	<u>EARNINGS</u>	<u>SWEEP INTO THE BFDS OF 1998 ISSUE</u>	<u>INVESTMENT BALANCE</u>
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**

<u>DATE</u>	<u>INTEREST PAYMENT</u>	<u>PRINCIPAL PAYMENT</u>	<u>TOTAL DEBT SERVICE</u>
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	<u>\$2,250,000.00</u>	<u>\$27,500,000.00</u>	<u>\$29,750,000.00</u>
	\$13,500,000.00	\$32,500,000.00	\$46,000,000.00

*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 transfer factor is equal to the following:

$$\frac{\text{Principal amount of prior issue discharged with} \\ \text{proceeds of the refunding issue on 1/1/99}}{\text{Outstanding principal amount of the prior} \\ \text{issue on 12/31/98}} =$$

$$\frac{\$ 2,500,000}{\$32,500,000} = .0769231$$

**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:

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

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

According to Treas. Reg. section 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.)

$$\$192,867 \times \frac{\$1,500,000}{2,507,268} = \$115,384.$$

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

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

*Continued on next page*

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

**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

$$\frac{\$ 2,500,000}{\$30,000,000} = .0833333$$

**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:

$$\begin{array}{r} \$1,384,615 \text{ amount in 4R Fund less amount transferred on 1/1/99} \\ \underline{421,315 \text{ amount in Project Fund less amount transferred on 1/1/99}} \\ \$1,805,930 \end{array}$$

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

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

A portion of the reserve fund transfers as follows:

$$\$150,494 \times \frac{\$1,384,615}{\$1,805,930} = \$115,384$$

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

$$\$150,494 \times \frac{\$421,315}{\$1,805,930} = \$ 35,110$$

*Continued on next page*

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

---

**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:

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

---

**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:

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

The amount subject to transfer is calculated as follows:

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

---

**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	RESERVE FUND SUBJECT TO TRANSFER	PROJECT FUND SUBJECT TO TRANSFER	TOTAL SUBJECT TO TRANSFER	ALLOCATED TO 1991	ALLOCATED TO 1998
					ISSUE	ISSUE
12/31/98		1,500,000.00	1,007,268.00	2,507,268.00	2,507,268.00	
1/1/99	192,867.00	(115,385.00)	(77,482.00)		2,314,401.00	192,867.00
12/31/99		1,384,615.00	421,315.00	1,805,930.00	1,805,930.00	
1/1/00	150,494.00	(115,384.00)	(35,110.00)		1,655,436.00	150,494.00
12/31/00		1,269,231.00	249,853.00	1,519,084.00	1,519,084.00	
1/1/01	1,519,084.00	(1,269,231.00)	(249,853.00)		-	1,519,084.00
<b>TOTAL</b>	<b>1,862,445.00</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,862,445.00</b>

*Continued on next page*

## 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 at 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 Treas. Reg. section 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.

When computing the amount of rebate due, a portion of each investment (and their related payments and receipts) is included in the computation. This portion is based on a ratio of amounts transferred to the total investment balance on the date of transfer.

---

*Continued on next page*

## Transferred Proceeds Rules – Dollar for Dollar Method,

Continued

---

**Effective Dates** Treas. Reg. section 1.148-0T(b)(1)(ii) (**Temporary**) provides that the dollar for dollar method is 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, AND
- August 31, 1986, if the bond is a governmental bond described in section 1312(c)(2) of the 1986 Act.

Treas. Reg. section 1.148-0(b)(8)(i) of the 1992 Regulations provides that section 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 issued after August 15, 1986 (or August 31, 1986 for certain governmental bonds) through June 17, 1992.

Additionally, Treas. Reg. section 1.148-0(b)(8)(iii) provides for elective early application of sections 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, Treas. Reg. section 1.148-0(b)(8)(iv) provides that an issuer may elect to apply the provisions of 1.148-11 and 1.148-4(b)(3) in lieu of section 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 requirements must also be met for issuers who make this election.

---

## Section 2

### 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 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 4R fund and proceeds of the 1995 issue. Only interest is due on the 1990 issue until 1999 and 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 can allocate the proceeds of the refunding issue (invested at 4 percent) to payment of interest on the 1990 issue and allocate unspent proceeds of the 1990 issue (invested at 8 percent) to payment of principal of the 1990 issue on the redemption date. Thus, State can invest unspent proceeds of the 1990 issue for five 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 Treas. Reg. section 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 “non-proceeds.” In effect, the general rule does not distinguish among amounts which come from different funds (e.g. project, 4R, BFDS) of the prior issue, preferring instead to lump together all proceeds which are NOT refunding bond proceeds, by referring to them as “non-proceeds.”

However, the exceptions 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 sections contains the following topics:

<b>Topic</b>	<b>See Page</b>
Overview	E-68
General Rule	E-70
Allocation Rules for Specific Types of Non-Proceeds	E-73
Treatment of Issuer Revenues	E-74
Example 1	E-76
Example 2	E-79

---

## General Rule

---

### **Introduction**

Treas. Reg. section 1.148-9(c)(2)(i) requires, with certain exceptions, that when a refunding escrow contains refunding proceeds and other amounts which 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 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 to the proceeds of the refunded bonds and 90 percent of the interest payment to 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, Treas. Reg. section 1.148-9(c)(2)(i) requires that the debt service payment be allocated between:

- sources of funds (refunding bond proceeds and non-proceeds), AND
  - uses (principal, interest, redemption price.)
- 

### Example 1

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:

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

$$\$500,000/2,500,000 \quad X \quad 1,500,000 = \$300,000 \text{ from the prior issue}$$

$$\$2,000,000/2,500,000 \quad X \quad 1,500,000 = \$1,200,000 \text{ from the refunding issue}$$

The second allocation determines the use of the funds:

#### Prior Issue Proceeds:

$$\$1,000,000/1,500,000 \quad X \quad 300,000 = \$200,000 \text{ for principal}$$

$$\$500,000/1,500,000 \quad X \quad 300,000 = \$100,000 \text{ for interest}$$

#### Refunding Issue Proceeds:

$$\$1,000,000/1,500,000 \quad X \quad 1,200,000 = \$800,000 \text{ for principal}$$

$$\$500,000/1,500,000 \quad X \quad 1,200,000 = \$400,000 \text{ for interest}$$

---

*Continued on next page*

## General Rule, Continued

---

**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 the refunded issue.

---

## Allocation Rules for Specific Types of Non-Proceeds

---

### **BFDS and Project Funds**

Treas. Reg. section 1.148-9(c)(2)(ii)(A) requires that amounts deposited into the refunding escrow which were in a bona fide debt service fund or in 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 there are unspent proceeds from both the BFDS and the project fund in the refunding bond escrow, an allocation between the two funds is NOT required.

---

### **Other Amounts**

Treas. Reg. section 1.148-9(c)(2)(ii)(B) provides that non-proceeds of the refunding issue MAY BE allocated to the earliest maturing investments in the mixed escrow, provided:

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



## Treatment of Issuer Revenues

---

**Introductions**      Treas. Reg. section 1.149(d)-1(d)(2) provides that 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 1**            City issues bonds to advance refund a prior issue issued to finance school construction. Prior to the issuance of the refunding bonds, City received a payment for 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. This further increases City's present value savings in connection with the refunding. As City uses the escrow to pay debt service on the refunded bonds, it need not allocate the payments between its own funds and the refunding bond proceeds.

---

**Example 2**

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 Treas. Reg. section 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.

Treas. Reg. section 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:

- IRC section 149(d)(2), AND
- IRC section 149(d)(3)(A)(i) and (ii).

Note that IRC section 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

Scheduled investment maturities are shown below:

---

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

---

Scheduled debt service payments are shown below.

---

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

---

**Allocations**

According to Treas. Reg. section 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.

---

*Continued on next page*

## Example 1, Continued

### Allocations (continued)

\$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:

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

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

Then, according to Treas. Reg. section 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:

<u>\$5,000,000</u>	refunding proceeds
<u>200,000</u>	reserve fund
\$5,200,000	

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

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

\$900,000

---

*Continued on next page*

## Example 1, Continued

---

**Allocations**  
(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

$\$1,250,000 \times \$864,000 = \$691,200$  for principal

\$250,000

$\$1,250,000 \times \$864,000 = \$172,800$  for interest

Non-proceeds (reserve):

\$1,000,000

$\$1,250,000 \times \$36,000 = \$28,800$  for principal

\$250,000

$\$1,250,000 \times \$36,000 = \$7,200$  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
- Prior issue sinking fund            200,000

Scheduled investment maturities are shown below:

<b>DATE OF MATURITY</b>	<b>FUND TYPE</b>	<b>INVESTMENT PROCEEDS</b>
1/1/99	BFDS	\$ 50,000
	Project	50,000
	4R	25,000
7/1/99	4R Fund	\$ 25,000
	Sinking Fund	200,000
	Refunding	100,000
	Bond Proceeds	

Scheduled debt service payments are shown below:

<b>DATE OF PAYMENT</b>	<b>TYPE OF PAYMENT</b>	<b>PAYMENT AMOUNT</b>
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	\$50,000
	BFDS	50,000
7/1/99	Non-proceeds	\$225,000
	Refunding bond proceeds	100,000

---

### Analysis

On 1/1/1999, 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 7/1/1999 payment. This amount must be allocated ratably with other non-proceeds and refunding bond proceeds because a principal payment will be made on 7/1/1999.

---

## Section 3

# Multipurpose Issue Allocations

## Overview

---

**Introduction** Multipurpose allocation rules may apply where the proceeds of a bond issue are used to finance or refinance distinct and separate governmental purposes.

The following example is illustrative:

---

**Example 1** In 1989 County issued bonds to build a recreation center. In 1994, County 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 Treas. Reg. section 1.150-1(c)(1) constituted a single issue.

In 1998, 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 Treas. Reg. section 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 issues bonds in 1997 to advance refunds 1994 Series B. 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 1984 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*



## Overview, Continued

---

### When are the Allocation Rules Used?

Treas. Reg. section 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 IRC section 148 except the following:

- arbitrage yield (except for two or more conduit loans that are tax-exempt bonds),
- rebate amount (except for two or more conduit loans that are tax-exempt bonds),
- minor portion of an issue under section 148(e),
- reasonably required reserve or replacement fund, AND
- applying the provisions of Treas. Reg. section 1.148-11(b) (relating to elective retroactive application of sections 1.148-1 through 1.148-10 to certain issues.)

In the above example, County 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.)

On the other hand, when the Series B bonds are advance refunded, the proceeds of Series A bonds are NOT subject to transfer to the 1997 issue.

---

### Application of Savings Test

Treas. Reg. section 1.149(d)-1(f)(3) provides that the multipurpose issue rules in Treas. Reg. section 1.148-9(h) apply for purposes of the savings test of IRC section 149(d)(3)(B)(i).

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

---

### In this Section

This section contains the following topics:

Topic	See Page
Overview	E-81
Separate Purpose	E-83
Rules on Allocations of Multipurpose Issues	E-85
Allocations of Bonds of a Multipurpose Issue	E-86
Partial Refundings	E-89

---

## Separate Purposes

---

### What is a Separate Purpose?

Treas. Reg. section 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 Treas. Reg. section 1.148-7(f)),  
AND
  - any clearly discrete governmental purpose reasonably expected to be financed by that issue.
- 

### 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 falls 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*

## Separate Purposes, Continued

---

### Capital Projects

Generally, capital projects that are (i) integrated or functionally related AND (ii) qualify for the same initial temporary period under Treas. Reg. section 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 medical office building. 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 three-year temporary period, they are not integrated or functionally related. Therefore, they are NOT treated as having a single governmental purpose.

---

### Refunding Issues

Treas. Reg. section 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.

Common costs include:

- issuance costs,
- accrued interest,
- capitalized interest on the issue,
- reserve or replacement fund,
- qualified guarantee fees, AND
- similar costs properly allocable to the separate purposes of the issue.

Treas. Reg. Section 1.148-9(h)(3)(ii).

---

## Rules on Allocations of Multipurpose Issues

---

### **General Rule**

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

Treas. Reg. section 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 IRC sections 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**

Treas. Reg. section 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.

---

## Allocations of Bonds of a Multipurpose Issue

---

### **Introduction**

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?

Treas. Reg. section 1.148-9(h)(4) provides the answers to these questions.

---

### **Safe Harbor for Allocation of Bonds**

Treas. Reg. section 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.

---

### **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.

Treas. Reg. section 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.

---

*Continued on next page*

## Allocations of Bonds of a Multipurpose Issue, Continued

---

### **Allocation of Bonds Used to Refund Two or More Prior Issues**

When one 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.

---

### **Example 5**

Series X in the amount of \$50,000,000 refunds Series A and Series B. \$2,500,000 of the bonds mature each year for 20 years. The present value of the debt service to be refunded for Series A and Series B is \$20,000,000 and \$22,000,000 respectively. These present values are determined using the yield of the Series X escrow. As the bonds of Series X mature, 40 percent ( $\$20,000,000/\$50,000,000$ ) 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**

Treas. Reg. section 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 IRC section 143. The Authority originates \$5,000,000 of loans at 5 percent and six 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.

---

*Continued on next page*

## Allocations of Bonds of a Multipurpose Issue, Continued

---

### **Allocations of Refunding Bonds**

When allocating bonds of a multipurpose issue which refunds separate prior issues, the rules of Treas. Reg. sections 1.148-9(h)(1) and (2) must be followed along with other rules found in Treas. Reg. section 1.148-9(h)(4)(v).

---

### **Multi-Generation Allocations**

A multi-generation bond issue refers to a refunding of an issue which already refunded a prior issue.

Treas. Reg. section 1.148-9(h)(5) provides that the allocation rules apply only to refunded issues, which are refunded directly by issues to which Treas. Reg. section 1.148-9(h) applies. Treas. Reg. section 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 (section 149(d)(2)) or the advance refunding limit for governmental bonds and 501(c)(3) bonds under section 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, Treas. Reg. section 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.

---

## Partial Refundings

---

### Introduction

Assume that State Q has a \$100,000,000 nine 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 Treas. Reg. section 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 by Treas. Reg. section 1.148-9(i).

---

### Allocating a Single-Purpose Refunded Issue

Treas. Reg. section 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:

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

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

See Treas. Reg. section 1.149-9(b)(2) for the definition of principal amount.

---

*Continued on next page*



## Partial Refundings, Continued

---

### **Allocations of Proceeds and Investments**

Treas. Reg. section 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 Treas. Reg. section 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 Treas. Reg. section 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.

---

## Part III: Introduction to the Arbitrage Rules

### 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.

Ideally, when advance refunding bonds are issued, the proceeds of the original issue will have already been spent. In this situation, only the proceeds of the refunding issue would be subject to the arbitrage rules.

Normally, however, when advance refunding bonds are issued, there are still proceeds of the original issue that remain unspent. These unspent proceeds are the major cause 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. It would seem that the issuer should be required to spend the prior issue proceeds before spending any of the refunding issue proceeds. And that is exactly what the allocation rules for refunding issues require! Even if the issuer actually spends refunding issue proceeds first, the rules treat these expenditures as coming from prior issue proceeds anyway. They do this by replacing spent refunding issue proceeds with unspent prior issue proceeds. These “replaced” proceeds are then subject to the arbitrage rules at the yield of the refunding issue. This is to prevent issuers from accumulating prior issue proceeds upon which higher yields can be earned, while using refunding proceeds to meet current liabilities.

Part III of this module is devoted to the special arbitrage rules of advance refundings. It begins with the yield restriction rules, and continues with the rebate rules. The last section discusses abusive arbitrage devices in advance refundings.

---

*Continued on next page*

## Overview, Continued

---

**In this Part** This part contains the following topics:

<b>Topic</b>	<b>See Page</b>
Overview	E-91
Section 1: General Rules - Yield Restriction	E-93
Section 2: General Rules - Rebate	E-107
Section 3: Treatment of Prior Issue Proceeds	E-128

---

# Section 1

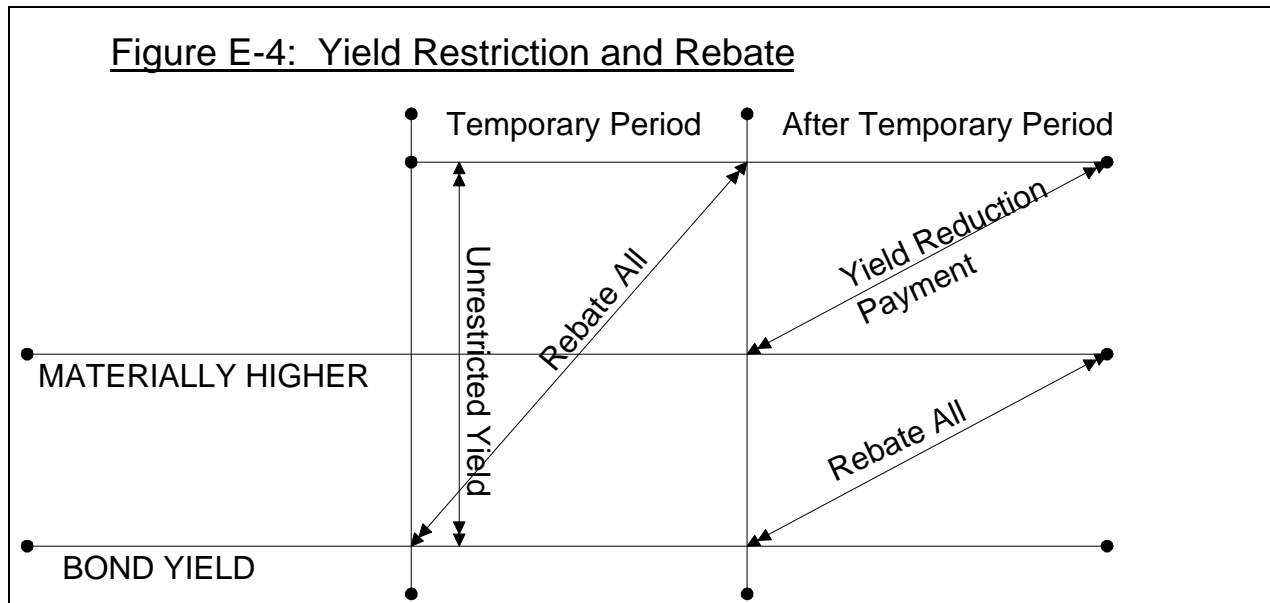
## General Rules – Yield Restriction

### 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 outstanding, 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 characterize 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 being able to differentiate 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 rebated to the US government. Rebate cannot cure a yield restriction problem. Noncompliance with the yield restriction rules can be corrected with a yield reduction payment.



*Continued on next page*

## Overview, Continued

---

**In this Section** This section contains the following topics:

<b>Topic</b>	<b>See Page</b>
Overview	E-93
Initial Temporary Periods	E-95
Definition of “Materially Higher”	E-97
Yield Blending in the Computation of Yield on Investments	E-99
Yield Reduction Payments	E-106

---

# Initial Temporary Periods

---

**Introduction**

IRC section 149(d)(3)(A)(iv) provides that:

- 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.
- 

**Temporary Periods for Specific Proceeds**

Although general temporary periods are set forth in Treas. Reg. section 1.148-2(e), these rules do NOT apply to refunding issues. Instead, Treas. Reg. section 1.149(d)-(1)(d)(3) provides that the rules in Treas. Reg. section 1.148-9(d) apply to refunding issues, as shown in the table below.

---

<b>Type of Proceeds</b>	<b>Temporary Period</b>
Unspent proceeds of prior issue	Ends on the issuance date of the refunding issue.
Proceeds of refunding issue held in refunding escrow	30 days
Proceeds reasonably expected to pay debt service on prior issue	30 days
Replacement proceeds held in BFDS (Bona Fide Debt Service) 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
Minor portion	unrestricted
Transferred Proceeds	none

---

*Continued on next page*

## Initial Temporary Periods, Continued

---

### Example 1

In 1998, City K advance refunds a series of bonds, which were originally issued in 1996. On the issuance date of the advance refunding bonds, the prior issue has unspent proceeds in its project fund. These funds still qualified for unrestricted yield under the three-year temporary period for construction projects.

However, according to IRC section 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**.

---

## Definition of “Materially Higher”

**General Rules** Treas. Reg. section 1.148-9 does NOT contain a special definition of “materially higher” for advance refundings. Therefore, the definitions of “materially higher” that are set forth in Treas. Reg. section 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 the refunding escrow	.001 percent
All other refunding issue proceeds	.125 percent

**Example 2** In 1999, City C issues \$15,000,000 bonds to advance refund bonds originally issued in 1998. 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.

Investments of amounts (including issuer equity and investment earnings) in the escrow fund must be yield restricted to 0.001 percent above the refunding bond yield.

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

Fund	Amount
Project	\$20M
4R	\$1.5M
BFDS	\$1M

*Continued on next page*



## 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 of 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 4R fund as the 4R fund of the refunding issue. The earnings on these amounts are not subject to yield restriction because they are sheltered by the 4R 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 update its equipment. During the three-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, so the issuer invests in securities yielding nine percent, thinking that the blended yield from the issuance date to the maturity date will be below seven percent.

Special rules in Treas. Reg. section 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. As we will find out, 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**      Treas. Reg. section 1.148-5(b)(2)(i) provides that for purposes of the yield restriction rules of IRC section 148(a) and Treas. Reg. section 1.148-2, **(but NOT for the rebate rules of IRC section 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 five-year computation date 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.

---

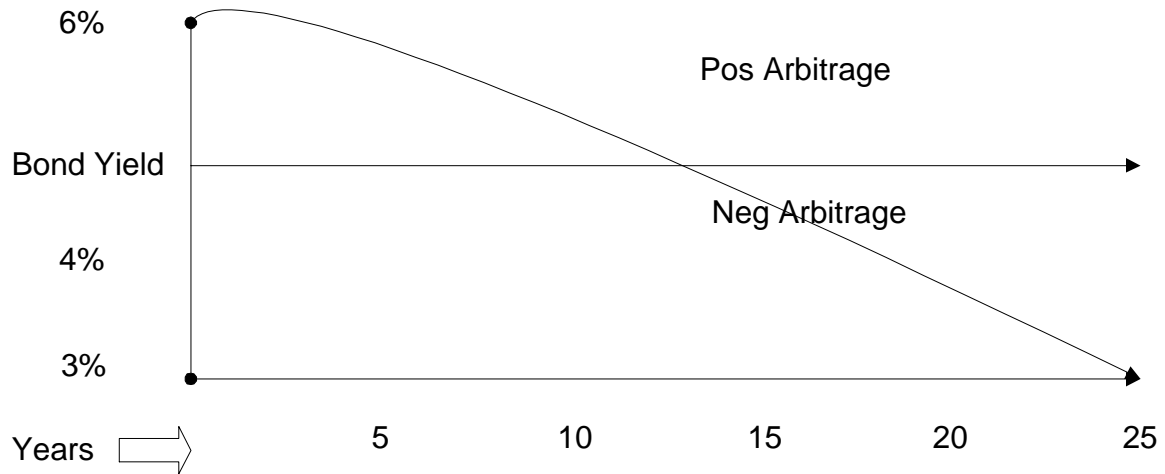
**Example 3**      On 1/1/1999, County R issues bonds to be used for a construction project. On 1/1/2002, the temporary period expires, but some project funds remain unspent and are invested at the bond yield. On 1/1/2003 County R makes the first payment to a sinking fund to provide for principal payments of term bonds maturing in years 2007 through 2009. Additional payments are made on 1/1/2004, 1/1/2005, and 1/1/2006. Amounts in the sinking fund are invested in excess of 0.001 percent of the bond yield. On 1/1/2004, County R calculates the amount of rebate due by including all payments and receipts on ALL funds subject to rebate from 1/1/1999 through 12/31/2003. 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 with those in the sinking fund for as long as the funds are invested, despite the computation date. **(See Figures E-4 and E-5)**

---

*Continued on next page*

# Yield Blending in the Computation of Investment Yield, Continued

Figure E-5: Single Investment Concept for Yield Restriction Purposes



*Continued on next page*

## Yield Blending in the Computation of Investment Yield,

Continued

---

### Investment Classes

Treas. Reg. section 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 Treas. Reg. section 1.148-2(d)(2),
- yield-restricted non-purpose investments, AND
- all other non-purpose investments.

Each of these classes is discussed below.

---

### Purpose and Program Investments

Accordingly, yield-restricted purpose and program investments would be separated into the following classes:

- qualified student loans,
- tax-exempt loans,
- qualified mortgage loans,
- program investments, other than student loans, AND
- 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 non-purpose 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), AND
  - sinking fund (which does NOT meet the definition of a 4R 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 Treas. Reg. section 1.148-5(b)(2)(i)(B), the yield on investments in an escrow fund should be able to be blended with the yields of yield-restricted investments in other funds. However, Treas. Reg. section 1.148-5(b)(2)(iii) provides that when there is positive arbitrage in the early part of the escrow, the yield on the escrow can only be blended with a sinking fund which is specially set up to earn negative arbitrage in the later years.

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

---

### **Mandatory Blending of All Escrow Funds**

Treas. Reg. section 1.148-5(b)(2)(iv) provides that for all purposes of IRC section 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.

---

*Continued on next page*

## Yield Blending in the Computation of Investment Yield,

Continued

---

### All Other Non-purpose Investments

This category consists of non-yield restricted non-purpose investments. For example:

- those invested during the three-year temporary period for capital projects,
- those invested in the 13-month temporary period for restricted working capital,
- those invested in a reasonably required reserve or replacement fund, AND
- those 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.

---

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

Treas. Reg. section 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, if, on the issuance date, the issuer expects that the yield on investments in the project fund during the first three 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.

Note that although this rule refers to all bond issues, an identical rule is found in Treas. Reg. section 1.148-9(g), which allows for waivers in advance refundings. (However, although waivers generally permit blending of normally non-yield-restricted funds with yield-restricted funds, special rules restrict funds, which 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:

- 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 Treas. Reg. section 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.)

---



## Yield Reduction Payments

---

**General Rules** For purposes of yield restriction, Treas. Reg. section 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 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” can be rebated, unless an exception is met.

No yield reduction payments can be made to reduce the yield on 4R funds because 4R funds are NOT subject to yield restriction. Any earnings above the bond yield must be rebated, unless an exception is met.

The yield reduction rule applies to covered investments delineated in Treas. Reg. section 1.148-5(c)(3).

---

## Section 2 General Rules - Rebate

### Overview

---

#### **Introduction**

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

The only rebate exceptions available to an advance refunding issue are the small issuer exception and the six-month spending exception.

If proceeds of a prior issue have not met a rebate exception by the transfer date, then they CANNOT meet an exception when they become transferred proceeds of the refunding issue.

Similarly, 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.

---

#### **In this Section**

This section contains the following topics:

Topic	See Page
Overview	E-107
Small Issuer Exception from Rebate	E-108
Six-Month Spending Exception from Rebate	E-110
Yield Blending in the Computation of Rebate	E-114
Comprehensive Example of Yield Blending	E-117

---

## 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. Although this module discusses only advance refundings, this section also applies to current refundings.

---

**Requirements** IRC 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 this exception,
- the average maturity of the refunded bonds was over three years and the average maturity date of the **refunding** bonds cannot be later than the average maturity date of the **refunded** bonds, AND
- the refunding bond cannot have a maturity date which 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 of 1986, IRC section 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** In an advance refunding issue, amounts in the 4R fund can be exempt from rebate only under the small issuer exception.

---

*Continued on next page*

## 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 advance refunding issue meets the small issuer exception.

---

**Effect of Advance Refunding on Subsequent Issues**      Treas. Reg. section 1.148-8(c)(3) provides that in applying the \$5,000,000 limitation, the portion of the current refunding issue previously issued is not taken into account to the extent that the principal amount of the current refunding issue is not greater than the refunded bonds refunded by such current refunding issue.

---

## Six Month Spending Exception to Rebate

---

### **Refunding Issue**

According to Treas. Reg. section 1.148-7(b)(1)(ii), the only spending exception applicable to **refunding** issues is the six-month exception.

---

### **Amounts NOT Treated as Gross Proceeds**

Treas. Reg. section 1.148-7(c)(3) provides that the following amounts are NOT treated as gross proceeds for purposes of the six-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 six-month spending period,
- amounts representing sale or investment proceeds derived from payments under any purpose investment of the issue, AND
- amounts representing repayments of grants financed by the issue.

**See Treas. Reg. section 1.148-6(d)(4)**

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

---

### **Bona Fide Debt Service Fund**

Amounts in the BFDS fund do not have to be spent for the refunding issue to meet the six-month spending exception, AND they are exempt from rebate if the refunding issue meets this exception.

---

*Continued on next page*

## Six Month Spending Exception to Rebate, Continued

---

### **Special Transferred Proceeds Rule for Refunded Issues**

Treas. Reg. section 1.148-7(b)(1)(i) provides that 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 excepted 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 2**

In 1999, City F advance refunds an issue originally issued in 1997. The 1997 issue met the two-year exception to rebate. The following 1997 proceeds remain unspent on the issuance date of the refunding bonds:

- Amounts equal to less than five percent of ACP in the project fund,
- sale proceeds and earnings thereon in the 4R fund, AND
- project revenues in the BFDS fund.

Rebate is not required on amounts equal to less than five percent of ACP in the project fund (as long as the amounts are spent within three years of the issue date of the 1997 issue.) Even if these proceeds transfer to the 1999 issue, they will not be subject to rebate.

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

Earnings on amounts in the BFDS fund are not required to be spent, nor are they subject to rebate, as long as the two-year spending exception is met. This is true both before and after transfer to the refunding issue.

---

*Continued on next page*

## Six Month Spending Exception to Rebate, Continued

---

### **Special Transferred Proceeds Rule for Refunded Issues**

Treas. Reg. section 1.148-7(b)(1)(ii)(A) provides, generally, that **for purposes of applying the six-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 six-month spending exception, those transferred proceeds are subject to rebate as proceeds of the refunding issue unless an exception to rebate applied to those proceeds as proceeds of the prior issue.

---

### **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 six-month spending exception because all of the proceeds (except for the transferred proceeds) are used to redeem the prior issue within six-months of the issuance date.

The \$5,000,000 in unspent proceeds does not jeopardize Issue B's satisfaction of the spending exception. Further, unless an exception to rebate applies to the unspent proceeds as proceeds of the prior issue, they will be subject to rebate as proceeds of the refunding issue.

---

### **Exception for Certain Transferred Proceeds Not Treated as Gross Proceeds**

Treas. Reg. section 1.148-7(b)(1)(ii)(B) provides that for purposes of applying the six-month exception, the following proceeds are generally treated as gross proceeds of the refunding issue, and must be spent within six 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 Treas. Reg. section 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 Treas. Reg. section 1.148-7(c)(3), AND
  - proceeds that transferred from a prior taxable issue.
- 

*Continued on next page*

## Six Month Spending Exception to Rebate, Continued

---

### Example 4

In 1999, City X advance refunds bonds which were originally issued in 1998. The 1998 bonds met the six-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 Treas. Reg. section 1.148-7(c)(3) 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 six-month exception.

If the amounts do not transfer within six-months of the issuance date of the refunding bonds, then the amounts do not affect the refunding issue for purposes of applying the six-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 eighteenth-month exception to rebate.

### See Treas. Reg. section 1.148-7(d)(3)

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

---

### Series of Refundings

Treas. Reg. section 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 Treas. Reg. section 1.148-9(d), the six-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

Treas. Reg. section 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 doesn't 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. (Remember that the yield restriction rules are based on reasonable expectations over the life of the bonds, while the rebate rules are based on actual events.)

The only investments that are excluded from the computation are those that are exempt from rebate.

---

### The Single Investment Concept Does Apply for Escrow Funds

Treas. Reg. section 1.148-5(b)(2)(iv) provides that for all purposes of IRC section 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 1

In 1992, County D issues bonds to advance refund bonds issued in 1985. The 1985 bonds were issued to advance refund a 1983 issue. Sale proceeds of the 1992 issue are placed into an escrow fund. As principal payments are made on the 1985 issue from the 1992 escrow, proceeds of the 1985 issue in its escrow fund become transferred proceeds of the 1992 issue. The yield on the investments of the transferred proceeds **must be** blended with the yield on investments of the 1992 escrow for **both** yield restriction and rebate purposes.

---

*Continued on next page*

## Yield Blending in the Computation of Rebate, Continued

---

**Example 2** County Q issues bonds to advance refund a prior issue. Sale proceeds of the issue are invested in SLGs 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 SLGs 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 consecutive

---

**Example 3** County M 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 can be blended for yield restriction and rebate.

---

**Special  
Permissive Rule  
for Refunding  
Escrows and  
Related Sinking  
Funds**

Treas. Reg. section 1.148-5(b)(2)(iii) provides that for **all purposes of IRC section 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.

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

---

**Example 4** 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. The yield on the investments in the refunding escrow may be blended with the yield on the investments in the 4R Fund.

---

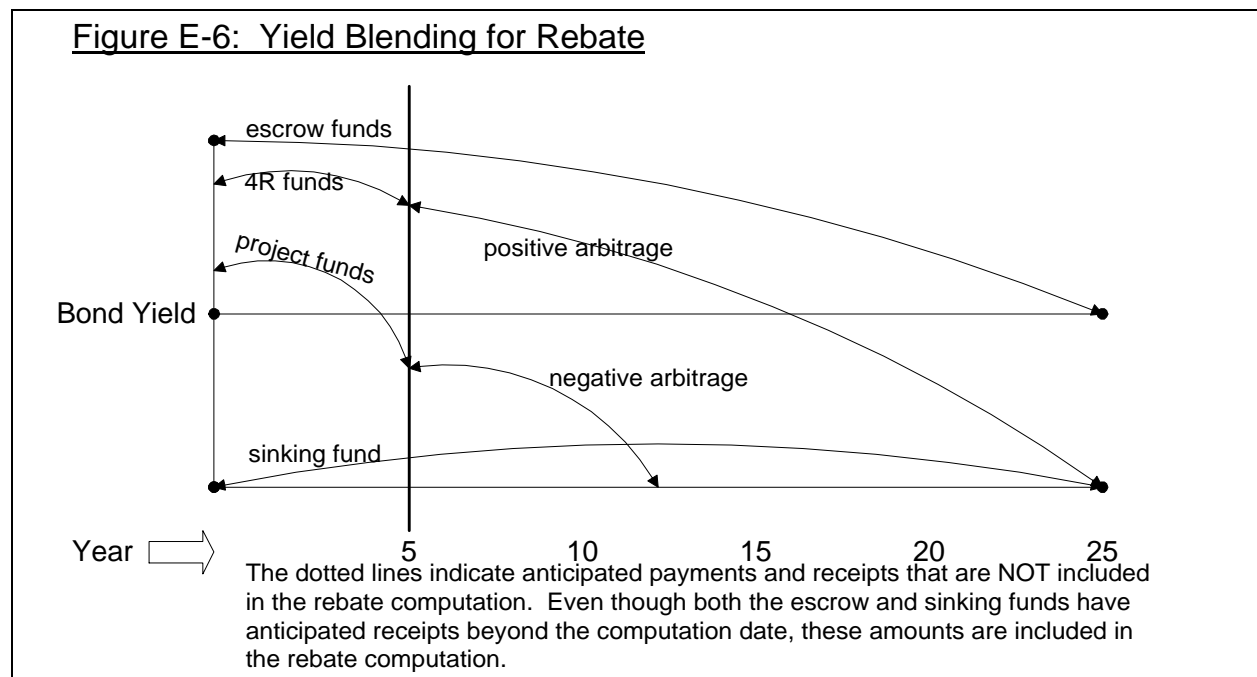
*Continued on next page*

## Yield Blending in the Computation of Rebate, Continued

### Putting it all Together

Figure E-6 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 five-year computation date, only the payments and receipts relative to the five-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 Treas. Reg. section 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 specially set-up sinking funds are treated for rebate purposes in the same manner as all funds are treated for yield restriction purposes.



# Comprehensive Example of Yield Blending

---

## Facts

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 SLGs, 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 three years to complete. \$25,000,000 is invested in open-market securities. \$10,000,000 is invested for six months and is expected to be spent at that time. \$15,000,000 is invested for three 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 five years, and then reinvested until the redemption 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 SLGs are made on October 1, 2005, 2006, and 2007. The funds will be used to redeem term bonds maturing on October 15, 2019.

---

*Continued on next page*

## 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 SLGs. 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 Treas. Reg. section 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 Treas. Reg. section 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 three-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.

---

*Continued on next page*

## Comprehensive Example of Yield Blending, Continued

---

**Analysis**  
(continued)

However, Treas. Reg. section 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 Treas. Reg. section 1.148-5(b)(2)(iv) **requires** that investments in the escrow be treated as single investment having a single yield.

---

*Continued on next page*



## Comprehensive Example of Yield Blending, Continued

<u>TABLE 1: CASH FLOWS FROM NONPURPOSE INVESTMENTS</u>													
DATE	ESCROW		SINKING FUND		PROJECT		4R		TOTAL	TOTAL	TOTAL	TOTAL	TOTAL
	PRINCIPAL	INTEREST	TOTAL	PRINCIPAL	INTEREST	PRINCIPAL	INTEREST	PRINCIPAL					
4/1/00	1,882,800	1,531,644	3,414,444			-	10,000,000		10,850,000				
10/1/00	243,400	1,659,281	1,902,681	200,000		200,000						754,000	754,000
4/1/01	1,808,300	1,659,281	3,467,581			-							-
10/1/01	244,900	1,600,656	1,845,556	285,000		285,000						744,000	744,000
4/1/02	1,933,000	1,592,494	3,525,494			-							-
10/1/02	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
4/1/03	2,069,400	1,518,136	3,587,536			-							-
10/1/03	266,900	1,446,142	1,713,042	300,000		300,000						760,000	760,000
4/1/04	2,221,200	1,436,765	3,657,965			-							-
10/1/04	37,825,600	2,706,196	40,531,796	1,500,000		1,500,000						8,000,000	8,750,000
10/1/04												(8,000,000)	(8,000,000)
10/1/05						-						744,000	744,000
4/1/06						-							-
10/1/06						-						744,000	744,000
4/1/07						-							-
10/1/07						-						744,000	744,000
10/1/08						-						744,000	744,000
10/1/09						-						744,000	744,000
10/1/19				6,000,000		6,000,000						8,000,000	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	16,222,000

Continued on next page



## Comprehensive Example of Yield Blending, Continued

**TABLE 2: YIELD OF ESCROW FUND**

ISSUE DATE	10/15/99		
COMP INTERVALS	2		
YIELD	7.62773percent		
<b>DATE</b>	<b>CASH FLOWS</b>	<b>PRESENT VALUE</b>	<b>DAYS</b>
10/15/99	(48,751,100.00)	(\$48,751,100.00)	0
4/1/00	3,414,444	\$3,298,594.55	166
10/1/00	1,902,681	\$1,770,596.34	346
4/1/01	3,467,581	\$3,108,313.63	526
10/1/01	1,845,556	\$1,593,566.10	706
4/1/02	3,525,494	\$2,932,293.74	886
10/1/02	1,782,527	\$1,428,131.66	1066
4/1/03	3,587,536	\$2,768,681.73	1246
10/1/03	1,713,042	\$1,273,472.04	1426
4/1/04	3,657,965	\$2,619,422.71	1606
10/1/04	40,531,796	\$27,958,027.50	1786
TOTAL	16,677,522	(0)	

*Continued on next page*

## Comprehensive Example of Yield Blending, Continued

**TABLE 3: YIELD OF ESCROW AND SINKING FUND**

ISSUE DATE		10/15/99	
COMP INTERVALS		2	
YIELD		6.71091percent	
<u>DATE</u>	<u>CASH FLOWS</u>	<u>PRESENT VALUE</u>	<u>DAYS</u>
10/15/99	(48,751,100)	(\$48,751,100.00)	0
10/15/99	(1,500,000)	(\$1,500,000.00)	0
4/1/00	3,414,444	\$3,312,084.45	166
10/1/00	1,902,681	\$1,785,722.52	346
10/1/00	200,000	\$187,705.93	346
4/1/01	3,467,581	\$3,148,771.86	526
10/1/01	1,845,556	\$1,621,468.05	706
10/1/01	285,000	\$250,395.22	706
4/1/02	3,525,494	\$2,996,868.83	886
10/1/02	1,782,527	\$1,466,055.66	1066
10/1/02	300,000	\$246,737.75	1066
4/1/03	3,587,536	\$2,854,809.91	1246
10/1/03	1,713,042	\$1,318,911.11	1426
10/1/03	300,000	\$230,977.02	1426
4/1/04	3,657,965	\$2,724,919.32	1606
10/1/04	40,531,796	\$29,213,025.42	1786
10/1/04	1,500,000	\$1,081,115.14	1786
10/1/05	(2,000,000)	(\$1,349,409.79)	2146
10/1/06	(2,000,000)	(\$1,263,214.29)	2506
10/1/07	(2,000,000)	(\$1,182,524.66)	2866
10/1/19	6,000,000	\$1,606,680.57	7186
<b>TOTAL</b>	<b>68,013,622</b>	<b>0</b>	

*Continued on next page*

## Comprehensive Example of Yield Blending, Continued

**TABLE 4: REBATE COMPUTATION WITHOUT BLENDING**

COMPUTATION DATE		10/15/04	
COMP INTERVALS		2	
YIELD		7.5000percent	
<u>DATE</u>	<u>CASH FLOWS</u>	<u>FUTURE VALUE</u>	<u>DAYS</u>
10/15/99	(48,751,100.00)	(70,447,481.75)	1800
10/15/99	(8,000,000.00)	(11,560,351.54)	1800
10/15/99	(25,000,000.00)	(36,126,098.57)	1800
10/15/99	(1,500,000.00)	(2,167,565.91)	1800
4/1/00	14,264,444.00	19,924,678.21	1634
10/1/00	2,656,681.00	3,576,743.30	1454
10/1/00	200,000.00	269,264.04	1454
4/1/01	3,467,581.00	4,499,734.31	1274
10/1/01	2,589,556.00	3,238,899.40	1094
10/1/01	285,000.00	356,465.10	1094
4/1/02	3,525,494.00	4,250,147.73	914
10/1/02	19,026,527.00	22,108,305.78	734
10/1/02	300,000.00	348,591.82	734
4/1/03	3,587,536.00	4,017,946.07	554
10/1/03	2,473,042.00	2,669,630.91	374
10/1/03	300,000.00	323,847.83	374
4/1/04	3,657,965.00	3,806,020.91	194
10/1/04	41,281,796.00	41,400,167.93	14
10/1/04	8,000,000.00	8,022,939.30	14
10/1/04	1,500,000.00	1,504,301.12	14
10/15/00	(1,000.00)	(1,342.47)	1440
10/15/01	(1,000.00)	(1,247.18)	1080
10/15/02	(1,000.00)	(1,158.65)	720
10/15/03	(1,000.00)	(1,076.41)	360
10/15/04	(1,000.00)	(1,000.00)	0
10/15/04	_____ -	_____ -	
<b>REBATE DUE</b>		<b>\$ 10,361.27</b>	

*Continued on next page*

## Comprehensive Example of Yield Blending, Continued

**TABLE 5: REBATE COMPUTATION WITH BLENDING**

COMPUTATION DATE		10/15/04	
COMP INTERVALS		2	
YIELD		7.5000percent	
<u>DATE</u>	<u>CASH FLOWS</u>	<u>FUTURE VALUE</u>	<u>DAYS</u>
10/15/99	(48,751,100.00)	(70,447,481.75)	1800
10/15/99	(8,000,000.00)	(11,560,351.54)	1800
10/15/99	(25,000,000.00)	(36,126,098.57)	1800
10/15/99	(1,500,000.00)	(2,167,565.91)	1800
4/1/00	14,264,444.00	19,924,678.21	1634
10/1/00	2,646,681.00	3,563,280.10	1454
10/1/00	200,000.00	269,264.04	1454
4/1/01	3,467,581.00	4,499,734.31	1274
10/1/01	2,589,556.00	3,238,899.40	1094
10/1/01	285,000.00	356,465.10	1094
4/1/02	3,525,494.00	4,250,147.73	914
10/1/02	19,026,527.00	22,108,305.78	734
10/1/02	300,000.00	348,591.82	734
4/1/03	3,587,536.00	4,017,946.07	554
10/1/03	2,473,042.00	2,669,630.91	374
10/1/03	300,000.00	323,847.83	374
4/1/04	3,657,965.00	3,806,020.91	194
10/1/04	41,281,796.00	41,400,167.93	14
10/1/04	8,000,000.00	8,022,939.30	14
10/1/04	1,500,000.00	1,504,301.12	14
10/15/00	<u>(1,000.00)</u>	<u>(1,342.47)</u>	1440
10/15/01	<u>(1,000.00)</u>	<u>(1,247.18)</u>	1080
10/15/02	<u>(1,000.00)</u>	<u>(1,158.65)</u>	720
10/15/03	<u>(1,000.00)</u>	<u>(1,076.41)</u>	360
10/15/04	<u>(1,000.00)</u>	<u>(1,000.00)</u>	0
10/15/04	<u>(3,044,207.00)</u>	<u>(3,044,207.00)</u>	0
	(NOTE 1)		
<b>REBATE DUE</b>		<b>\$ (3,033,845.73)</b>	
<b>NOTE 1: SEE TABLE 6 FOR COMPUTATION OF (3,044,207)</b>			

Continued on next page

## Comprehensive Example of Yield Blending, Continued

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

COMPUTATION DATE	10/15/04		
COMP INTERVALS	2		
COMP INTERVALS	6.71091percent		
<b>DATE</b>	<b>CASH FLOWS</b>	<b>PRESENT VALUE</b>	<b>DAYS</b>
10/1/05	(2,000,000.00)	(\$1,877,059.37)	346
10/1/06	(2,000,000.00)	(\$1,757,159.57)	706
10/1/07	(2,000,000.00)	(\$1,644,918.54)	1066
10/1/19	<u>6,000,000.00</u>	<u>\$2,234,930.25</u>	5386
<b>TOTAL</b>	-0-	(3,044,207)	

## Section 3 Treatment of Prior Issue Proceeds

### Overview

---

**Introduction** On the issuance date of the 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.

---

**In this Section** This section contains the following topics:

Topic	See Page
Overview	E-126
Required Reserve and Replacement Fund	E-127
Bona Fide Debt Service Fund	E-132
Project Fund	E-135
Refunding Escrow	E-137
Sinking Fund	E-139
Minor Portion	E-140

---

# Required Reserve and Replacement Fund

---

## **Introduction**

Regardless of whether the prior issue was a new money or a refunding issue, generally a 4R fund would 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 this 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 Prior to Becoming Transferred Proceeds**

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.

---

*Continued on next page*

## Required Reserve and Replacement Fund, Continued

---

### **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. Although there is no rule (statutory or otherwise) prohibiting them, the regulations do discourage them. Treas. Reg. section 1.148-9(e) provides that in a refunding, both the refunded and the refunding issues can have 4R funds, but the funds are aggregated for purposes of the size limitations.

In addition, the size limitations are based on the refunding issue only. Therefore, if amounts remain in the prior issue's 4R fund, these amounts can remain there only if proceeds of the refunding issue are reduced to meet the size limitations.

If the 4R fund exceeds the size limitations, the excess must be yield restricted. Investments of excess funds attributable to the prior issue reserve fund must not exceed 0.125 percent (or 0.001 percent if replacement proceeds) of the yield of the prior issue until the funds transfer to the refunding issue. A portion of the funds will transfer to the refunding issue when refunding issue proceeds are used to make principal payments on the prior issue. When the funds transfer to the refunding issue, investments on the funds must not exceed 0.125 percent of the yield on the refunding issue.

Yield reduction payments can be used to comply with the arbitrage rules prior to the transfer date.

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 Treas. Reg. section 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.

---

*Continued on next page*



## 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 4R fund as a 4R 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.

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 sale proceeds (unless they are replacement proceeds) of the prior issue. (Remember the one-issue rule?)

These proceeds retain their character as transferred proceeds (rather than replacement proceeds) while in the 4R fund. (Think of the universal cap.)

If, however, amounts in the prior 4R fund were issuer equity or revenues, they retain their character as replacement proceeds, but immediately become gross proceeds of the refunding issue, (because they may be used to pay debt service on the refunding issue) and are subject to rebate as such at the refunding issue bond yield. Remember that as replacement proceeds, they do not become transferred proceeds.

---

*Continued on next page*

## Required Reserve and Replacement Fund, Continued

---

### **Reserve Funds are Deposited into the Refunding Escrow**

Depositing prior issue 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 Treas. Reg. section 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 4R 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, then these funds must be spent ratably with refunding bond proceeds. Because they are at the end of the line in priority, these amounts have a good chance of becoming transferred proceeds of the refunding issue.

---

### **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 sale 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 AND they are in the escrow fund now, which requires yield restriction at 0.001 percent.) Upon transfer, they retain their character as transferred proceeds, but because they are now proceeds of the refunding issue, they must be yield restricted to no more than 0.001 percent of the refunding bond yield.

If a deallocation is required under the universal cap, these amounts are treated as transferred proceeds, rather than replacement proceeds. (Since they were originally sale proceeds of the prior issue, they could not now be replacement proceeds of the prior issue.)

---

*Continued on next page*

## Required Reserve and Replacement Fund, Continued

---

**Treatment of  
Prior Issue  
Revenues in the  
Refunding  
Escrow**

If the amounts in the prior issue 4R fund were issuer equity or revenues, and are placed in the escrow fund, they retain their character as replacement proceeds but now must be yield restricted to no more than 0.001 percent of the prior issue bond yield.

As replacement proceeds of the prior issue, they will not have an opportunity to become transferred proceeds. (According to Treas. Reg. section 1.148-9(b)(1), only **proceeds** of the prior issue transfer, and replacement proceeds are NOT proceeds.)

Nor do they become gross proceeds of the refunding issue because they are not used to pay debt service on the refunding issue. (Contrast this treatment with issuer revenues or equity from the prior issue 4R fund that are deposited into the 4R 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 the transferred proceeds and complies with the mixed escrow rules.

---

*Continued on next page*

## 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 from 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 Treas. Reg. section 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. Treas. Reg. section 1.148-10(c)(2) provides that excess gross proceeds means all gross proceeds of an advance refunding issue that exceed an amount equal to one percent of sale proceeds of an issue. The excess proceeds concept is discussed later.

.

---

*Continued on next page*

## 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.

Treas. Reg. section 1.148-9(c)(2)(ii)(A) requires that 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 dates, 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 4R 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.

However, because of their high priority in the mixed escrow rules, sale proceeds which were originally in the BFDS fund have only a slight chance of becoming transferred proceeds.

---

# 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,
  - amounts in the project fund can be deposited into the refunding escrow, OR
  - amounts in the project fund can be used to make the earliest debt service payments on the refunded issue.
- 

## **Amounts in the Project Fund 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 this Module.

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 section 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 rebate based on the refunding issue's yield.

---

*Continued on next page*

## Project Funds, Continued

---

**Amounts in the Project Fund 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 Treas. Reg. section 1.148-9(c)(2)(ii)(A) **requires** that when project funds are deposited into a refunding escrow, they (along with funds from the 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 prior issue debt service.

If the amounts are sale proceeds of the prior issue, they retain this characterization 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.

---

**Amounts in the Project Fund Can be Used to Make the Earliest Debt Service Payments on the Refunded Issue**

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 the original bonds were issued prior to 1986, and have already been advance refunded, then the refunded issue will have its own refunding escrow. This escrow (escrow #1) will be paying the debt service on the original bond issue, while revenues will be paying the debt service on the refunding issue.

When the 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 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 on the first refunding, unspent proceeds of the first refunding will become transferred proceeds of the second refunding issue. Unspent proceeds include amounts in the escrow fund.

However, remember that in establishing an escrow fund, the issuer computed the exact amount necessary for debt service payments, and then proceeded to calculate the amount of the required initial deposit to the escrow based on the limited yield of the fund. Usually, the escrow is invested in SLGs. If these investments were to be sold and invested in SLGs 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 Treas. Reg. section 1.148-5(b)(2)(iv) which provides that all investments in all refunding escrows will be treated as a single investment having a single yield for purposes of IRC section 148. This means that the yields of both escrows can be blended.

---

*Continued on next page*

## Refunding Escrow, Continued

---

**Transferred  
Proceeds  
Penalty**

However, this yield blending may not be enough to compensate for escrow #1's higher yield. In that case, the issuer can use the "transferred proceeds penalty" to lower the yield on escrow #2.

A discussion of the computation of the transferred proceeds penalty is beyond the scope of this course. 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, these revenues and earnings will be available when the refunding bonds are issued. Some of the issuer's options regarding these amounts are:

- amounts can be used to pay earliest debt service payments on the refunded issue,
  - amounts can be deposited into the refunding escrow,
  - amounts can be deposited into the 4R fund, OR
  - amounts can be deposited into the sinking fund of the refunding issue.
- 

## **Amounts Are Used to Pay Earliest Debt Service on Prior Bonds**

Prior to the issuance date of the refunding issue bonds, these amounts are replacement proceeds and must be yield restricted to no more than 0.001 percent of 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 revenues are deposited into the refunding escrow, they retain their characterization as replacement proceeds 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 revenues are used as reserve funds of the refunding issue, they immediately become gross 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 proceeds of the refunding issue.

---

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

When these revenues 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.

---

## Minor Portion

---

### **Introduction**

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 concerns.

As mentioned previously, Treas. Reg. section 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 as large as possible. As proceeds of the refunded issue become transferred proceeds of the refunding issue, the minor portion of the refunded issue will shrink. At the same time, the minor portion of the refunding issue cannot be enlarged. This means that the issuer has to be ever vigilant over the yield of the various investments. Obviously, those investments with the highest yield (generally transferred proceeds from the refunded issue) will be considered to be included in the minor portion, while lower-yielding investments will cease to be included.

---

## Part IV: Abusive Arbitrage Devices in Advance Refundings

### Overview

---

#### **Introduction**

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

IRC 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.

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

IRC section 149(d)(4) provides that abusive transactions employed in an advance refunding are prohibited.

---

#### **Advance Refunding Issues that Employ Abusive Devices**

Treas. Reg. section 1.149(d)-1(b) provides that an advance refunding issue employs an abusive device and is described in IRC section 149(d)(4) if:

- the issue violates any of the anti-abuse rules under Treas. Reg. section 1.148-10,
  - the issue fails to meet the general rebate requirements of Treas. Reg. section 1.148-3,
  - any of the proceeds of the issue are invested in certain tax-exempt bonds, as described in Treas. Reg. section 1.149(d)-1(b)(3), OR
  - certain sales of conduit loans (Treas. Reg. section 1.149(d)-1(b)(4) and Treas. Reg. section 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 IRC section 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, 99<sup>th</sup> Cong., 1<sup>st</sup> Sess. (1986), Example 1 at 850). 1986-3 C.B. Vol. 3, 850.

---

### In this Part

This part contains the following topics:

Topic	See Page
Overview	E-141
Anti-abuse Under Treas. Reg. section 1.148-10	E-143
Anti-abuse Rules on Excess Proceeds of Advance Refundings	E-147
Mixed Escrows Invested in Certain Tax-Exempt Bonds	E-148
Hedge Bond Rules for Refunding Issues	E-149
Summary	E-157
Case Study	E-159

---

## Anti-Abuse Rules Under Treas. Reg. Section 1.148-10

---

### Introduction

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

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

---

### Definition of Abusive Arbitrage Device

Treas. Reg. section 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

Treas. Reg. section 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 Treas. Reg. section 1.148-10(d), Example 2

---

*Continued on next page*

## Anti-Abuse Rules Under Treas. Reg. Section 1.148-10,

Continued

---

### **Overburdening the Tax-exempt Market**

An action overburdens the tax-exempt bond market if it results in any of the following, based on all of the facts and circumstances:

- 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.

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 initial bond issue. The refunding bonds have no required debt service payments until eight 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, a portion of which is used to pay debt service on the prior bonds until the redemption date. On the issuance date of the refunding bonds, the city invests the available sewer revenues in a forward contract at a yield which is materially higher than the yield on the refunding bonds. The contract is structured to provide amounts that are used to redeem the prior bonds.

The city's issuance of the bonds was not necessary, and therefore 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 and Treas. Reg. section 1.148-10(d), Example 3**

---

*Continued on next page*



## Anti-Abuse Rules Under Treas. Reg. Section 1.148-10,

Continued

---

### Consequences of Overburdening the Tax-exempt Market

If an issue overburdens the market, without exploiting the tax-exempt interest rates, Treas. Reg. section 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 can’t be deducted when computing yield, AND
- proceeds are not allocated to expenditures unless the “proceeds-spent-last” rule is satisfied, with certain restrictions.

Treas. Reg. section 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 Treas. Reg. Section 1.148-10,

Continued

---

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

Treas. Reg. section 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 IRC section 148, the Commissioner may exercise the Commissioner's discretion to depart from the rules in the regulations as necessary to ensure that the economic substance of the transaction is clearly reflected. 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**

Treas. Reg. section 1.148-10(f) provides that if the Commissioner determines that an issue is likely to fail to meet the requirements of Treas. Reg. section 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, Treas. Reg. section 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 IRC section 148 in lieu of or in addition to other consequences of those failures, OR
  - other action.
-

## Anti-Abuse Rules on Excess Proceeds of Advance Refundings

---

### **Excess Gross Proceeds**

Treas. Reg. section 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**

Treas. Reg. section 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 specific purposes.

The specific purposes are itemized in the regulations and include such purposes as the payment of principal and interest on the prior bond and the payment of issuance costs of the refunding issue.

---

### **Other Special Rules**

Treas. Reg. section 1.148-10(c)(4) contains special rules for crossover refundings.

Treas. Reg. section 1.148-10(c)(5) contains special rules for gross refundings.

---

## Mixed Escrows Invested in Certain Tax-Exempt Bonds

---

### Introduction

Treas. Reg. section 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

Treas. Reg. section 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 IRC section 148. Therefore, 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.

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

---

# Hedge Bond Rules for Refunding Issues

---

## **Introduction**

In Phase I of this course, Module C discussed the provisions of IRC section 149(g) regarding hedge bonds. That module discussed application of the hedge bond rules to original bond issues only. The hedge bond rules also have provisions which apply only to refundings and 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 IRC section 149(g) applies to the refunded issue.

---

## **Applicability When IRC Section 149(g) Applies to the Refunded Issue**

IRC Section 149(g)(3)(C)(i) states that a refunding bond will be treated as meeting the requirements of IRC section 149(g) if the original bond met the requirements. For this section to apply, the provisions of IRC section 149(g) must apply to the refunded issue. IRC 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 exceptions apply, then IRC section 149(g)(3)(C)(i) will apply to the refunded issue. Generally, the status of the refunded bond will just carry over to the refunding issue.

---

## **Example 3**

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 section 149(g) applied to the refunded issue (1989). To do this, you can use Figure E-7. Answering the first four questions tells you that section 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. If it isn't, then neither issue will be a hedge bond. If, however, the 1989 issue turns out to be a hedge bond, then the 1993 issue will also be a hedge bond.

---

*Continued on next page*

## Hedge Bond Rules for Refunding Issues, Continued

---

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

If you find that IRC section 149(g) does **not** apply to the refunded issue (usually because it was issued before the effective date), you should refer to IRC sections 149(g)(3)(C)(ii) and (iii). These sections contain the hedge bond provisions for refunded bonds that were issued prior to the effective date of IRC section 149(g). There are two separate provisions, and if the requirements of at least one of them are met, then the refunding issue will not be a hedge bond. These provisions are summarized below.

---

**General Rule  
for Pre-  
Effective Date  
Bonds**

IRC Section 149(g)(3)(C)(ii) states that a refunding bond will not be a hedge bond if all of the following are true:

- IRC 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, and
  - the amount of the refunding bond does **not** exceed the outstanding amount of the refunded bond.
- 

*Continued on next page*

## Hedge Bond Rules for Refunding Issues, Continued

**Example 4**

County M issues \$15,000,000 principal amount of bonds at a yield of 4 percent on September 1, 1993. 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		1993 Issue	
Due	Amount Maturing	Due	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*

## Hedge Bond Rules for Refunding Issues, Continued

**Example  
(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	
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	69,000
Weighted average maturity equals: 192,000/20,000 = 9.60 years	69,000/15,000 = 4.60 years

Now that we have the weighted average maturity of each issue, we simply 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:

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

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

*Continued on next page*



## Hedge Bond Rules for Refunding Issues, Continued

---

### Special Rule for Refunded Bonds Meeting Spending Tests

If the bonds cannot meet the general rule of IRC section 149(g)(3)(C)(ii), then IRC section 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:

- IRC 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 five-year period, but would **not** be spent within a three-year period (the three-year and five-year periods begin on the issuance date), **and**
- 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 for Refunding Issues

Treas. Reg. section 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:

- Treas. Reg. section 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.)
- Treas. Reg. section 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.

---

*Continued on next page*

## Hedge Bond Rules for Refunding Issues, Continued

---

**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 section 149(g). To do this, you will need to refer to Figure E-7 and Figure E-8.

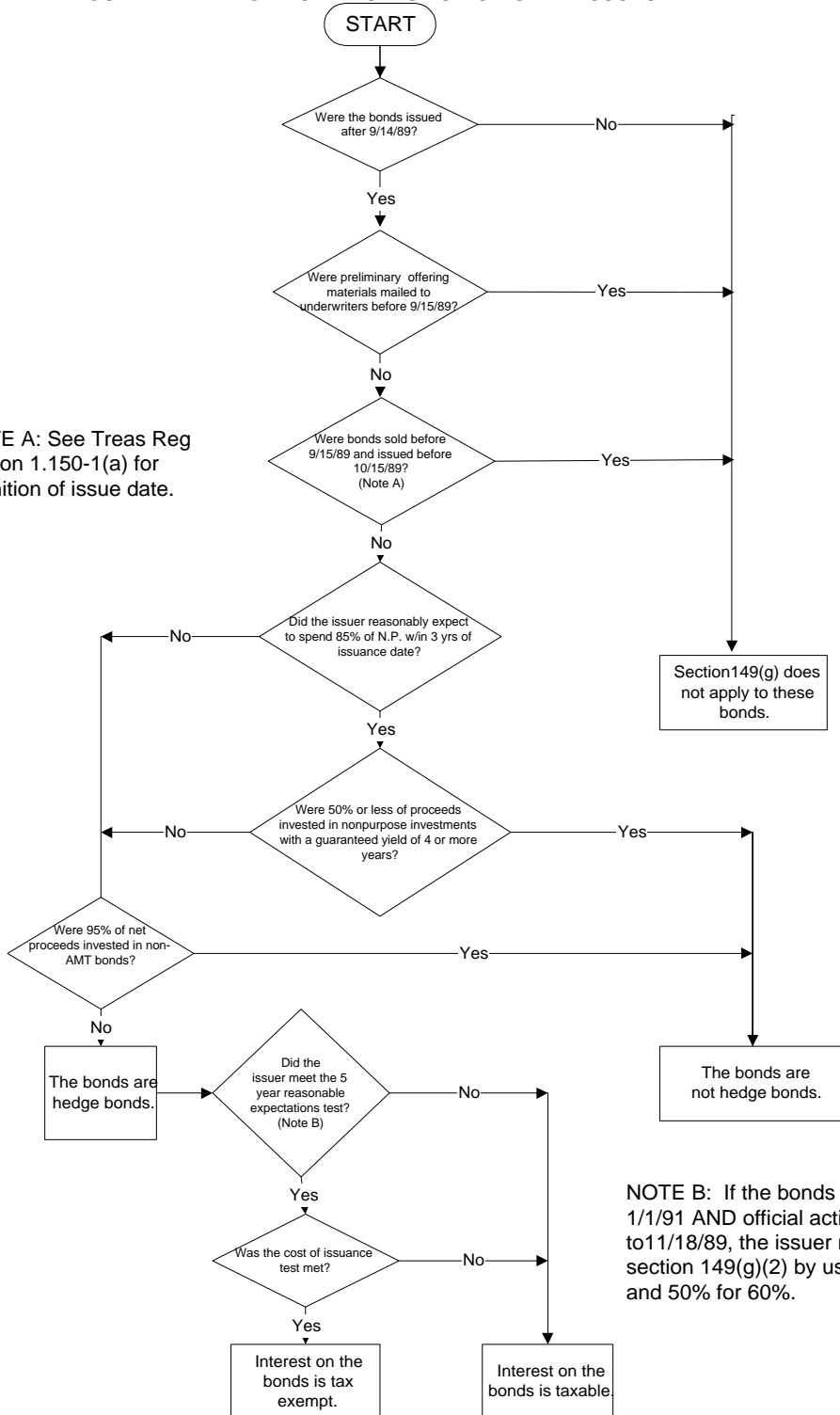
Remember that this determination depends on whether or not the original issue was subject to IRC section 149(g). As soon as you know that the bond is a refunding issue, you should request documents for the original issue.

---

*Continued on next page*

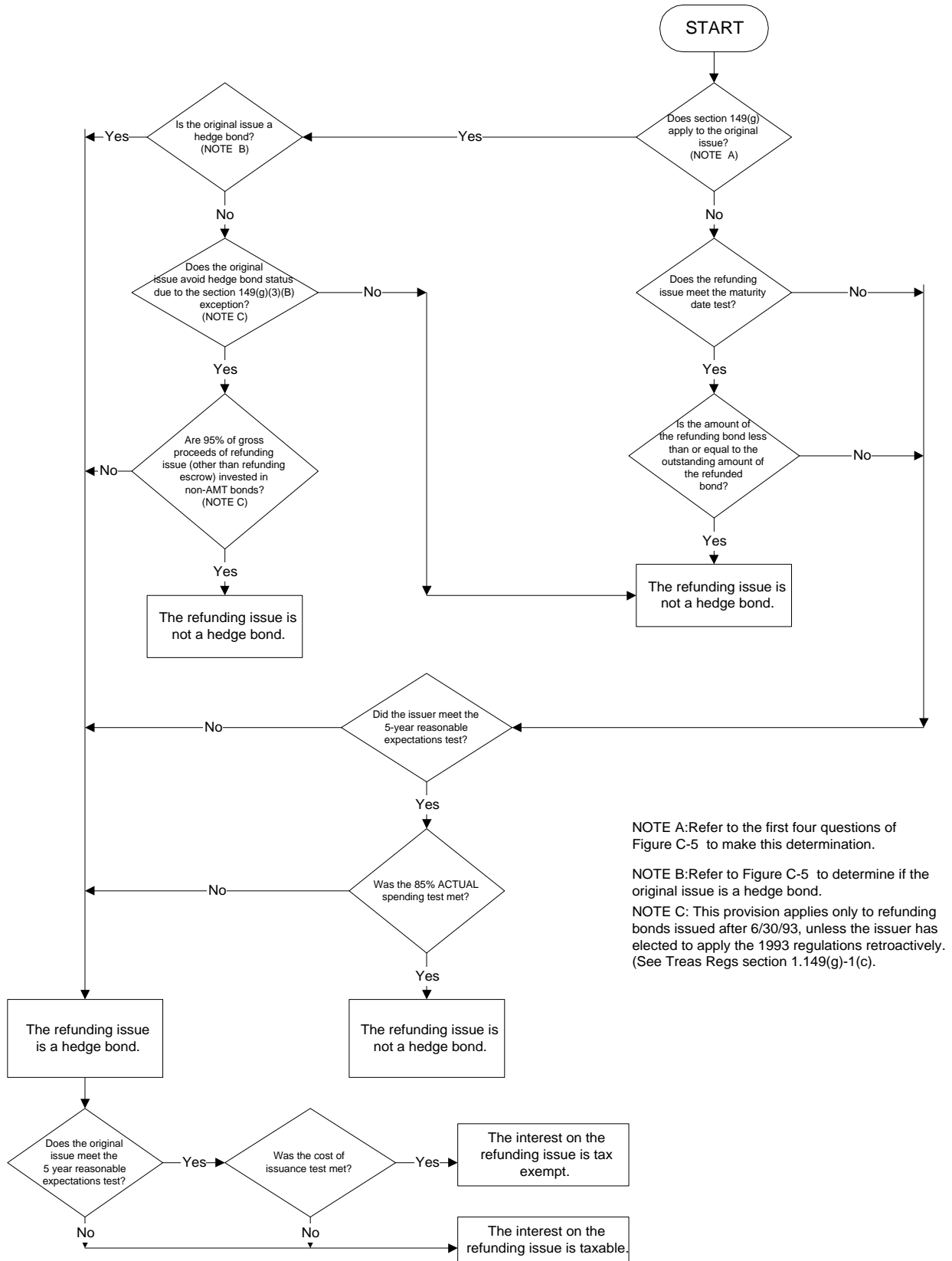
**FIGURE E-7: HEDGE BOND RULES FOR ORIGINAL ISSUES**

NOTE A: See Treas Reg section 1.150-1(a) for definition of issue date.



NOTE B: If the bonds were issued prior to 1/1/91 AND official action was taken prior to 11/18/89, the issuer may elect to apply section 149(g)(2) by using 15% for 10% and 50% for 60%.

**FIGURE E-8: HEDGE BOND RULES FOR REFUNDING ISSUES**



# Summary

---

## Review of Module E

There are two kinds of refundings. A bond is an advance refunding 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 **less than 90 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 IRC section 149(d) and the accompanying regulations. Certain definitions are found in Treas. Reg. section 1.150-1(d). The arbitrage rules are found throughout Treas. Reg. sections 1.148-0 to 11. The provisions of IRC section 146 and 147 apply only in certain cases. Lastly, whenever a bond is issued after August 15, 1986 to advance refund a bond issued before August 15, 1986, the Transition rules of Section 1313(b) of the TRA 1986 need to be consulted.

IRC Section 149(d) provides that:

- Only governmental and qualified 501(c)(3) bonds 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 establish three different funds:

- escrow,
- reasonably required reserve and replacement fund, and
- bona fide debt service.

Once proceeds of the refunding issue are used to pay principal on the prior issue, any unspent 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 Module E (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 purposes, but the yields of non-yield-restricted investments cannot be included with them.

Proceeds of advance refunding issues can qualify only for the small issue exception to rebate or the six-month spending exception. 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 purposes.

Abusive devices are described in Treas. Reg. section 1.149(d)-1(b).

---

### **Preview of Module F**

Module F explains how to determine which set of regulations applies to the issue.

---

## Case Study

---

**Facts:**

On January 1, 1985, City A issues \$35M of 20-year bonds with varied interest rates at a yield of 10.15681 percent. Interest is payable in May and November. The bonds maturing on and after November 1, 1995 are subject to optional redemption on November 1, 1995 at a price of 102percent. Bonds maturing on and after November 1, 1996 are subject to optional redemption at par. The bonds are issued to fund improvements of city property, such as roadways, bridges, public recreation areas, traffic signals, and cemeteries. The average maturity of the issue does not exceed 120 percent of the average reasonably expected economic life of the financed facilities. The bonds are secured by the full faith and credit of City A, and the city's general revenues have been pledged to pay the debt service. As of January 1, 1994, the bonds are still outstanding, and have not been defeased.

The debt service schedule is shown in **Table 1**.

A schedule of sources and uses of gross proceeds is shown in **Table 2**.

A schedule of fund balances from January 1, 1994 through March 1, 1996 is shown in **Table 3**.

Present Value of Debt Service is on **Table 4**.

Calculation of Bond Yield is on **Table 5**.

On January 1, 1994, the City decides to issue \$59.5M 20-year bonds with varied interest rates and a yield of 6.51 percent. Part of the proceeds will be used to refund the 1985 issue on November 1, 1995, while the remainder will be used for waterway and public building improvements. Interest is payable in March and September. The bonds are not subject to redemption prior to maturity.

The debt service schedule is shown in **Table A**.

A schedule of sources and uses of gross proceeds is shown in **Table B**.

Computation of bond yield on the entire issue is in **Table C**.

Computation of bond yield on the refunding portion of the issue is in **Table D**.

**REQUIRED:**

Review the tables and answer the following questions about the issues.

---

*Continued on next page*

## Case Study, Continued

---

**Questions:**

1. What type of bonds are the 1985 bonds - governmental, qualified private activity, or private activity bonds?
  2. What type of bonds are the 1994 bonds - governmental, qualified private activity or private activity bonds?
  3. Determine if the 1994 issue is a current or advance refunding of the 1985 issue.
  4. How many times can the 1985 bonds be advance refunded? What are the limits on current refundings of the 1985 issue?
  5. How many times can the 1994 bonds be advance refunded? What are the limits on current refundings of the 1994 issue?
  6. Determine if the TRA 1986 Transition rules apply to the 1994 issue.
  7. Determine the required redemption date of the 1985 bonds under IRC section 149(d)(3)(B).
  8. Determine the temporary periods for proceeds of both issues.
  9. Determine the maximum yield that can be earned on the gross proceeds of the 1994 issue in order to comply with yield restriction rules.
  10. Discuss the treatment of the unspent proceeds of the 1985 issue for arbitrage purposes.
  11. Calculate the amount of transferred proceeds on November 1, 1994 and November 1, 1995.
-