“This Money’s Yours”- Investments & Arbitrage

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Session Objectives

- Investment considerations
- Arbitrage considerations
- Real world examples

Investing Roadmap

1 Approve Investment Policy and Review staff capabilities

2 Develop & Approve Investment Policy

3 Prepare Cash Forecast

4 Determine Investment Needs

5 Review State Laws

6 Examine Investment Options

7 Select Investments

8 Monitor Portfolio

9 Modify Investments & Policies as Needed

Investment Program Objectives

Defines eligible investments

- **Safety of principal**
- **Liquidity**
- **Yield**

Suitability of investments

Fiduciary responsibility

Arbitrage Implications

Cash Forecasting

Cash flow forecasting estimates receipts and disbursements during a given period.

- Distinct from governmental accounting and budgeting
- Helpful in determining arbitrage implications

Investment Market Participants

Parties you will most likely work with in the investment space:

- Broker / Dealer
- Registered Representative
- Bank
- Registered Investment Advisor
- Custodial Bank

Investment Risks

Common Investment Types

Local Government Investment Pools

Time Deposit or CD

Money Market Mutual Fund

Commercial Paper

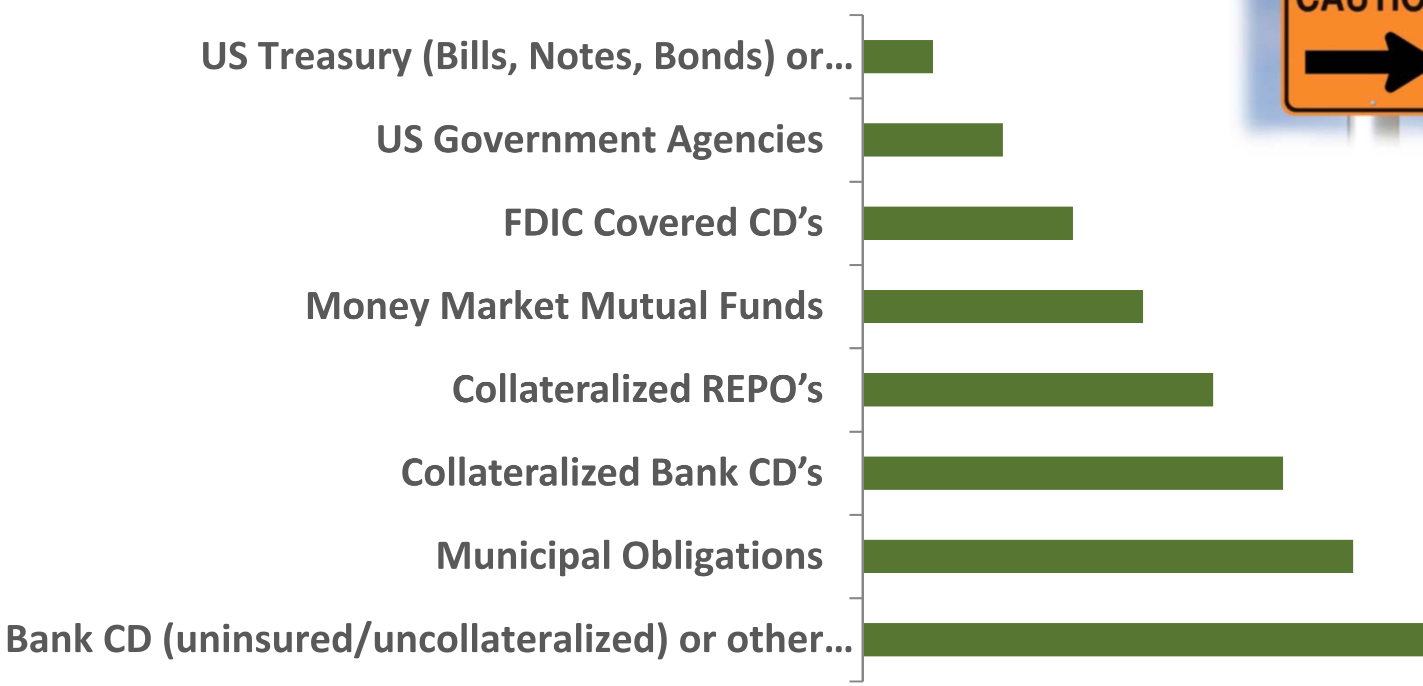
Repurchase Agreement (aka Repos)

Obligations of federal government (T-bills / notes / bonds)

Obligations guaranteed by the federal government (GNMA, SBA, etc.)

Obligations of federal agencies/quasi-public institutions (FNMA, FHLMC, FHLB, FFCB, etc.)

Investment Risk examples



Fixed Income Investment Strategies

Passive

Money Market/Local Government Investment Pool

Immediate availability

Minimal resources required to monitor

Zero market/interest rate risk

- No mark-to-market impact on income statement

Inconsistent investment returns

Lowest return over time

Active

Managed portfolio of permitted investments

Consistent investment returns

Maximize returns over time

Availability of funds investment dependent

Additional resources required to monitor

Subject to market/interest rate risk

- Income statement ramifications

Arbitrage

The concept behind "arbitrage" for bonds is the difference in the cost of issuing debt in the tax-exempt market versus the benefit of earning interest in the taxable investment market. An imbalance as shown in the scale below can create arbitrage.

So what side of the scale portrays arbitrage?

Arbitrage Rebate

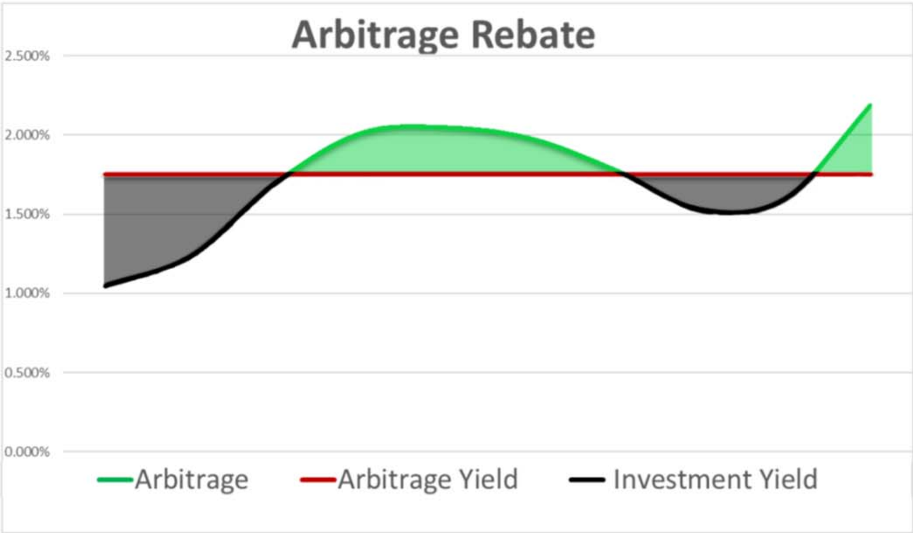
The purpose of “arbitrage rebate” is to explain the arbitrage concept in a meaningful way (i.e. mathematically). The series of cashflows that represent the receipt and/or expenditure of taxable investments are individually future valued against the tax-exempt arbitrage yield of a debt issue.

Makes perfect sense right?

Arbitrage Rebate Example

$10MM Street Project Financing Issued as Tax-Exempt

Issuer invests $10MM in a LGIP while the project is in process. The issuer receives taxable interest and the total expenditures during the spending period equal $10.1MM.



Arbitrage Rebate

The results of an analysis will confirm the mathematical existence of a positive or negative rebate liability.

Positive rebate liabilities have to be rebated back to the Federal Government as a tax payment while negative liabilities only prove that a tax payment is not due.

Arbitrage Yield Restriction

Arbitrage rebate represents the whole pie for analysis purposes, while "arbitrage yield restriction" is only a piece of the pie.

Arbitrage yield restriction did not cover all of the myriad of concerns that the Federal Government had with tax-exempt bonds which is why the arbitrage rebate rules were introduce (e.g. to plug the regulatory holes).

Arbitrage Yield Restriction

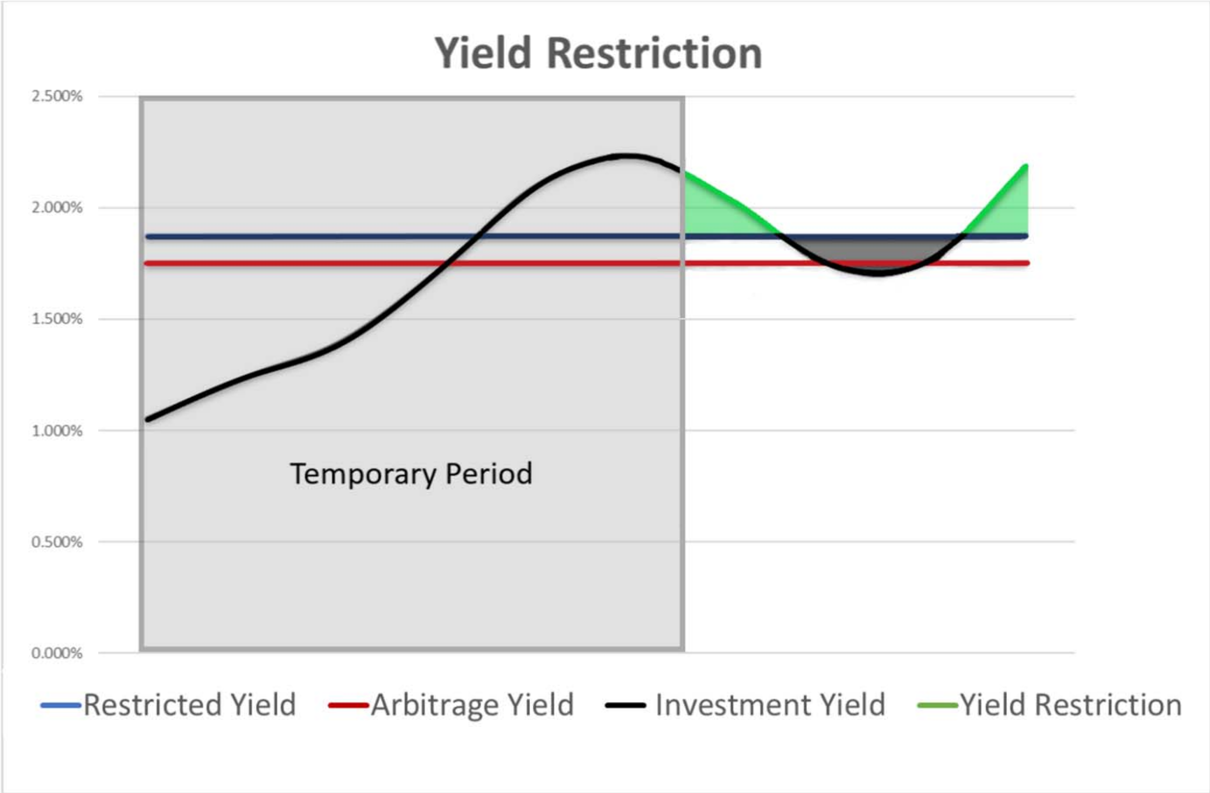
The results of an analysis will confirm the mathematical existence of a positive or negative yield restriction liability.

Positive yield restriction liabilities have to be rebated back to the Federal Government as a tax payment at the same time and manner as a rebate payment (i.e. not mutually exclusive).

Negative liabilities only prove that a tax payment is not due.

Arbitrage Yield Restriction

In the revised example chart there are a number of differences. Does anything stand out?



Reimbursements

The goal of the reimbursement rules is to provide a mechanism for the entity to recoup project expenses paid prior to the sale of a debt issue without fear of noncompliance.

By declaring an intent to reimburse expense through issuing debt, tracking the exact date and amount of the allowable expenses, and timely reimbursing the affected fund(s) an Issuer can be confident that they will not run afoul of the rules.

Definition of Expenditure

An expenditure for arbitrage purposes is the actual date of the expenditure of the debt proceeds for a governmental purpose. In an effort to further define this concept the Federal Government created the 5 day cash outlay rule for expenditure of tax-exempt debt proceeds.

Would a transfer of funds out of an investment account meet this definition?

General Investment Rules

The Federal Government wants Issuers to ensure they have purchased investments at a fair market value.

The Federal Government wants the arbitrage analysis to reflect the proper valuation methods for investment that are outstanding during the computation period. Generally speaking investments can be valued as plain par (i.e. Bank CD), present value or fair market value during each computation period, except in those scenarios where present value or fair market value is required.

Spend Down Rules

6-Month Exemption Schedule:

*100% of identified Gross Proceeds to be spent within 6 months

18-Month Exemption Schedule:

15% within 6 months

60% within 12 months

*+100% within 18 months

24-Month Exemption Schedule:

10% within 6 months

45% within 12 months

75% within 18 months

*+100% within 24 months

Spend Down Rules

* 5% Retention option extends the 6-Month exception to 12 months, 18-Months exception to 30 months, and 24-Month exception to 36 months.

+ De Minimis exempts the lesser of 3% of the issue price or $250,000 as long as the issue exercises due diligence to complete the project.

The 18-Month and 24-Month exemptions cannot be used at the same time on the same issue even if that issue is bifurcated, however, the 6-Month exemption can be used with either the 18-Month or 24-Month exemption when bifurcated.

Spend Down Rules

Bona Fide Debt Service Fund (generally defined at the proper matching of revenues to debt service expenditures each bond year). Depleting the fund at least annually except the greater of:

- Previous year’s earnings in the fund, or
- 1/12th of the previous year’s principal and interest payments

WI § Ch. 67.11 “Each municipality that issues municipal obligations under this chapter,…shall establish and maintain a debt service fund...”

Spend Down Rules

WI Issuers typically establish single debt service fund with subaccounts for each issue.

Fund balances are restricted to pay only debt service.

Common revenue sources include capitalized interest, tax levy, special assessment, TIF or revenues from various Enterprise Funds.

Based on these principals the debt service fund is always bona fide, right?

Spend Down Rules

Arbitrage Yield Restriction:

Project Funds - Exempt from restriction for 3 or 5 years based on project size/complexity

Capitalized Interest - Either 13 months or 3 years based on where the money is deposited (i.e. debt service fund versus project fund respectively)

Replacement Proceeds - 30 days (i.e. excess debt service levy funds)

Minor Portion - lesser of 5% of sales proceeds or $100,000

Spend Down Rules

The arbitrage rebate spend downs (6-month, 18-month or 24-month) are optional, generally used when there are identified arbitrage opportunities.

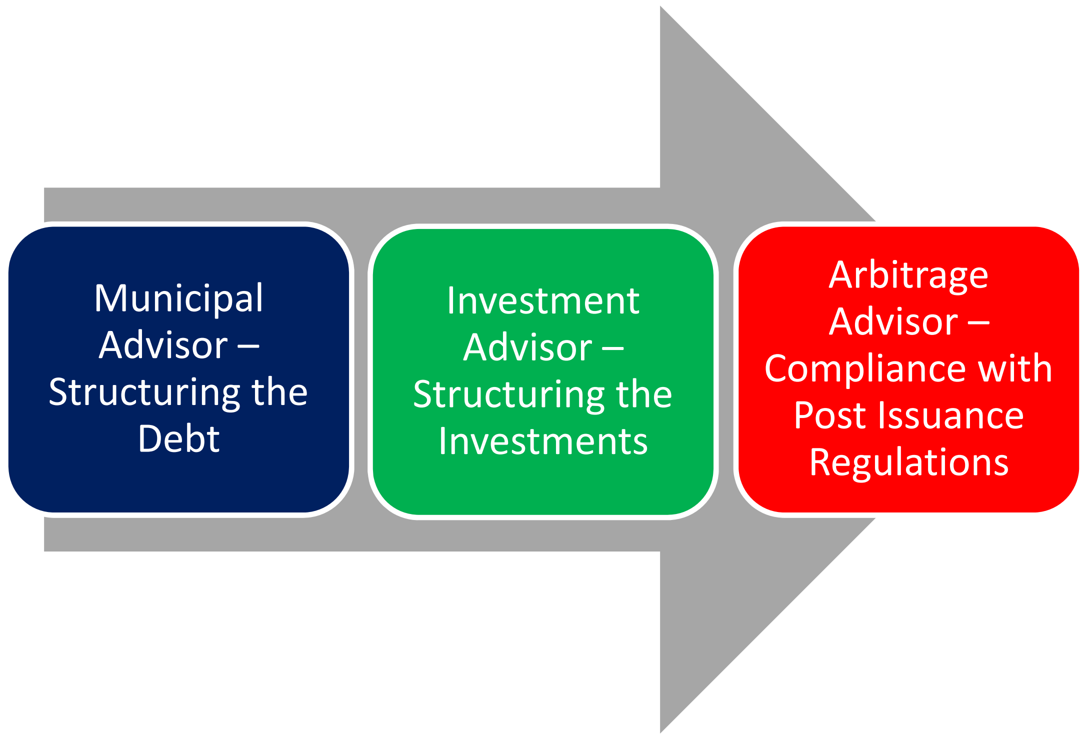
The bona fide debt service fund exception is <u>not</u> optional.

The arbitrage yield restriction exemptions (i.e. temporary periods) are optional, can be waived at the delivery date of an debt issue, and can be met by intentionally yield restricting the applicable fund(s).

Case Study

City XYZ's 2019 Debt Issue

The City needs to complete a long list of projects and determined the funding source as debt proceeds.



Case Study

Considerations:

- Single debt sale or multiple (phased) debt sales
- Projected investment earnings during project draw down
- Arbitrage spend down considerations

Single debt sale:

- Longer duration investments
- Potential for arbitrage issues with spend downs
- Potential for arbitrage payment due (rebate and/or yield reduction)

Case Study

Multiple debt sales:

- Appropriately sized debt issues
- Shorter duration investments
- Potential for less arbitrage issues

Results:

- Structured under a multiple debt sales approach
- Structured investments that fit the exact phase of project draw down
- Reduced risk of arbitrage issues generally

Putting it All Together

Investing funds properly creates additional resources for Issuers.

Understanding the benefits of cash flow forecasting, coupled with prudent investment decisions, and the potential partners that can assist with investments is helpful.

When Issuers invest debt sales and replacement proceeds in taxable investments they generally create a need for arbitrage review.

Arbitrage can be simplified for each debt issue, tracked at the Issuer level, and should be verified by a qualified firm.

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